Making general practice attractive: encouraging GP attraction and retention - appendices

KCE reports 90S

Federaal Kenniscentrum voor de Gezondheidszorg
Centre fédéral d'expertise des soins de santé
Belgian Health Care Knowledge Centre
2008

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- appendices -

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Title : Making General Practice Attractive: Encouraging GP attraction and Retention - appendices

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APPENDIX 1: STATE OF THE ART: GENERAL PRACTICE IN BELGIUM (CHAPTER 1)

APPENDIX 1.1.GLOSSARY AND DEFINITIONS

Glossary

AM	Arrêté ministériel/ Ministerieel Besluit
AMI	Assurance Maladie Invalidité/Ziekte Invaliditeitsverzekering
AR	Arrêté Royal/ Koninklijk Besluit
CIES	Centre d'études interdisciplinaires en économie de la santé (Centre of interdisciplinary studies in health economics)
CIPMP	Centre d'informations sur les professions médicales (Information center on medical professions)
GP	General Practitioner
INAMI/RIZIV	Institut National d'Assurance Maladie-Invalidité / Rijksinstituut voor Ziekte- en Invaliditeitsverzekering (National Institute for Sickness and Disability Insurance)
MD	Medical doctor
SESA	Unité de Socio-Economie de la Santé (Department of socio-economics of health)
SP	Specialist

Terminology used in the analyses

In the present report, the following definitions were used:

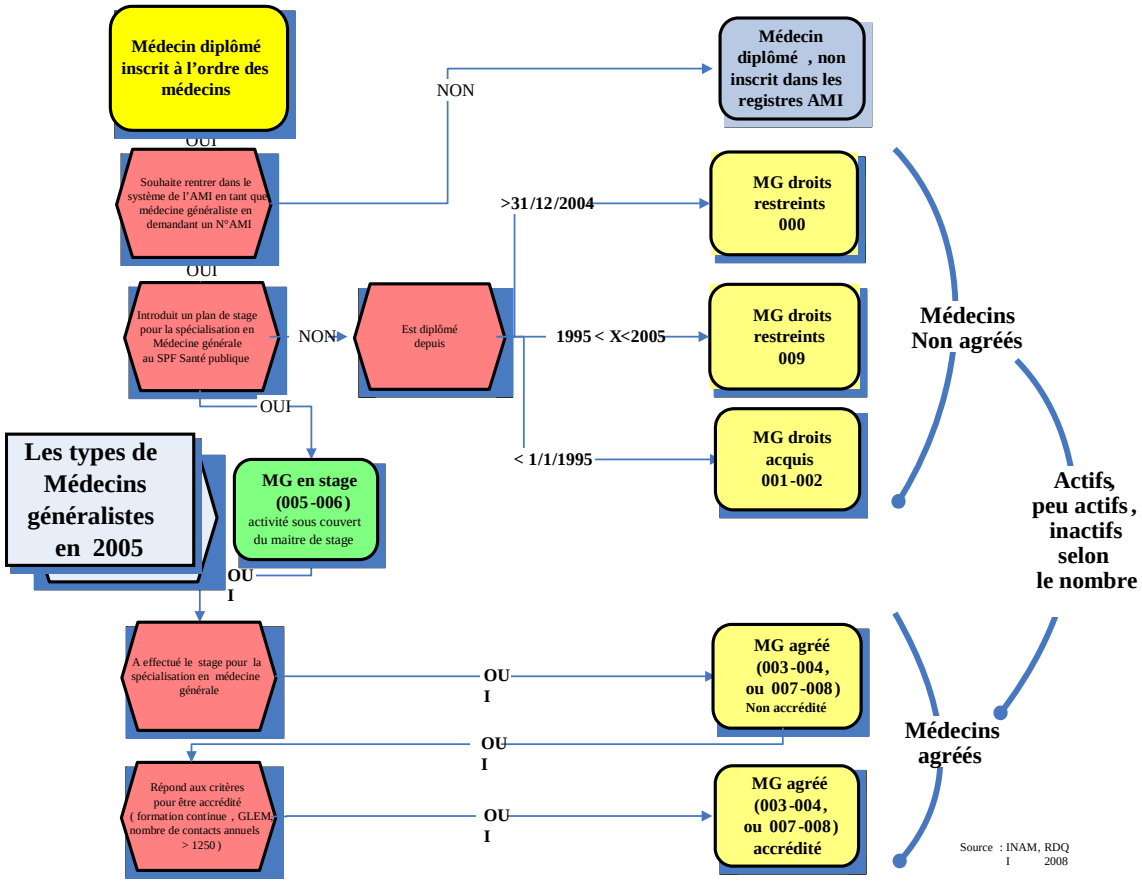
- Cadastre of Health Care Professions: cadastre des professions de santé/ Kadaster gezondheidsberoepen (see section 3.2. for more explanation).
- Medical doctor (MD): holder of a degree in medicine
- Unlicensed general practitioner: medical doctor without any formal specialization in general practice (INAMI/RIZIV code: 000, 001, 002, 009[a])
- Licensed general practitioner (GP): medical doctor specialized in general practice (INAMI/RIZIV code: 003, 004, 007, 008[b])
- Specialists: medical doctor specialized in other disciplines than general practice, such as cardiology, dermatology, etc...
- Accredited GP: licensed GP (003,004, 007, and 008) who fulfils the following criteria: ongoing training, peer review, number of contacts per year ≥ 1250.
- Contacts: home visits, consultations or medical advice with delivery of attestations of the medical acts given during that contact.
- Act: medical service reimbursed in the INAMI/RIZIV frame (more than 1 act possible in a contact).
- Active MD (INAMI/RIZIV): a physician having registered with INAMI/RIZIV as intending to work in the curative sector and having not declared stopping to work in that sector since his registration(situation code 1: not declared dead, retired, dropped out or permanently living in a foreign country).
- Inactive MD in the curative sector (INAMI/RIZIV): an active MD having provided 0 medical acts in the AMI frame during the year considered.

[a] See appendix 1.3.

[b] See appendix 1.3.

- Small practice: the number of MDs having between 1 and 1249 acts a year.
- Active MD in the curative sector (CIPMP): physicians having at least one place of curative care in Belgium (hospitals, solo practice, etc) reported in the CIPMP database.
- Inactive MD in the curative sector (CIPMP): a MD with no reported place of curative care registered in the CIPMP database.
- Registered MD: physicians registered with the INAMI/RIZIV, allowing their medical acts to be reimbursed within the INAMI/RIZIV frame.
- Attraction: attracting students who are likely or plan to be GPs, influencing speciality choice of undergraduate and graduate students, and educating future GPs.
- Recruitment: adding postgraduates –those with an MD degree– to the pool of practicing GPs (through internship, residency and, secondarily, choice of practice location).
- Retention: maintaining GPs in their current practice.

The following chart gives the different status and qualification codes of the medical doctors (only GPs) allowed to practice under the Health Insurance according to their training stages:



An alternative version of the terminology was suggested in a flowchart of Denise Deliège (cf appendix 1.8).

APPENDIX 1.2.DESCRIPTION OF THE DATABASES

National Institute for Health and Disability Insurance (INAMI/RIZIV) file:

MDs have specific qualification codes[c] and their situation codes (so called "active" or "inactive")[d] . By "active", we mean a MD having registered with INAMI/RIZIV as intending to work in the curative sector and having not declared stopping to work in that sector since his registration. The activity levels of the MDs are registered in the second file, called "profiles". This file records the total number of acts provided[e], per qualification codes and per type of MDs (thus not containing individual information).

Those acts are more precisely those paid or reimbursed by the National Health Insurance. They are yearly registered for each medical doctor (excluding those performed under a lump sum system in medical houses, for some group practices and those performed outside the Sickness Insurance).

Both the qualification codes and the situation codes reflect the situation of the MDs at the end of the civil year.

CIPMP database and Variables of interest used in our analysis

Description of the database

All the MDs are taken into account in the database once they have obtained their degree as MD in Belgium and not once they subscribed at the INAMI/RIZIV. In order to be accurate about this information, the CIPMP gets an annual list of newly graduated MDs by all the universities of Belgium. The MDs, who graduated abroad, allowed to practice in Belgium who received an AM or an AR and who are registered at the Order of Physicians are also encoded. All the registered MDs, Belgians or foreigners, are thus holders of a legal Belgian certificate or have a legal authorization to practice medicine in Belgium.

Those MDs are then "followed" through two main files: one file that counts the types of activities of the MDs (one line will observe one type of activity, one MD will have as many lines as he will have activities) and another file that counts the MDs (one line will observe one MD and counts all his/her type of activities). This last file enables us to do individual follow-ups of the MDs.

Not all the years can be observed since it takes 2 to 3 years to update the whole database of the MDs, The database has been updated since 1975. Detailed statistics are available for the activities carried out in 1989, 1992, 1994, 1996, 1999, 2002 and 2005.

The registry of activities is limited to 12 activities divided into curative (ambulatory or hospital sector) or non-curative (prevention activities, administration, management, teaching, research and cooperation). Each activity in that register mentions in the municipality where the health activity is performed.

Very important variables enable to determine whether a MD has graduated in Belgium or abroad, works in Belgium (as licensed, unlicensed or in training) or abroad, is dead or for whom we have no information about professional activity (place and type of activities).

---

c See appendix 1

d See appendix 2

e Even if the consultations, the visits and the advices are given separately for 2004 and 2005, they have been computed together.

Variables

Year: year of statistical observation (1989, 1992, 1994, 1996, 1999, 2002 and 2005)

Age: based on year of birth

Year of MD degree:

- Year of medical degree (+ 2 years specialization for the licensed GPs)
- Year of medical degree + years needed to be specialist (4 to 6)

Gender: male/female

University of graduating: degree as "Docteur en médecine, chirurgie et accouchement/ Doctor in de genees-, heel- en verloskunde" (used to define the linguistic community)

Speciality : INAMI/RIZIV qualification code

Status of MDs : active or inactive in Health system in Belgium

Activity sector : curative or non curative

Linguistic community: based on the University of Graduation of the MD

Comparison of the two databases:

Data of the computed percentages are not exactly the same:

a. The curative activities :
   - For INAMI, the curative activities include all those who performed at least one act under AMI during the year (including those who perform acts on an occasional basis).
   - For the CIPMP, this criterion is: an official place of curative activity must have been identified, excluding thus those who provide care on an occasional basis.

b. The denominator :
   - The analysis for the INAMI database restricts the data to those who are registered and the present analysis restricts the data to those who have a situation code 1 (thus not known as being deceased, out of practice, retired, abroad or forbidden to practice).
   - The CIPMP database takes all qualified MDs into account, except the MDs above 75 years of age, those foreign qualified who worked in Belgium under AM, AR and left Belgium (for instance to train as specialist) and the MDs graduated after the same year as the year observed.

c. Both numerators and denominators

The CIPMP excludes the MDs who might be active but for whom the professional activity is unclear.

APPENDIX 1.3.QUALIFICATION CODES (INAMI/RIZIV AND CIPMP)

Médecins

000 Médecin inscrit après le 31/ 12/ 2004

009 Médecin inscrit entre le 01/ 01/ 1995 et le 31/ 12/ 2004

Médecins de médecine générale

001 Médecin de médecine générale inscrit avant le 01/ 01/ 1995

002 Médecin de médecine générale + ECG à 75 % inscrit avant le 01/ 01/ 1995

003 Médecin de médecine générale, porteur d'un certificat de formation complémentaire

004 Médecin de médecine générale, porteur d'un certificat de formation complémentaire + ECG à 100 %

005 Médecin de médecine générale en formation professionnelle

006 Médecin de médecine générale en formation professionnelle + ECG à 75 %

007 Médecin de médecine générale, porteur d'un certificat de formation complémentaire + F et P (réadaptation fonctionnelle et professionnelle des handicapés)

008 Médecin de médecine générale, porteur d'un certificat de formation complémentaire + ECG à 100 % + F et P (réadaptation fonctionnelle et professionnelle des handicapés)

Summary:

Not licensed: 000, 001, 002 and 009

Licensed: 003, 004, 007 and 008

In training: 005 and 006

Note: the qualification codes reflect the situation at the end of the civil year

APPENDIX 1.4. SITUATION CODES (INAMI/RIZIV)

00 = voorlopig dossier provisoire

01 = actief / actif

02 = overleden / décédé

03 = gepensioneerd / pensionné

04 = in buitenland / à l'étranger

05 = geschorst / suspendu

06 = geschrapt / radié

07 = tijdelijk niet-actief / inactivité temporaire

08 = afgesloten dossier clôturé

09 = stopzetting activiteit / cessation d'activité

10 = sociaal plan social kinesitherapeute

11 = zonder erkening VG / sans agrément Santé Publique

Note:

code 02 is updated with the National Institute of Statistics

codes 03, 04, 07, 09 are based on the declaration from the MDs

codes 05, 06, 08, 10 and 11 are updated on a disciplinary or administrative basis

Note: the situation codes reflect the situation <u>at the end of the civil year</u>

APPENDIX 1.5.VARIABLES OF INTEREST FOR THE INAMI/RIZIV DATABASE

For the numerator:

Qualification codes

- from 000 to 009: GPs including those still training to become GPs
- from 010 to 099: candidates in training to become specialists
- from 100 to 999: specialists

Age groups

- <=29
- age classes of 5 years
- >75

→ recoded in the following age groups:

- 25-29
- 30-39
- 40-49
- 50-59
- 60-69
- 70+

Number of acts a year

- none
- between 1 and 499
- between 500 and 1249
- between 1250 and 4999
- 5000 and more

→recoded in the following groups:

- none
- between 1 and 1249
- 1250 and more

Gender: Female or male

Linguistic community

French or Dutch (mailing language with INAMI/RIZIV)

For the denominator:

- Qualification codes→ see numerator
- Age groups →Recoded from the birth year (see numerator)
- Gender → Same as numerator
- Linguistic community →same as numerator
- Situation codes→see appendix 1.4

APPENDIX 1.6.EXTERNAL VALIDATIONS OF THE CIPMP DATABASE

Matching with a Sickness Fund database (2002)

Activity according to the CIPMP database	Activity in the curative sector according to a Sickness Fund database			
Frequency Percent Row Pct Col Pct		No act reimbursed	At least one act reimbursed	Total
No place of curative activity	166 0.81 2.75 91.71	3277 16.06 54.30 72.12	2592 12.71 42.95 16.54	6035 29.58
At least one place of curative care	15 0.07 0.10 8.29	1267 6.21 8.82 27.88	13082 64.13 91.07 83.46	14364 70.42
Total	181 0.89	4544 22.28	15674 76.84	20399 100.00

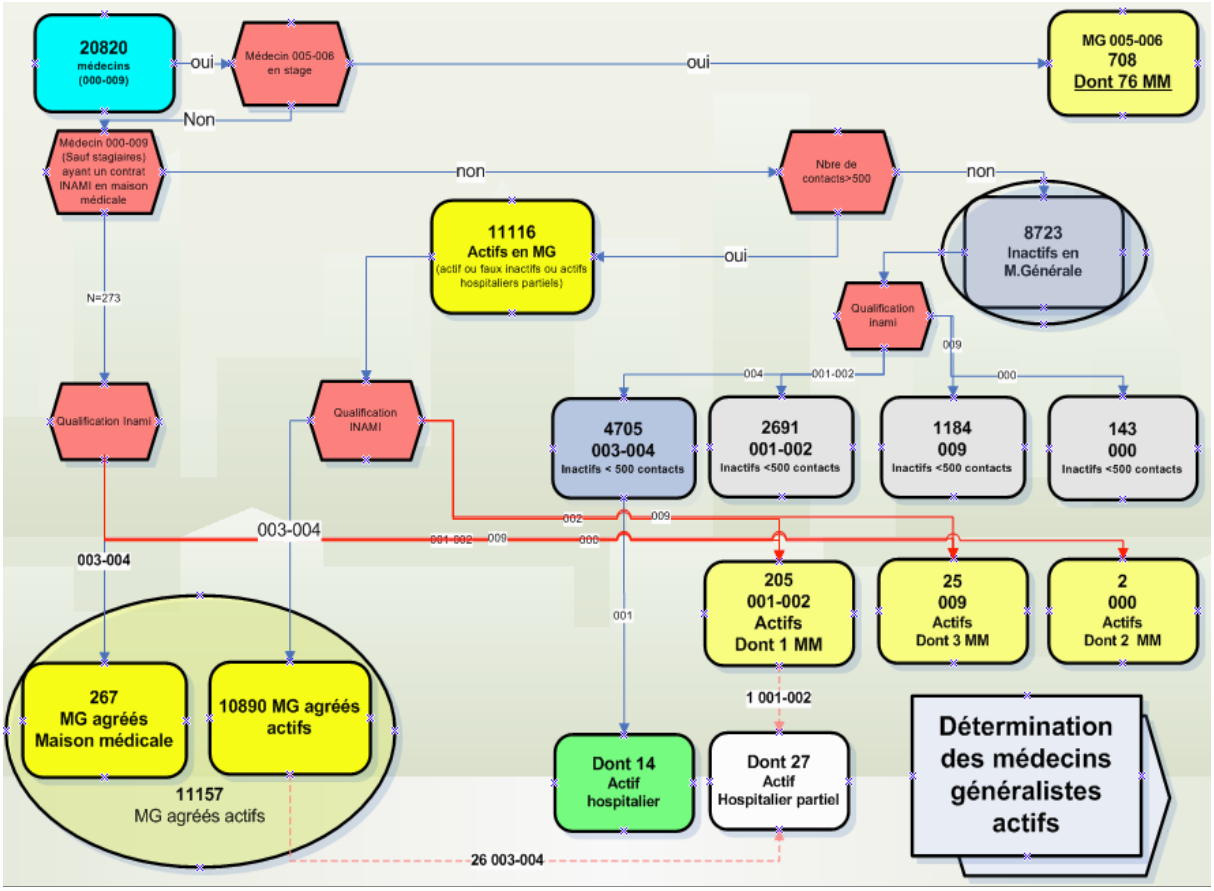
Validation procedure carried out in 2006

In 2006, a sample of 6000 GPs was selected, all over the country. The aim of the study concerned the use of electronic patient's records kept by GPs. One among the professional addresses of each MD was kept. Only 3 % came back, most of them due to moving.

APPENDIX 1.7.CLASSIFICATION OF GPS AND EFFECTIVES BY CATEGORY IN 2005 (SOURCE: P. MEEUS, 2007)

« Les 20820 médecins généralistes identifiés sont répartis selon les catégories d'activité identifiées, en fonction de leur qualification. Après avoir retiré les médecins stagiaires et les médecins travaillant en maisons médicales, les médecins qui restent sont répartis selon leur qualification ».

Algorithme de classement des médecins généralistes et calcul des effectifs par catégorie



Selon que l'on considère ou non les stagiaires comme une catégorie à part, on identifie dans les catégories « actives » » en médecine générale (>500 contacts) les médecins actifs hospitaliers partiels, ceux qui travaillent en maison médicale ou les maître de stage). Les autres se répartissent en catégories d'activités selon certains seuils et selon qu'ils sont ou non accrédités. Dans la catégorie des médecins inactifs en médecine générale (<500 contacts (8723 MG ou 9307 selon que l'on compte ou non les stagiaires)), nous distinguons, ceux qui sont complètement inactifs y compris en matière de prescriptions de médicaments (inactif sp), ceux qui sont inactifs en médecine générale mais chez qui on a identifié une activité en hôpital (actif hosp) et les autres inactifs.

APPENDIX 1.8.SUMMARY OF THE TYPES OF « LOSSES » AMONG MDS DURING THEIR CAREER

	Etapes	**Types de pertes**	**Catégories concernées**		
			Libellé courant	**Libellés proposés**	
				En Français	En Anglais
1	Obtention du Diplôme[a]		Diplômés	Diplômés	Graduates (MD Degree)
2		Premières pertes (abandons, départs à l'étranger)			
3	Visa du diplôme auprès du SPF [a] (via Commission médicales provinciales ?)		Diplômés	Diplômés visés	
4		Deuxièmes pertes (pour le curatif) Pas de plan de stage (numerus clausus, spécialités non contingentées, recherche, départs à l'étranger)			
5	Accès à formation pour titre particulier par Universités (Visa du maître de stage) par SPF (via Commissions d'agrément)		- Universités : Contingentement - SPF : Plans de stage	Candidats spécialistes Candidats généralistes	In training (GPs or specialists)
6		Troisièmes pertes Non enregistrement à l'INAMI			
7	Enregistrement à l'INAMI		« Agréés » (total) NB terme ambigu	Enregistrés à l'INAMI	Registered by Sickness Funds
8		Quatrièmes pertes Abandon en cours de formation (cas rares : pas de statistiques)			
9	Fin de plan de stage Agrément au titre particulier (via Commissions d'agrément - SPF)		« Agréés » (terme ambigu) Généralistes (y compris droits acquis) Spécialistes (y compris non contingentés)	Agréés SPF [b] NB y compris spécialités non contingentées	Licensed (as GP or as specialist)
10	« Non recyclés »	Enregistrés à l'INAMI (mais sans agrément à un	(Généralistes)	(Généralistes)	Registered not

	(terme ancien désignant les situations avant introduction de la formation spécifique en médecine générale, uniquement pour ceux dits « généralistes »)	titre particulier)	non agréés (NB restant enregistrés)	Enregistrés non agréés	licensed
11	Ne répondent pas aux nouveaux critères du généraliste [c]	Enregistrés à l'INAMI, mais sans agrément à un titre particulier, selon nouvelle définition du généraliste [c]	(Généralistes) non agréés (NB restant enregistrés)	Enregistrés non agréés	Registered not licensed
12	Reste : généralistes nouvelle définition [c]		?	Médecins de famille	Approved
13	*Introuvables dans une fonction du système de santé belge [d]*	*Cinquièmes pertes* *Inactifs dans le système de santé belge (spécifique au CIPMP)*	*« Inactifs »* *(sous entendu dans le système de santé belge)*	*« Inactifs »*	*Non active*
14	*Reste : ceux ayant une fonction identifiée dans le système de santé belge*	*(spécifique au CIPMP)*	*Actifs* *(sous entendu dans le système de santé belge)*	*Actifs* *(sous entendu dans le système de santé belge)*	*Active*
15	Décédés, Pensionnés, En cessation d'activité, A l'étranger, Radiés, Suspendus, En inactivité temporaire	Cinquièmes pertes bis Passent dans la catégorie des agréés INAMI dits « non-actifs »	Non actifs	Non actifs	Non active
16	Reste la catégorie des agréés dits « actifs » (en réalité, nombre d'entre eux ne prodiguent pas de soins)	NB L'INAMI les présente souvent comme les « agréés », sans spécifier que les agréés non actifs ont été éliminés	« Agréés » dits « actifs » (pour l'INAMI)	Potentiellement disponibles », (vu que leur activité réelle est inconnue)	Potentially available
17		*Sixièmes pertes :* *Aucun lieu d'activité de soins trouvé (spécifique au CIPMP)*	*« Que non curatif »*	*« Que non curatif »*	*Active only outside care*
18	*Reste ceux ayant au moins un lieu d'activités curatives*			*Actifs en soins curatifs, fût ce partiellement [e]*	
19		Sixièmes pertes bis Ne prodiguent aucun soin INAMI dans l'année	= Non prestataires (dans les stat des « Profils »)		
20	Reste ceux prodiguant au moins un soin INAMI dans l'année		Prestataires (dans les stat des	« Prestataires », « Praticiens » ou	Practitioners (or « Practising care »)

			« Profils »)	« curatifs » [f]	
21		Septièmes pertes Font peu de curatif (Selon seuil à fixer)		Faibles pratiques	Low activty for care
22	Reste les prestataires au delà d'un certain seuil de prestations	Seuil ? 500 actes ?			
23	Accréditation	Seuil 1250 actes + autres conditions	Accrédités	Accrédités	

Author : Denise Deliège **November 2007**

24	Equivalents temps-plein (Selon définition du « temps-plein »)	Huitièmes pertes diminution d'activité due à la féminisation et au vieillissement	Force de travail en ETP	Force de travail en ETP	Workforce in FTE
25	Equivalents temps-plein tenant compte de la réduction séculaire du temps de travail	Neuvièmes pertes (pour les perspectives d'avenir)	Force de travail en ETP-RTT	Force de travail en ETP-RTT	Workforce in FTE-WTR

En italiques : cas spécifiques au fichier d'activités médicales du CIPMP

(a) Il n'est pas clair à quel moment se fait l'enregistrement au cadastre

(b) Cette catégorie peut inclure les candidats quand on somme agréés et les candidats ; elle inclut les spécialités non curatives (non enregistrées à l'INAMI)

(c) Conditions : Minimum d'actes annuels, participation au rôle de garde, dossier médical, Participation à des cycles de formation continue, … ;

(d) De nombreux « inactifs » selon cette définition fournissent néanmoins encore diverses prestations à l'INAMI, notamment parmi les âgés

(e) Les statistiques habituelles du CIPMP ne présentent pas cette catégorie, mais seulement les « Equivalents-personnes » exercés dans une fonction curative

(f) Sous entendu : en soins à charge de l'INAMI

APPENDIX 1.9.DETAILS OF THE RESULTS INAMI/RIZIV AND CIPMP DATABASES

Table [1]: Evolution of unlicensed GPs registered at the INAMI/RIZIV: numbers and percentages by gender in 1995, 2000 and 2005. (Source: INAMI/RIZIV database, Belgium, 2007)

	Year		
	1995	**2000**	**2005**
Women	1282	1667	1582
%	38.28	43.86	47.0
Men	2067	2134	1784
%	61.72	56.14	53.0
Total	3349	3801	3366

Source: INAMI/RIZIV (file of registered MDs), 2007
Note: the unlicensed GPs at the INAMI/RIZIV are the GPs who have the qualification codes 001 or 002 (GPs with granted rights-but not considered as licensed), 000 or 009 (GPs with restricted rights).

Table [2]: Licensed GPs registered at the INAMI/RIZIV: numbers and percentages by gender in 1995, 2000 and 2005. (Source: INAMI/RIZIV database, Belgium, 2007)

	Year		
	1995	**2000**	**2005**
Women	2747	3667	4433
%	22.34	27.2	31.26
Men	9550	9813	9746
%	77.66	72.80	68.74
Total	12 297	13 480	14 179

Source: INAMI/RIZIV (file of registered MDs), 2007
Note: the licensed GPs at the INAMi/RIZIV are the GPs who have the qualification codes 003, 004, 007 and 008.

Table [3]: GPs in training registered at the INAMI/RIZIV: numbers and percentages by gender in 1995, 2000 and 2005. (Source: INAMI/RIZIV database, Belgium, 2007)

	Year		
	1995	**2000**	**2005**
Women	439	442	399
%	50.52	63.69	59.38
Men	430	252	273
%	49.48	36.31	40.63
Total	869	694	672

Source: INAMI/RIZIV (file of registered MDs), 2007
Note: the GPs in training at the INAMI/RIZIV are the GPs who have the qualification codes 005 and 006

Inactivity or small practice in the curative sector for unlicensed GPs under AMI: analysis by age group (INAMI/RIZIV database)

The total number of unlicensed GPs remained quite stable during the observed years (from 3327 in 1995 to 3346 in 2005) whereas the proportions of unlicensed GPs who were inactive globally increased by 10% each year (from 61% in 1995 to 84% in 2005). As a matter of fact, the inactivity proportion was very high in comparison with the licensed GPs: the majority of the unlicensed in fact did not practice any curative activity. The inactivity percentage increased for all age groups but the increase was more pronounced for the younger age group (from 52% in 1995 to 93% in 2005).

Regarding the small practice percentages, they decreased for all age groups.

Table [4]: Inactivity or small practices in the curative sector for the unlicensed GPs under AMI: numbers and percentages among potentially available GPs, by age group in 1995, 2000 and 2005. (Source: INAMI/RIZIV database, Belgium, 2007)

Age groups	Year								
	1995			2000			2005		
	% inactive in curative care under AMI*	Small practice percentage **	Total GP***	% inactive in curative care under AMI*	Small practice percentage **	Total GP	% inactive in curative care under AMI*	Small practice percentage **	Total GP
25 - 29	51.5	47.4	680	66.5	32.4	936	92.7	7.3	510
30 - 39	69.1	26.0	1056	72.7	21.7	915	87.4	11.1	796
40 - 49	64.2	24.4	693	76.3	15.9	931	87.8	8.4	858
50 - 59	55.2	19.0	306	64.8	19.5	415	76.9	15.3	601
60 - 69	53.2	22.2	293	63.6	16.7	264	67.9	16.3	252
70+	60.2	29.4	299	74.3	18.3	311	79.9	15.2	329
total	**61.0**	**29.4**	**3327**	**70.7**	**22.1**	**3772**	**84.2**	**11.4**	**3346**

Source: INAMI/RIZIV (file of profiles), 2007

*The inactivity percentage is computed for MDs who do not provide any INAMI acts during the observed year (group nr 19 in appendix 1.8).

** The small practice percentage concerns MDs who provide between 1 and 1249 acts during the observed year.

***the total GP concern the unlicensed GPs who are potentially available (those called "active", i.e. not being dead, and not know as being out of practice, retired, living abroad, nor forbidden of practice) group nr 16 in appendix 1.8

****There is a difference between the totals of table 6 and the totals of table 2 due to calculation on 2 different INAMI's files (max loss/year: 29 persons).

Inactivity in the curative sector for licensed GPs under AMI: analysis by gender (INAMI/RIZIV database)

This section stratified the analysis by gender for the licensed GPs (see also appendix 1.9, table 5).

Figure [1]: Licensed GPs- Women: Inactivity in the curative sector under AMI: percentages among potentially available GPs by age groups between 1995 and 2005. (Source: INAMI/RIZIV database, Belgium, 2007)

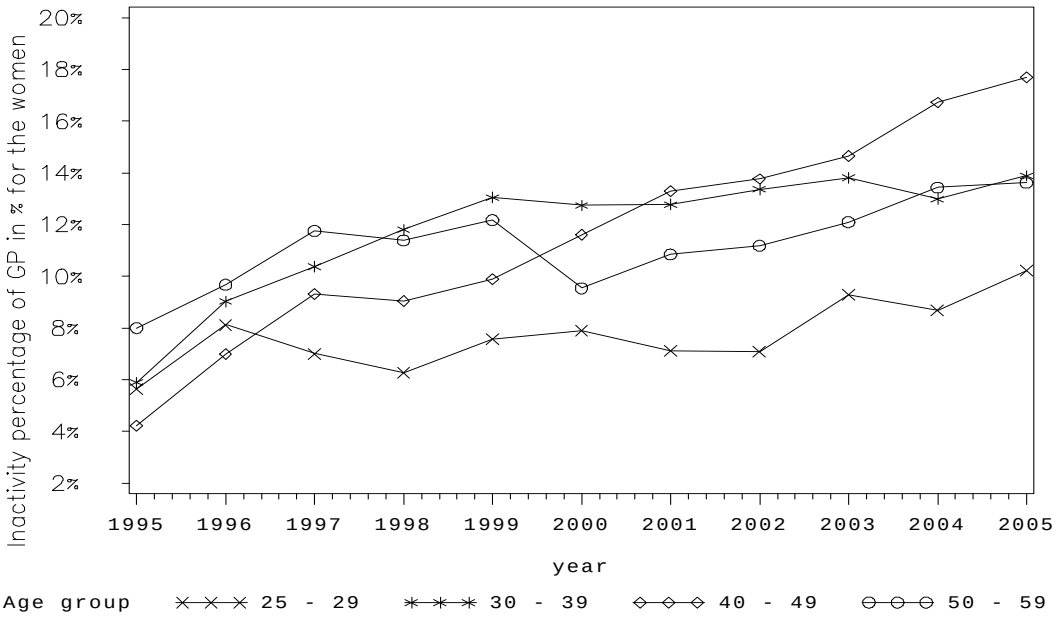
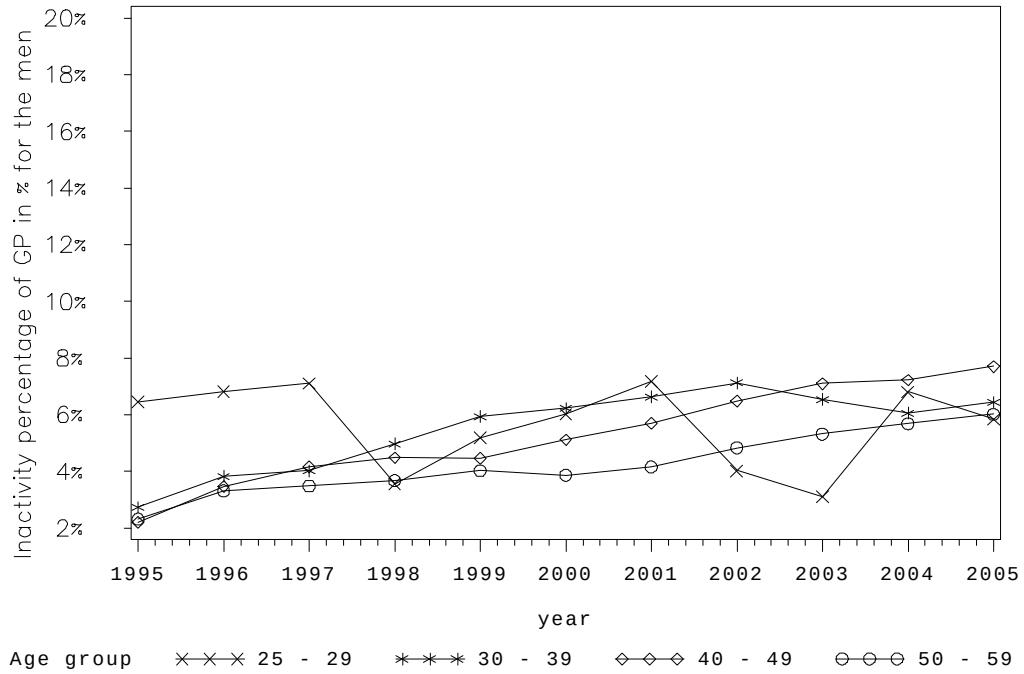


Figure [2]: Licensed GPs- Men: Inactivity in the curative sector under AMI: percentages among potentially available GPs by age groups between 1995 and 2005 (source: INAMI/RIZIV database, Belgium, 2007)



Inactivity in the curative sector for the licensed GPs under AMI: analysis per linguistic community (INAMI/RIZIV database)

Figure [3]: Licensed GPs-French Community: inactivity in the curative sector under AMI: percentages among potentially available GPs between 1995 and 2005 (source: INAMI/RIZIV database, Belgium, 2007)

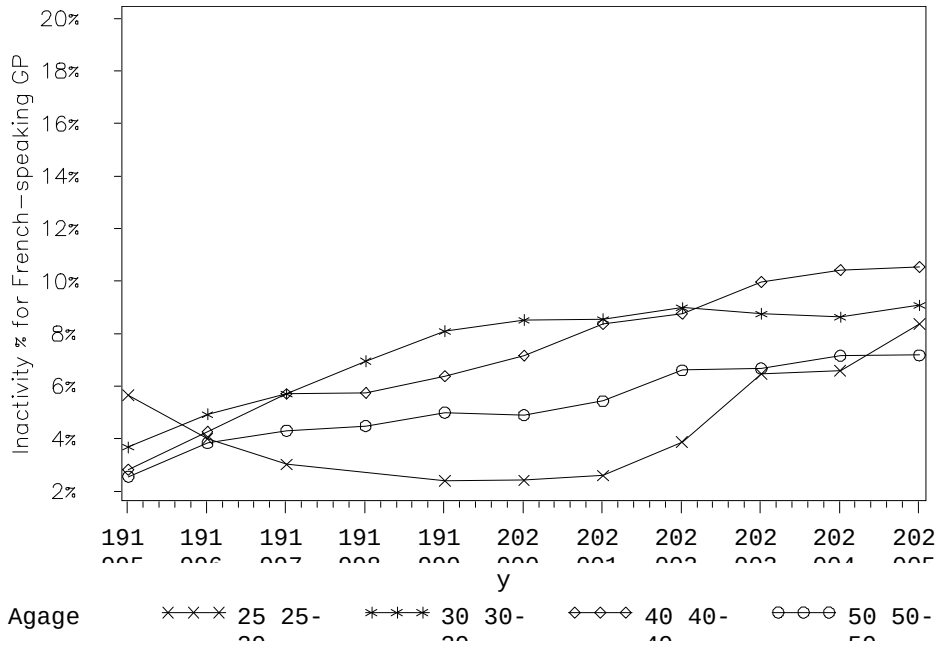


Figure [4]: Licensed GPs-Flemish Community: inactivity in the curative sector under AMI: percentages among potentially available GPs between 1995 and 2005 (source: INAMI/RIZIV database, Belgium, 2007)

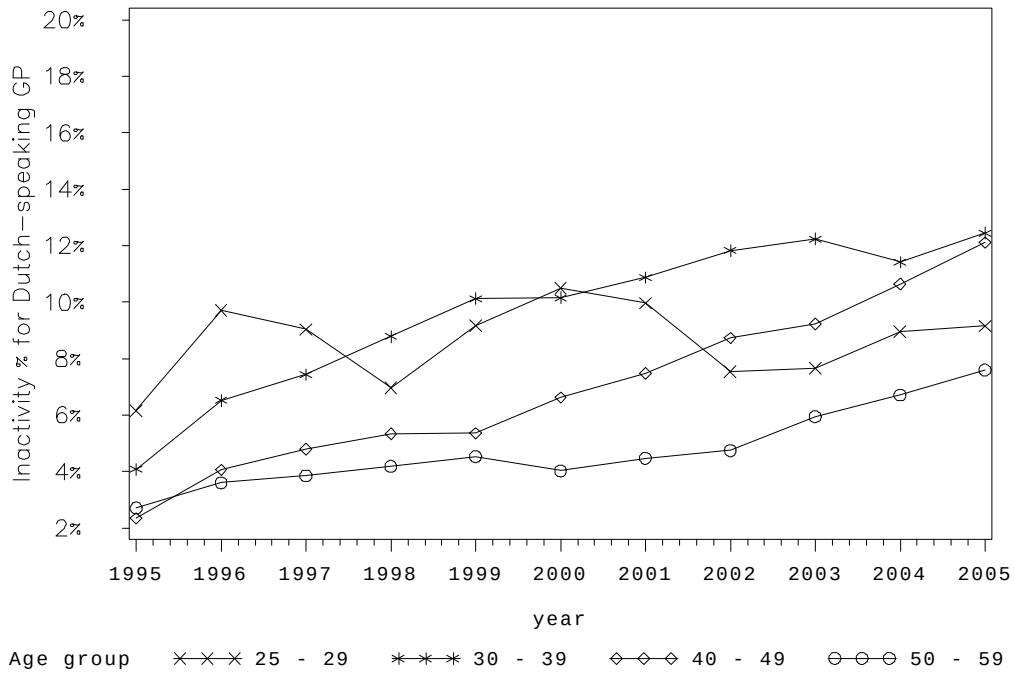


Table [5]: Inactivity or small practice percentages for licensed general practitioners: percentages and numbers by gender and age-group in 1995, 2000 and 2005. (Source: INAMI/RIZIV database, Belgium, 2007)

		Year								
		1995			2000			2005		
		% inactive in curative care under AMI *	Small practice percentage**	total GP***	% inactive in curative care under AMI *	Small practice percentage	total GP	% inactive in curative care under AMI *	Small practice percentage	total GP
Women	**25 - 29**	5.6	46.5	284	7.9	46.7	418	10.2	51.2	303
	30 - 39	5.9	26.4	1562	12.7	21.5	1459	13.9	25.0	1641
	40 - 49	4.2	25.1	780	11.6	19.6	1463	17.7	19.8	1609
	50 - 59	8.0	29.3	75	9.5	29.0	262	13.6	23.3	771
	60 - 69	19.4	41.9	31	33.3	31.3	48	28.2	29.6	71
	70+	8.3	83.3	12	28.6	50.0	14	44.1	38.2	34
	total	**5.6**	**28.6**	**2744**	**11.8**	**24.4**	**3664**	**15.4**	**24.8**	**4429**
Men	**25 - 29**	6.5	32.8	186	6.0	33.8	216	5.8	50.4	137
	30 - 39	2.7	9.0	2745	6.2	10.3	1492	6.4	14.3	1055
	40 - 49	2.2	8.1	3716	5.1	7.4	3950	7.7	9.0	2804
	50 - 59	2.3	9.6	1379	3.9	8.4	2327	6.0	9.3	3588
	60 - 69	6.0	18.4	1095	9.3	17.3	1137	9.7	17.4	1194
	70+	25.5	43.6	427	36.3	34.6	688	43.5	30.0	963
	total	**3.9**	**11.8**	**9548**	**7.7**	**11.7**	**9810**	**10.7**	**13.4**	**9741**

Source: INAMI/RIZIV (file of profiles), 2007

*The inactivity percentage is computed for MDs who do not perform any act during the observed year.

** The small practice percentage is computed for MDs who perform between 1 and 1249 acts during the observed year.

***the total GP concern the licensed GPs who are potentially available (those not being dead, retired, living abroad, nor forbidden of practice) group nr 16 in appendix 1.8

Table [6]: Inactivity or small practice percentages for unlicensed general practitioners: percentages and numbers by gender and age-group in 1995, 2000 and 2005. (Source: INAMI/RIZIV database, Belgium, 2007)

		Year								
		1995			2000			2005		
		% inactive in curative care under AMI *	Small practice percentage**	total GP***	% inactive in curative care under AMI *	Small practice percentage	total GP	% inactive in curative care under AMI *	Small practice percentage	total GP
Women	**25 - 29**	56.1	43.3	367	71.7	27.5	545	94.4	5.6	304
	30 - 39	74.1	22.6	491	80.8	16.4	463	91.8	7.1	462
	40 - 49	71.7	25.0	276	82.1	15.2	414	89.2	7.2	443
	50 - 59	69.7	22.7	66	77.7	17.3	139	82.0	14.1	255
	60 - 69	78.8	18.2	33	82.1	10.3	39	84.5	13.8	58
	70+	77.1	22.9	35	97.8	2.2	45	97.9	2.1	47
	total	**68.4**	**29.0**	**1268**	**78.4**	**19.3**	**1645**	**89.9**	**8.1**	**1569**
Men	**25 - 29**	46.0	52.1	313	59.1	39.1	391	90.3	9.7	206
	30 - 39	64.8	29.0	565	64.4	27.2	452	81.4	16.5	334
	40 - 49	59.2	24.0	417	71.6	16.4	517	86.3	9.6	415
	50 - 59	51.3	17.9	240	58.3	20.7	276	73.1	16.2	346
	60 - 69	50.0	22.7	260	60.4	17.8	225	62.9	17.0	194
	70+	58.0	30.3	264	70.3	21.1	266	77.0	17.4	282
	total	**56.5**	**29.6**	**2059**	**64.7**	**24.2**	**2127**	**79.2**	**14.2**	**1777**

Source: INAMI/RIZIV (file of profiles), 2007

*The inactivity percentage is computed for MDs who do not perform any act during the observed year.

** The small practice percentage is computed for MDs who perform between 1 and 1249 acts during the observed year.

***the total GP concern the unlicensed GPs who are potentially available (those not being dead, retired, living abroad, nor forbidden of practice) group nr 16 in appendix 1.8.

Table [7]: Inactivity or small practice percentage in the curative sector for licensed GPs: percentages among potentially available GPs by linguistic community and age-group between 1995 and 2005. INAMI/RIZIV database

		Year								
		1995			2000			2005		
		% inactive in curative care under AMI *	Small practice percentage	total GP	% inactive in curative care under AMI *	Small practice percentage	total GP	% inactive in curative care under AMI *	Small practice percentage	total GP
French	**25 - 29**	5.6	38.8	178	2.4	43.9	253	8.3	59.6	156
	30 - 39	3.6	20.8	1954	8.5	21.9	1228	9.0	29.2	1162
	40 - 49	2.8	14.6	2277	7.1	14.8	2681	10.5	18.8	2068
	50 - 59	2.5	15.1	716	4.9	14.2	1297	7.1	16.0	2215
	60 - 69	8.1	23.8	505	9.8	19.4	552	11.4	23.2	604
	70+	21.9	44.7	219	37.5	32.8	341	39.0	34.9	439
	total	**4.3**	**19.4**	**5849**	**8.6**	**18.6**	**6352**	**11.0**	**22.1**	**6644**
Flemish	**25 - 29**	6.2	42.5	292	10.5	41.2	381	9.2	46.1	284
	30 - 39	4.1	10.7	2353	10.2	11.4	1723	12.5	14.5	1534
	40 - 49	2.3	7.4	2219	6.6	6.7	2732	12.1	7.8	2345
	50 - 59	2.7	6.2	738	4.0	6.8	1292	7.6	7.3	2144
	60 - 69	5.0	15.3	621	10.7	16.6	633	10.1	13.5	661
	70+	28.2	44.5	220	34.9	36.8	361	47.1	26.7	558
	total	**4.3**	**12.1**	**6443**	**9.0**	**12.1**	**7122**	**13.2**	**12.4**	**7526**

Source: INAMI/RIZIV (file of profiles), 2007

*The inactivity percentage is computed for MDs who do not perform any act during the observed year.

5 ** The small practice percentage is computed for MDs who perform between 1 and 1249 acts during the observed year.

***the total GP concern the licensed GPs who are potentially available (those not being dead, retired, living abroad, nor forbidden of practice) group nr 16 in appendix 1.8

Difference between GPs and specialists

Inactivity in the curative sector under AMI: comparison for the licensed GPs and specialists by gender (INAMI/RIZIV database)

Is the situation of GPs different from that of the specialists? The global inactivity for specialists also increased for both genders (from 9% in 1995 to 12% in 2005 for the women and from 7.8% in 1995 to 15.5% in 2005 for the men) (figure 5). This increase was higher than for the licensed GPs (for men: from 3.9% to 10.7%; for women: from 5.6% to 15.4%).

However, the comparison of licensed GPs with specialists is gender-specific. Indeed, the percentage of young female specialists aged 30 to 39 was smaller than 11% in 2005 than the corresponding young female licensed GPs (14% in 2005) meanwhile the reverse was observed among males: the percentage of male specialists was more inactive (10% in 2005) than the male general practitioners (6% in 2005).

Figure [5]: [Specialists- women, inactivity in the curative sector under AMI: percentages between 1995 and 2005 among potentially available specialists (excluding those in training). (Source: INAMI/RIZIV database, Belgium, 2007)

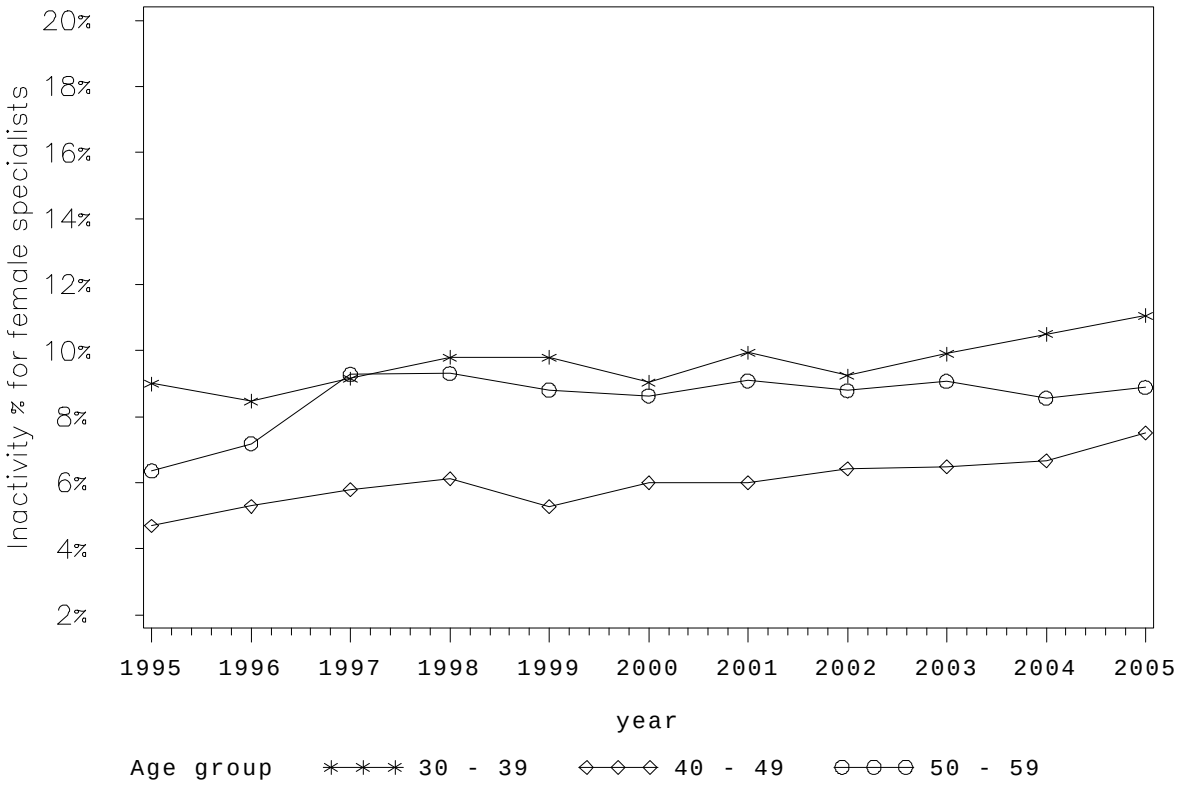
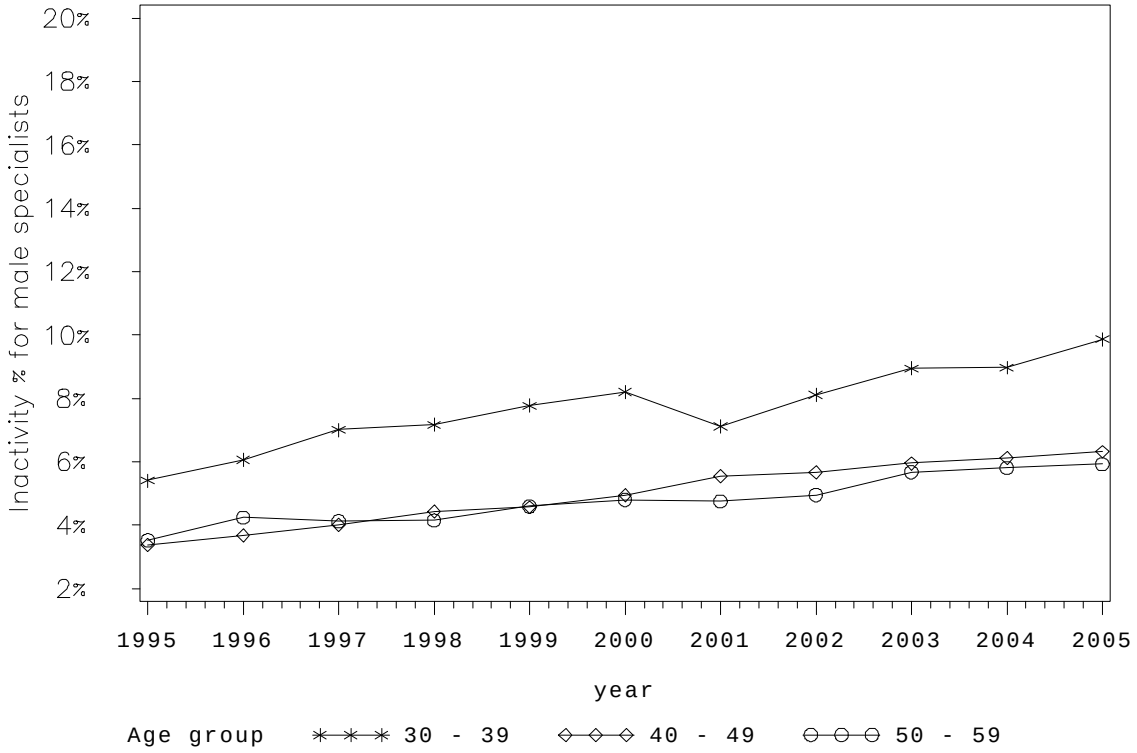


Figure [6]: [Specialists-Men: inactivity in the curative sector under AMI: percentages between 1995 and 2005 among potentially available specialists (excluding those in training) (source: INAMI/RIZIV database, Belgium, 2007]



5 For further details on figures 5 and 6, see table 8 in appendix 1.9.

Table [8]: [Inactivity or small practice percentage for specialists: numbers and percentages among potentially available specialists by gender and age-group between 1995 and 2005 for Belgium, INAMI/RIZIV database]

		year								
		1995			2000			2005		
		% inactive in curative care under AMI *	Small practice percentage**	total SP***	% inactive in curative care under AMI *	Small practice percentage	total SP	% inactive in curative care under AMI *	Small practice percentage	total SP
Women	**25 - 29**	[7.5]	[90.0]	40	[14.8]	[66.7]	27	[5.6]	[72.2]	36
	30 - 39	9.0	26.0	1733	9.0	24.8	2245	11.1	23.7	2613
	40 - 49	4.7	20.9	1299	6.0	15.4	1635	7.5	13.0	2026
	50 - 59	6.4	26.3	456	8.6	19.5	776	8.9	16.8	1271
	60 - 69	22.0	37.4	214	26.6	34.6	263	25.5	26.8	381
	70+	54.7	36.0	75	61.7	27.3	128	69.8	22.9	192
	total	**8.8**	**25.8**	**3817**	**10.3**	**21.7**	**5074**	**12.1**	**19.5**	**6519**
Men	**25 - 29**	18.8]	[75.0]	16	[30.0]	[50.0]	10	[12.5]	[50.0]	8
	30 - 39	5.4	21.5	3343	8.2	18.8	2875	9.9	21.8	2411
	40 - 49	3.4	9.0	3673	4.9	7.6	3924	6.3	7.2	3940
	50 - 59	3.5	10.8	2520	4.8	9.8	3019	5.9	9.4	3593
	60 - 69	9.7	31.2	1749	15.0	26.6	1899	15.1	23.2	2181
	70+	41.6	45.5	920	56.8	34.7	1301	65.0	27.8	1710
	total	**7.8**	**18.8**	**12221**	**12.3**	**16.1**	**13028**	**15.5**	**15.4**	**13843**

Source: INAMI/RIZIV (file of profiles), 2007

5 *The inactivity percentage is computed for MDs who do not perform any act during the observed year.

** The small practice percentage is computed for MDs who perform between 1 and 1249 acts during the observed year

***the total specialists concern those who are potentially available (those not being dead, retired, living abroad, nor forbidden of practice) group nr 16 in appendix 1.8
(Percentages for 25-29 are into brackets, because they are not reliable due to the small numbers)

Table [9]: Inactivity among unlicensed and licensed GPs, qualified between 1988 and 1990, active or not in the curative sector in 1994: numbers and percentages by linguistic community (Source: CIPMP database)

Qualified as GP in '88- '90		Situation in 1999			
Situation in 1994		Active		Inactive*	
		%	N	%	N
French	Active	91.23	281	6.82	21
	Inactive	7.41	2	92.59	25
Flemish	Active	91.30	451	7.89	39
	Inactive	6.59	6	93.41	85
Total	Active	91.27	732	7.48	60
	Inactive	6.78	8	93.22	110

Table [10]: Inactivity among specialists, qualified between 1988 and 1990, active or not in the curative sector in 1994: numbers and percentages by linguistic community (Source: CIPMP database)

Qualified as specialists in '88- '90		Situation in 1999			
Situation in 1994		Active		Inactive*	
		%	N	%	N
French	Active	98.91	723	0.96	7
	Inactive	40.00	2	60.00	3
Flemish	Active	99.31	715	0.69	5
	Inactive	53.33	8	46.67	7
Total	Active	99.10	1438	0.83	12
	Inactive	50.00	10	50.00	10

Table [11]: Inactivity among unlicensed and licensed GPs, qualified between 1993 and 1995, active or not in the curative sector in 1999: numbers and percentages by linguistic community (Source: CIPMP database)

Qualified as GP in '93- '95		Situation in 2005			
Situation in 1999		Active		Inactive*	
		%	N	%	N
French	Active	86.36	171	11.62	23
	Inactive	6.90	2	89.66	26
Flemish	Active	82.62	233	16.67	47
	Inactive	6.52	3	93.48	43
Total	Active	84.17	404	14.58	70
	Inactive	6.67	5	92.00	69

Table [12]: Inactivity among specialists, qualified between 1993 and 1995, active or not in the curative sector in 1999: numbers and percentages by linguistic community (Source: CIPMP database)

Qualified as specialists in '93- '95		Situation in 2005			
Situation in 1999		Active		Inactive*	
		%	N	%	N
French	Active	98.69	676	1.17	8
	Inactive	75.00	9	25.00	3
Flemish	Active	98.35	833	1.65	14
	Inactive	50.00	5	50.00	5
Total	Active	98.50	1509	1.44	22
	Inactive	63.64	14	36.36	8

Table [13]: Inactivity among specialists, qualified between 1988 and 1990, active or not in the curative sector in 1994: numbers and percentages by gender (Source: CIPMP database)

Qualified as specialists in '88- '90	Situation in 1999	
Situation in 1994	Active	Inactive*

		%	N	%	N
Women	**Active**	98.93	462	0.86	4
	Inactive	33.33	3	66.67	6
Men	**Active**	99.19	976	0.81	8
	Inactive	63.64	7	36.36	4
Total	**Active**	99.10	1438	0.83	12
	Inactive	50.00	10	50.00	10

*for whom no place of curative care has been registered

Table [14]: Inactivity among specialists, qualified between 1993 and 1995, active or not in the curative sector in 1999: numbers and percentages by gender (Source: CIPMP database)

Qualified as specialists in '93- '95		**Situation in 2005**			
Situation in 1999		**Active**		**Inactive***	
		%	N	%	N
Women	**Active**	98.35	595	1.49	9
	Inactive	69.23	9	30.77	4
Men	**Active**	98.60	914	1.40	13
	Inactive	55.56	5	44.44	4
Total	**Active**	98.50	1509	1.44	22
	Inactive	63.64	14	36.36	8

*for whom no place of curative care has been registered

APPENDIX 1.10. EXTERNAL VALIDATION BY OTHER DATA SOURCES

INAMI/RIZIV database

Reference	Subject	Method	Population and sample : denominator definition	Definition of inactivity: numerator definition	Results of the analyzed study	Results of our study	Observations (possible explanation of the difference)
Roberfroid D, Léonard C, Camberlin C, Stordeur S, Van De Voorde C, Vrijens F, 2008, L'offre de médecins en Belgique. Situation actuelle et défis.	Study of the Belgian workforce of 2005	Analysis of the INAMI/RIZIV database of 2005, Cadastre of Health Care Professions, Inter Mutuality's Agency	GP's registered in the cadastre of Health Care Professions, INAMI/ RIZIV database	Not having at least one clinical act registered in 2005	In 2005: 21804 general practitioners (total general practitioners in the cadastre), 18332 GP (active=being registered as active in the INAMI database in 2005), 11626 GP (having at least one curative act registered in 2005)	In 2005, 20163 general practitioners (all situation codes except deaths), 18217 active in the curative sector (situation code "active"), 12971 (having at least one curative act registered in 2005) (licensed and unlicensed)	Analysis of different sources of information
A.De Wever & N.Benahmed 2005, Analyse des pratiques réduites à charge de l'assurance maladie-invalidité en Communauté française de Belgique Tome I, Vol 2.	Analysis of medical population according to an INAMI/RIZIV database from 1996 to 2001	Evolution of graduates along different years and photography's of the general practitioners ' situation for different years	GP's with qualification codes 001 to 008, all situation codes (00 to 09)	No activity or activities under the benchmark of the accreditation (less than 1250 acts a year)	In 2001, 23.7% of the general practitioners had no curative activity	In 2000, 9% of the general practitioners had no curative activity	GPs with qualification codes 003, 004, 007 and 008 and situation code 01

Meeus, P. 2007, Radioscopie du médecin généraliste en 2005, INAMI.	Photography of the general practitioner in Belgium in 2005	Analysis of the 2005 INAMI database. Analysis of the percentage of MD who really practice the profession, what is the profile of the GPs who practice the general practice (nr of acts a year)	GP's with qualification codes 000 to 009, (all the situation codes) , recoding and crossing of the active file and the descriptive file	Less than 500 acts a year	For the denominator=20820 general practitioners from which: 8723=less than 500 curative acts a year 11157= more than 500 curative acts a year 708= GPs in training	Denominator= 20163 (all situation codes except deaths)	Crossing of different variables, no use of the situation codes

CIPMP database

Reference	Subject	Method	Population and sample : denominator definition	Definition of inactivity rate : numerator definition	Results of the analyzed study	Results of our study	Observations (possible explanation of the difference)
Antoine L; Lorant V; Deliège D, 2001 Charge de travail et "mal emploi" des médecins. Une enquête en Communauté française de Belgique	Study of the plethora of MDs in Belgium	Cohort study : Study of medical doctors since 15 to 19 years and 5 to 9 years on the labor market by questionnaire	5574 graduates as medical doctors	MDs characterized by 24 reliable indicators reflecting their "mal-emploi" (difficulties to enter the labor market)	Poorer activity condition was more common among those having 5 to 9 years of practice (25%) than among those having between 15 and 19 years of practice (18%)	13.5% of men and women qualified as GP between '93 and '95 had left the curative sector 4 to 6 years after their degree as MD. 14.5% of men and women of the same cohorts had left this sector 9 to 11 years after their degree as MD if they had been active in the curative sector 4 to 6 years after their degree as MD	
Van Baelen S, Goedhuys J, & Heyrman J (1998). Beroepskeuze van huisartsen vijf jaar na	Study of the professional path of young graduated MDs	Follow-up of a cohort of students in the medical section graduated in 1985, having the intention	Young medical doctors having the intention to study general practice after their degree as MD.	Difference between the intention to choose the general practice in the 7th year and being a	25% have left the general practice (but not all have left the curative		

afstuderen: promotie 1990 vergeleken met promotie 1985. Tijdschrift voor geneeskunde 54 (12), 824-828.		to do the training to become GP and observed in 1990 (5 yrs later) =by questionnaire	N=244 medical students interviewed (valid questionnaires)	GP 5 years later	sector) 75% : are still GP		
Van Baelen S, Goedhuys J, Heyrman J, Stroobants R, & Minguet C 2001, Het beroep van huisartsen die in 1995 afstudeerden anno 2000 Leuven.	Study of the professional path of young graduated MDs	Follow-up of a cohort of students in the medical section graduated in 1995, having the intention to do the training to become GP and observed in 2000 (5 yrs later) =by questionnaire	Young medical doctors having the intention to study general practice after their degree as MD. N=292 medical students interviewed (valid questionnaires)	Difference between the intention to choose for the general practice in the 7th year and being a GP 5 years later	30% have left the general practice (M : 25.3 and F : 29.4 but not all have left the curative sector) 70% are still GP (M : 74.7 and F : 70.6)	For the young qualified as MD between 1996 and 1998 observed in 2002: 15.41% males and 25.15% females are inactive in the curative sector	

Lorant,V., Violet, I., Artoisenet, C., 2007. An 8-years follow-up of professional activity of medical doctors in Belgium (1994-2002). Cah.Sociol.Demogr.Med 47 (2), 107-124.	Study of the professional path of young graduated MDs	Analysed database : CIPMP Longitudinal follow-up of MDs, less than 57 years, who graduated since more than 5 years, active in the curative sector	In 1994: n=19840	inactive in the curative sector	After 8 years (in 2002): 85% of MDs less than 45 years are still active in the curative sector 3.4% are in the non-curative sector 7.8% are in a mix of curative and non-curative activities 3.4% is undetermined		

APPENDIX 2: LITERATURE REVIEW ON FACTORS AND POLICIES INFLUENCING ATTRACTION, RECRUITMENT AND RETENTION OF GENERAL PRACTITIONERS (CHAPTER 2 AND 5)

APPENDIX 2.1.OTHER WEBSITES/DATA BASES CONSULTED

The researchers consulted the following data bases in a systematic way:

- CFHSR (Canada)
  http://www.chsrf.ca/home_f.php
- Cochrane Library (EPOC: Effective Practice and Organisation of Care)
  http://www.mrw.interscience.wiley.com/cochrane/cochrane_clsysrev_subjects_fs.html
- GRIS (U. Montréal) from 1995 onwards
  http://www.gris.umontreal.ca/actualite.asp
- HAS (France)
  http://www.has-sante.fr/portail/display.jsp?id=j_5
- Institut de Rercherche et de Documentation en Economie de la Santé (IRDES)
  http://www.irdes.fr/default.htm
- NICE
  http://www.nice.org.uk/
- OMS (rapport 2006:Le Rapport sur la santé dans le monde 2006 Travailler ensemble pour la santé)
  http://www.who.int/whr/2006/fr/index.html
- Observatoire européen des systèmes et des politiques de santé
  http://www.euro.who.int/observatory?language=French
- Observatoire National de la Démographie des Professions de Santé (ONDPS) (France)
  http://www.sante.gouv.fr/ondps/index.html
- Nederlands instituut voor onderzoek van de gezondheidszorg (NIVEL)
  http://www.nivel.nl/
- Organisation Mondiale des Médecins Généralistes (Wonca)
  http://www.woncaeurope2007.org/Wonca
- Cecil G. Sheps Center for Health Services Research (UNC)
  http://www.shepscenter.unc.edu/Research.html
- The Australian Medical Workforce Advisory Committee (AMWAC)
  http://www.health.nsw.gov.au/amwac/amwac/

APPENDIX 2.2. SEARCH AND SELECTION OF PAPERS

MEDLINE

Terms used

The following terms were selected using Pubmed: (primary care OR family physician* OR general practitioner*) AND (shortage OR intent to leave OR career exit OR turnover OR recruitment OR retention OR career choice)

Title/abstract screening

The initial list of 2798 references was firstly screened by one researcher (DS). References were included using the following criteria:

- Papers about policy / factors associated with recruitment and retention in GP (including practice in rural or deprived areas);
- Western European countries, Australia, New Zealand and North America

This first screening selected **180 articles**.

ISI web of Science

Terms used

The following terms were selected: (primary care OR family physician* OR general practitioner*) AND (shortage OR intent to leave OR career exit OR turnover OR recruitment OR retention)

Title/abstract screening

The initial list of 1450 references was independently reviewed by one researcher (DS). The same exclusion / inclusion criteria were used as for Pubmed.

The first selection Included **116 articles** (after having excluded duplicate records selected from pubmed)

On the 296 papers screened, a second selection was performed by DP and WD, based on the following inclusion criteria.

- Policies to attract – retain (student) GPs, either in medical schools or in the GP profession (including rural areas (I)
- Factors influencing the career choice and retention in the GP profession (excluding specific factors for deprived – rural areas as they were not applicable to this project) (II)

The papers were excluded using four broad categories of criteria:

1. Beyond the scope of the project as for example:
   - Specific population (Appalacheans, Arborigens, latino);
   - Specific context (influence of debts, Medicaid);
   - Specific factors related to rural or deprived areas (e.g., selection of students from rural population);
   - Descriptive statistics of foreign students/physician populations;
   - Description of the link between satisfaction and retention without any further additional explanatory analysis;
   - Immigrant physician;
   - Specific aspects of practice (content, quality);
   - Medical education (curriculum, content, program, training).
2. Not specific information relating to the GP specialty;

3. Other countries than Western Europe, North America, New Zealand and Australia;
4. No abstract available.

Tables 1 and 2 show the analysis of interrater agreement based on the above criteria

Table 1 : Interrater agreement : Cross Tabulation Report

	William		
Dominique	Accept	Reject	
Accept	127	3	130
Reject	48	118	166
Total	175	121	296
Kappa reliability test	**0,66**		

Table 2 : Interrater agreement : List Report

William	**Dominique**	**Count**
Accept	Accept	127
Accept	Reject	48
Reject	Accept	3
Reject	Reject	118

The 127 articles accepted by both raters were retained. The 51 articles accepted by only one rater underwent a second check: 25 were kept. The 33 articles rejected due to absence of abstract were evaluated in full text: 13 were kept.

So, a total **165 papers** are finally included for literature review.

Moreover, we used the references of the selected articles and consulted various Internet databases to extend the search. 72 articles or reports were added.

The summary of the selection of articles is in the flow chart in appendix 2.4.

Assessment of the papers

The assessment of the 110 papers about the factors was based on an instrument developed by an Australian group of authors (1) who made a systematic review on the policies for recruitment and retention in rural areas (see appendix 2.5). Their check list developed for the appraisal of papers fits to the purpose of this study as it takes account of the wide variety of paper designs published on this topic. Studies with a methodology as systematic reviews or RCTs are indeed scarce in the wide variety of articles that relate to the factors influencing the GP attraction, recruitment and retention.

We developed a modified version of the Australian Evidence-Based Rating Scale to make easier its use and to take the Belgian context into account:

- A category was added to enable evaluation of literature review.
- The categories were regarded as classes (low - high), not like an ordinal scale
- A criterion of utility of the information was added (is the information relevant/are the results usueful for a study aimed at developing policies on GPs attraction, recruitment, or retention in the Belgian context).

The table in appendix 2.6 appraises the quality of the papers and checks their utility with regard to the topic of this report.

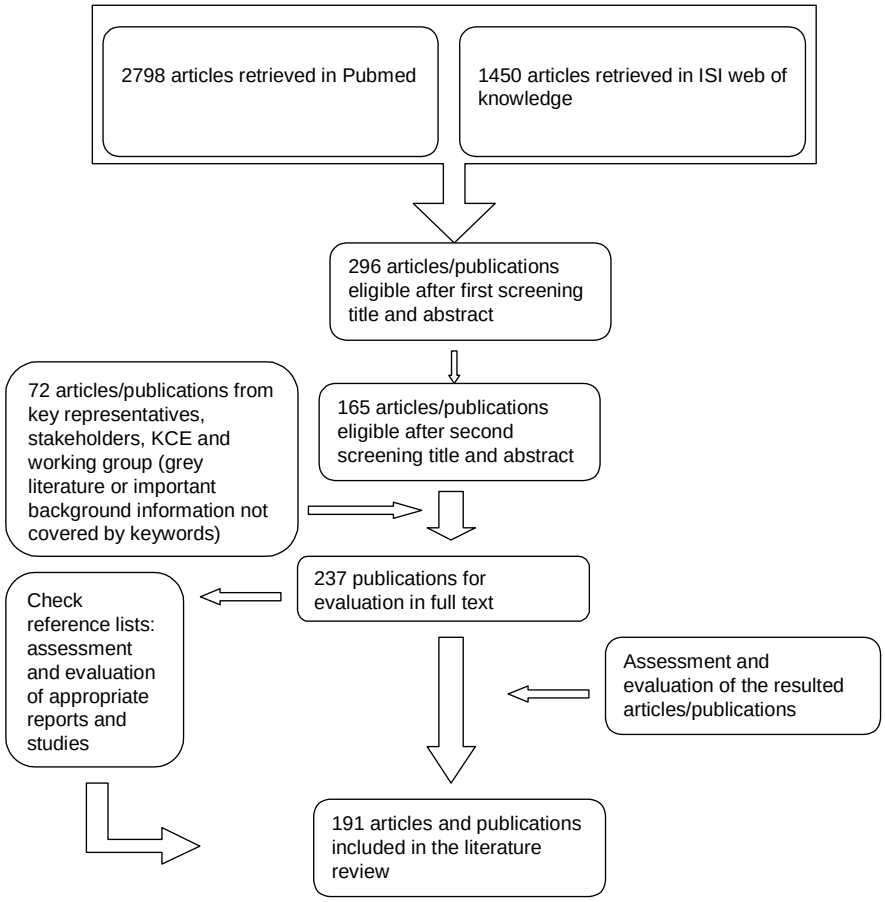
It is important to acknowledge that comparing and synthesising such heterogeneous research as this review involves is limited by the differing methodologies, sample compositions, definitions of attraction, recruitment and retention, data analyses, geographical locations and individual communities. Most studies are survey- or interview- based and we did not found systematic review of randomised control trials nor randomised control trial. As McDonald et al 2002 (2) point out, the best that can be aimed for in such a review is to gain a general overview of common topics and findings arising in the literature.

APPENDIX 2.3. SEARCH STRATEGY

Date	09/08/2007
Database (name + access ; eg Medline OVID)	ISI web of knowledge http://portal.isiknowledge.com/portal.cgi?DestApp=WOS&Func=Frame
Search Strategy (attention, for PubMed, check « Details »)	(primary care OR family physician* OR general practitioner*) AND (shortage OR intent to leave OR career exit OR turnover OR recruitment OR retention)
Note	

Date	17/08/2007
Database (name + access ; eg Medline OVID)	Pubmed http://www.ncbi.nlm.nih.gov/sites/entrez
Search Strategy (attention, for PubMed, check « Details »)	(primary care OR family physician* OR general practitioner*) AND (shortage OR intent to leave OR career exit OR turnover OR recruitment OR retention OR career choice) Limits: published in the last 10 years, Humans, Editorial, Review, Comparative Study, Evaluation Studies, Government Publications, Journal Article, Legislation, Research Support, N I H, Extramural, Research Support, N I H, Intramural, Research Support, Non U S Gov't, Research Support\, U S Gov't\, Non P H S, Research Support, U S Gov't, P H S, English, French, Dutch
Note	

APPENDIX 2.4.LITERATURE SEARCH: FLOW CHART



Thus, 46 publlications (237 publications for evaluation in full text – 191 articles and publication included in the literature review) were read but not integrated in the literature review either because they were off the subject or because they were too old.

1. Abelson J, Forest PG, Eyles J, Smith P, Martin E, Gauvin FP. Deliberations about deliberative methods: issues in the design and evaluation of public participation processes. Soc Sci Med 2003 Jul;57(2):239-51.
2. Ashworth M, Armstrong D. Sources and implications of dissatisfaction among new GPs in the inner-city. Family Practice 1999;16(1):18-22.
3. Benahmed N, De WA. [A medical reduced practice reimbursed by the sickness insurance is not synonymous with medical plethora in the French community of Belgium]. Rev Med Brux 2007 Jan;28(1):21-6.
4. Boulger JG. Family medicine education and rural health: a response to present and future needs. J Rural Health 1991;7(2):105-15.
5. Buchbinder SB, Wilson M, Melick CF, Powe NR. Primary care physician job satisfaction and turnover. American Journal of Managed Care 2001;7(7):701-13.
6. Buntinx F, Heyrman J, Beullens J, Vankrunkelsven P, Van den Oever R, Delesie L, et al. De behoefte aan huisartsen in België. K.U.Leuven,Academisch Centrum voor Huisartsgeneeskunde(ACHG), KULeuven, 45;1995.
7. Campens D. Eens huisarts altijd huisarts? Een onderzoek naar de carrieremogelijkheden van artsen die de prespecialisatie huisarts volgen in het vierde doktoraat. Rapport van het Academisch Centrum voor Huisartsgeneeskunde (ACHG), KULeuven, 1992.
8. Contandriopoulos AP, Fournier MA, Lemay A. Attitudes des médecins résidents et internes du Québec face au choix du lieu de pratique.1984, 140p.
9. Giovino JM. How to recruit new residency graduates. Fam Pract Manag 2002 Mar;9(3):33-6.
10. Han GS, Humphreys JS. Integration and retention of international medical graduates in rural communities - A typological analysis. Journal of Sociology 2006 Jun;42(2):189-207.
11. Hays RB, Veitch PC, Cheers B, Crossland L. Why doctors leave rural practice. Aust J Rural Health 1997 Nov;5(4):198-203.
12. Hueston WJ. Rekindling the fire of family medicine. Fam Pract Manag 2006 Jan;13(1):15-7.
13. Kuruvilla S, Mays N, Pleasant A, Walt G. Describing the impact of health research: a Research Impact Framework. BMC Health Serv Res 2006;6:134.
14. Kuzel AJ, Moore SS. Choosing a specialty during a generalist initiative: a focus group study. Fam Med 1999 Oct;31(9):641-6.
15. Lambert TW, Evans J, Goldacre MJ. Recruitment of UK-trained doctors into general practice: findings from national cohort studies. Br J Gen Pract 2002 May;52(478):364-72.
16. Landon BE, Reschovsky J, Blumenthal D. Changes in career satisfaction among primary care and specialist physicians, 1997-2001. JAMA 2003 Jan 22;289(4):442-9.
17. Larkins SL, Spillman M, Parison J, Hays RB, Vanlint J, Veitch C. Isolation, flexibility and change in vocational training for general practice: personal and educational problems experienced by general practice registrars in Australia. Fam Pract 2004 Oct;21(5):559-66.
18. Lavis J, Davies H, Oxman A, Denis JL, Golden-Biddle K, Ferlie E. Towards systematic reviews that inform health care management and policy-making. J Health Serv Res Policy 2005 Jul;10 Suppl 1:35-48.
19. Lawson SR, Hoban JD. Predicting career decisions in primary care medicine: a theoretical analysis. J Contin Educ Health Prof 2003;23(2):68-80.
20. Looney SW, Blondell RD, Gagel JR, Pentecost MW. Which medical school applicants will become generalists or rural-based physicians? J Ky Med Assoc 1998 May;96(5):189-93.
21. Macinko J, Starfield B, Shi L. The contribution of primary care systems to health outcomes within Organization for Economic Cooperation and Development (OECD) countries, 1970-1998. Health Serv Res 2003 Jun;38(3):831-65.
22. MacIsaac P, Snowdon T, Thompson R, Wilde T. Case management: a model for the recruitment of rural general practitioners. Aust J Rural Health 2000 Apr;8(2):111-5.
23. Matorin AA, Venegas-Samuels K, Ruiz P, Butler PM, Abdulla A. U.S. medical students choice of careers and its future impact on health care manpower. J Health Hum Serv Adm 2000;22(4):495-509.

24. Mays N, Pope C, Popay J. Systematically reviewing qualitative and quantitative evidence to inform management and policy-making in the health field. J Health Serv Res Policy 2005 Jul;10 Suppl 1:6-20.
25. McDougle L, Gabel LL, Stone L. Future of family medicine workforce in the United States. Family Practice 2006 Feb;23(1):8-9.
26. Morgan M, McKevitt C, Hudson M. GPs' employment of locum doctors and satisfaction with their service. Fam Pract 2000 Feb;17(1):53-5.
27. Moss PJ, Lambert TW, Goldacre MJ, Lee P. Reasons for considering leaving UK medicine: questionnaire study of junior doctors' comments. BMJ 2004 Nov 27;329(7477):1263.
28. Nugent A, Black N, Parsons B, Smith S, Murphy AW. A national census of Irish general practice training programme graduates 1990-1996. Ir Med J 2003 Jan;96(1):10-2.
29. Pathman DE, Fryer GE, Phillips RL, Smucny J, Miyoshi T, Green LA. National Health Service Corps staffing and the growth of the local rural non-NHSC primary care physician workforce. Journal of Rural Health 2006;22(4):285-93.
30. Pawson R, Greenhalgh T, Harvey G, Walshe K. Realist review--a new method of systematic review designed for complex policy interventions. J Health Serv Res Policy 2005 Jul;10 Suppl 1:21-34.
31. Perrin JM, Valvona J. Does increased physician supply affect quality of care? Health Aff (Millwood) 1986;5(4):63-72.
32. Phillips RL, Starfield B. Why does a US primary care physician workforce crisis matter? American Family Physician 2003;68(8):1494-+.
33. Politzer RM, Trible LQ, Robinson TD, Heard D, Weaver DL, Reig SM, et al. The National Health Service Corps for the 21st century. J Ambul Care Manage 2000 Jul;23(3):70-85.
34. Roberts A, Creech AH, Blue W. A multistate program to educate physicians: successful, economical, but endangered. Acad Med 1995 Jul;70(7):578-82.
35. Sheldon GF. Great expectations: the 21st century health workforce. American Journal of Surgery 2003;185(1):35-41.
36. Sinclair HK, Ritchie LD, Lee AJ. A future career in general practice? A longitudinal study of medical students and pre-registration house officers. Eur J Gen Pract 2006;12(3):120-7.
37. Spann SJ. Report on financing the new model of family medicine. Ann Fam Med 2004 Dec 2;2 Suppl 3:S1-21.
38. Stewart A, Catanzaro R. Can physician assistants be effective in the UK? Clin Med 2005 Jul;5(4):344-8.
39. Strasser RP, Hays RB, Kamien M, Carson D. Is Australian rural practice changing? Findings from the National Rural General Practice Study. Aust J Rural Health 2000 Aug;8(4):222-6.
40. Straus SE, Straus C, Tzanetos K. Career choice in academic medicine: systematic review. J Gen Intern Med 2006 Dec;21(12):1222-9.
41. Weil TP, Brenner G. Physician and other ambulatory care services in Germany. J Ambul Care Manage 1997 Jan;20(1):77-91.
42. Whynes DK, Baines DL. Income-based incentives in UK general practice. Health Policy 1998 Jan;43(1):15-31.
43. Williams ES, Konrad TR, Scheckler WE, Pathman DE, Linzer M, Mcmurray JE, et al. Understanding physicians' intentions to withdraw from practice: The role of job satisfaction, job stress, mental and physical health. Health Care Management Review 2001;26(1):7-19.
44. Woloschuk W, Tarrant M. Does a rural educational experience influence students' likelihood of rural practice? Impact of student background and gender. Med Educ 2002 Mar;36(3):241-7.
45. Wright B, Scott I, Woloschuk W, Brenneis F, Bradley J. Career choice of new medical students at three Canadian universities: family medicine versus specialty medicine. CMAJ 2004 Jun 22;170(13):1920-4.
46. Zhao C. One resident's view on the shortage of rural physicians. Can Fam Physician 2004 May;50:821-4.

APPENDIX 2.5. APPRAISAL TOOL FOR THE SELECTION OF ARTICLES

Evidence-Based Rating Scale (McDonald J, Bibby L, & Carroll S, 2002(3))

Level of Evidence	Criteria
I	Systematic review of randomised control trials
II	Randomised control trial
III-1	Cohort study (comparison groups) Large sample size relative to population Data set analysis Regression models
III-2	Same as above except small sample size Content analysis or lack of statistical analysis
IV-1	Survey-based Representative sample size Multiple regression analysis or factor analysis High RR (ie over 60%, but consider sample size) Closed questions Comparison group/s
IV-2	Survey-based Representative sample size Chi-square & t-tests (weaker analysis that MR) Open &/or closed questions No comparison group
IV-3	Survey-based Representative sample size No statistical analysis No comparison group
V-1	High level qualitative studies (ie. Meet all/majority of essential criteria for rigorous qualitative research) Interviews – structured (best) Appropriate sample size Thorough explanation of method & data analysis Formulated theory (optional) Content analysis Raw data included as examples
V-2	Surveys with extremely low n – very poorly completed survey studies Medium level qualitative studies (ie. meets most essential criteria for good qualitative research) Structured or Semi-structured interviews Thorough method explanation Model developed (optional) Content analysis (by computer program or other … Medium/appropriate sample size
V-3	Low level qualitative research (ie. fails to meet essential criteria for rigorous qualitative research) Interviews (unspecified) Low or unrepresentative sample size Structured or semi-structured questions No data analysis explanation Community meetings with key stakeholders Content analysis (not described) Unspecified sample size Referenced expert opinion

Modified Evidence-Based Rating Scale

Level of Evidence	Criteria
I - 1	High level systematic review of randomised control trials (no instance)
I - 2	Low level systematic review of randomised control trials (no instance)
II - 1	High level systematic literature review (eg : cohort studies)
II - 2	Low level systematic literature review (available literature)
III - 1	High level randomised control trial (no instance)
III - 2	Low level randomised control trial (no instance)
IV - 1	High level cohort study (comparison groups)
IV - 2	Low level cohort study (no comparison groups)
V - 1	High level survey-based
V - 2	Low level survey-based
VI - 1	High level qualitative studies (including narrative literature review)
VI - 2	Low level qualitative studies

APPENDIX 2.6. SUMMARY TABLES FOR THE QUALITY AND UTILITY OF THE PAPERS

Appraisal tool used for the quality of the papers and their utility of with regard to the topic of this report

First author	Year	Title	Publication	Location	Study & sampling procedures	Level of evidence	is the information relevant/are the results usueful ?
Appleton, House, & Dowell	1998	A survey of job satisfaction, sources of stress and psychological symptoms among general practitioners in Leeds	British Journal of General Practice	Leeds England	Study : Postal questionnaire survey Sample : All GP principals on the Leeds Health Authority list in 1993. (285/406 GPs, response rate 70%)	V - 2	-
Avgerinos, Msaouel, Koussidis, Keramaris, Bessas, & Gourgoulianis	2006	Greek medical students' career choices indicate strong tendency towards specialization and training abroad	Health Policy	Athens, Thessaly, Ioannina, Patras Greece	Study : A structured, written questionnaire survey Sample : 591 students of four (Athens, Thessaly, Ioannina, Patras) out of seven Greek Medical Schools (response rate 90.9%, 591/650). The sample included students of all academic years. A number that represents approximately 12% of the total number of students enrolled in all 6 academic years.	V - 2	+
Backer, McIlvain, Paulman, & Ramaekers	2006	The characteristics of successful family physicians in rural Nebraska: A qualitative study of physician interviews	Journal of Rural Health	Nebraska USA	Study : Qualitative study using semistructured interviews. Sample : 11 Nebraska family physicians successfully practicing in rural (frontier) areas	VI - 2	-
Barnett, Gareis, & Carr	2005	Career satisfaction and retention of a sample of women physicians who work reduced hours	Journal of Womens Health	Boston USA	Study : Face-to-face closed-ended + mailed questionnaire. Sample : a random sample of female physicians between 25 and 50 years of age working within 25 miles of Boston, whose names were obtained from the Board of Registration in Medicine in Massachusetts. The final sample consisted of 51 full-time doctors and 47 reduced hours doctors. Response rate: 49,5%	V - 2	+

Basco, Buchbinder, Duggan, & Wilson	1998	Associations between primary care-oriented practices in medical school admission and the practice intentions of matriculants	Academic Medicine	USA	Study : Cross-sectional, secondary analyses of databases from the Association of American Medical Colleges (AAMC). Sample : 120 U.S. medical schools (95%) completed the AAMC's Survey of Generalist Physician Initiatives in either 1993 or 1994. Analysis : multivariable analysis	V - 1	+
Basco, Jr., Buchbinder, Duggan, & Wilson	1999	Relationship between primary care practices in medical school admission and the matriculation of underrepresented-minority and female applicants	Acad.Med.	USA	Study : Cross-sectional, secondary analyses of databases from the Association of American Medical Colleges (AAMC). Sample : 120 U.S. medical schools (95%) completed the 1994 school survey. Analysis : multivariable analysis	V - 1	+
Bazargan, Lindstrom, Dakak, Ani, Wolf, & Edelstein	2006	Impact of desire to work in underserved communities on selection of specialty among fourth-year medical students	J.Natl.Med.Assoc.	USA	Study : A cross-sectional, web-based survey Sample : 668 fourth-year students from 32 medical schools. The link to the survey was sent to the associate deans of student affairs (or equivalent) of all 126 U.S. medical schools, with a request for permission to survey their students. Thirty-two medical schools (25.4%) agreed to participate in the study. Responses represented 19% of fourth-year students from the 32 schools that participated in this study.	V - 1	++
Beaulieu, Dory, Pestiaux, Pouchain, Gay, Rocher, & Boucher	2006	General practice as seen through the eyes of general practice trainees: a qualitative study	Scand.J.Prim.Health Care	Bruxelles, Paris, Bordeaux Belgium France	Study : Focus-group Sample : 28 trainees took part (16 from Belgium in one Belgian medical schools and 12 from France in two French medical schools).	VI - 2	+
Bellman	2002	Whole-system evaluation research of a scheme to support inner city recruitment and retention of GPs	Family Practice	London England	Study : Semi-structured interviews, non-participant observations in the practice, audio-taped meetings and personal journals. Sample : 34 stakeholders in the academic department 14 GPs Assistants' (GPAs) who participated in the nine month scheme 5 GPAs from a previous year's scheme	VI - 2	-

Beulens, Struyf, Degryse, Heyrman	2006	Determinanten van de carrièrekeuze in de perceptie van geneeskundstudenten	Tidschr. voor Geneeskunde	Leuven Belgium	Study : questionnaire survey Sample : 167 third-year students from the Catholic university of Leuven (KUL). Response rate : 91% (167/181)	V - 2	++
Blades, Ferguson, Richardson, & Redfern	2000	A study of junior doctors to investigate the factors that influence career decisions	Br.J.Gen.Pract.	Northern Deanery United Kingdom	Study : Questionnaire survey Sample : Convenience sample of registrars from across the Northern Deanery in January 1997. Responses were received from 76% of the 147 GPRs and 63% of the 100 PRHOs in the region.	V - 2	+
Block, Clark-Chiarelli, & Singer	1998	Mixed messages about primary care in the culture of U.S. medical schools	Acad.Med.	USA	Study : Telephone interviews + Focus groups Sample : 264 fourth-year students and 500 clinical faculty members at 59 medical schools using data obtained in 1993 to 1994 from telephone interviews of a national stratified probability sample of students (response rate 90%) and faculty (response rate 81%) Analysis : Multilevel analysis	VI - 1	++
Bonsor, Gibbs, & Woodward	1998	Vocational training and beyond - listening to voices from a void	British Journal of General Practice	United Kingdom	Study : Discussion paper Sample : Viewpoint of a doctor who has recently undergone general practice vocational training	VI - 2	+
Boulger	2000	Minnesota bound. Stability of practice location among UMD family physicians in Minnesota	Minn.Med.	Minnesota USA	Study : Survey using alumni records Sample : All students (n=270) who matriculated at the University of Minnesota, Duluth School of Medicine between 1972 and 1992 and who have entered practice.	IV - 2	-

Bowman & Penrod	1998	Family practice residency programs and the graduation of rural family physicians	Fam.Med.	USA	Study :mail questionnaire survey Sample : Researchers obtained information about family residency programs from three sources. First, family practice residency directors were surveyed about program characteristics, including opportunities for rural experiences, practice locations of graduates, numbers of faculty who had been rural physicians, and obstetrical training, Second, data regarding program characteristics was obtained from the 1992 and 1993 Directories of Family Practice Residency Programs published by the American Academy of Family Practice. Finally, data from the U.S. Census was obtained regarding the population of the city and state of the program site. Response rate: 96% (352/367 programs)	V - 1	+
Brooks, Mardon, & Clawson	2003	The rural physician workforce in Florida: A survey of US- and foreign-born primary care physicians	Journal of Rural Health	Florida USA	Study : Cross-sectional mailed surveys Sample : All of Florida's rural primary care physicians (n=399) and a 10% sampling (n=1236) of urban and suburban primary care physicians. The overall number of usable responses was 1000 (61%) (272 rural, 385 urban, 343 suburban)	V - 1	+
Brooks, Walsh, Mardon, Lewis, & Clawson	2002	The roles of nature and nurture in the recruitment and retention of primary care physicians in rural areas: A review of the literature	Academic Medicine	USA	Study : A systematic review of factors associated with recruitment and retention of primary care physicians in rural areas. Sample : Using PubMed and Medline databases, 21 quantitative articles analyzing recruitment and retention of primary care physicians in rural areas from 1990 to 2000 were found.	II - 1	++
Cahill	2005	Practising in northern Ontario. Why young physicians are choosing Timmins	Can.Fam.Physician	Ontario Canada	Study : Interviews Sample : 4 health care professionals at Timmins and Distric Hospital The medical Program Director of the continuing Care Program Two physicians A GP anesthetist	VI - 2	-

Campos-Outcalt, Senf, & Kutob	2004	A comparison of primary care graduates from schools with increasing production of family physicians to those from schools with decreasing production	Fam.Med.	USA	Study : Mailed questionnaire survey Sample : All physicians who graduated (n = 1428) from 24 US medical schools in 1997–1999, and who entered a family medicine residency, and a randomly selected equal number of graduates (n = 1247) from the same years who entered other primary care specialties. The overall response rate: 51.5% (Finally, 1457 questionnaires were completed)	V - 1	++
Casey, Owens, Gross, & Dixon	2005	Rural Kentucky's physician shortage: strategies for producing, recruiting, and retaining primary care providers within a medically underserved region	J.Ky.Med.Assoc.	Kentucky USA	Study : Narrative literature review	VI - 1	++
Chambers, Colthart, & McKinstry	2004	Scottish general practitioners' willingness to take part in a post-retirement retention scheme: questionnaire survey	British Medical Journal	Scotland	Study : Questionnaire survey Sample : All Scottish general practitioner principals over the age of 55. Response rate : 72% (348/487)	V - 1	-
Connelly, Sullivan, Peters, Clark-Chiarelli, Zotov, Martin, Simon, Singer, & Block	2003	Variation in predictors of primary care career choice by year and stage of training	J.Gen.Intern.Med.	USA	Study : 2 cross sectional telephone surveys and a panel survey Sample : National probability sample of fourth-year medical students in 1994 (n=306 ; Response rate : 92,5%) and 1997 (n=219 ; Response rate : 86,6%). National probability sample of second-year residents medical students in 1994 (n=635 ; Response rate : 77,2%) and 1997 (n=483 ; Response rate : 78,6%). Of the fourth-year students interviewed in 1994, 241 (78,5%) were reinterviewed as third-year residents in 1997.	V - 1 And IV - 2	++
Corbett, Jr., Owen, & Hayden	2002	Effect of a second-year primary care preceptorship on medical students' career plans	South Med.J.	Virginia USA	Study : questionnaire mail survey Sample : For each of 3 years (1993, 1994 and 1995), surveys were mailed to all of the second year students from the University of Virginia, 2 week after their perceptorship experience (n=406).	V - 2	+

Curran & Rourke	2004	The role of medical education in the recruitment and retention of rural physicians	Medical Teacher	Canada	Study : Narrative literature review	VI - 1	++
Del Mar, Freeman, & Van	2003	"Only a GP?": is the solution to the general practice crisis intellectual?	Med.J.Aust.	Australia	Study : Narrative literature review	VI - 1	+
DeWitt, Curtis, & Burke	1998	What influences career choices among graduates of a primary care training program?	J.Gen.Intern.Med.	Washington USA	Study : Structured mailed survey and a semistructured telephone interview Sample : 88 residency graduates of the University of Washington who completed training between 1979 and 1993, (response rate : 96% (88/92))	V - 2 And VI - 2	++
Ellsbury, Baldwin, Johnson, Runyan, & Hart	2002	Gender-related factors in the recruitment of physicians to the rural Northwest	J.Am.Board Fam.Pract.	Alaska, Idaho, Montana, Oregon, Washington, Wyomming USA	Study : Cross-sectional mailed questionnaire survey Sample : 77 men and 37 women (response rate 61%) physicians successfully recruited between 1992 and 1999 to towns of 10000 or less in six states in Pacific Northwest.	V - 2	+
Fairhurst & May	2006	What general practitioners find satisfying in their work: implications for health care system reform	Ann.Fam.Med.	United Kingdom	Study : Audio recordings of patient visits and semistructured interviews Sample : 19 general practitioners (the participants were invited to record between 25 and 30 office visits)	VI - 2	-
Felix, Shepherd, & Stewart	2003	Recruitment of rural health care providers: A regional recruiter strategy	Journal of Rural Health	Arkansas USA	Study : Narrative literature review	VI - 1	++
Fournier & Henderson	2005	Incentives and physician specialty choice: A case study of Florida's Program in Medical Sciences	Inquiry-the Journal of Health Care Organization Provision and Financing	Florida USA	Study : Comparisons groups using data's from the American Medical Association (AMA). Sample : 2107 graduates for the calendar years 1972 - 1992 from the University of Florida's College of Medicine were evaluated ; 406 of these were from Florida's Program in Medical Sciences (PIMS) (the treatment group) and 1701 completed their medical studies entirely at the UF campus (the control group).	V - 2	+

Gardiner, Sexton, Durbridge, & Garrard	2005	The role of psychological well-being in retaining rural general practitioners	Aust.J.Rural Health	South Australia Australia	Study : mailed questionnaire survey Sample : 187 rural GPs (response rate 61% (187/336)) working in rural practice, as identified by the Rural Doctors Workforce Agency (RDWA).	V - 2	+
Gardiner, Sexton, Kearns, & Marshall	2006	Impact of support initiatives on retaining rural general practitioners	Aust.J.Rural Health	South Australia Australia	Study : mailed questionnaire survey Sample : 221 GPs working in rural practice (response rate 55% (221/404)).	V - 2	+
Garibaldi, Popkave, & Bylsma	2005	Career plans for trainees in internal medicine residency programs	Acad.Med.	USA	Study : Questionnaire survey (Resident Survey) Sample : all residents participating in the Internal Medicine In-Training Examination (IM-ITE) from 1998 to 2003. Respondents : 1998 : 4008 1999 : 4338 2000 : 4562 2001 : 4565 2002 : 3495 2003 : 4732	V - 1	++
Gavin & Esmail	2002	Solving the recruitment crisis in UK general practice: Time to consider physician assistants?	Social Policy & Administration	United Kingdom	Study : Narrative literature review	VI -1	++
Godwin, Hodgetts, Wilson, Pong, & Najgebauer	1998	Practice choices of graduating family medicine residents	Can.Fam.Physician	Kingston Canada	Study : mailed questionnaire survey Sample : 230 (76%) of the 303 graduates from 1977 to 1991 of the Queen's University family medicine residency program	V - 2	-
Goertzen	2005	The four-legged kitchen stool - Recruitment and retention of rural family physicians	Canadian Family Physician	Canada	Study : editorial	VI - 2	+

Goldacre, Davidson, & Lambert	2007	Career preferences of graduate and non-graduate entrants to medical schools in the UK	Med.Educ.	United Kingdom	Study : Cohort study using postal questionnaire Sample : Medical qualifiers from all UK medical schools in 1999, 2000 and 2002, surveyed 1 year after qualification, and qualifiers of 1999 and 2000, surveyed 3 years after qualification. There were 13 088 doctors in the 3 cohorts surveyed during the pre-registration year, and 8652 doctors in the 2 cohorts surveyed 3 years after graduation. Excluding small numbers who had qualified but had never registered to practice, or who replied but decline to participate, and those who had died, the response rates were 65% (8478/13 050) at the end of the pre-registration year, and 64% (5518/8600) at the end of the third year.	IV - 1	+
Grayson, Klein, & Franke	2001	Impact of a first-year primary care experience on residency choice	J.Gen.Intern.Med.	New York USA	Study : Retrospective cohort study Sample : 3 groups were formed with the 6 academic year (1988-89 through 1993-94) of all New York Medical College first year students : The students selected for the course "Introduction to Primary Care (IPC)" (n = 282) Students who wanted but were not selected for IPC (n = 398) Students who chose another elective (n = 245)	IV - 1	+
Harris, Proudfoot, Jayasinghe, Holton, Davies, Amoroso, Bubner, & Beilby	2007	Job satisfaction of staff and the team environment in Australian general practice	Medical Journal of Australia	Australia	Study : Cross-sectional multipractice study based on a self-completed survey Sample : 626 practice staff (response rate 65%) in 96 general practices in five states and the Australian Capital Territory between December 2003 and October 2004.	V - 1	+
Hays, Wynd, Veitch, & Crossland	2003	Getting the balance right? GPs who chose to stay in rural practice	Aust.J.Rural Health	Queensland Australia	Study : semi-structured telephone interviews Sample : 13 rural doctors in North Queensland	VI - 2	+

Howe & Ives	2001	Does community-based experience alter career preference? New evidence from a prospective longitudinal cohort study of undergraduate medical students	Medical Education	Sheffield England	Study : cohort study using questionnaire Sample : Questionnaire to medical student cohort from Sheffield Medical School before and after two consecutive levels of course, one with, and the other prior to, substantial community placement. The questionnaires were given out at the start and end of the year for each cohort. Depending on the student rotation in year 4, there was a temporal gap of a maximum of 9 months from the completion of the second questionnaire, and a minimum of 3 months. Response rate averaged > 70%, with 504 responses from 692 questionnaires distributed	IV - 2	+
Hsueh, Wilkinson, & Bills	2004	What evidence-based undergraduate interventions promote rural health?	N.Z.Med.J.	New Zealand	Study : Literature review Sample : 22 articles published between 1961 and 2001 on 10 successful medical undergraduate courses/programmes.	II - 2	++
Hueston, Bradford, & Shepard	2004	Family medicine and hospital specialty match rates: does the economy have anything to do with it?	Fam.Med.	USA	Study : Survey using data's from three sources. Data between 1978 and 2001 (22-year time period) provided by the Association of American Medical Colleges (AAMC), the US Bureau of Labor statistics and the US Statistical Abstract. Sample : All seniors graduating from US medical schools during the time period stated. Analysis : linear regression models	V - 1	-
Humphreys, Jones, Jones, Hugo, Bamford, & Taylor	2001	A critical review of rural medical workforce retention in Australia	Aust.Health Rev.	Australia	Study : Systematic literature review using Australian and international databases. Sample : The time period covered was form 1991 to 2001. 28 references were relevant for analysis.	II - 1	++
Humphreys & Rolley	1998	A modified framework for rural general practice: The importance of recruitment and retention	Social Science & Medicine	Australia	Study : Narrative literature review	VI - 1	+
Humphreys, Jones, Jones, & Mara	2002	Workforce retention in rural and remote Australia: determining the factors that influence length of practice	Medical Journal of Australia	Australia	Study : National questionnaire survey Sample : A stratified sample of all rural GPs practicing during April-June 2001 (1400 GPs)	V - 1	++

Janes & Dowell	2004	New Zealand Rural General Practitioners 1999 Survey--Part 3: rural general practitioners speak out	N.Z.Med.J.	New Zealand	Study : postal questionnaire survey Sample : All rural general practioners in New Zealand. 338 GPs were completed questionnaires (response rate 75%)	V - 1	++
Johnson, Hasler, Hayden, Mathie, & Dobbie	1998	The career outcomes for doctors completing general practice vocational training 1990-1995	Br.J.Gen.Pract.	Mersey, North West, Oxford United Kingdom	Study : postal questionnaire survey Sample : All doctors completing vocational training during the period 1990-1995 in three region of the United Kingdom. (921 GPs questionnaires were returned, response rate 64,8%)	V - 1	+
Jordan, Brown, & Russell	2003	Choosing family medicine. What influences medical students?	Can.Fam.Physician	London England	Study : Qualitative study using semistructured interviews. Sample : 11 of the 29 graduating of the University of Western Ontario (UWO) medical students matched to Canadian family medicine residency programs beginning in July 2001	VI - 2	+
Joyce, Veitch, & Crossland	2003	Professional and social support networks of rural general practitioners	Aust.J.Rural Health	Queensland Australia	Study : Qualitative study using in-depth interviews. Sample : GPs in rural Queensland : 7 long term rural GPs (more than 5 years) 9 more recent arrivals (less than 5 years)	VI - 2	++
Kahn, Markert, Lopez, Specter, Randall, & Krane	2006	Is medical student choice of a primary care residency influenced by debt?	MedGenMed.	Louisiana, Florida, New Orleans USA	Study : Cross sectional research study Sample : 2001-2005 graduates from 3 US medical Schools over the five-years study period (n = 2022)	V - 2	+
Kahn, Jr., Schmittling, Garner, & Graham	1998	Entry of US medical school graduates into family practice residencies: 1997-1998 and 3-year summary	Fam.Med.	USA	Study : Result of the National Resident Matching Program	V - 1	-
Kahn, Jr., Schmittling, & Graham	1999	Results of the 1999 National Resident Matching Program: family practice	Fam.Med.	USA	Study : Result of the National Resident Matching Program	V - 1	-
Kearns, Myers, Adair, Coster, & Coster	2006	What makes 'place' attractive to overseas-trained doctors in rural New Zealand?	Health & Social Care in the Community	New Zealand	Study : Qualitative study using in-depth interviews. Sample : 9 overseas-trained medical practioners within rural area in New Zealand during 2004	VI - 2	-

Kiker & Zeh	1998	Relative income expectations, expected malpractice premium costs, and other determinants of physician specialty choice	J.Health Soc.Behav.	USA	Study : Questionnaire survey Sample : The medical students who completed the Association of American Medical Colleges' Medical School Graduation Questionnaire and graduated from medical school in 1995 (81,7% of the 15888 graduates were completed the questionnaire).	V - 1	++
Landon, Reschovsky, Pham, & Blumenthal	2006	Leaving medicine - The consequences of physician dissatisfaction	Medical Care	USA	Study : nationally representative telephone survey (prospective study) Sample : Data for this study are from the first 2 rounds of the Community Tracking Study CTS Physician Survey, supplemented with information on the "work status" of these survey respondents 2 years later. The CTS Physician Survey is a series of nationally representative telephone surveys of physicians conducted in 1996–1997 (Round 1, 12,385 respondents, response rate 65%) and 1998–1999 (Round 2, 12,280 respondents, response rate 61%). The final analytic sample consist of 16581 physicians from the first and the second rounds of the CTS survey whose work status was determined 2 years later.	IV - 1	-
Laven, Beilby, Wilkinson, & McElroy	2003	Factors associated with rural practice among Australian-trained general practitioners	Medical Journal of Australia	Australia	Study : Observational, retrospective, case-control study using a self administered questionnaire distributed by mail Sample : 2414 Australian-trained rural and urban GPs (response rate 71,1%)	V - 1	-
Littlewood, Ypinazar, Margolis, Scherpbier, Spencer, & Dornan	2005	Early practical experience and the social responsiveness of clinical education: systematic review	BMJ	United Kingdom	Study : A systematic review Sample : All empirical studies (verifiable, observational data). The review covered the decade 1992-2001. 38 studies were included in the study.	II - 2	+
Lloyd & Leese	2006	Career intentions and preferences of GP registrars in Yorkshire	British Journal of General Practice	Yorkshire England	Study : Postal questionnaire survey Sample : All GP registrars (trainees) on the Yorkshire deanery database in April 2004. Response rate: 60% (207/347).	V - 2	-

Lynch, Newton, Grayson, & Whitley	1998	Influence of medical school on medical students' opinions about primary care practice	Acad.Med.	New York, East Carolina USA	Study : Cross-sectional survey using self administered questionnaire Sample : Medical students at New York Medical College (NYMC), a private school, and at East Caroline University School of Medicine (ECUSOM), a public school, over three years (1993-94, 1994-95 and 1995-96). Three consecutive classes of first-year students from both schools (n=807), two consecutive classes of fourth-year NYMC students (n=373), and three consecutive classes of fourth-year ECUSOM students (n=221). The Overall response rate: 74% (1035 returned questionnaires)	V - 1	-
Lynch & Willis	2000	Can a 3-day preceptorship change first-year medical students' opinions about living and working in small towns?	Family Medicine	North Carolina USA	Study : Questionnaire survey Sample : 102 first-year medical students (two classes) from a public medical school located in a predominantly rural region of the south-eastern United States. (response rate : 74% (102/137))	V - 2	+
Lynch, Teplin, Willis, Pathman, Larsen, Steiner, & Bernstein	2001	Interim evaluation of the rural health scholars program	Teaching and Learning in Medicine	North Carolina, East Carolina USA	Study : Questionnaire survey. Comparisons between one group who participated in The Rural Health Scholars Program (RHSP) and one group who did not. Sample : Broby School of Medicine at East Carolina University (ECU) : 151 non scholars and 24 scholars (response rate : 80%) University of North Carolina School of Medicine (UNC) : 338 non scholars and 19 scholars (response rate : 100%)	V - 2	+
MacIsaac, Snowdon, Thompson, Crossland, & Veitch	2000	General practitioners leaving rural practice in Western Victoria	Aust.J.Rural Health	Victoria Australia	Study : Telephone interviews. Sample : 20 Rural Victorian GPs identified by the West Vic Division who had left the division within the last 10 years. Finally, 10 GPs were completed the interviews (response rate : 50% (10/20))	VI - 2	+

Mariolis, Mihas, Alevizos, Gizlis, Mariolis, Marayiannis, Tountas, Stefanadis, Philalithis, & Creatsas	2007	General Practice as a career choice among undergraduate medical students in Greece	BMC Med.Educ.	Athens Greece	Study : Self-reported questionnaire survey. Sample : All medical students who were in the sixth final year of their academic studies and all graduating students who had not successfully completed their studies during the predefined 6 years of the Athens' medical school curriculum. Response rate was 82,5% with 1021 questionnaires out of 1237 completed and returned.	V - 2	+
Mateen	2006	Future practice location and satisfaction with rural medical education: survey of medical students	Can.Fam.Physician	Saskatchewan Canada	Study : Survey questionnaire Sample : All students (n=228) enrolled in the 2003-2004 academic year at the University of Saskatchewan were invited to participate in the study. Response rate was 54% with 122 medical students who are completed the questionnaire.	V - 2	-
Mayo & Mathews	2006	Spousal perspectives on factors influencing recruitment and retention of rural family physicians	Can.J.Rural Med.	Newfoundland, Labrador Canada	Study : interviews Sample : 13 interviews were conducted with spouses of rural physicians	VI - 2	+
Mayorova, Stevens, Scherpbier, van der Velden, & Van der Zee	2005	Gender-related differences in general practice preferences: longitudinal evidence from the Netherlands 1982-2001	Health Policy	Netherlands	Study : Longitudinal cohort study using national postal questionnaire Sample : All graduate GPs in the Netherlands between 1982 and 2001. The data source for this article, provided by the Netherlands Institute of Health Services Research (NIVEL) in Utrecht. The Total number of GPs participants is 3750.The Overall mean response rate through the year was 94%.	IV - 1	+
Miettola, Mantyselka, & Vaskilampi	2005	Doctor-patient interaction in Finnish primary health care as perceived by first year medical students	BMC Med.Educ.	Kuopio Finland	Study : analyze of written reports (In 2002, 2003 and 2004) (students in the University of Kuopio observed the work of GPs in eastern and central Finland. As a part of their assignment, they wrote a short report of their experiences). Sample : Of the 133 first year students in 2002, 127 students (95.5 % of all in the class) submitted their reports. In the reference years 2003 and 2004, we received reports from 118 students (92.2% of 128 students) and 130 students (98.5% of 132 students) respectively.	VI - 2	+

Moore, Gale, Dew, & Simmers	2006	Student debt amongst junior doctors in New Zealand; part 2: effects on intentions and workforce	N.Z.Med.J.	New Zealand	Study : Questionnaire (Likert scales of agreement) survey Sample : All 296 New-Zealand-graduate first-year house officers practicing in New-Zealand at the end of 2004. A total of 158 out of 296 questionnaire recipients responded (53%).	V - 2	+
Newton, Grayson, & Whitley	1998	What predicts medical student career choice?	J.Gen.Intern.Med.	New York, East Carolina USA	Study : Cross sectional questionnaire survey. Sample : Three consecutive graduating classes (1995, 1996, and 1997) at New York Medical College (NYMC) and East Carolina University School of Medicine (ECUSOM). The overall response rate was 81,8% (649 of 793), and 565 (71,2%) provided complete responses.	V - 2	+
Newton, Grayson, & Thompson	2005	The variable influence of lifestyle and income on medical students' career specialty choices: data from two U.S. medical schools, 1998-2004	Acad.Med.	New York, East Carolina USA	Study : questionnaire survey Sample : A total of 1334 (73%) of the medical students graduating from Brody School of Medicine at East Caroline University (BSOM) (485 graduates) and New York Medical College (NYMC) (1348 graduates) between 1998 and 2004 completed the questionnaire.	V - 2	+
Owen, Hayden, & Connors, Jr.	2002	Can medical school admission committee members predict which applicants will choose primary care careers?	Acad.Med.	Virginia USA	Study : Survey using historical data Sample : Recording of 13 characteristics from the applications of medical school applicants who entered the University of Virginia School of Medicine in 1990-1993. (n=520)	V - 2	+

Pacheco, Weiss, Vaillant, Bachofer, Garrett, Dodson, Urbina, Umland, Derksen, Heffron, & Kaufman	2005	The impact on rural New Mexico of a family medicine residency	Academic Medicine	New Mexico USA	Study : Cross-sectional study. A number of sources were used to develop the data set for this study: The Office of Graduate Medical Education (GME) database of former residents and fellows The family medicine residency database of former residents The 2004 Location Report database of the University of New Mexico (UNM) School of Medicine graduates and former residents/fellows currently practicing in New Mexico. Sample : From 1974 to 2004, a total of 317 UNM family medicine residents had graduated from the program out of a total of 4,031 residents for the whole institution	V - 1	-
Pathman, Steiner, Jones, & Konrad	1999	Preparing and retaining rural physicians through medical education	Academic Medicine	USA	Study : cohort study using two national mail survey (1991 and 1996-97) Sample : 456 primary care physicians who had moved to rural pratices nationwide from 1987 through 1990 responded to both surveys (response rate of 69%)	IV - 1	++
Pathman, Konrad, Williams, Scheckler, Linzer, & Douglas	2002	Physician Job satisfaction, job dissatisfaction, and physician turnover	Journal of Family Practice	USA	Study : Cross-sectional questionnaire mail survey Sample : 1939 practicing generalists and specialists across the United States. (Sampling frame was constructed from the American Medical Association's Physician Masterfile) (response rate of 52%)	V - 1	+
Phillips, Rosenblatt, Schaad, & Cullen	1999	The long-term effect of an innovative family physician curricular pathway on the specialty and location of graduates of the University of Washington	Acad.Med.	Washington USA	Study : Survey using data's from the 1994 Physician Masterfile of the American Medical Association Sample : 239 medical students who had entered the University of Washington between 1968 and 1973.	V - 2	+

Probst, Samuels, Shaw, Hart, & Daly	2003	The National Health Service Corps and Medicaid inpatient care: experience in a southern state	South Med.J.	North Carolina USA	Study : survey using licensure files and hospital discharge data Sample : All physicians practicing in South Carolina who attended at least one discharge in 1998, excluding physicians who graduated before 1969, residents, and current NHCS-obligated physicians. (n=3608) Analysis : Multivariate analysis	V - 1	++
Pugno, McPherson, Schmittling, & Kahn, Jr.	2000	Results of the 2000 National Resident Matching Program: family practice	Fam.Med.	USA	Study : Result of the National Resident Matching Program	V - 1	-
Pugno, McPherson, Schmittling, & Kahn, Jr.	2002	Results of the 2002 National Resident Matching Program: family practice	Fam.Med.	USA	Study : Result of the National Resident Matching Program	V - 1	-
Pugno, Schmittling, Fetter, Jr., & Kahn, Jr.	2005	Results of the 2005 national resident matching program: family medicine	Fam.Med.	USA	Study : Result of the National Resident Matching Program	V - 1	-
Rabinowitz, Diamond, Markham, & Hazelwood	1999	A program to increase the number of family physicians in rural and underserved areas - Impact after 22 years	Jama-Journal of the American Medical Association	Pennsylvania USA	Study : Retrospective cohort sudy Sample : 206 Physician Shortage Program (PSAP) graduates from the classes of 1978 to 1991 from the Pennsylvania medical schools	IV - 2	+
Rabinowitz, Diamond, Hojat, & Hazelwood	1999	Demographic, educational and economic factors related to recruitment and retention of physicians in rural Pennsylvania	Journal of Rural Health	Pennsylvania USA	Study : Longitunial cohort study Sample : 1609 medical college graduates from the classes of 1972 to 1991 who were practicing in Pennsylvania in March 1996. Analysis : multivariate analysis	IV - 1	++
Rabinowitz, Diamond, Veloski, & Gayle	2000	The impact of multiple predictors on generalist physicians' care of underserved populations	Am.J.Public Health	USA	Study : mail questionnaire survey Sample : 1993 national random sample of 2955 allopathic and osteopathic generalist physicians who graduates from medical school in 1983 or 1984. (response rate 74% 2199 of the 2955 physicians)	V - 1	++

Rabinowitz, Diamond, Markham, & Paynter	2001	Critical factors for designing programs to increase the supply and retention of rural primary care physicians	Jama-Journal of the American Medical Association	Philadelphia USA	Study : Retrospective cohort study Sample : 3414 Jefferson Medical College graduates from the classes of 1978 to 1993, including 220 Physician Shortage Area Program (PSAP) graduates. Analysis : multivariate analysis	IV - 1	++
Rabinowitz, Diamond, Markham, & Rabinowitz	2005	Long-term retention of graduates from a program to increase the supply of rural family physicians	Academic Medicine	Philadelphia USA	Study : Retrospective cohort study Sample : 1937 Jefferson Medical College graduates from the classes of 1978 to 1986, including 148 Physician Shortage Area Program (PSAP) graduates.	IV - 2	+
Rourke	2005	Strategies to increase the enrolment of students of rural origin in medical school: recommendations from the Society of Rural Physicians of Canada	Canadian Medical Association Journal	Canada	Study : Narrative literature review	VI - 1	+
Rourke, Incitti, Rourke, & Kennard	2005	Relationship between practice location of Ontario family physicians and their rural background or amount of rural medical education experience	Can.J.Rural Med.	Ontario Canada	Study : Cross-sectional questionnaire mail survey Sample : 507 stictly defined rural family physicians and 505 urban family physicians practicing in Ontario. Responses of 264 (response rate 52%) rural physicians were compared with 179 (response rate 35%) urban physician responses	V - 2	+
Schafer, Shore, French, Tovar, Hughes, & Hearst	2000	Rejecting family practice: why medical students switch to other specialties	Fam.Med.	California USA	Study : Questionnaire mail survey Sample : 397 graduating medical students at the University of California, San Fransisco (UCSF). Response rate: 81% (320/397)	V - 2	+
Schwartz, Basco, Grey, Elmore, & Rubenstein	2005	Rekindling student interest in generalist careers	Annals of Internal Medicine	USA	Study : Narrative literature review	VI - 1	++

Scott	2001	Eliciting GPs' preferences for pecuniary and non-pecuniary job characteristics	J.Health Econ.	England and Scoltand	Pilot study : Interviews with three full-time GP principals and from a random sample survey of 100 full-time GPs in England, conducted as part of pilot work to this study. Study : Questionnaire survey Sample : The sample frame was all full-time GPs in England (at 1st October 1997) and in Scotland (at 1st April 1998). The final sample used was 624 GPs in England and 582 GPs in Scotland. The overall response rate after two reminders was 70% (848/1206). Analysis : regression model	V -I	++
Scott, Gravelle, Simoens, Bojke, & Sibbald	2006	Job satisfaction and quitting intentions: A structural model of British general practitioners	British Journal of Industrial Relations	England and Scoltand	Study : Anonymous postal questionnaire survey Sample : English and Scottish GPs. The overall response rate was 62,9% (2781/4421), with England being slightly higer (1924/3000 = 64%) than Scotland (857/1421 = 60%)	V - I	++
Senf, Campos-Outcalt, & Kutob	2002	Lessons not learned from the generalist initiatives	Acad.Med.	USA	Study : literature review Sample : 7 articles included	II - 2	+
Senf, Campos-Outcalt, & Kutob	2003	Factors related to the choice of family medicine: a reassessment and literature review	J.Am.Board Fam.Pract.	USA	Study : literature review Sample : 36 articles on family medicine specialty choice published since 1993	II - 2	++
Senf, Kutob, & Campos-Outcalt	2004	Which primary care specialty? Factors that relate to a choice of family medicine, internal medicine, combined internal medicine-pediatrics, or pediatrics	Fam.Med.	USA	Study : Questionnaire mail survey Sample : All family physicians and an equal number of other primary care physicians graduating from one of 24 selected medical school in 1997-1999. These schools were selected to maximize the potential difference in factors related to specialty choice. The response rate was 51,5%, with 2985 questionnaires mailed and 1457 completed and return.	V - I	+

Shannon, Baker, Jackson, Roy, Heady, & Gunel	2005	Evaluation of a required statewide interdisciplinary rural health education program: student attitudes, career intents and perceived quality	Educ.Health (Abingdon.)	West Virginia USA	Study : online questionnaire survey Sample : Baseline data questionnaires (BDQ) were completed by 907 medical students, usually during their second year, from the state's (West Virgina) three medical schools. A post rotation questionnaire, the student evaluation of rural field experience (SERFE), was completed by 1360 students in 10 disciplines from seven institutions of higher learning. The response rate for the SERVE was 73% (1360 fo 1872)	V - 2	+
Sibbald, Enzer, Cooper, Rout, & Sutherland	2000	GP job satisfaction in 1987, 1990 and 1998: lessons for the future?	Family Practice	United Kingdom	Study : Postal questionnaire survey Sample : Random national samples of GPs were carried out by separate groups of investigators in 1987, 1990 and 1998. the final samples consisted of 1817 GPs in 1987 (response rate 45%), 917 GPs in 1990 (response rate 61%) and 1828 GPs in 1998 (response rate 49%).	V - 1	+
Simoens, Scott, & Sibbald	2002	Job satisfaction, work related stress and intentions to quit of Scottish GPs	Scottish Medical Journal	Scotland	Study : cross-sectional postal questionnaire survey Sample : random sample of 1000 GP principals, 359 GP non-principals, and 62 personal medical service GPs (1421 Scottish GPs). Reponse rate: 56% (802/1421)	V - 1	++
Somers, Young, & Strasser	2001	Rural career choice issues as reported by first year medical students and rural general practitioners	Aust.J.Rural Health	Monash Australia	Study : Questionnaire (Likert scales of agreement) survey Sample : 84 student who had commenced at Monash University in the year 2000. Response rate : 66% (84/127)	V - 2	+
Stimmel & Serber	1999	The role of curriculum in influencing students to select generalist training: a 21-year longitudinal study	J.Urban Health	New York USA	Study : 21-year longitudinal cohort study Sample : 1659 graduates from the Mount Sinai School of Medicine (New York) between 1970 and 1990	IV - 1	++

Szafran, Crutcher, & Chaytors	2001	Location of family medicine graduates' practices - What factors influence Albertans' choices?	Canadian Family Physician	Alberta Canada	Study : Cross-sectional survey employing a self-administered, mailed questionnaire Sample : 702 graduates who completed the family medicine residency program at the University of Alberta or the University of Calgary between 1985 and 1995. Response rate: 63% (442 graduates completed the questionnaire)	V - 2	++
Tandeter & Granek-Catarivas	2001	Choosing primary care? Influences of medical school curricula on career pathways	Isr.Med.Assoc.J.	Israel	Study : Narrative literature review	VI - 1	+
Taylor, Quayle, & Roberts	1999	Retention of young general practitioners entering the NHS from 1991-1992	British Journal of General Practice	United Kingdom	Study : Retrospective cohort study using data for the period 1990–1994 (data for five points in time: 1 October 1990, 1991, 1992, 1993, and 1994). These data are aggregated by the STATS GMS division of the NHS Executive (which collects information from health authorities) Sample : All qualified GPs in England and Wales. Data were available for 1933 new entrants (who entered in 1991 and 1992) who were followed-up for two years. Analysis : Multilevel logit model	IV - 1	++
Tolhurst & Stewart	2005	Becoming a GP--a qualitative study of the career interests of medical students	Aust.Fam.Physician	New South Wales United Kingdom	Study : 10 focus groups Sample : 82 first and final year medical students from three Australian medical schools in 2002	VI - 2	+
Van Baelen, Goedhuys, Heyrman	1998	Beroepskeuze van huisartsen vijf jaar na afstuderen : Promotie 1990 vergeleken met promotie 1985	Tijdschr. voor Geneeskunde	Flanders Belgium	Study : Cohort study using questionnaire Sample : Evaluation in 1995 of 147 last-year medical students who studied in one of the 4 Flemish universities in 1990. Response rate 71% (147/207)	IV - 2	+

Van Baelen, Goedhuys, Heyrman, Stroobants, Minguet	2003	Het beroep van huisartsen dii in 1995 afstuderen	Tijdschr. voor Geneeskunde	Belgium	Study : Cohort study using questionnaire Sample : Evaluation in 2000 of 244 last-year medical students who studied in one of the Belgian universities in 1995. Two Walloon universities whose response rate did not exceed 45% were excluded from the analyses. Finally, with the 5 remaining universities, the response rate were 87% (244/281)	IV - 2	+
Xu, Hojat, Brigham, & Veloski	1999	Factors associated with changing levels of interest in primary care during medical school	Acad.Med.	USA	Study : Retrospective cohort study using national mail questionnaire survey in 1993 Sample : 2600 allopathic medical school graduates from all US allopathic medical schools in 1983 and 1984 and whose current specialty codes, identified through the American Medical Association Masterfile as of December 1992, were family practice, general internal medicine, or general pediatrics. Response rate : 73,5% (1911/2600)	IV - 1	++
Young, Leese, & Sibbald	2001	Imbalances in the GP labour market in the UK: Evidence from a postal survey and interviews with GP leavers	Work Employment and Society	United Kingdom	Study : Postal survey mailed and semi-structured interviews Sample : Questionnaire : All 1083 individuals in annual GP Census (the GP Census covers all principals practising in England and Wales from 1990 onwards – 1997 was the latest year available) in October 1996 but not 1997. (response rate : 57% (613/1083)). Interviews : A national sub-sample of 32 doctors selected from 350 respondents who agreed to be contacted.	V - 1 And VI -1	++
Zayas & McGuigan	2006	Experiences promoting healthcare career interest among high-school students from underserved communities	Journal of the National Medical Association	Buffalo, Batavia, New York City USA	Study : 7 focus groups Sample : 51 respondents Students and parents in the city of Buffalo Students, parents and teachers from the rural town of Batavia Students, parents and teachers from New York City	VI - 2	+

Zinn, Block, & Clark-Chiarelli	1998	Enthusiasm for primary care: comparing family medicine and general internal medicine	J.Gen.Intern.Med.	USA	Study : Confidential telephone interviews Sample : National stratified probability sample of family medicine and general internal medicine (n = 68), residents (n = 196), and students (n = 81).	VI - 1	+
Zinn, Sullivan, Zotov, Peters, Connelly, Singer, & Block	2001	The effect of medical education on primary care orientation: results of two national surveys of students' and residents' perspectives	Acad.Med.	USA	Study : Confidential telephone interviews Sample : National stratified probability sample of first and fourth year medical students and residents were conducted in 1994 and 1997. The 1997 survey included 219 students and 241 residents who also had been interviewed in 1994.	VI - 1	+

APPENDIX 2.7. OVERVIEW OF THE FACTORS ASSOCIATED WITH ATTRACTION, RECRUITMENT AND RETENTION OF THE GPS

Attraction : Choice to become general practitioner (College, high school and undergraduate Students)		
Deterring characteristics of job :	**Patients**	Litigation (4)
		Increasing demands and expectation of patients (4-7)
	Government	Increasing demands of government (4)
		Increasing amounts of time to administration (paper work) (7-13)
		Increasing amounts of time to management (8;10;11)
		Worries about erosion of professional autonomy (5;8;10)
		Lack of clarity about the future of primary care practice (9)
	Isolation	no teamwork (14;15)
	Intellectual aspects	Less interesting clinically (vs hospital specialty) (14)
		Low intellectual content (10)
		insufficient intellectual content (16;17)
		excessive breadth of content area (17)
		No research activity / opportunities (16;18)
	Working conditions	Workload (4;7;8;12;13;19)
		Stressful lifestyle (9;17)
		noncontrollable lifestyle + Inflexibility of hours demanded + Commitment required + on call commitment (4;5;8;9;12;13;15-17;20-25)
		Deteriorating working conditions (5)
		A demanding career (5;24-26)
	Work family balance	Accommodation of family life (8;27)
		Difficulties of combining work and family (4;5;22;28;29)
		Family considerations (16;30)
		More time with family (9)
		personal time (8)
	Prestige	GP in non-prestigious (vs speciality) (9;10;16;17;19;24;25;30-35)
	Negative view	Greater value that society places on speciality practice (5;14)
		low reward (vs specialty) (24;25;30)
		The perceived poor state of intellectual activity (vs specialties) (GPs publish less research) (36)
		Frightening (5)
Attractive characteristics of	**Patients**	Enjoy the continuity of care (4;5;9;37)
		Enjoy the holistic approach (4;14)

job :		Good working relationships with patients (4;5;10;38)
		knowing the patient's background (14)
		More humane working environment (vs hospital specialty) (14)
		Continuing relationships with patients (5)
		Patient advocacy (5)
	Professional relationships	Good working relationships with staff, and local hospitals (4)
		positive interpersonal relationships (14)
		Teamwork (8)
	Intellectual aspects	Intellectual challenge (15;27)
		Breadth of clinical problems addressed in practice (37)
		Varied tasks (8;37)
		Capacity to deal with both common and complex problems (5)
		A skilled clinician (encompassing the clinical aspects of diagnosis and treatment) (5;13)
	Autonomy	Professional autonomy (4)
		Clinical freedom (8)
	Education	Opportunities for postgraduate education (4)
	Working conditions	Opportunity for flexible working (8)
		control over working pattern (8)
		A flexible career (according to skills, interests, and personal situation) (5;13)
	Prestige	Prestige, respected title (27)
		family doctor is a positive role models (17;24-26;39-41)
		Challenging (5;17)
		Good match with their interests (9)
Job dissatisfaction :		Burn out (even in young doctors) (4)
		High rate of poverty among rural residents (4)
		Depression (4)
Attitudinal :	**Media**	Influence of the media (26;42;43)
	Preference	an intent to practice or an actual subsequent practice in a rural area (32;44)
		Quality primary and secondary educational opportunities (18;45;46)
		Lifestyle preference (24-27;47)
		Personal wishes regarding future practice (practice setting, location) (16)
		Preference for primary care (34)

Professional image of GPs :	**Personnel characteristics**	A caring and altruistic personality (18;43;46)
		Social compassion attitudes and values (15;16)
		less authoritarian (46)
		income were not so important for them (vs specialties) (15;23;48)
		prestige were not so important for them (vs specialties) (15;30)
		Socioemotional status orientation (vs technoscientific orientation) (15;19;34;35;49)
		interest in addressing psychosocial issues (19;35)
		more likely to be "feeling" in the Myers-Briggs classification (46)
Role of school :	**Schools characteristics**	Perceived level of academic commitment (43)
		Presence of a departement of family medicine (26;50;51)
		Size of a department of family medicine (50)
		Research intensity (50)
		Class size (50)
		School age (50)
		Levels of Medicare Direct Medical Education funding to school's affiliated teaching hospitals (50)
		public ownership (versus private) of the medical school (32;44;46)
	School environment	Culture of the academic medicine : Mission of the school (strong primary care missions encouraged students to become GPs) (30;42;50)
		the proportion of faculty in family medicine (26;44)
		the proportion of matriculating students who express an interest in family medicine (44)
		the proportion of matriculating students who required clinical training in family medicine (44)
		the proportion of rural students admitted (44)
		the number of family medicine and primary care required clinical rotations (44)
		presence of a family practice residency within the medical school (19)
		The learning environment valued and promoted by the medical school faculty clearly has favoured specialty and subspecialty careers over generalist careers (30)
		The creation of subspecialty-oriented , research-oriented academic environment had unidirectional long-term effects on career decisions of medical graduates (--) (30)
		Select candidates whose personal characteristics are compatible with generalist careers (30;42;52-55)

		interest in primary care on the part of medical students nurtured and encouraged during medical school, and supported during residency (41)
		Increasing representation and leadership by generalist physicians on admission committees. (41)
		medical school socialization reduced student interest in generalist residencies for those who initially wanted a primary care experience (45)
		Encouragement from faculty : not predictive (49)
		Quality of the leadership (56)
	Course	Medical school curriculum (26;30;45;46;50;57)
		Enrichment extra curricular program (53)
		optional courses in primary care (58)
	Mentor / model	Students having a generalist mentor (37;41;42;49;54)
		Professional/lay role models and mentors (43)
		Perceptorship of the medical school (53;59;60)
		Exposure to role model (++) (10;15;19;38;46;49;61;62)
		Exposure to generalist clinician-educators during clerkships (41)
		student perceptions of resident (41)
	Students' perception	No sex difference (not predictive) (44)
		The students' perceptions about the primary care practice may decrease during medical school (63)
		The students' perceptions about the primary care practice may increase during medical school (58)
		Graduate entrants were more likely than others (non graduate entrants) to want a career in general practice. (UK) (64)
	Exposure to general practice and patients	Students valued interaction with patients and generalists early in medical school (41)
		For rotations, students placed in successful primary care practices (41;61)
		exposure to primary and community care alter career intentions in undergraduate (10;13-15;19;23;26;33;37;41;42;45;49;61)
		A community-based primary care experience in the first year of medical school was positively associated with students' selection of generalist residency (45)
		Unsatisfactory experiences of medical students in primary care clerkships (--) (9)
Student background :	**health experience**	Personal/family experiences with health problems (43)
		Career preference at matriculant (GPs vs specialty) (43)
		Participation in health-related curricula/activities (such as an engaging science class) (43)

		Work experience in healthcare environment (such as working in a gift shop at a hospital one summer) (43)
	Origin	Smaller hometown size (49)
		NHS reorganization (job dissatisfaction with the 1990 GP contract) (23;46)
	Personal competence	Academic strengths in required subjects (particularly in math and science) (43)
Group influence :	**Social influence**	Encouragement from peer (49)
		Encouragement from house staff (49)
		Students with a GP parent (or an other family member) (43)
		Peers Interested in health professions (such a friend) (15;43)
		opportunities to see the diversity of family doctors' practices (10)
		Auto selection for the NHCS (65)
Financial issues :	**General context**	variations in the economic conditions in the United States : Declines in the percentage of insured Americans and a greater reliance on public programs for health expenses were associated with increased family medicine match rates. (66)
	Incentives	economic incentives are a driving force in students' choice of careers (37)
	Debt	Debt during study (26;27)
		The debt that a medical student will incur can be an important factor in career choice (specialties more lucrative) (16;23;27;32;41;46;67)
		Indebtedness (9;23)
	Income	specialists have higher income than GP (6;9;12;13;16;17;19;30;32;34;37;41;46;47;68)
		more income (Vs an other job) (35)
Demographics factors associated with attraction :	**Gender**	Female sex (Women currently appear in relation-orientated, humanistic specialties, such as family medicine) (18;32;41;44;46;48)
		No gender difference (vs specialties) (37;69;70)
		gender difference (vs specialties) (9;15;16;23)
		Female students viewed GP more positively than male students (14)
		gender : not predictive (socioemotional orientation, rather than gender, explains the seeming predilection of woman for primary care careers) (49)
	Age	older age (associated with choice of a generalist career) (15;18;41;44;46;49;69)
		age (associated with choice of a generalist career) : not predictive (49;70)

		Age at graduation affects work-life. Younger physicians have a longer expected work-life and higher expected lifetime earnings, both of which increase the attractiveness of specialty training (32)
	Race	Race : with nonwhites being more inclined than whites to select primary care (some evidence) (32)
		Race : not predictive (46;49;69)
		Race (vs specialties) (16)
	Rural background	rural background (associated with choice of a generalist career) (18;30;37;41;71)
		rural background (associated with choice of a generalist career) : not predictive (37)
	Family / marital status/ child	more often married (vs specialties) (15;32;34;44;46;69)
		Marital status : not predictive (49)
		lower level of parents' education (vs specialties) (18;46;72)
	socioeconomic status	lower socioeconomic status or lower parental income or education is related to a choice of family medicine (vs specialties) (46)
Other general factors :		1990 GP Contract (UK) (-) (7;22)
		encounter generalist physicians who are poor role models because they are unhappy and stressed, are under tremendous time pressure, feel burned out, and are considering leaving their practices (41)
		Education cost of healthcare careers (43)
		Reductions in education funding (schools not having the resources for offering more courses relevant to their healthcare career goals) (43)
		Racism and discrimination in society (43)
		Geographic isolation from healthcare practice sites (43)
		Growing demand among consumers for subspecialty care (9)

(+) **Favoring recruitment**
(-) **Decreasing recrutment**
Not predictive

Recruitment			
1. Rural Area recruitment			
Deterring caracteristics of job :	**Commitment**	Long work hours (73)	(-)
		frequent call schedules (73)	(-)
	Isolation	professional isolation (13;73)	(-)
	Education	concern about staying up to date (73)	(-)
	Working conditions	Higer level of responsability than urban doctors (stress) (74)	(-)
Attractive caracteristics of job :	**Intellectual aspects**	An orientation toward procedures (wide variety of procedures) (73;75;76)	(+)
	Autonomy	Autonomy - independence (73;76)	(+)
Attitudinal :	**Preference**	having a strong interest in practicing in an underserved area prior to attending medical school (20;73;77-81)	(+)
		positive opinion of the quality of rural life (74;75)	(+)
		Rural lifestyle (76;82)	(+)
Personality :	**Personnel characteristics**	Independent-minded (73)	(+)
		relationships-driven (73)	(+)
		Resourceful (73;75)	(+)
		Trustworthy (73)	(+)
		students who displayed a high tolerance of ambiguity also expressed more interest in a rural practice setting (74)	(+)
Spousal / Family / leisure :	**Spousal**	Spousal exposure (rural primary or secondary school) (83)	(+)
		Spousal exposure (having a rural childhood home) (73;83)	(+)
		Spousal happiness (73;75)	(+)
		Spouse's career aspiration (75)	(+)
		having partners in practice (74)	(+)
		Combination of GPs' and partners' background (83)	(+)
		Need of spouses and partners (78;84)	(-)
		Employment opportunities for spouses (84)	(+)
	Family	family concerns (74)	(+)
		Family educational goal (75)	(+)
		Proximity of family (43;76;85;86)	(+)
	Leisure	availability of recreational facilities (74;75;84)	(+)

		cultural opportunities available to the GP, their spouses, and their children (75;82;84)	(+)
		educational opportunities available to them, their spouses, and their children. (75)	(+)
		social opportunities available to them, their spouses, and their children. (75)	(+)
		Quality of live issues (73)	(+)
GP Background :	**Participation to a program designed to increase PCPs recruitment**	Being in the Physician Shortage Area Program (PSAP) (80;81)	(+)
		having participated in the National Health Services Corps (79;81;87)	(+)
		Had been medical students at the University of New Mexico (UNM) School of Medicine (88)	(+)
		Family practice residency programs (Rural Program) (89)	(+)
	School competence	science grade-point average (positively associated with students' choosing rural practice) (20)	(+)
		verbal Medical College Admission Test (MCAT) score (positively associated with students' choosing rural practice) (20)	(+)
	Origin	Having had a rural home (83)	(+)
		attending a rural primary and secondary school (20;76;83;87;90;91)	(+)
		To have studied in a public medical schools (20;77)	(+)
		Rural background (not predictive) (86)	
		to be of an origin rural (20;39;41;43;48;56;73-75;78-80;83;87;88;92-97)	(+)
		Grew up in an underserved area (84;87;90)	(+)
		being a member of an underserved ethnic/minority group (7;79;88)	(+)
Local community :	**Community**	Community involvement (73)	(+)
		Have a big impact on their local community (73)	(+)
		a friendly community (85)	(+)
		High rate of poverty among rural residents (84)	(-)
	Community support	Social support networks (necessary) (73)	(+)
		specialist support (76)	(+)
		Practice relief coverage for vacation and continuing education (84)	(+)
		compatibility with medical community (84)	(+)
		Quality primary and secondary educational opportunities (84)	(+)
		Availability of capital for practice development (84)	(+)
		Consultation availability (84)	(+)

	Lifestyle	Availability of quality housing (84)	(+)
Role of school :	**Schools caracteristics**	Schools with premedical recruitment activities targeting future generalists (20;69;77)	(+)
		Medical school located in rural area (20;74)	(+)
		The size of the student's undergraduate college (20)	(+)
	School policy	Encourage admission of rural students (60;74;80)	(+)
	School environment	Select candidates whose personal characteristics are compatible with generalist rural careers (98)	(+)
		Socioemotional status orientation (vs technoscientific orientation) (55)	(+)
	Exposure to rural practice and patients	Rural exposure / student rotations (early) during residency or medical school (20;39;43;44;55;60;71;74;75;78;88-92;99-105)	(+)
		Rural exposure (early) during residency or medical school (not predictive) (87)	
		Rural exposure (early) during residency or medical school : little effect (106)	(+)
		Longer rural exposure during residency or medical school (97)	(+)
		Postgraduate rural-practice training (74;75;91;92;97;100)	(+)
		Size of a department of family medicine (75)	(+)
	Curriculum	Rural-oriented medical curriculum (20;89;90;96;96;105)	(+)
		Specific courses that prepare students to understand and work with rural communities (90)	(+)
	Mentor / model	rural mentor / rural role model (48;78;90;93;104;105)	(+)
		Mentoring relationships with a family practice preceptor (60;81;98)	(+)
	General context	the inadequacies of fee for service in the rural setting, especially as payment for on call services (74)	(-)
		the perception that rural physicians were not reimbursed as well as were their urban counterparts (48)	(-)
Financial issues :	**Incentives**	Some data suggest that a higher debt load upon leaving training is inversely related to the likelihood of practicing in a rural area. (20)	(-)
		a greater need for financial assistance may actually increase the chance of rural practice by motivating more physicians into contracts with state and federal loan repayment and financial incentive programs. (20)	(+)
		Loan repayment (60;86)	(+)
	Debt	Mean levels of debt (not predictive) (80)	
	Financial advantages	Cheaper housing (76)	(+)
	Fees	The learning environment valued and promoted by the medical school faculty clearly has favoured specialty and subspecialty careers over generalist careers (73)	(-)

Demographics factors associated with recruitment in rural area :	**Gender**	Male gender (7;20;39;55;73;81;83;88;90;107;108)	(+)
		Gender : not predictive (20;87;88)	
		Special problem with young women with child-bearing (108)	(-)
	Age	Age : not predictive (20;83;90)	
		Age at graduation : not predictive (83)	
	Race	Race/ethnicity : not predictive (20)	
		Ethnic minority : not predictive (88)	
	Family / marital status/ child	GP with partner (83)	(+)
		Marital status : not predictive (20)	
		To have children under 18 years of age (83)	(+)
	socioeconomic status	Level of father's education (20)	(+)
		Family income when growing up : not predictive (87)	
2. Inner city recruitment			
Local community :	**Education**	Few opportunities provided by inner city practice for continuing education (109)	(-)
3. Indifferent area recruitment			
Role of school :	**Exposure to urban practice and patients**	Early exposure to clinical and community settings in medical education (41)	(+)
Deterring caracteristics of job :	**Working conditions**	lack of flexibility in working arrangements (6)	(-)
		Heavy workload (6)	(-)
	Patients	Increasing demands and expectation of patients (6)	(-)
	Education	Training and career development issues (6)	(-)
Financial issues :	**Income**	Low incomes (110)	(-)
	Debt	Mean levels of debt (predictive to urban practice) (80)	(+)
Attitudinal :	**Preference**	Career preference at matriculant (GPs vs specialty) (46)	(+)
Other general factors :		NHS reorganization (job dissatisfaction with the 1990 GP contract) (6;111)	(-)

Retention
1. Rural Area retention

GP Background :	**Origin**	To have studied in a public medical schools (20)	(+)
		To have studied in a public medical schools : not predictive (20)	
		upbringing in a rural area (81;99)	(+)
		some other attachment to the country, such as a hobby farm, marriage to a farmer or member of the local community, or the adoption of a rural lifestyle with its vernacular values (99)	(+)
		being prepared for small town living (20;106)	(+)
		Grew up in an underserved area (not predictive) (90)	
		Growing up in a rural area (not predictive) (80;81)	
	participation to a program	National Health Service Corps (NHSC) the turnover of physicians once they complete their obligation is high (20)	(-)
		Being in the Physician Shortage Area Program (PSAP) (81)	(+)
Role of school :	**Schools caracteristics**	Medical school's location in a rural state (20)	(+)
		private school training (20)	(+)
	School environment	percentage of graduates trained in family practice : not predictive (20)	
		emphasis on rural medicine : not predictive (20)	
		emphasis on underserved-area health care : not predictive (20)	
		Smaller NIH funding associated with more rural GP production (20)	(+)
	Exposure to general practice and patients	Rural exposure / student rotations during residency or medical school (20;67;84;103)	(+)
Deterring caracteristics of job :	**Isolation**	Professional isolation (from specialised medical and other health professional support) (20;76;91;93;100;112;113)	(-)
		not teamwork (114)	(-)
		physical isolation (67;100)	(-)
	Working conditions	Time pressure (stressor) (114)	(-)
		Stress (115)	(-)
		Working condition (100;114)	(-)
		Work dissatisfaction resulting from working conditions (78;114)	(-)
		Burn-out (93)	(-)
		lack of time off for holidays (108)	(-)
		lack of control over practice environment (116)	(-)
		Longer working hours (76;99;100;113;114;116;117)	(-)
		after-hours care / coverage (78;100;118)	(-)
		heavy workloads (67;76;78;80;91;93;95;100;108;112;113;115;116)	(-)
		the frequency of being on-call (76;78;91;100;108;113)	(-)
		inability to get time off (100)	(-)

		numerous other functions including promoting community health, offering health education, undertaking casual epidemiological research and improving the local healthcare delivery system (100)	(-)
	Privacy	lack of anonymity (especially if doctors are diffident about taking on a wider role within the community) (100)	(-)
		loss of anonymity (100;112)	(-)
	Intellectual aspects	a need to keep up with a wide range of new skills (especially trauma and emergency medicine) (100)	(-)
		issues surrounding lack of choice for the doctor and the patients (100)	(-)
		Lack of opportunity to practice procedures due to the small number of cases and high malpractice insurance premiums (78)	(-)
	Government	Bureaucratic requirements (78)	(-)
	Education	Lack of professional development opportunities (100)	(-)
Attractive caracteristics of job :	**Prestige**	recognition for good work (114)	(+)
		A feeling of doing an important job (78)	(+)
	Patients	forming strong relationships with patients and the community (100;108)	(+)
		The continuity of care they were able to provide (greater in rural area) (100)	(+)
		Variety of work (78;108)	(+)
	Autonomy	Autonomy of practice (78)	(+)
Spousal / Family / leisure :	**Lack of leisure**	a lack of cultural activities and entertainment for the family (78;91;100)	(-)
		Remoteness from family (78)	(-)
		Social isolation for medical families (91;93)	(-)
	Family	family education needs (76;91;93;100;112)	(+)
		family health needs (100)	(+)
		a lack of suitable and affordable child care (112)	(-)
		High rate of poverty among rural residents (78;100;118)	(+)
		Local availability of services : opportunities for spouse employment (100;112;118)	(+)
		Family conflicts (112)	(-)
		problems with secondary schooling for children (76)	(-)
		Lack of time spend with the family (78)	(-)
		Quality primary and secondary educational opportunities (7;112;116)	(-)
		the quality of public schools (100)	(+)
		Child at home (84)	(+)
	Spouse	the spouse's happiness in the community (95;100)	(+)

		Partners who had found satisfying work or other interest (93)	(+)
		Spouse employment opportunities (95)	(+)
Financial issues :	**Income**	Low income (lower reimbursement rates and greater numbers of uninsured patients) (75;76;80;100;114)	(-)
		poor remuneration for after-hours work (76)	(-)
		Lower financial reimboursement rates (20;80)	(-)
		Socioemotional status orientation (vs technoscientific orientation) (100)	(-)
		Income was not a primary consideration (95)	(+)
	General context	Rural physicians typically derive a larger share of their gross practice revenue from Medicaid and Medicare patients, but these publicly supported insurance programs pay physicians at lower rates than private insurers (67)	(-)
		Rural physicians also typically have received lower Medicaid and Medicare reimbursements than their urban counterparts for performing the same medical procedures (67;84)	(-)
	Debt	GPs placed in underserved communities stay just long enough to repay their loan obligations (119)	(-)
Local community :	**General**	Size of a department of family medicine (112)	(-)
		increasing demand from a changing rural health care system (e.g. hospital closures and reduction in staff numbers) (112)	(-)
	Lifestyle	Personnal and social satisfaction with rural lifestyle (78;80;95)	(+)
	Relationships	conflicts with local hospitals (76)	(-)
		Personality clashes with colleagues (78;80)	(-)
		Jealousy by other community members of the doctor's income (78)	(-)
	Community	underinsured patients (100)	(-)
		the acceptance of the practitioner by the community (100)	(+)
		compatibility with the local community (95;100;113)	(+)
	Community Support (professional life)	Lack of speciality support (20;78;113)	(-)
		Lack of educational opportunities (20)	(-)
		Lack of locum relief (78;91;93;100;108;113)	(-)
		Lack of support from local hospitals or community health staff (78)	(-)
		The learning environment valued and promoted by the medical school faculty clearly has favoured specialty and subspecialty careers over generalist careers (113)	(+)
		distance from a referral centre (100)	(-)
		lower satisfaction with hospital services (100)	(-)
		lower satisfaction with hospital consultants (100)	(-)

		The availability of professional support from local, well qualified colleagues and specialists, and from professional organisations through continuing medical education (CME) (91;93;99;100;108;113;118)	(+)
		Good on-call arrangements, including time off for holidays (75;100;118)	(+)
		the availability of relief coverage after hours (100)	(+)
		support from colleagues (75;93)	(+)
		medical group dynamics (75)	(+)
		Lack of support services (including treating doctors) available for rural GPs (112)	(-)
		available diagnostic services (75)	(+)
		The local rural health training unit (RHTU) (93)	(+)
		Benefit from a mentor relationships (120)	(+)
	Community Support (private life)	the availability of suitable housing (100)	(+)
		the availability of religious support structures (100)	(+)
		Local geographic attractions, such as proximity to the coast or national parks, or opportunities for a rural lifestyle. (118)	(+)
		Proximity to a city or large regional centre : not predictive (118)	
Demographics factors associated with retention in rural area :	**Gender**	No sex difference (not predictive) (20)	
others:		low psychological well-being (112;121)	(-)
		moderately low levels of work-related distress (112;121)	(-)
		External factors (political, economic, social) (78)	(+)
		Internal factors (78)	(+)
2. Indifferent area retention			
Deterring caracteristics of job :	**Working conditions**	The challenge of maintaining high-quality care (46)	(-)
		to keep up with an ever expanding list of recommended therapeutic and preventive treatments. (122)	(-)
		lack of flexibility in working arrangements (6)	(-)
		Career preference at matriculant (GPs vs specialty) (8;123)	(-)
		Amount of responsibility given (123)	(-)
		Dissatisfaction (intend to leave or to retire) (117;124)	(-)
		NHS reorganization (job dissatisfaction with the 1990 GP contract) (8)	(-)
		Unrealistically high expectations of others (stressors) (123)	(-)
		Interruptions by emergency calls during surgery (stressors) (123)	(-)
		24h responsibility for patients' lives (stressors) (123)	(-)

		Finding a locum (stressors) (123)	(-)
		Arranging hospital admissions (stressors) (123)	(-)
		Night visits (stressors) (123)	(-)
		Working environment (e.g. surgery set-up) (stressors) (123)	(-)
		Fear of assault during visits (stressors) (123)	(-)
		Heavy workload (6;7;117;125)	(-)
		Increase time pressure (41)	(-)
		long hours of work (117;123)	(-)
		Hours on call (117)	(-)
	Threats to clinical autonomy	Threats to clinical autonomy (41)	(-)
		autonomy (now, with US physicians often employed by others) (126)	(-)
	Government	The NHS reforms of 1990/1991 (attack on the independent contractor status and professional autonomy of GPs + Workload was increased, particularly in relation to administration, method of payment…) (6;7;123)	(-)
		Dissatisfaction with reforms (7)	(-)
		meet increased administrative requirements (7;126;127)	(-)
	Patients	Increasing demands and expectation of patients (6;7)	(-)
		Worrying about patient complaints (stressors) (123)	(-)
		see more patients (128)	(-)
Attitudinal :	**Media**	Adverse publicity in the media (stressors) (123)	(-)
Professional image of GPs :	**Professional identity**	the relationships the doctor has with him or herself, that is, his or her sense of self as a doctor (129)	(+)
		preferences for job flexibility (117)	(-)
		preferences for different work–life balance (7;117)	(-)
Attractive caracteristics of job :	**General**	Overall satisfaction (93;123;126)	(+)
	Intellectual aspects	Opportunities to use one's abilities (123)	(+)
		Amount of variety in job (123)	(+)
	Prestige	Recognition for good work (123;129)	(+)
	Patients	Interpersonal relationships between doctor and patient (129)	(+)
	Work family balance	General practitioners who were married or cohabiting were more satisfied with physical working conditions (117)	(+)
Local community :	**Community**	relationships with their local communities (126)	(+)
		A greater proportion of patients living in areas designated as deprived (resulting in deprivation payments for the new GP) (130)	(-)

	Community Support (professional life)	local practice arrangements that allow for adequate time off (93)	(+)
		Training and career development (6)	(+)
	Relationships	with doctor-patient relationships (126)	(+)
		their relationships with the nonphysician staff in their offices (126)	(+)
Spousal / Family / leisure :	**Family**	When reduced hours physicians had low marital role, there was an associated higher intention to leave their jobs than for full-time physicians; when marital role was high, there was an associated lower intention to leave their jobs than for full-time physicians (131)	(+)
		When reduced hours physicians had low parental role quality, there was an associated higher intention to leave their jobs than for full-time physicians; when parental role quality was high, there was an associated lower intention to leave their jobs than for full-time physicians (131)	(+)
		When reduced hours physicians had low marital role quality, there was an associated lower career satisfaction; full-time physicians report high career satisfaction regardless of their marital role quality (131)	(+)
		When reduced hours physicians perceived that work interfering with family was high, there was an associated greater intention to leave their jobs that was not apparent for full-time physicians. (131)	(+)
		Disturbance at home/family life by GP work (stressors) (123)	(-)
		Dividing time between work and family (stressors) (123)	(-)
		The number of children was associated with satisfaction with the amount of responsibility. (117)	(+)
Financial issues :	**Income**	Low income (influenced by the household income) (6;28;117;123;126)	(-)
		those with higher incomes were less likely to cut back on their hours (132)	(+)
		those with lower incomes were more likely to cut back on their hours (133)	(-)
		Income was not related to retirement (134)	(+)
		decreasing reimbursement in real terms (135)	(-)
		rising practice costs (136)	(-)
		Debt during study (137)	(-)
GP Background :	**Origin**	Graduates of foreign medical schools were less likely to cut back on hours (138)	(+)
		foreign medical school graduate status was not related to retirement. (139)	(+)

Demographics factors associated with retention in urban area :	**Age**	age (55 years and older more satisfied) (126)	(+)
		age (satisfaction declines until age 45 and then increases so that satisfaction at age 60+ is significantly greater than at age 35 to 44) (GPs aged over 60 were more likely to be satisfied with the opportunity to use abilities and hours of work) (117)	(+)
		advancing age (intent to leave) (117;126;140)	(-)
		Younger GPs were less likely to be satisfied with the amount of responsibility (117)	(-)
	Race	ethnicity (white GPs being more satisfied with physical working conditions) (117)	(+)
	Gender	Male gender (Males were less satisfied than females with their remuneration and opportunity to use abilities) (Women were generally more satisfied with their work than men) (117;123)	(-)
		women are more likely than men to retire for all age ranges (female physicians retired 5.5 years earlier than male physicians) (trying to balance work and family responsibilities) (130;141)	(-)
Other general factors :		GPs who were non-principals were also more likely to quit. (117)	(-)
		Scottish GPs more likely to quit than English GPs (working conditions) (117)	(-)
		medical specialists retired 2.0 years earlier than family or general physicians. (142)	(+)
		practice size (with greater retention in larger practices) (130)	(+)

APPENDIX 3: QUALITATIVE AND QUANTITATIVE STUDY WITH 7TH YEAR MEDICAL STUDENTS ON MOTIVATIONS TO CHOOSE OR NOT THE GP PROFESSION (CHAPTER 3)

APPENDIX 3.1: LITERATURE SEARCH STRATEGY

Search strategy: table 1: search strategy: articles in Pubmed

Table 1: Zoekstrategie artikels in Pubmed

	keywords en limits	# artikels
#1	Search: career preferences AND medical students Limits: only items with abstracts, English, French, German, Publication date from 1995 to 2007, Humans	39
#2	Search: general practice AND career choice Limits: only items with abstracts, English, French, German, Publication date from 1995 to 2007, Humans	31
#3	Search: general practice AND career choice AND medical students Limits: only items with abstracts, English, French, German, Publication date from 1995 to 2007, Humans	91
#4	Search: #1 OR #2 OR #3 Limits: only items with abstracts, English, French, German, Publication date from 1995 to 2007, Humans	144

Based on the abstracts 3 researchers selected independently the relevant articles out of these 144.

At the end, 53 articles were retained. Hand-searching of Dutch and Belgian publications provided another 9 articles.

The total of 62 articles were read and scored on quality. This resulted in 50 articles.

Additional search

Author	
Name	Hilde Bastiaens
Project number	PPF07-19
Project name	General practice : motivations to choose for or to leave the profession
Keywords	Career Choice ; career mobility ; career preference ; Education, medical, undergraduate ; Students, medical ; Physician, family ; Family practice ; Primary health care ; general practi$; physicians ; Clerkship and Residency ;

These keywords were used to search Embase, Medline and the Cochrane Library for articles published from 1995 to 2007.

Medline search

Non-review articles: only articles from 2006 and 2007 were screened. The search of the student included articles till 2005 (only part of the publications in 2006).

Selection from 137 articles from 2006 and 2007 was based on the title and/or abstract and we used following criteria:

- Primary care/general practice is included or is the focus (if focus on another specialty, article is deleted)

- Should address 'career choice' and factors impacting on that choice or leaving the GP practice
- If no abstract and title doe not indicate our topic of interest : delete article
- If country specific and only description of 'numbers choosing specialties' then the article is not retained. When the article addresses motivation for choosing a specialty, then it is retained.
- If entirely focussing on 'rural area' and specific areas in large countries then the article is not included.

8 articles were selected: 2 duplicates of the student (Beaulieu) search and 6 extra articles.

So 5 extra publications were included: Bly 2006 (39) , Buddenberg-Fischer 2006(143) , Ciechanowski 2006 (144), Fairhurst 2006 (129) and Mariolis 2007 (33).

Review articles: The same criteria were used to screen the 37 review articles.

One article focussing on rural care was included (Brooks) because it could contain

useful information for primary care/general practice as such.

9 Articles were selected of which 5 were in fact review articles (Senf 2003(46), Brooks 2002(20), McKinnon 1999 (145), Young 1999(146), Rosenthal 1996 (147). The Rosenthal review was cited in the Senf review which itself was also retained in the students' thesis. So 3 extra full text reviews were selected.

Of the 4 non-review publications: 1 duplicated the student search, one article was excluded because it was in Polish: Pawelczyk 2007 (148) and one was no research article (Tandeter 2001(62)). So one non-review article was selected (Garner 1999 (149).

Cochrane search

Selection was made using the same criteria as in Medline. Extra criterium regarding date of publication : only publications from 1995 onward were selected.

Only 1 publication remained : Gazewood 2002 (150).

Embase search

Resulted in 132 articles which were selected and screened on basis of abstract or title using the same criteria as in the Medline search.

42 Articles were selected in this way: 17 were duplicates of the student search, 5 were used in de review of Senf 2003 and 4 publications duplicated articles in the extra cochrane and medline search (143) ,(33), (144). So 17 extra articles were selected. For one article (151) full text was not available.

Final selection of articles

For evaluating the quality of publications we used the checklists of the Dutch Cochrane Centre. Qualitative research was evaluated using the critical appraisal checklist for focus group research articles (152). For other research articles we used a self-constructed scoring list:

- Was the study population adequately described?
- Was systematic bias avoided or minimized?/ Can systematic bias be excluded?
- Was follow-up sufficient and are 'drop outs' (= also people selected to fill out a questionnaire but who did not return it) described?
- If the study involves an intervention, was this intervention described in sufficient detail?
- Was the analysis process clearly described? (Is it clear how the data was analysed?)

- Do (part of) the results address to the research question?
- Is the information/conclusion relevant for our context and setting?
- Are the results valid and applicable?

Excluded after quality scoring (relevance for our research included): Gazewood (150), Young (146), McKinnon (145), Rubeck (153),

One publication (Fairhurst 2006(129)) was not selected in relation to the student research part, but was used in the GP part.

One extra article Dornan 2006 (154) was obtained by a colleague.

Endnote file of the selected articles was integrated in the file of the part regarding the factors associated with attraction, recruitment and retetntion of the Gps in practice. e l in appendix 2.6. 25 articles duplicated articles from this part.

Tables of search strategies

Date	250907
Database (name + access ; eg Medline OVID)	EMBASE.com
Date covered (segment)	[1987-2007]
Search Strategy (attention, for PubMed, check « Details »)	**No. Query Results Results** **#1. 'general practitioner'/exp AND [embase]/lim AND [1987-2007]/py 26,278** **#2. 'decision making'/exp 79,379 25** **#3. 'career'/exp 8,057 25** **#4. 'career'/exp AND choice AND -2007]/py 420** **#5. ('career'/exp OR 'career') AND choice AND -2007]/py 1,140 25** **#6. 'career'/exp AND preference* AND -2007]/py 126** **#7. ('career'/exp OR 'career') AND preference* AND [1987-2007]/py 301** **#8. #2 AND #3 858** **#9. #4 OR #5 OR #6 OR #7 OR #8 1,996** **#10. 'medical student'/exp 22,632** **#11. #9 AND #10 494** **#12. 'general practice'/exp 53,304** **#13. 'primary health care'/exp 60,183** **#14. #12 OR #13 107,160** **#15. #11 AND #14 146** **#16. 'physician'/exp 89,402** **#17. 'career mobility'/exp 712** **#18. #9 OR #17 2,695** **#19. #9 AND #16 AND #18 164** **#20. #9 AND #14 AND #19 35** **#21. #11 OR #19 618** **#22. #14 AND #21 174**
Note	Duplicates were removed and only articles starting from 1995 were retained. This resulted in 133 articles. These 133 articles were screened on basis of abstract or title using the following criteria : Primary care/general practice is included or is the focus (if focus on one specialty, article is deleted) Should address 'career choice' and factors impacting on that choice If no abstract and title does not indicate our topic of interest : delete article If country specific and only description of 'numbers choosing specialties' then the article is not retained. When the article addresses motivation for choosing a specialty, then it is retained. If entirely focussing on 'rural area choice' and specific areas in large countries then article is not included. 58 Articles were selected in this way (KCE in).

Date	091007
Database (name + access ; eg Medline OVID)	Ovid MEDLINE(R)
Date covered (segment)	<1950 to September Week 4 2007>
Search Strategy (attention, for PubMed, check « Details »)	---------- 1 Career Choice/ (11508) 2 career preference?.mp. (126) 3 1 or 2 (11530) 4 exp Education, Medical, Undergraduate/ (14748) 5 education, medical, graduate/ or exp education, medical, undergraduate/ (29229) 6 Students, Medical/ (13533) 7 5 or 6 (38914) 8 3 and 7 (1866) 9 Family Practice/ (51777) 10 Physicians, Family/ (11231) 11 Primary Health Care/ (34764) 12 general practice.mp. (45557) 13 9 or 10 or 11 or 12 (112186) 14 8 and 13 (495) 15 Career Mobility/ (7339) 16 exp Physicians/ (61862) 17 1 or 2 or 15 (18065) 18 16 and 17 (1699) 19 9 or 11 or 12 (106531) 20 17 and 19 (1319) 21 14 or 20 (1336) 22 limit 21 to "review articles" (37) 23 from 22 keep 1-37 (37) 24 limit 21 to yr="2000 - 2007" (553) 25 limit 21 to yr="2006 - 2007" (137) 26 from 25 keep 17,21,23,47,55-56,62-63,68,84,110,114,116-117,119-120,123,133 (18) 27 from 26 keep 1-18 (18) 28 from 25 keep 1-137 (137) 29 from 23 keep 1-37 (37)
Note	Non-review articles : only articles from 2006 and 2007 were screened. The search of the student included articles till 2006 (only part of the publications in 2006). Selection from 137 articles from 2006 and 2007 was based the title and/or abstract and we used the following criteria : primary care/general practice should be included topic is career choice or reasons for leaving the GP profession or staying a GP if only rural practice, article is deteted abstract or full text available 14articles were selected. The same criteria were used to screen the 37 review articles. On article focussing on rural care was included (Brooks) because it could contain useful information for primary care/general practice as such. The Colwill publication was retained because it may hold interesting references. 13 articles were selected.

Date	111007
Database (name + access ; eg Medline OVID)	Cochrane_Wiley interscience
Date covered (segment)	
Search Strategy (attention, for PubMed, check « Details »)	ID Search #1 MeSH descriptor Career Choice, this term only 32 #2 MeSH descriptor Vocational Guidance, this term only 26 #3 career preference 27 #4 (#1 OR #2 OR #3) 79 #5 MeSH descriptor Education, Medical explode all trees 1140 #6 MeSH descriptor Students, Medical explode all trees 206 #7 (#5 OR #6) 1211 #8 (#4 AND #7) 14 #9 MeSH descriptor Family Practice explode all trees 1831 #10 MeSH descriptor Physicians, Family explode all trees 317 #11 general practic* 1034 #12 MeSH descriptor Physicians, this term only 356 #13 MeSH descriptor Career Mobility explode all trees 4 #14 (#9 OR #10 OR #11 OR #12) 1133 #15 (#4 OR #13) 83 #16 (#14 AND #15) 16 #17 (#8 OR #16) 25
	Selection was made using the same criteria as in Medline. Extra criteriumregarding date of publication : only publications from 1995 onward were selected. Only 3 publications were selected : Gazewood 2002 (150), Lynch 2000 (106), Bauer 1997 (155)

APPENDIX 3.2: QUALITATIVE INSTRUMENT: DUTCH VERSION.

	Inleiding	
	Allereerst wil ik je bedanken omdat je aan dit onderzoek wil meewerken. Ik ben..... en ik werk op de faculteit geneeskunde van de Universiteit Antwerpen. Het onderzoek gaat over het **keuzeproces en de motivatie om al dan niet voor huisartsgeneeskunde** te kiezen. De resultaten van dit onderzoek zullen bijdragen tot een beleidsvoorbereidend rapport. Je mag in dit onderzoek **jouw eigen mening** vrijuit zeggen en er zijn geen goede of foute antwoorden. Het interview duurt ongeveer een uur en wordt opgenomen. Nadat het uitgetypt is, wordt de tekst geanalyseerd. Alles wat je tijdens het interview zegt is vertrouwelijk en in geen enkel document zullen je persoonlijke gegevens herkenbaar zijn. Dit interview bestaat uit twee delen: eerst gaan we wat dieper in op je studiekeuze voor geneeskunde en dan op het beslissingsproces tijdens de opleiding. Heb je zelf nog vragen voor we beginnen met het gesprek? Mag ik je nog vragen om je GSM even uit te schakelen?	
	Beslissingsproces voor de studie geneeskunde	
1	We willen je eerst vragen om in gedachten terug te gaan in het verleden, namelijk naar de tijd dat je een studierichting ging kiezen, en dat je voor geneeskunde koos. **Herinner je je nog wanneer je beslist hebt om geneeskunde te gaan studeren?** Hoe ben je daar toen toe gekomen? Wanneer heb je daar voor het eerst aan gedacht? Wat heeft deze keuze mee bepaald? Wat heeft eventueel nog meegespeeld ? **Had je twijfels?** Welke? Waarom? Waren er eventueel **drempels** die het moeilijk maakten om je keuze te realiseren?	
2	Had je op het moment dat je startte met geneeskunde al een idee welke discipline (specialiteit) je aansprak? Zo ja, welke? Hoe is die keuze tot stand gekomen? Wat heeft die keuze mee bepaald denk je? (eerst laten vertellen) Wat trok je in die discipline aan?	
3	Weet je nog hoe je tegenover de huisartsgeneeskunde stond bij het begin van je studie? Welk beeld had je toen, bij het begin van je studie, van het beroep van huisarts? Wat trok je aan? Wat vond je minder aantrekkelijk? Welk beeld had je van een leven als huisarts? Wat trok je aan? Wat vond je minder aantrekkelijk? Waarop was je beeld gebaseerd, denk je? Waar heb je dat beeld vandaan? Indien moeilijk om te beantwoorden kan je vragen: 'Dit kan heel ruim zijn: eigen ervaringen, gelezen, gehoord, gezien,…'	
	Beslissingsproces tijdens het studieverloop	
1	Contact met huisartsgeneeskunde	
	Je hebt nu 6 jaren geneeskunde achter de rug. **Hoe heb je de opleiding tot nu ervaren?** Wat vond je de sterke punten, wat heb je gewaardeerd? *(vond je goed)* Wat vond je zwakke punten, wat heb je minder gewaardeerd? *(vond je minder goed)* **Heb je in je opleiding al kennis kunnen maken met de**	

	huisartsgeneeskunde? Op welke manier? *In colleges, lessen, of op stages, of met huisartsen zelf, op een andere wijze?* **Hoe heb je dat ervaren?** Welk beeld gaf dat van huisartsgeneeskunde? Hoe kwamen de huisartsen naar voor? **Hoe hebben deze ervaringen je keuze beïnvloed?** *(ook toetsen : colleges, stage, huisartsen als rolmodel, contact met bepaalde personen/artsen in de opleiding)*	
	Hoe is uw visie over huisartsgeneeskunde nu? Welk beeld heb je nu van het huisartsenberoep? Is dit beeld van huisartsgeneeskunde, het beroep van huisarts, veranderd/geëvolueerd tov in het begin van je studie? Indien ja, in welke zin? Wat heeft dit beeld veranderd/bevestigd?	
2	Keuzeproces discipline	
	Naar welke discipline gaat nu je voorkeur uit? Kan je uitleggen hoe je tot deze keuze gekomen bent? Aandachtspunten: invloed media, hoe vrienden:medestudenten denken over de keuze, Invloed curriculum. Twijfel je nog of heb je het gevoel dat je keuze definitief is?	
	Keuze zelfde nu dan bij aanvang van de studie Je keuze is niet gewijzigd tijdens je studies/in de loop van je opleiding. Wat heeft de doorslag gegeven om bij je keuze te blijven? Wat motiveerde je om deze keuze te behouden? Je koos voor huisartsgeneeskunde. Wat verwacht je van het beroep als huisarts? Heb je ooit overwogen om te specialiseren? Indien nee: waarom niet? Indien ja: waarom uiteindelijk toch huisartsgeneeskunde gekozen? Je hebt nu gekozen om te specialiseren in…. Heb je ooit overwogen om huisartsgeneeskunde te gaan doen? Zo neen: Waarom niet? Zo ja: Waarom uiteindelijk toch geen huisartsgeneeskunde gedaan? Keuze is veranderd in de loop van de opleiding Je keuze is veranderd tijdens je studies/in de loop van je opleiding. Bij het begin ging je voorkeur uit naar …, nu naar …. Wat heeft gemaakt dat je nu voor … kiest en niet meer voor …. Je koos voor huisartsgeneeskunde. Wat verwacht je van het beroep als huisarts? Heb je ooit overwogen om te specialiseren? Indien nee: waarom niet? Indien ja: waarom uiteindelijk toch huisartsgeneeskunde gekozen? Je hebt nu gekozen om te specialiseren in…. Heb je ooit overwogen om huisartsgeneeskunde te gaan doen? Zo neen: Waarom niet? Zo ja: Waarom uiteindelijk toch geen huisartsgeneeskunde gedaan? Van twijfel naar keuze	

	Toen je aan geneeskunde begon had je nog geen duidelijk plan voor welke discipline je wou volgen, nu heb je een keuze gemaakt voor … Hoe is die keuze tot stand gekomen? Wat motiveerde je om deze keuze te maken? Je koos voor huisartsgeneeskunde. Wat verwacht je van het beroep als huisarts? Heb je ooit overwogen om te specialiseren? Indien nee: waarom niet? Indien ja: waarom uiteindelijk toch huisartsgeneeskunde gekozen? Je hebt nu gekozen om te specialiseren in…. Heb je ooit overwogen om huisartsgeneeskunde te gaan doen? Zo neen: Waarom niet? Zo ja: Waarom uiteindelijk toch geen huisartsgeneeskunde gedaan? Nog steeds twijfel Toen je aan geneeskunde begon had je nog geen duidelijk plan voor welke discipline je wou volgen, en ook nu twijfel je nog. Wat maakt de keuze moeilijk? Tussen welke disciplines twijfel je? Wat zijn tot nu de voor en tegen-s?	
	Afsluiten	
	Ok, we zijn rond met de vragen die ik jou wilde stellen, de topics die ik wenste te bespreken. Zijn er zaken die nog niet aan bod gekomen zijn tijdens het gesprek maar die jij toch belangrijk vindt in het kader van dit onderzoek (je specialisatiekeuze)? Heb je zelf nog vragen, bedenkingen over dit gesprek of over het onderzoek? Bedankten voor het gesprek. Succes wensen in hun laatste jaar.	

APPENDIX 3.3. QUALITATIVE INSTRUMENT: FRENCH VERSION.

	Introduction
	D'abord je vous remercie pour votre contribution à ce projet de recherche. Je m'appelle Christiane Duchesnes et je travaille à la faculté de médecine de l'Université de Liège. Le projet **concerne les raisons et les motivations des étudiants à choisir ou non la médecine générale.** Les résultats de cette étude seront inclus dans un rapport adressé aux responsables gouvernementaux. Vous pouvez **exprimer votre propre opinion** sans crainte ; il n'y a ni bonnes ni mauvaises réponses. L'entrevue durera environ une heure et sera enregistrée. Ultérieurement l'entrevue sera retranscrite et analysée. Tout ce que vous direz pendant ce temps est strictement confidentiel et ne pourra être relié en aucune façon à votre personne. Cette entrevue est divisée en deux parties : d'abord nous allons parler de votre choix pour les études de médecine. Ensuite nous parlerons de l'évolution de votre décision de spécialisation durant la formation. Avez- vous des questions avant que nous ne commencions ? Puis-je vous demander d'éteindre votre téléphone mobile ?
	Les questions concernant le processus de choix de la médecine
	Je voudrais d'abord vous demander de retourner en pensée dans le passé, particulièrement au moment où vous alliez choisir vos études supérieures et où vous avez choisi la médecine. **Vous souvenez-vous encore du moment où vous avez décidé d'étudier la médecine ?** Comment êtes-vous arrivé à ce choix ? Quand y avez-vous pensé pour la première fois ? Qu'est-ce qui a contribué à ce choix ? Qu'est-ce qui est entré en jeu éventuellement ? **Avez-vous eu des doutes ?** Si oui, lesquels ? Pourquoi ? Y a-t-il eu**, des barrières qui rendaient ce choix difficile à réaliser** ?
	Quand vous avez commencé la médecine, aviez-vous déjà un intérêt pour une discipline (spécialisation) et si oui laquelle? Comment ce choix vous est-il venu à l'esprit ? Qu'est-ce qui a contribué à ce choix, d'après vous ? Laisser d'abord parler l'interviewé Qu'est-ce qui vous a attiré dans cette discipline ?
3	Vous rappelez-vous de votre point de vue au début de vos études vis-à-vis de la médecine générale ? Quelle image vous faisiez-vous, au début de vos études, de la profession de médecin généraliste ? Qu'est-ce qui vous attirait ? Qu'est-ce que vous trouviez moins attrayant ? Quelle image aviez-vous de la vie quotidienne d'un médecin généraliste ? Qu'est-ce qui vous attirait ? Qu'est-ce que vous trouviez moins attrayant ? A votre avis, sur quoi cette image se basait-elle, d'où venait-elle ? Si c'est difficile pour l'étudiant de répondre : Cela peut être très vaste : quelque chose dont vous vous souvenez, que vous

	avez lu, entendu, vu, …
	Les questions concernant le processus de choix de la spécialisation durant les études
I	Contact avec la médecine générale
	En ce moment, vous avez terminé 6 années d'études. **Comment avez-vous ressenti cette formation jusqu'à maintenant ?** Quels en sont les points forts, que vous avez appréciés ? Quels sont les points faibles, que vous avez moins appréciés ? **Avez-vous déjà eu l'occasion pendant la formation de faire connaissance avec la médecine générale ? De quelle manière ?** *En grands groupes, en petits groupes, en stage, ou avec les médecins généralistes eux-mêmes ou autrement ?* **Comment avez-vous ressenti ces moments de rencontre avec la médecine générale?** Quelle idée cela vous a-t-il donné de la médecine générale ? Comment les médecins généralistes vous apparaissaient-ils comme personnes ? **Ces expériences ont-elles influencé votre choix de spécialisation ?** (Vérifier aussi : en grands groupes, en petits groupes, en stage, avec les médecins comme modèle de rôle). Le contact avec d'autres médecins ou personnes, durant la formation, a-t-il influencé votre choix ?
	En ce moment, quel est votre vision, votre appréciation de la médecine générale ? Quelle image avez-vous de la profession de médecin généraliste actuellement ? Votre point de vue a-t-il changé/évolué depuis le début de vos études ? Si oui, dans quel sens ? Qu'est-ce qui a changé/confirmé votre opinion ?
	Processus de choix vis-à-vis d'une spécialité
	En ce moment, quel est votre choix de spécialisation ? Pouvez-vous expliquer comment vous êtes arrivé à ce choix ? Points d'attention :Comment vos amis ou collèges réagissent-ils par rapport à ce choix ?Média ? Curriculum ? Avez-vous encore des doutes ou avez-vous l'impression que c'est un choix définitif ?
	Le choix pour une spécialisation n'a pas changé pendant la formation Votre choix de spécialisation n'a pas changé pendant vos études/votre formation. Quels sont les éléments qui vous ont permis de confirmer votre choix ? Qu'est-ce que vous a motivé à garder ce choix ? Vous avez choisi la médecine générale : Qu'attendez-vous de cette profession de généraliste ? Avez-vous jamais envisagé de vous spécialiser ? Si non : pourquoi pas ? Si oui : pourquoi finalement avoir choisi la médecine générale ? Vous avez choisi de vous spécialiser en …… Avez-vous jamais envisagé de choisir la médecine générale ? Si non : pourquoi pas ?

	Si oui : pourquoi finalement avoir choisi autre chose ? Le choix de discipline a changé pendant la formation. Votre choix de spécialisation a changé pendant la formation. Au début de vos études vous préfériez…. Et maintenant vous choisissez….. Qu'est-ce qui a motivé ce changement de choix pour … et plus pour …. ? Vous avez choisi la médecine générale : Qu'attendez-vous de cette profession de généraliste ? Avez-vous jamais envisagé de vous spécialiser ? Si non : pourquoi pas ? Si oui : pourquoi finalement avoir choisi la médecine générale ? Vous avez choisi de vous spécialiser en …… Avez-vous jamais envisagé de choisir la médecine générale ? Si non : pourquoi pas ? Si oui : pourquoi finalement avoir choisi autre chose ? Dans le doute au début des études mais a maintenant choisi Au début de vos études, vous n'aviez pas de préférence pour une spécialisation. Maintenant vous avez choisi la..... Comment êtes-vous arrivé à ce choix ? Qu'est-ce qui vous a motivé pour faire ce choix ? Vous avez choisi la médecine générale : Qu'attendez-vous de cette profession de généraliste ? Avez-vous jamais envisagé de vous spécialiser ? Si non : pourquoi pas ? Si oui : pourquoi finalement avoir choisi la médecine générale ? Vous avez choisi de vous spécialiser en …… Avez-vous jamais envisagé de choisir la médecine générale ? Si non : pourquoi pas ? Si oui : pourquoi finalement avoir choisi autre chose ? L'interviewé n' a pas encore choisi Au début de vos études, vous n'aviez pas de préférence pour une spécialisation. Maintenant, vous doutez encore. Qu'est-ce qui rend le choix si difficile pour vous ? Entre quelles disciplines hésitez-vous ? Quel sont les avantages et les inconvénients que vous envisagez en ce moment ?
	Fin de l'interview
	J'ai posé toutes les questions que j'avais préparées et nous avons abordé tous les thèmes prévus. Y a-t-il encore des choses que vous trouvez importantes vis-à-vis de notre recherche mais dont nous n'avons pas encore parlé ? Avez-vous des questions, des commentaires à faire à propos de cette conversation ou de notre recherche ? Je vous remercie d'avoir participé à ce travail et vous souhaite bonne chance cette dernière année.

APPENDIX 3.4. PARTICIPANTS : STUDENTS´ INTERVIEWS

	Univ.	Gender	Age	First choice	Second choice	Remarks
pilot	UA	F		General Practice	Pediatrics	Pilot – 7the year student
pilot	UA	F		General Practice	No	Pilot – 1st year of GP training
pilot	ULG	F	25	Child psychiatry	Psychiatry	Pilot – 7the year student
1	KUL	F	24	Internal medicine	Pediatrics/General practice	
2	KUL	M	24	General Practice	No	Student was late; end of the interview happend in a rush but all topics were covered.
3	UA	F	25	General Practice	No	
4	VUB	M	27	Radiology	General Practice	Second choice GP but no other students who wanted to participate available at this university. An extra 'specialist student' was selected.
5	UA	M	24	Internal medicine - Cardiology	Radiology	
6	UA	M		Internal medicine	No	
7	UA	F	24	Urology	Surgery	
8	VUB	F	27	General Practice	Tropical health	
9	KUL	M	25	General Practice	Internal medicine	
10	KUL	M	29	General Practice	Internal medicine	
11	UG	F	24	General Practice	Geriatrics	
12	UG	F	26	Psychiatry	Children and youth psychiatry	
13	UG	M	24	Surgery	No	
14	ULG	M	24	Anesthesiology	neuro	
15	ULG	F		Hematology	Geriatrics	
16	ULG	F		General Practice	Anesthesiology	
17	ULG	F		General Practice	No	
18	ULB	F	32	General Practice	No	
19	ULB	F	24	General Practice	Gynaecology	
20	ULB	M	28	Child psychiatry	Pediatrics	
21	ULB	F	24	Surgery	anesthesiology	
22	UCL	M	30	Neurosurgery	No	
23	UCL	M	24	Clincal Biology	No	
24	UCL	F	24	General Practice	No	
25	UCL	F		General Practice	No	

APPENDIX 3.5.CONCEPT LIST : STUDENTS' INTERVIEWS

Concepts = factors influencing the choice whether or not to choose general practice

Choice to study medicine (elements before medical training)

- Personal characteristics (interests, experiences, intelligence, intuition)

a. Desire to help people/care for people
   - Role models and environment (own medical contacts, family, teachers)
   - Characteristics of the medical education itself (science, interesting courses , prestige, challenging)
   - Image (perception) of the medical profession in

b. Science, helping people, useful, prestige

c. Is very vague! Based on 'heard about it', media, own experiences with the medical sector

Image of a general practitioner/general practice

Work content

	Before	During training
Variety – wide feeld Complex General (versus details in other specialties)	x	x x x
A lot of contact with people Able to follow up for a long periode	x	 x
A lot of administration		x
General practice = less technical acts General practitice = talking with people A lot of psychosocial problems		x x x
Not a lot of knowledge needed		x

Working conditions

Workload

	Before	During training
Hard work	x	x
No personal time / high availability	x	x
Administrative burden		x

Work organisation

	Before	During training
Setting: GP works alone Different practice settings exist Autonomy – own boss	x	 x x
More friendly environment then hospital		x
Combination with family life (GP works at home, close to his family)		x

Professional identity/prestige

	Before	During training
GP has a central role in health care	x	
Confident	x	
Well known person in the village	x	
Lower status then other specialists/less charisma	x	

General practice = soft side of medicine		x
Lack of respect and appreciation for the GP		x
'Waste bin' in medical education		x

Factors related to specialty choice in general during education

Perception of the different disciplines

- Work content and professional identity

d. Variation

e. Technical aspects (balance clinical/technical)

f. Patient contact

g. Possibility to determine work content (eg. In a group practice it is possible to 'sub specialise')

- Organisational aspects

h. Setting (own boss, possibility to interdisciplinary work, different atmosphere hospital/GP setting, ...)

i. Combination with family life, other activities

Sources of ideas on the different specialties

- Content and experiences during courses and clerkships
- Role models (doctor-teachers, during clerkships, doctors in the family or personal environment)
- Media ('complaining GPs', TV series)

Choice is based on a vague idea/inadequate information

- Clerkships: too little and too late
- Profession remains unknown till the clerkship period ("real experience with the discipline) + experience highly depends on the specific clerkship environments
- Little information on specialty choice during medical education

Fit of the perception of the discipline with own characteristics/preferences

- What you like to do/what interests you

j. E.g. General practice fits with the combination science and helping people

- The way in which you like to work

k. E.g. No general practice because you like team work and general practice is perceived as a lonely profession.

Factors related to the choice of general practice during educattion

The profession itself (perception, outcome of the process of medical education) (cfr. Scheme in on general practice)

- Work content (diversity, taking time for the patient, life-long follow-up)
- Working conditions
- Organisation/setting (own boss, friendlier environment then hospital)
- Professional identity/prestige (lack of repect, waste bin in medical education)

Personal fit with job content and work climate

Teachers (role models) and courses content (whole curriculum)

- Content of the courses by GPs = organisational and psychological aspects. In contrast with the 'real courses on medicine' taught by specialists.
- GPs seem to know little in contrast with the highly detailed lessons of specialists
- During courses GPs are presented as inferior to specialists ('assistant')
- Importance of teaching capacities! Being able captivate the students during your course if very important. GPs score not so well.

General practice education

- No clear image of general practice during education
- Perception of the general practice training: very hard (long hours, low financial remuneration)
- Is the waste bin in the medical education: is what you do when you don't get accepted in the other specialties.

Clerkships

- Residents who train students: enthusiastic or not motivated
- Experience and content of the clerkship (= first real contact with the profession)
- Too short and too dependent of the practice/hospital you are assigned to. Importance of different experiences, in different settings, practices.

APPENDIX 3.6.QUANTITATIVE INSTRUMENT: DUTCH VERSION

VRAGENLIJST "GENERAL PRACTICE: MOTIVATIONS TO CHOOSE FOR OR TO LEAVE THE PROFESSION."

DEEL I: PERSOONLIJKE GEGEVENS

1. Geslacht

	Man
	Vrouw

2. Geboortejaar 19 ….. …..

3. Wat is het hoogste diploma van je vader en moeder?

	vader	moeder
Lager onderwijs		
Lager middelbaar		
Hoger middelbaar		
Hoger niet-universitair korte type (max 3 J)		
Hoger niet-universitair lange type (max 4 J)		
Universitair		
Ander diploma:_____		
_____		

4. Wat is het beroep van je vader en moeder?

	vader	moeder
Huisarts		
Klinisch specialist		
Arts in maatschappelijke gezondheidszorg		
Arts in een andere functie		
Andere		

5. Heb je een arts of tandarts in de rechtstreekse familie (broer, zus, ouder, oom, tante, grootouder)?

	Ja
	Neen

6. Aan welke universiteit studeert u nu?

	KUL
	UCL
	ULB
	UA
	UGent
	ULg
	VUB

7. Heb je de studieprogramma's geneeskunde van de verschillende universiteiten met elkaar vergeleken?

	Ja
	Neen

8. Heeft je interesse in (een) bepaalde discipline(s) meegespeeld bij je keuze voor de universiteit?

	Ja
	Neen

9. Bepaalde de aandacht voor …… in het curriculum mee je keuze voor de universiteit?

	Ja	Neen
Huisartsgeneeskunde als specialisme		
Andere specialismen		
Sociale/maatschappelijke gezondheidszorg		
Wetenschappelijk onderzoek		

10. In welke mate ben je het eens met volgende stellingen?

A = Helemaal oneens

B = Oneens

C = Eerder oneens

D = Eerder eens

E = Eens

F = Helemaal eens

	A	B	C	D	E	F
Ik ben zeer persoonlijk betrokken bij mijn studie.						
Mijn leven draait op dit moment voornamelijk om mijn studie.						

DEEL II: KEUZE VOOR DE STUDIE GENEESKUNDE: BESLISSINGSPROCES

11. Wanneer heb je voor geneeskunde gekozen?

Meerdere antwoorden zijn mogelijk!

	In mijn kindertijd ging mijn interesse al uit naar geneeskunde
	Tijdens mijn middelbare studies
	In het allerlaatste jaar van het secundair
	Tijdens het studeren van een andere hogere opleiding
	Ik weet het niet

12. **Wat** heeft die keuze, voor de studie geneeskunde, mee bepaald?

Meerdere antwoorden zijn mogelijk!

	Het was vanzelfsprekend, de studie paste geheel bij mijn persoonlijkheid
	Omgaan met mensen
	Intellectuele uitdaging
	Combinatie van intellectuele uitdaging en het omgaan met mensen
	Het aanzien van de opleiding
	Omdat ik een goede leerling(e) was
	Eigen contacten met artsen
	Media
	Algemene interesse
	Andere

13. **Wie** beïnvloedde de keuze voor geneeskunde, zowel in positieve als in negatieve zin?

Meerdere antwoorden zijn mogelijk!

	Ouder(s) die arts is (zijn)
	Ouders die geen arts zijn
	Andere familieleden
	Vrienden/kennissen
	Artsen die jou of je familie behandel(d)en
	Leerkrachten uit het middelbaar onderwijs
	Niemand
	Anderen

14. Had je bij de start van je studies al een idee van de specialisatie die je later wil uitoefenen?

	Ja, welke? _____
	Neen

DEEL III: KEUZEPROCES DISCIPLINE

15. Welke discipline is je eerste keuze?

	Acute geneeskunde			Neurologie
	Anesthesiologie			Nucleaire geneeskunde
	Arbeidsgeneeskunde			Oftalmologie
	Arts gespecialiseerd in het beheer van medische gegevens			Ontwikkelingssamenwerking
	Cardiologie			Orthopedie
	Dermatologie			Oto-rhino-laryngologie
	Endocrinologie			Pathologische anatomie
	Fysische geneeskunde			Pediatrie
	Gastro-enterologie			Plastische heelkunde
	Gerechtelijke geneeskunde			Pneumologie
	Geriatrie			Psychiatrie
	Gynaecologie - verloskunde			Radio- en radiumtherapie
	Heelkunde			Radiologie
	Hematologie			Reumatologie
	Huisartsgeneeskunde			Sportgeneeskunde
	Inwendige geneeskunde			Stomatologie
	Jeugdgezondheidszorg			Tropische geneeskunde
	Kinderpsychiatrie			Urgentiegeneeskunde
	Klinische biologie			Urologie
	Maatschappelijke gezondheidszorg			Wetenschappelijk onderzoek
	Neurochirurgie			

16. Welke discipline is je tweede keuze?

Deze discipline kan dezelfde zijn als jouw eerste keuze!

	Acute geneeskunde			Neurologie
	Anesthesiologie			Nucleaire geneeskunde
	Arbeidsgeneeskunde			Oftalmologie
	Arts gespecialiseerd in het beheer van medische gegevens			Ontwikkelingssamenwerking
	Cardiologie			Orthopedie
	Dermatologie			Oto-rhino-laryngologie
	Endocrinologie			Pathologische anatomie
	Fysische geneeskunde			Pediatrie
	Gastro-enterologie			Plastische heelkunde
	Gerechtelijke geneeskunde			Pneumologie
	Geriatrie			Psychiatrie
	Gynaecologie - verloskunde			Radio- en radiumtherapie
	Heelkunde			Radiologie
	Hematologie			Reumatologie
	Huisartsgeneeskunde			Sportgeneeskunde
	Inwendige geneeskunde			Stomatologie

	Jeugdgezondheidszorg			Tropische geneeskunde
	Kinderpsychiatrie			Urgentiegeneeskunde
	Klinische biologie			Urologie
	Maatschappelijke gezondheidszorg			Wetenschappelijk onderzoek
	Neurochirurgie			

17. Was huisartsgeneeskunde voor jou een optie?

	Nooit geweest.
	Ik heb het overwogen, maar verworpen.
	Ik overweeg het nu.
	Het is mijn definitieve keuze.

18. Wanneer ontstond jouw keuzezekerheid over de vervolgopleiding?

	Voor ik aan de studie geneeskunde begon
	Tijdens de theoretische opleiding
	Tijdens de stages
	Ik ben nog niet zeker van mijn keuze

DEEL IV: CONTACT MET HUISARTSGENEESKUNDE

In te vullen door iedereen: zowel diegene die kiest voor huisartsgeneeskunde als diegene die een andere specialisatie verkiest!

19. In welke mate ben je het eens met volgende stellingen?

A = Helemaal oneens

B = Oneens

C = Eerder oneens

D = Eerder eens

E = Eens

F = Helemaal eens

	A	B	C	D	E	F
Tijdens mijn opleiding waren de meeste van mijn lesgevers medisch specialisten (geen huisartsen).						
Tijdens mijn opleiding waren de meeste van mijn lesgevers huisartsen.						
Tijdens mijn opleiding waren de meeste van mijn lesgevers werkzaam buiten de curatieve sector.						

20. Heb je tot nu toe volgende ervaringen gehad met de huisartsgeneeskunde?

	Ja	Neen
Hoorcolleges		
Lessen in kleine groepen		
Huisartsenstage in het 1ste of 2de jaar		
Huisartsenstage in het 3de of 4de jaar		
Huisartsenstage in het 5de of 6de jaar		

21. In welke mate ben je het eens met volgende stellingen?

A = Helemaal oneens

B = Oneens

C = Eerder oneens

D = Eerder mee

E = Eens

F = Helemaal eens

	A	B	C	D	E	F
Wat het beroep van arts inhoudt, daar ben ik pas tijdens mijn stage achter gekomen.						
Ik heb voldoende huisartsenstage kunnen doen om mijn keuze op te baseren.						
Huisartsen belichten tijdens de lessen in onvoldoende mate hun eigen vakmanschap.						
Ik heb in mijn huisartsenstage intellectuele uitdaging gemist.						
Ik kreeg vaak de indruk dat mijn opleiders de huisartsgeneeskunde als een minderwaardige beroepskeuze bekeken.						
Een huisarts die slecht bij me overkomt, kan mij in belangrijke mate demotiveren om voor huisartsgeneeskunde te kiezen.						

22. Hebben de volgende ervaringen je specialisatiekeuze beïnvloed?

	Ja	Neen	Geen ervaring
Hoorcolleges basisdisciplines			
Hoorcolleges huisartsgeneeskunde			
Hoorcolleges specialisme			
Lessen in kleine groepen			
Huisartsenstage			

23. Hoe is je visie over huisartsgeneeskunde?

In welke mate ben je het eens met volgende stellingen

A = Helemaal oneens

B = Oneens

C = Eerder oneens

D = Eerder mee

E = Eens

F = Helemaal eens

	A	B	C	D	E	F
Mits goede organisatie is het huisartsenberoep goed te combineren met een gezinsleven.						
Een huisarts kent een grote variatie in zijn/haar werk.						
De huisarts is in de eerste plaats een hooggeschoold medicus.						
Huisartsgeneeskunde is een moeilijke discipline omdat je alle domeinen moet kennen.						
Huisartsgeneeskunde is moeilijk omdat je vaak met onzekerheden moet omgaan.						
Huisartsgeneeskunde laat toe om autonoom te werken en ik vind dat een voordeel.						
De huisarts moet weinig weten van veel (en de andere specialisten veel van weinig).						
De huisarts kent een grote werkdruk.						
De huisarts krijgt veel respect van patiënten.						
De huisarts moet permanent bereikbaar zijn.						

De huisarts heeft het voorrecht om met patiënten in verschillende levensfasen te werken.						
Het financiële aspect van het huisartsenberoep is aantrekkelijk.						
De huisarts moet een groot aantal dagen van wacht zijn.						
Er zit een groot aandeel routinewerk vervat in het werk van een huisarts.						
Als huisarts is het moeilijk om een administratieve hulp te hebben.						
Een huisarts moet veel nascholing volgen.						
Het huisartsenberoep kent veel aanzien.						
Technologie is niet zo belangrijk in de huisartspraktijk.						
Als huisarts ben je in hoge mate onderworpen aan de druk en eisen van patiënten.						
Huisarts is een eenzaam beroep, met weinig contact met collega's.						
Als huisarts heb je heel wat mogelijkheden om jezelf te bekwamen in subdomeinen.						
Als huisarts heb je heel wat mogelijkheden tot wetenschappelijk onderzoek.						

24. Is het beeld, van het beroep van huisarts veranderd/geëvolueerd ten opzichte van in het begin van je studie?

	Ja
	Neen

25. **Wat** heeft, volgens jou, voornamelijk het beeld dat je **nu** hebt over de huisarts bepaald?

Meerdere antwoorden zijn mogelijk!

	Lessen en hoorcolleges
	Media
	Persoonlijke ervaring (bvb. eigen ziektebeleving of die van familie)
	Stage
	Andere

26. **Wie** heeft, volgens jou, voornamelijk het beeld dat je **nu** hebt over de huisarts bepaald?

Meerdere antwoorden zijn mogelijk!

	Familie/kennissen uit de medische sector
	Familie/kennissen niet uit de medische sector
	Docenten, assistenten,…
	Stagebegeleiders
	Eigen huisarts
	Andere

DEEL V: BLIK OP DE TOEKOMST

27. Wat vind je belangrijk in je toekomstig beroepsleven?

Slechts één antwoord geven per lijn.

A = Helemaal niet belangrijk

B = Niet belangrijk

C = Eerder niet belangrijk

D = Eerder belangrijk

E = Belangrijk

F = Heel belangrijk

	A	B	C	D	E	F
Goed samenwerken met collega's						
Het ontwikkelen van nieuwe vaardigheden en kennis						
Een goede beloning						
Aanvaard worden door anderen						
Mogelijkheden voor eigen initiatieven						
Regelmatige salarisverhogingen						
Vriendschappen ontwikkelen						
Zelfrespect ontwikkelen						
Openheid en eerlijkheid tussen collega's						

28. Welke waarde hecht je in je toekomstig beroepsleven aan de volgende beloningen?

Slechts één antwoord geven per lijn.

A = Helemaal niet waardevol

B = Niet waardevol

C = Eerder niet waardevol

D = Eerder waardevol

E = Waardevol

F = Heel waardevol

	A	B	C	D	E	F
Een goed salaris						
Prestigieuze functieaanduiding						
Vrije dagen en vakantie						
Jobzekerheid						
Interessant werk						
Prettige werkomstandigheden						
Erkenning						
Carrièremogelijkheden						
Flexibele werktijden						
Prettige collega's						

29. In welke mate ben je het eens met volgende stellingen?

Slechts één antwoord geven per lijn

A = Helemaal oneens

B = Oneens

C = Eerder oneens

D = Eerder eens

E = Eens

F = Helemaal eens

	A	B	C	D	E	F
Huisartsgeneeskunde zou aantrekkelijker zijn indien de betaling per prestatie zou vervangen worden door een betaling per patiënt (zogenaamde "capitation" of abonnementssysteem).						
Het is noodzakelijk dat er een financiering komt van de praktijkondersteuning (praktijkassistentie, secretariaat) van de huisarts.						
Een hoger honorarium voor raadplegingen na 18u vormt een goede maatregel om de aantrekkingskracht van de huisartsgeneeskunde te vergroten.						
De functie van huisarts zou aantrekkelijker zijn indien de patiënten sterk zouden worden aangespoord om pas via verwijzing door de huisarts naar de specialist te gaan.						
Vermits huisartsgeneeskunde het meest kosteneffectieve niveau van zorgverstrekking is, dient de persoonlijke bijdrage ("het remgeld") voor contacten met de huisarts afgeschaft.						
Het gemiddeld inkomen van een huisarts en dat van een specialist zou van dezelfde grootte-orde moeten zijn.						
De organisatie van de continuïteit tijdens de nacht en het weekend via huisartsenwachtposten zou het beroep van huisarts meer aantrekkelijker maken.						
Samenwerking tussen huisartsen en andere disciplines zou financieel moeten worden ondersteund.						
De huisarts zou een grotere impact moeten hebben in de beleidsbeslissingen wanneer zijn/haar patiënten in het ziekenhuis zijn opgenomen.						
Patiënten zouden moeten verplicht worden zich in te schrijven bij een huisartspraktijk, zodat de huisarts goed weet voor wie hij/zij verantwoordelijk is.						
Ik zou liever werken als huisarts in loondienst dan als zelfstandige.						

Bedankt voor jouw medewerking!

APPENDIX 3.7. QUANTITATIVE INSTRUMENT: FRENCH VERSION

QUESTIONNAIRE "GENERAL PRACTICE: MOTIVATIONS TO CHOOSE FOR OR TO LEAVE THE PROFESSION."

PARTIE I: DONNEES PERSONNELLES

1. Sexe

	Masculin
	Féminin

2. Année de naissance 19 ….. …..

3. Quel est le diplôme le plus élevé de votre père et de votre mère?

	père	mère
Enseignement primaire		
Enseignement secondaire inférieur		
Enseignement secondaire supérieur		
Enseignement de type court non universitaire (max. 3 ans)		
Enseignement de type long non universitaire (max. 4 ans)		
Enseignement universitaire		
Autre diplôme:_____		
_____		

4. Quelle est la profession de vos parents?

	père	mère
Médecin généraliste		
Spécialiste clinicien		
Médecin dans le cadre de la santé publique		
Médecin dans une autre fonction		
Autre		

5. Avez-vous un médecin ou un dentiste dans votre famille proche (frère, sœur, parents, oncle, tante, grand-parents)?

	Oui
	Non

6. A quelle université êtes-vous actuellement inscrit ?

	KUL
	UCL
	ULB
	UA
	UGent
	ULg
	VUB

7. Avez-vous comparé les programmes d'études médicales des différentes universités?

	Oui
	Non

8. Votre intérêt pour une (ou plusieurs) discipline(s) a-t-il joué un rôle dans le choix de l'université ?

	Oui
	Non

9. L'attention pour …. dans le curriculum a-t-elle eu une influence sur le choix de l'université?

	Oui	Non
La médecine générale comme spécialité		
D'autres spécialités		
La médecine dans le cadre de la santé publique		
Recherche scientifique		

10. Dans quelle mesure êtes-vous d'accord avec les propositions suivantes ?

A = Pas du tout d'accord

B = Pas d'accord

C = Plutôt pas d'accord

D = Plutôt d'accord

E = D'accord

F = Tout à fait d'accord

	A	B	C	D	E	F
Je suis très impliqué dans mes études						
En ce moment, ma vie gravite essentiellement autour de mes études						

PARTIE II: CHOIX DES ETUDES DE MEDECINE: PROCESSUS DE DECISION.

11. Quand avez-vous choisi la médecine?

Plusieurs réponses sont possibles!

	Dans mon enfance, mes centres d'intérêt se tournaient déjà vers la médecine
	Pendant mes études secondaires
	Pendant la dernière année de mes études secondaires
	Pendant des études supérieures dans une autre matière
	Je ne sais pas

12. **Qu'est-ce qui** a contribué à ce choix pour les études de médecine?

Plusieurs réponses sont possibles!

	C'était évident, les études convenaient tout à fait à ma personnalité
	Le contact humain
	Le défi intellectuel
	La combinaison du défi intellectuel et du contact humain
	Le prestige de la formation
	Parce que j'étais un bon élève
	Des contacts personnels avec des médecins
	Médias
	Un intérêt général
	Autres

13. **Qui** a influencé ce choix pour la médecine (de manière positive ou négative)?

Plusieurs réponses sont possibles!

	Un (ou des) parent(s) médecin(s)
	Des parents non médecins
	D'autres membres de la famille
	Amis ou connaissances
	Le médecin traitant de vous ou de votre famille
	Des enseignants de l'enseignement secondaire
	Personne
	Autre

14. Au début de vos études, aviez-vous déjà une idée de la discipline que vous alliez pratiquer dans le futur?

	Oui. Laquelle?_____
	Non

PARTIE III: CHOIX DE LA DISCIPLINE DE SPECIALISATION

15. Quelle discipline souhaitez-vous choisir en premier choix?

	Anatomie pathologique			Médecine médico-légale
	Anesthésie-Réanimation			Médecine nucléaire
	Biologie clinique			Médecine scolaire
	Cardiologie			Médecine tropicale
	Chirurgie			Neurochirurgie
	Chirurgie plastique			Neurologie
	Coopération au développement			Ophtalmologie
	Dermatologie			Orthopédie
	Endocrinologie			Oto-rhino-laryngologie
	Gastro-entérologie			Pédiatrie
	Gériatrie			Pédopsychiatrie
	Gestion des données de santé			Physiothérapie (Médecine physique)
	Gynécologie – Obstétrique			Pneumologie
	Hématologie			Psychiatrie
	Médecine aiguë			Radiodiagnostic
	Médecine d'urgence			Radiothérapie
	Médecine dans le cadre de la santé publique			Recherche (pure)
	Médecine du sport			Rhumatologie
	Médecine du travail			Stomatologie
	Médecine générale			Urologie
	Médecine interne			

16. Quel est votre deuxième choix de spécialisation?

Cette discipline peut être la même que votre premier choix!

	Anatomie pathologique			Médecine médico-légale
	Anesthésie-Réanimation			Médecine nucléaire
	Biologie clinique			Médecine scolaire
	Cardiologie			Médecine tropicale
	Chirurgie			Neurochirurgie
	Chirurgie plastique			Neurologie
	Coopération au développement			Ophtalmologie
	Dermatologie			Orthopédie
	Endocrinologie			Oto-rhino-laryngologie
	Gastro-entérologie			Pédiatrie
	Gériatrie			Pédopsychiatrie
	Gestion des données de santé			Physiothérapie (Médecine physique)
	Gynécologie – Obstétrique			Pneumologie
	Hématologie			Psychiatrie
	Médecine aiguë			Radiodiagnostic

	Médecine d'urgence			Radiothérapie
	Médecine dans le cadre de la santé publique			Recherche (pure)
	Médecine du sport			Rhumatologie
	Médecine du travail			Stomatologie
	Médecine générale			Urologie
	Médecine interne			

17. La médecine générale a-t-elle été une de vos options?

	Jamais
	Je l'ai envisagé mais cette option a été rejetée ensuite.
	Je l'envisage maintenant.
	C'est mon choix définitif.

18. Quand avez-vous été certain de votre choix de spécialisation?

	Avant que je ne commence mes études de médecine
	Pendant la formation théorique
	Pendant les stages
	Je ne suis pas encore certain(e) de mon choix

PARTIE IV: CONTACT AVEC LA MEDECINE GENERALE

A remplir par tous, que vous ayez choisi la médecine générale ou une autre spécialité!

19. Dans quelle mesure êtes-vous d'accord avec les propositions suivantes ?

A = Pas du tout d'accord

B = Pas d'accord

C = Plutôt pas d'accord

D = Plutôt d'accord

E = D'accord

F = Tout à fait d'accord

	A	B	C	D	E	F
Pendant ma formation, la plupart des formateurs étaient des médecins spécialistes (non généralistes).						
Pendant ma formation, la plupart des formateurs étaient médecins généralistes.						
Pendant ma formation, la plupart des formateurs étaient actifs en dehors du secteur curatif.						

20. Avez-vous déjà eu les contacts suivants avec la médecine générale?

	Oui	Non
Cours en grands groupes		
Cours en petits groupes, séminaires		
Stage de médecine générale en 1ère ou 2ème année		
Stage de médecine générale en 3ème ou 4ème année		
Stage de médecine générale en 5ème ou 6ème année		

21. Dans quelle mesure êtes-vous d'accord avec les propositions suivantes ?

A = Pas du tout d'accord

B = Pas d'accord

C = Plutôt pas d'accord

D = Plutôt d'accord

E = D'accord

F = Tout à fait d'accord

	A	B	C	D	E	F
Je n'ai compris que, récemment, pendant mes stages ce que la profession de médecin signifiait.						
J'ai pu faire assez de stages de médecine générale pour étayer mon choix.						
Lors des cours, les médecins généralistes présentent insuffisamment leur métier.						
J'ai manqué de défi intellectuel pendant mon stage de médecine générale.						
J'ai eu souvent l'impression que les formateurs considéraient la médecine générale comme un choix professionnel de moindre qualité.						
Un médecin généraliste qui me fait mauvaise impression peut me démotiver de manière importante et m'empêcher de choisir la médecine générale.						

22. Ces expériences ont-elles influencé votre propre choix?

	Oui	Non	Pas eu d'expérience
Les cours sur les disciplines de base en grands groupes			
Les cours de médecine générale en grands groupes			
Les cours de spécialités en grands groupes			
Les cours en petits groupes, séminaires			
Les stages en médecine générale			

23. Quelle est votre image de la médecine générale?

Dans quelle mesure êtes-vous d'accord avec les propositions suivantes?

A = Pas du tout d'accord

B = Pas d'accord

C = Plutôt pas d'accord

D = Plutôt d'accord

E = D'accord

F = Tout à fait d'accord

	A	B	C	D	E	F
La médecine générale permet d'avoir une vie de famille correcte à condition d'avoir une bonne organisation.						
Un médecin généraliste a un travail varié.						
Le médecin généraliste est, avant tout, un médecin hautement qualifié.						
La médecine générale est une discipline difficile parce que vous devez connaître tous les domaines.						
La médecine générale est difficile parce qu'on doit souvent composer avec l'incertitude.						
La médecine générale permet de travailler de manière autonome et je trouve que c'est un atout.						
Le médecin généraliste doit savoir un peu de tout (alors que les autres spécialistes en connaissent beaucoup dans un domaine très particulier).						
Le médecin généraliste a une grande charge de travail.						
Le médecin généraliste est fort respecté par les patients.						
Le médecin généraliste doit être accessible à tout moment.						
Le médecin généraliste a le privilège de travailler avec des patients de tous âges.						
L'aspect financier de la médecine générale est attirant.						
Le médecin généraliste doit prester un grand nombre de jours de garde.						
Il y a une grande part de routine dans le travail du médecin généraliste.						
Comme généraliste il est difficile d'avoir une aide administrative.						
Un médecin généraliste doit suivre beaucoup de cours de recyclage.						
La profession de généraliste est prestigieuse.						
La technologie n'est pas fort importante pour la pratique de médecine générale.						
Comme généraliste, on est fort soumis aux pressions et exigences des patients.						
Dans le métier de généraliste on est fort seul, avec peu de contacts entre collègues.						
Un médecin généraliste a beaucoup d'occasions de se former dans des domaines particuliers.						
Un médecin généraliste a beaucoup d'occasions de faire de la recherche scientifique.						

24. Votre image de la médecine générale a-t-elle changé/évolué depuis le début de vos études de médecine?

	Oui
	Non

25. **Qu'est-ce qui** a, d'après vous, fortement déterminé l'image de la médecine générale que vous avez **actuellement**?

Plusieurs réponses sont possibles!

	L'ensemble des cours
	Médias
	Expérience personnelle (p.ex. maladie personnelle, maladie d'un membre de la famille, …)
	Stages
	Autre

26. **Qui** a, d'après vous, fortement contribué à créer l'image de la médecine générale que vous avez **actuellement** ?

Plusieurs réponses sont possibles!

	Famille/connaissances dans le domaine médical
	Famille/connaissances hors du domaine médical
	Les professeurs, assistants, …
	Les maîtres de stage
	Votre propre médecin traitant
	Autre

PARTIE V: COUP D'OEIL SUR LE FUTUR

27. Que trouvez-vous important pour votre vie professionnelle ?

Une seule réponse par ligne, s'il vous plaît.

A = Pas important du tout

B = Pas important

C = Plutôt pas important

D = Plutôt important

E = Important

F = Très important

	A	B	C	D	E	F
Collaborer efficacement avec des collègues						
Le développement de nouvelles capacités et de nouvelles compétences						
De bons revenus						
Etre accepté par les autres						
L'occasion de prendre des initiatives						
Une hausse régulière des rentrées d'argent						
Développer des amitiés						
Développer son amour-propre						
Franchise et honnêteté entre collègues						

28. Quelle valeur accordez-vous aux apports suivants dans votre vie professionnelle?

Une seule réponse par ligne, s'il vous plaît.

A = Sans valeur du tout

B = Sans valeur

C = Plutôt sans valeur

D = Avec un peu de valeur

E = Avec de la valeur

F = Avec beaucoup de valeur

	A	B	C	D	E	F
Un bon salaire						
Une nomination à une fonction prestigieuse						
Des jours de congé et de vacances						
La sécurité d'emploi						
Un travail intéressant						
Des conditions de travail agréable						
La reconnaissance						
Des possibilités de carrière						
Un temps de travail flexible						
Des collègues agréables						

29. Dans quelle mesure êtes-vous d'accord avec les propositions suivantes?

Une seule réponse par ligne, s'il vous plaît!

A = Pas du tout d'accord

B = Pas d'accord

C = Plutôt pas d'accord

D = Plutôt d'accord

E = D'accord

F = Tout à fait d'accord

	A	B	C	D	E	F
La médecine générale serait plus attrayante si le paiement à la prestation était remplacé par le paiement par patient (aussi appelé « capitation » ou système d'abonnement).						
Il est nécessaire de financer les aides du médecin généraliste (assistants, secrétariat).						
Fixer des honoraires plus élevés pour les consultations après 18 heures serait une bonne démarche pour augmenter l'attrait pour la médecine générale.						
La fonction du médecin généraliste serait plus attrayante si on incitait fort les patients à consulter d'abord le médecin généraliste avant d'aller chez le spécialiste.						
La contribution financière personnelle (« le ticket modérateur ») pour les contacts avec le médecin généraliste devrait être abandonnée puisque la médecine générale est le niveau financièrement le plus efficace de distribution des soins.						
Le revenu moyen du médecin généraliste et celui du médecin spécialiste devraient être du même ordre de grandeur.						
L'organisation de la continuité des soins pendant la nuit et le week-end par les postes de garde de médecine générale rendrait la profession de médecin généraliste plus attrayante.						
La collaboration entre médecins généralistes et professionnels d'autres disciplines devrait être appuyée financièrement.						
Le médecin généraliste devrait avoir un plus grand impact dans le processus de décision concernant ses patients hospitalisés.						
Les patients devraient être obligés de s'inscrire chez un généraliste pour que le médecin généraliste sache bien de qui il est responsable.						
Je préférerais travailler comme médecin généraliste appointé plutôt que comme indépendant.						

Merci de votre participation!

APPENDIX 3.8.BINARY LOGISTIC REGRESSION

Table [1]: [Logistic regression: personal characteristics and chance on choosing General Practice as specialty n = 412]

	Odds ratio (95% CI)	P-value
Gender (ref = women)	**0,542 (0,329-0,893)**	**0,016**
What is your father's highest qualification?		0,790
Primary education	2,140 (0,139-33,006)	0,586
Lower secondary	0,856 (0,243-3,023)	0,810
Higher secondary	0,692 (0,327-1,462)	0,334
Higher short-term non-university (max 3 years)	1,320 (0,659-2,643)	0,433
Higher long-term non-university (max 4 years)	0,933 (0,419-2,077)	0,866
University	1,000	1,000
Other	0,585 (0,039-8,876)	0,699
What is your mother's highest qualification?		**0,012**
Primary education	0,721 (0,067-7,727)	0,787
Lower secondary	1,06 (0,292-3,841)	0,929
Higher secondary	**2,397 (1,148-5,008)**	**0,020**
Higher short-term non-university (max 3 years)	**3,315 (1,747-6,289)**	**0,000**
Higher long-term non-university (max 4 years)	1,831 (0,710-4,724)	0,211
University	1,000	1,000
Other	2,377 (0,288-19,600)	0,421
What is the profession of your father?		**0,008**
General Practitioner	2,192 (0,909-5,288)	0,081
Clinical Specialist	**0,134 (0,029-0,614)**	**0,010**
Public Health Physician	no result	
Physician in some other function	0,133 (0,009-1,892)	0,137
Other	1,000	1,000
What is the profession of your mother?		0,176
General Practitioner	**5,647 (1,081-29,505)**	**0,040**
Clinical Specialist	0,966 (0,174-5,348)	0,968
Public Health Physician	no result	
Physician in some other function	6,946 (0,565-85,453)	0,130
Other	1,000	1,000
Do you have a doctor or dentist in your immediate family (brother, sister, parent, uncle, aunt, grandparent)?	1,225 (0,720-2,086)	0,454
Dutch-French-speaking differences (ref = Dutch-speaking)	0,946 (0,586-1,527)	0,820
Constant	**0,306**	**0,000**
Nagelkerke R^2	0,195	
Chi^2 Model	62,280	0,000

Table [2]: [Logistic regression: values in the future professional life and chance on choosing General Practice as specialty n = 393]

	Odds ratio (95% CI)	P-value
Gender (ref = women)	0,733 (0,435-1,235)	0,243
Dutch-French-speaking differences (ref = Dutch-speaking)	0,760 (0,446-1,295)	0,313
What do you think is important in your future professional life?		
Good working relationship with colleagues	0,313 (0,053-1,853)	0,201
Developing new skills and acquiring knowledge	0,209 (0,016-2,697)	0,230
A good salary	1,281 (0,443-3,707)	0,648
Being accepted by others	**3,213 (1,048-9,847)**	**0,041**
Possibility of taking initiatives	3,872 (0,545-27,484)	0,176
Regular salary increases	0,761 (0,402-1,443)	0,403
Developing friendships	1,068 (0,380-3,000)	0,901
Developing self-respect	1,408 (0,611-3,246)	0,422
Openness and honesty between colleagues	*No result*	
How do you rank the following in terms of your future professional life?		
A good salary	1,083 (0,377-3,108)	0,882
Prestigious job designation	**0,323 (0,191-0,546)**	**0,000**
Free days and holiday	1,563 (0,555-4,406)	0,398
Job security	0,470 (0,089-2,476)	0,373
Interesting work	*No result*	
Pleasant working conditions	*No result*	
Recognition	1,075 (0,357-3,237)	0,897
Career opportunities	**0,341 (0,173-0,671)**	**0,002**
Flexible working hours	**4,350 (1,295-14,613)**	**0,017**
Nice colleagues	0,564 (0,037-8,686)	0,682
Constant	*No result*	
Nagelkerke R^2	0,239	
Chi^2 Model	74,534	0,000

Table [3]: [Logistic regression: motivation to choose medical education and chance on choosing General Practice as specialty n = 410]

	Odds ratio (95% CI)	P-value
Gender (ref = women)	**0,542 (0,320-0,920)**	**0,023**
Dutch – French speaking differences(ref = Dutch-speaking)	**0,589 (0,355-0,979)**	**0,041**
What was one of the deciding factors in your choice of medicine?		
It was obvious, this subject fitted in with my personality	0,936 (0,549-1,596)	0,808
Dealing with people	**3,895 (2,064-7,350)**	**0,000**
Intellectual challenge	0,532 (0,197-1,438)	0,214
Combination of intellectual challenge and dealing with people	1,049 (0,569-1,933)	0,879
The appearance of the training course	0,702 (0,315-1,566)	0,387
Because I was a good student	1,151 (0,601-2,203)	0,672
My own contact with doctors	0,921 (0,483-1,753)	0,801
Media	0,713 (0,103-4,945)	0,732
General interest	1,387 (0,869-2,216)	0,170
Other	0,513 (0,211-1,246)	0,141
Who influenced your choice of medicine, both negatively or positively?		
Parent(s) who is (are) physician	0,774 (0,375-1,595)	0,487
Parents who aren't physician	0,629 (0,334-1,187)	0,153
Other family members	0,758 (0,376-1,527)	0,438
Friends / Acquaintance	0,771 (0,429-1,387)	0,386
Physicians who treated you or your family	1,568 (0,764-3,221)	0,220
Teachers out of secondary school	0,578 (0,275-1,213)	0,147
Nobody	0,610 (0,295-1,262)	0,182
Others	1,499 (0,600-3,748)	0,386
When you started your studies did you already have an idea of the specialisation you wanted to do later?	**2,512 (1,553-4,065)**	**0,000**
Constant	0,546	0,222
Nagelkerke R^2	0,224	
Chi^2 Model	72,374	0,000

Table [4]: [Logistic regression: experience during medical education and chance on choosing General Practice as specialty n = 298]

	Odds ratio (95% CI)	P-value
Gender (ref = women)	0,756 (0,399-1,430)	0,390
Dutch-French speaking differences (ref = Dutch-speaking)	0,889 (0,459-1,723)	0,728
Did the following experiences have an influence on your choice of specialty?		
Lectures about basic disciplines	0,857 (0,366-2,010)	0,723
Lectures about general practice	1,674 (0,708-3,962)	0,241
Lectures about specialities	**0,265 (0,108-0,649)**	**0,004**
Tutorials	0,929 (0,421-2,054)	0,857
GP Clerkship	**8,248 (3,758-18,103)**	**0,000**
What, in your opinion, defined the image that you have **today** about GPs?		
Lectures	0,495 (0,234-1,047)	0,066
Media	1,185 (0,359-3,908)	0,780
Personal experience	1,053 (0,579-1,915)	0,866
Clerkship	0,510 (0,196-1,327)	0,168
Who, in your opinion, defined the image that you have **today** about GPs?		
Family / acquaintance working in the medical sector	**2,120 (1,060-4,241)**	**0,034**
Family / acquaintance not working in the medical sector	2,079 (0,845-5,118)	0,111
Lecturers, assistants	1,105 (0,557-2,193)	0,775
Supervisor of practical training	1,817 (0,865-3,814)	0,115
Own general practitioner	0,791 (0,428-1,462)	0,454
When were you absolutely sure about your choice to continue your studies?		0,303
Before I started studying medicine	1,784 (0,533-5,974)	0,348
During theory training	0,524 (0,229-1,198)	0,126
During clerkship	1,000	
I'm not sure yet about my choice	0,000	0,999
Constant	0,379	0,062
Nagelkerke R^2	0,414	
Chi^2 Model	106,834	0,000

Table [5]: [Logistic regression: statements with respect to the medical training and chance on choosing General Practice as specialty n = 342]

	Odds ratio (95% CI)	P-value
Gender (ref = women)	**0,519 (0,302-0,891)**	**0,017**
Dutch-French speaking differences (ref = Dutch-speaking)	1,029 (0,586-1,808)	0,921
Statements about commitment to the study		
I am very personally involved in my studies.	1,211(0,412-3,562)	0,727
My life at this moment revolves mainly around my studies.	0,714 (0,335-1,521)	0,383
Statements about professional orientation of teachers		
While I was studying most of my teachers were medical specialists (no GPs).	1,785 (0,378-8,437)	0,465
While I was studying most of my teachers were GPs.	3,644 (0,599-22,164)	0,160
During my studies, the majority of my teachers were working out of the curative sector.	0,772 (0,375-1,590)	0,483
To what degree do you agree with the following statements?		
I only realised what the profession of doctor implied when I was doing my internship.	0,902 (0,548-1,484)	0,685
I have done enough GP internships to be able to base my choice on them.	0,891 (0,535-1,484)	0,658
During the lessons, the GPs didn't give sufficient explanation about their own expertise.	0,920 (0,551-1,535)	0,749
I found that there wasn't any challenge when I did my GP internship.	**0,326 (0,173-0,617)**	**0,001**
I often get the impression that my teachers see GP studies as being an inferior choice of profession.	**4,127 (2,329-7,314)**	**0,000**
If I don't get a good impression of a GP it can be seriously demotivating when it comes to choosing to study to be a GP.	**0,538 (0,324-0,895)**	**0,017**
Constant	0,353	0,272
Nagelkerke R^2	0,219	
Chi^2 Model	59,481	0,000

Table [6]: [Logistic regression: statements with respect to the characteristics of the profession and chance on choosing General Practice as specialty n = 356]

	Odds ratio (95% CI)	P-value
Gender (ref = women)	0,714 (0,390-1,308)	0,276
Dutch-French speaking differences (ref = Dutch-speaking)	1,904 (0,892-4,066)	0,096
How do you see the profession of GP?		
As long as it is well organised, the profession of GP makes for a good combination with family life.	1,387 (0,591-3,254)	0,453
GPs have a lot of variety in their work.	1,921 (0,361-10,225)	0,444
GPs are first and foremost highly skilled practitioners.	0,698 (0,321-1,518)	0,364
The profession of GP is a difficult discipline because you have to know a lot about all different fields.	1,799 (0,386-8,385)	0,454
The profession of GP is difficult because you often have to deal with uncertainties.	1,721 (0,576-5,140)	0,331
The profession of GP allows you to work autonomously and I think that is an advantage.	2,284 (0,970-5,381)	0,059
GPs need to know a little bit about a lot of things (and other specialists a lot about few things).	0,546 (0,269-1,109)	0,094
GPs have a lot of work pressure.	1,038 (0,219-4,926)	0,962
GPs get a lot of respect from patients.	**2,609 (1,111-6,126)**	**0,028**
GPs need to be permanently available.	0,633 (0,347-1,156)	0,137
GPs have the privilege of working with patients in different stages of their life.	1,956 (0,342-11,196)	0,451
The financial aspect of the GP profession is appealing.	1,162 (0,607-2,226)	0,650
GPs need to be on call for a large number of days.	1,486 (0,820-2,693)	0,192
There is a lot of routine work involved in being a GP.	**0,240 (0,121-0,476)**	**0,000**
It is difficult for GPs to get help with their administrative work.	1,450 (0,785-2,676)	0,235
GPs need to follow a lot of refresher courses.	2,230 (0,918-5,415)	0,076
The profession of GP is highly respected.	**0,484 (0,262-0,894)**	**0,020**
Technology is not so important in GP practices.	0,790 (0,443-1,410)	0,425
GPs are subject a great degree to the pressures and demands of patients.	**0,471 (0,242-0,916)**	**0,027**
The profession of GP is a lonely one with little contact with colleagues.	**0,429 (0,225-0,818)**	**0,010**
GPs have a lot of possibilities to study in subdomains.	**2,578 (1,155-5,753)**	**0,021**
GPs have lots of opportunities to do scientific research.	**3,793 (1,987-7,240)**	**0,000**
Constant	**0,020**	**0,008**
Nagelkerke R^2	0,432	
Chi² Model	133,943	0,000

Table [7]: [Logistic regression: measures to make the GP profession more attractive and chance on choosing General Practice as specialty n = 339]

	Odds ratio (95% CI)	P-value
Gender (ref = women)	**0,488 (0,283-0,843)**	**0,010**
Dutch-French speaking differences (ref = Dutch-speaking)	0,632 (0,349-1,146)	0,131
Measures to make the GP profession more attractive		
The work of a GP would be more attractive if fee-for-service were replaced by a payment per patient (so-called "capitation" or subscription system).	**0,479 (0,278-0,824)**	**0,008**
There should be financing for practice support (practice assistant, secretary) for the GP.	2,323 (0,709-7,614)	0,164
Higher fees for consultations after 18:00 would be a good measure for increasing the appeal of the profession of GP.	0,635 (0,338-1,194)	0,159
The job of GP would be more attractive if the patients were strongly recommended that they should only visit specialists after being referred by a GP.	2,097 (0,751-5,857)	0,158
Because the profession of GP is the most cost-effective level of healthcare, the personal contribution for consultations with the GP should be scrapped.	0,811 (0,477-1,379)	0,440
The average income of a GP and that of a specialist should be of the same order.	**3,462 (1,741-6,885)**	**0,000**
Organising continuity during the night and the weekend via doctors on call should make the job of GP more attractive.	**3,563 (1,079-11,763)**	**0,037**
Partnerships between GPs and other disciplines should be supported financially.	1,101 (0,575-2,109)	0,772
GPs should have a bigger say in the management decisions when their patients are taken into hospital.	1,770 (0,985-3,181)	0,056
Patients should be obliged to register with a GP so that the GPs know who they are responsible for.	**2,204 (1,197-4,059)**	**0,011**
I would rather work as a GP in a salaried position than as self-employed.	0,985 (0,580-1,670)	0,954
Constant	**0,016**	**0,000**
Nagelkerke R^2	0,228	
Chi^2 Model	61,155	0,000

APPENDIX 4: INTERVIEWS WITH GENERAL PRACTITIONERS WHO LEFT THE PRACTICE (CHAPTER 4)

APPENDIX 4.1.QUALITATIVE INSTRUMENT FOR GP INTERVIEWS – FINAL DUTCH VERSION

Inleiding
Allereerst wil ik u bedanken omdat u aan dit onderzoek wil meewerken. Ik ben..... en ik werk op de faculteit geneeskunde van de Universiteit Antwerpen. Het onderzoek gaat over de motivatie om uit het huisartsenberoep te stappen en het beslissingsproces dat hieraan vooraf ging. De resultaten van dit onderzoek zullen bijdragen tot een beleidsvoorbereidend rapport over redenen waarom huisartsen hun beroep verlaten. We zijn geïnteresseerd in uw ervaringen en u mag in dit onderzoek dan ook alles zeggen waarvan u vindt dat het belangrijk is voor dit onderzoek. Het interview duurt ongeveer een uur en wordt opgenomen. Nadat het uitgetypt is, wordt de tekst geanalyseerd. Alles wat u tijdens het interview zegt is vertrouwelijk en in geen enkel document zullen uw persoonlijke gegevens herkenbaar zijn. De bedoeling van het interview is om dieper in te gaan op uw beslissing om het huisartsenberoep te verlaten: het beslissingsproces, de redenen, overwegingen. Daarvoor zou ik eerst even willen stilstaan bij uw keuze voor geneeskunde en huisartsgeneeskunde en zou ik het graag met u hebben over hoe u uw beroep als huisarts ervaren hebt en wat u ervan verwachtte. Hebt u zelf nog vragen voor we beginnen met het gesprek? Mag ik u nog vragen om je GSM even uit te schakelen? **Invullen gegevensfiche** Voor we ons gesprek beginnen wil ik samen met u nog een korte vragenlijst invullen. Het gaat om een aantal algemene gegevens die belangrijk zijn bij de verwerking en interpretatie van de resultaten.
Deel 1: Studie geneeskunde en HA geneeskunde
Ik wil u eerst vragen om in gedachten terug te gaan in het verleden namelijk naar periode dat u aan de studie geneeskunde begon. Herinnert u zich nog wat u motiveerde om geneeskunde te gaan studeren? Hebt u ooit – bij aanvang van uw studies of tijdens uw opleiding - overwogen om een andere specialisme dan huisartsgeneeskunde te kiezen? Indien neen: wat waren voor u de belangrijkste 'redenen' om voor huisartsgeneeskunde te kiezen?
Deel 2: Concrete verwachtingen en ervaringen met het huisartsenwerk/beroep **Beslissingsproces om uit het beroep te stappen**
Kan u eerst beschrijven hoe (praktijkvorm – regio) u als Hibo gewerkt hebt? Hoe hebt u het beroep van huisarts ervaren in uw Hibo-periode? Wat vond u aangenaam? Wat vond u minder aangenaam? In welke mate kwamen deze ervaringen overeen met wat u verwachtte van uw beroep als huisarts? Hoe bent u dan als afgestudeerd huisarts begonnen? Regio, praktijkvorm, aanleiding om in die bepaalde praktijk te starten, om zelf te beginnen. Hoe hebt u het beroep ervaren in die periode dat u als huisarts werkte? Wat vond u aangenaam? Wat vond u minder aangenaam?

In welke mate kwamen deze ervaringen overeen met wat u verwachtte?

Hoe is uw beslissing om uit het beroep te stappen dan tot stand gekomen?
Wanneer bent u gaan twijfelen?
Hoe lang heeft dit beslissingsproces geduurd?
Hoe hebt u dan uiteindelijk de beslissing genomen (welke dingen afgewogen)?
Wat had kunnen verhinderen dat u met uw praktijk stopte?

Deel 3: Huidige situatie / Suggesties

Nu werkt u als…. **of** Op dit moment hebt u geen professionele activiteit.
Om welke redenen hebt u hiervoor gekozen?
Wat veranderde er hierdoor *(nieuw beroep/stop professionele activiteit)* vooral voor u?

Mist u bepaalde aspecten van het huisartsenberoep? Welke?
Ziet u zichzelf nog ooit terug als huisarts werken? Waarom wel/niet?

Los van het feit of u zelf terug als huisarts zou gaan werken, welke maatregels zou u voorstellen om het huisartsenberoep in de toekomst aantrekkelijker te maken?

Deel 4:

Er zijn in het gesprek heel wat aspecten aan bod gekomen die meespeelden bij uw beslissing om te stoppen met uw werk als huisarts.
Graag overloop ik met u nog kort systematisch een aantal mogelijke redenen die verzameld werden bij andere collega's om te bekijken of deze redenen voor u al dan niet meespeelden.

Jobinhoud		
Medisch – technisch (pathologie-aanbod – diagnose – aanpak)		
Contact/relatie met patiënten en familie		
Werkomstandigheden		
Werkbelasting hoeveelheid werk, beschikbare tijd, verwachtingen van patiënten, verwachtingen qua vaardigheden/kennis en navorming		
Werkorganisatie Eigen praktijk/praktijkbeheer, Beschikbaarheid Huisbezoeken Praktijkondersteuning Administratie (bureaucratie), Mogelijkheid part-time werken / regelmatige uren		
Verloning		
Samenwerking/relatie met collega's		
Positie van de huisarts (verantwoordelijkheid, status, erkenning) T.o.v andere medische specialismen T.o.v patiënten		
Balans privé-werk ('kwaliteit van leven')		
Combinatie met andere professionele activiteiten studenten begeleiden, lesgeven andere professionele activiteit (preventie, …)		

Afsluiten

Ok, we zijn rond met de vragen die ik u wilde stellen, de topics die ik wenste te bespreken. Zijn er zaken die nog niet aan bod gekomen zijn tijdens het gesprek maar die u toch belangrijk vindt in het kader van dit onderzoek (uw keuze om uit het huisartsenberoep te stappen)? Hebt u zelf nog vragen, bedenkingen over dit gesprek of over het onderzoek? Bedankt voor het gesprek. Succes in uw verdere loopbaan.

APPENDIX 4.2.QUALITATIVE INSTRUMENT FOR GP INTERVIEWS – FINAL FRENCH VERSION

	Introduction
	D'abord je vous remercie pour votre contribution à ce projet de recherche. Je m'appelle Christiane Duchesnes et je travaille à la faculté de médecine de l'Université de Liège. Le but du projet est de connaître les raisons qui conduisent les medecins generalistes à quitter leur profession et le processus de decision vis-à-vis de cette décision**.** Les résultats de cette étude seront inclus dans un rapport adressé aux responsables gouvernementaux. Nous sommes intéressés par votre expérience et tout ce qui vous semble important pour cette recherche. il n'y a ni bonnes ni mauvaises réponses. L'entrevue durera environ une heure et sera enregistrée. Ultérieurement l'entrevue sera retranscrite et analysée. Tout ce que vous direz pendant ce temps est strictement confidentiel et ne pourra être relié en aucune façon à votre personne. Cette entrevue est divisée en trois parties : d'abord nous parlerons de votre choix de la médecine et de la médecine generale. Ensuite nous évoquerons ce que vous attendiez de la medecine generale et votre experience dans ce domaine. et, pour terminer, nous aimerions savoir pourquoi vous avez quitté la profession et ce que vous avez comme activites professionnelles actuellement. Puis-je vous demander d'éteindre votre téléphone mobile-GSM ? **Remplir la fiche** Avant que nous ne commencions je voudrais encore vous soumettre un petit questionnaire. Il s'agit de quelques données globales qui sont importantes pour l'analyse et l'interprétation des résultats.
	Partie 1: Recevoir des idées concernant le choix de la médecine et de la médecine générale
	Je voudrais d'abord vous demander de retourner en pensée dans le passé, particulièrement au moment où vous alliez choisir la médecine. Vous souvenez-vous encore de ce qui vous a motivé à entreprendre ces études ? Avez-vous jamais – au début ou pendant le cours de votre formation- envisagé de vous spécialiser? Si non : quelles étaient les raisons principales de choisir la médecine générale ? Si oui : pourquoi finalement avoir choisi la médecine générale ?
	Partie 2: attentes et expériences par rapport à la profession Processus de décision pour quitter la profession
	D' abord, pourriez-vous décrire votre travail comme assistant pendant les 2 ans de formation comme médecin généraliste ? Comment avez-vous ressenti la profession durant cette période ?

	Que trouviez-vous attrayant ? que trouviez-vous moins attrayant ? Dans quelle mesure ces expériences rencontraient-elles ce que vous attendiez de la profession de médecin généraliste? Pourriez-vous parler de votre pratique comme nouveau médecin généraliste agréé ? Comment avez-vous ressenti la profession durant les X années pendant lesquelles vous avez travaillé comme généraliste ? Que trouviez-vous attrayant ? que trouviez-vous moins attrayant ? Comment êtes-vous arrivé à la décision de quitter la médecine générale? Quand avez-vous commencé à douter ? Combien de temps a pris le cheminement qui a abouti à cette décision ? Comment avez-vous finalement pris cette décision ? (quels ont été les éléments déterminants dans cette décision) Qu'est-ce qui aurait pu vous empêcher d'arrêter ?
	Partie 3: Situation actuelle - suggestions
	Pour le moment vous travaillez comme….OU Pour le moment vous n'avez pas d'activité professionnelle. Pour quelles raisons avez-vous choisi ces nouvelles activités ? Qu'est-ce que cela a changé surtout pour vous ? Certains aspects de la profession de généraliste vous manquent-ils? Si oui, lesquels? Envisagez-vous de reprendre la médecine générale ? Pourquoi oui/non ? Même si vous n'êtes plus intéressé, quelles politiques proposeriez-vous pour rendre la médecine générale plus attrayante à l'avenir ?
	Partie 4
	Pendant cette entrevue, nous avons abordé beaucoup d'aspects qui ont joué un rôle dans votre décision d'abandonner la pratique de la médecine générale. Je voudrais vous proposer une série de thèmes ou de concepts qui ont été rassemblés par mes collègues à partir de la littérature ; pourriez-vous me dire s'ils ont eu une influence dans votre décision.
	Type de travail
	Médical-technique (pathologies – diagnostic)
	Contact/relations avec le patient et sa famille
	Les conditions de travail
	Charge de travail la quantité de travail le temps disponible les attentes des patients vos attentes en termes de connaissance, formation continuée
	Organisation du travail La gestion du cabinet Les disponibilités Les visites à domicile Le soutien pratique L'administration (bureaucratie) Possibilité de travail à temps partiel / à des heures régulières
	Aspect financier – les honoraires

	Travail d'équipe, relations avec les collègues
	La position du médecin généraliste (responsabilités, statut, reconnaissance) Par rapport aux autres spécialistes Par rapport aux patients
	L'équilibre entre la vie privée et le travail ('qualité de vie')
	Combiner avec autres activités professionnelles accompagner des étudiants, donner cours autre activité professionnelle (secteur de prévention, …)

APPENDIX 4.3.GP PARTICIPANTS

	Region	Gender	Age	Years in practice	Stop	Activity
1	W	F	40	14	< 1year	Hygiene inspector
2	W	M	38	11	1 year	Medical director
3	W	M	44	13	6 years	Society director in the social sector
4	W	F	33	3	5 years	Labour medicine
5	W	F	37	6	5 years	Pharmaceutical company
6	W	F	33	4	4 years	Labour medicine
7	W	F	36	5	4 years	Helping spouse
8	W	F	40	9	6 years	Prevention for children (ONE)
9 pilot	Vl	F	36	7	<1 year (stopped 2 months before interview)	Emergency medicine
10	Vl	F	33	5	1.5 years	University teaching – preparing PhD
11	Vl	F	37	6	2 years	Nursing home physician in the Netherlands
12	Vl	F	38	6	4 years	'GP' in a psychiatric residence
13	Vl	F	42	7 + 4	Stop 2001 Start over 2002 Stop 2006	Housewife
14	Vl	F	36	4	4 years	Prevention for Children (Kind en Gezin)
15	Vl	F	35	9	< 1 year	Esthetical medicine
16	Vl	M	30	< 1 year	1 year	Starts as a GP in the Netherlands

APPENDIX 4.4.CONCEPT LIST GP INTERVIEWS: SUGGESTIONS FOR GP RETENTION

Concepts = suggestions for support of retention

WORKING CONDITIONS: workload and work organisation

- Stimulating group practices (sharing responsibility- workload - availability)
- Deputizing services
- Practice support : Administrative tasks (simplify and remunerate) – Nursing tasks

RELATIONSHIP WITH COLLEGUES

- Collaboration / teamwork
- Solidarity

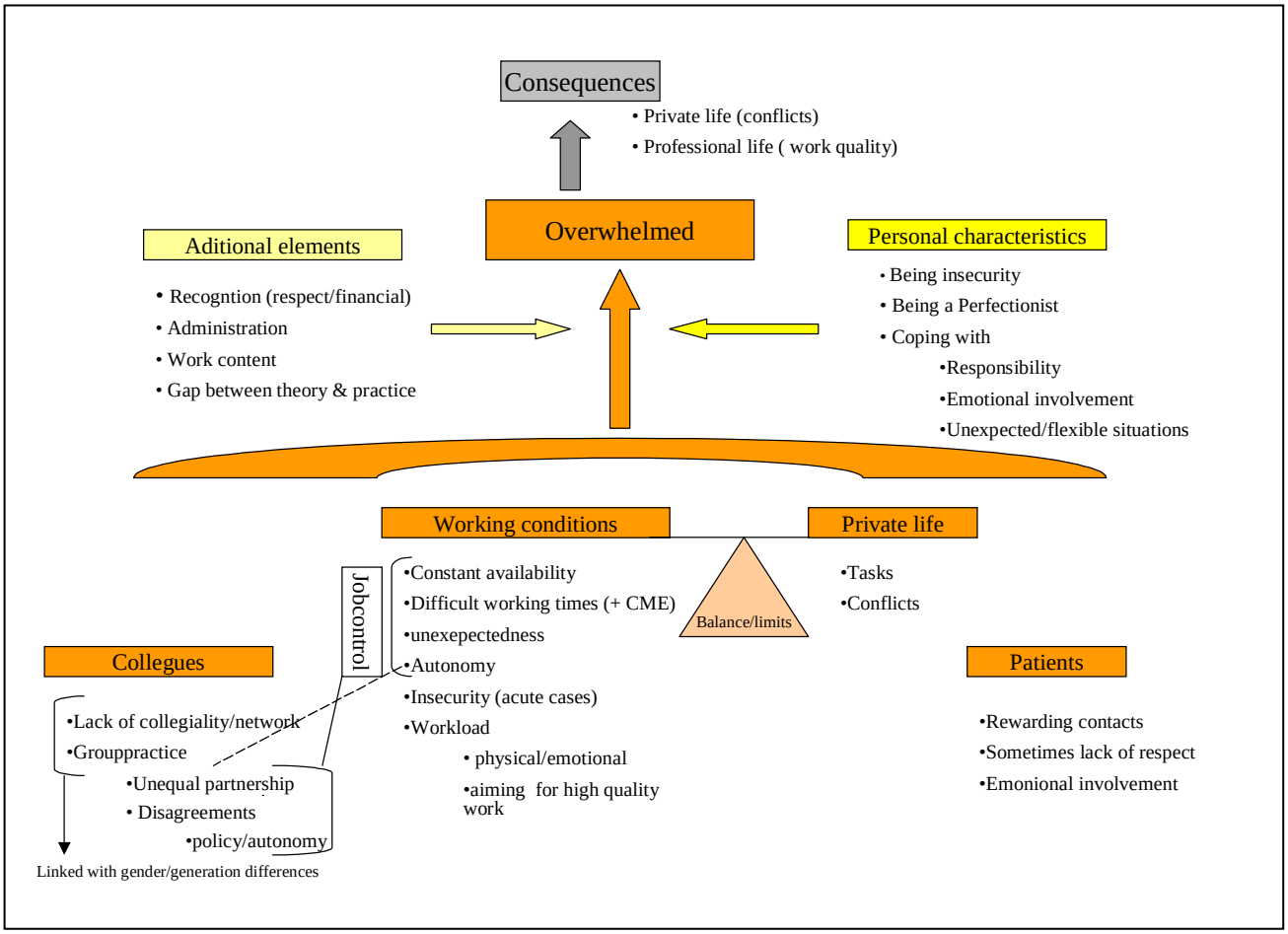
TRAINING

- During medical education: emergencies – financial/ organizational aspects
- Continuing medical education during working hours

OTHER SUGGESTIONS

- Recognitions (financially and of general practice in general)
- Change patients attitudes (campaigns/patient education)
- Continuing support after graduation

APPENDIX 4.5.CONCEPT FRAME GP INTERVIEWS: FACTORS RELATED TO LEAVING GENERAL PRACTICE



APPENDIX 4.6.CURRICULA PAR FACULTE

Curricula by university: GP teaching (H = hours- D = Days – M = Months)

	1st Year		2d Year		3d Year		4th Year		5th Year		6th Year		
	Theory	Clerkship	Theory	Clerkship	Theory	Clerkship	Theory	Clerkship	Theory	Clerkship	Theory	Clerkship	
UA					8D (a) 6x3 H (c)	2D	6x3 H (c)	3D	2D (b)	2D		8D (compulsory all students)	
ULB		15D(d)					15H 49H(c)	10D		1M(a)			
VUB	1D (c)	5D (c)	1D (c)	5D					4H	1M	12H		
UCL			16H.	6D			48H	1M	36H		36H		
UGent	4H			8D*	4D***		30H**		30H**	5D	8H		15D (compulsory all students)
ULiège	2H				8H 7H (e)	2D			5H (e)		15H 5H (e)		
KULeuven			5H	4D	5H 36H(f)	4D	10H	3D	7H 3H(f)		4H	1M	

Remarks

a/ from 2009 onwards

b/from 2007 onwards

c/ UA and VUB, multidisciplinary clinical cases (GP together with specialist)

d/ULB from 2009, including brief teaching by GPs

e/ULiège, Evidence-based medicine courses: teachers are GPs

f/KULeuven: hours between brackets are optional lessons (e.g. 36h = 4 series of nine hours thought by GPs on primary care topics, students are free to choose one out of these 4 topics)

* Interdisciplinary clerkship in homes

**Clinical case presentations by a family physician, with a patient and with participation of other disciplines and/or specialities if needed.

*** Including a Community Oriented Primary Care Project in a deprived area in Ghent

APPENDIX 5: POLICIES TO BE IMPLEMENTED IN BELGIUM TO IMPROVE ATTRACTION, RECRUITMENT AND RETENTION OF THE GENERAL PRACTITIONERS: A STAKEHOLDERS' ANALYSIS (CHAPTER 6)

APPENDIX 5.1.MULTI-CRITERIA ANALYSIS

MCM has been used in the domain of stakeholder analysis (156) or selection of drugs (157). In the MCM approach a core of specific options are predefined and could, for example, be provided by the deliverable 1 (review of policies). But interviewees are also allowed to add additional ones. Secondly, interviewees may be entirely free to define their attribute without affecting comparability. Indeed, MCM allows for aggregation and an overall performance index can be computed. Third, MCM allows opening–up to different perspectives and allow the stakeholder to air its opinion on the different options. Detailed methodology of the multi-attribute criteria can be found in Belton and Steward; an application to health policies tackling obesity can be found at http://www.sussex.ac.uk/spru/1-4-7-1-8-2-1.html

APPENDIX 5.2.REASONS OF POLICIES

The policies

The policies would be identified through the following sources:

- The literature review carried out in the D1 (David Sauwens and Wiliam Dhoore) has identified several policy options and factors that may contribute to improve retention/recruitment of GPs.
- The Del2, particularly the qualitative interviews with students, was useful to develop policies addressing teaching and attractivity issues.
- The recent review of policies carried out by the European Observatory
- Recent policy review carried in Belgium, such as the KCE report 72B on medical supply (158), the Visitatie Report (159) , or the study related to General practice Emergency study (160) .
- The policies being currently under discussion or being developed in Belgium, such as the DMG, Impulseo I, Impulseo II, the numerus clausus, etc.

How to decide which policies to include in the survey? First of all, we need to considerer the studies being (1) effective, (2) being transferable to the Belgian context. As the review showed, effectiveness is not always well settled so that limiting the scope to evidenced-based policies would miss important and popular policies. We decide thus to consider as efficient policies that were widely implemented and considered successful. We considered as transferable to the Belgian context policies that make sense in the Belgian context or that is being considered. This transferability was assessed by discussing the policies several times in the group responsible of the stakeholders' study as well as with key persons considered as knowledgeable of the Belgian health care system. We did not exclude a policy because it could controversial. This is precisely what the stakeholder survey aims at: to identify polices not being legitimate under the Belgian context. The policies are organised in 5 themes: educational programme, economic incentives, work organisation and work-life balance, health care organisation.

A first list of policies was drafted and then revised: two focus groups were organised with the teams responsible of this stakeholders' study, one focus groups with all those participating to the project. Face-to-face cognitive testing was also carried out (see below) to check the understanding of each scenario.

Educational programmes and curricular approaches

Synthesis

The review concluded that students enter medical school with a preference for primary care, but this preference diminishes over time (Dhoore and Sauwens, 2008). Indeed, most of recent generations of medical graduates are trained by academic hospitals and, as a consequence, it could be that primary care is not well-known and promoted among medical students. Educational strategies aim at providing young graduates with early and positive experience in primary care.

Some educational programmes such as the PSAP were successful in attracting and retaining GPs. However all such initiatives did not succeed (see the Florida PIMS programme).

Moreover, these programmes include many components (selection of students with an interest in family medicine, education in community medicine, support by family physician, internship in family medicine, loans, administrative support for locating/opening their own family practice) making difficult to disentangle selection component, from educational or financial components.

Exposing medical students and residents to practice in the community has been suggested (Pathman, 1999) as the best educational experience both to prepare physicians for rural practice and to lengthen the time they stay. Such educational approach is thus likely to improve retention.

One important tenet of such approach is that socialization to GP will lead to improved ARR. The longitudinal exposure to community-based medicine may be an important key (Sauwens and D'hoore). To some extent, this is supported by Geerts and Lorant showing that inactivity in curative medicine is increasing among the licensed GPs: this suggests that the socialization into the work of GP will make a difference. The solution is not to add a GP preceptorship since this last will not improve ARR. As the PSAP experience shows, what is needed is to a have pipeline strategy exposing all medical doctors to strong and attractive models of primary care and allowing GP and specialty to be considered as equals.

The tenet is supported by the deliverable 2 results, particularly those related to the students: "*Students very strongly emphasize the lack of GP teachers in the curriculum. Because of the preponderate presence of specialist teachers some students feel as if they are all considered and trained as specialists*" . Clerkships seems to improve much influence on the decision to run for speciality medicine of GP and it seems that early clerkships in GP have much room for improvement : students complain that such clerkships experience come very late and are not enough or are very dependent of the supervisor quality (maitre de stage).

Implication for Belgium

Educational interventions are the most important instruments for attraction strategies. In that domain, the role of medical school is particularly important and many policies have been designed to improve GP attraction.

- Select students according to motivations and abilities considered as key in general practice.
- Transformation on medical school mission and culture and availability of primary care models and culture
- Increase and improve longitudinal exposure to primary care in teaching and earlier internship
- Improve relay with general practice to counter-balance the role of hospital in the training of medical graduates.

Economic incentives

Synthesis

Different economic incentives have been considered for attraction, retention and recruitment (scholarship for students, grants for medical schools, grants for starting practice, income of GPs).

Funded Scholarships (such as the National Health Services Corps) are important in the US but they are controversial both regarding effectiveness (Probst 2003) and ethic. For two reasons we think however that such instrument are not relevant for Belgium. First, these scholarships have been used to promote a better geographical distribution, which is less an issue in Belgium. Additionally, because in Belgium the cost of medical teaching is largely financed by the state, the issue of economic incentive through scholarship is not relevant in the Belgian context.

Grants for medical schools (Title VII fundings) are second funding scheme, delivered not directly to students but to medical schools. Title VII funding amount to an average of 127,500 USD per year and per institution. These funding is associated with increased activity in family practice although causal relationship is hard to ascertain. Because these fundings are delivered to medical school, these funding must be correlated with educational and curriculum programmes presented in the previous section.

Another economic incentive is of providing young GP starting up their practice with a subsidy. This policy instrument is used in Canada and Australia, particularly in the context of the urban/rural divide. The Belgian Impulseo I programme belongs to this type of programme: a subsidy of €20,000 particularly if GP decides to open a family practice in an urban positive action zone (Sauwens and Dhoore). However, the relevance and effectiveness of financial incentives to improve recruitment and retention remain controversial. Theoretically, it is difficult to understand how a rather small subsidy could change recruitment decision for a life-long career: such subsidy is mostly insignificant on the overall return after a full career. However, several studies point to the needs of young graduates of being helped in their installation. Young graduates may be better assisted by being provided with support staff, fiscal advices, lawyer support and information technology support. This kind of support is however more easily delivered to a group practice (see below) .

Improved income is another important issue which may influence recruitment and retention. There is some indication that GP have lower income opportunity than specialist. In the US, the median income for GPs increased, between 1994 and 2004 , by 21% against 38% for specialists (161). In Norway, efforts have been made to reduce the income gap between the GPs and the specialists (162). However, the effectiveness of such measure to improve ARR is unknown.

Finally, as the European Observatory blueprint suggests, the issue of income is not only of question of level of income but also an issue related to the income mechanism : payment should not be only fee-for-service, but should also be (at least partially) capitated. To some extent, this fits with the Belgian "Dossier Medical Global" policy which provides the GP with an additional income of 25€ per patient registered. The deliverable 2 "leavers" study also suggest that some GP may be willing to work under a salary basis.

Implication for Belgium

- Scholarship are not relevant in the Belgian context
- In the line of Impulseo II, to provide better assistance in setting up a group practice with financial, information technology, legal and medical assistant support.
- As the best-practice example of RPAP, to set up independent not-for-profit and proactive organisation financed and entitled by the Government and aiming at 1) to analyse the communities needs in primary care 2) to attract students to general practice during their study and provide some with grants, advice and support; 3) to inform and help young GP graduates to open their practice or join their practice (including sometimes helping

their spouse find a job), 4) to provide working GPs with support and activities retaining the GP in the profession.

- In line with the recent improvement in GP fees, to reduced the income differences between GP and specialist.
- Diversification of the payment mechanism.

Working Conditions and Family balance

Several quantitative and qualitative studies have shown the importance of working conditions. Locum relief allows a physician to be temporarily replaced by another physician and helps to decrease the workload or burn-out of GPs. These programmes exist in Australia and Canada, facing a big urban/rural divide. Locum is however conditional on having a sufficiently staffed workforce. There are few studies investigating the effects of locum on ARR. Moreover, if locum can be attractive for the GPs who benefit from it, it is not likely to be the case for those providing it. On the long term providing locum is not appealing for highly qualified professionals. Moreover, the feasibility of locum could be problematic in Belgium: first of all, each GP is obliged to participate to an out-of-hour service, second locum could be considered as not trustful because of the highly competitive market in GP. The design of locum needs thus to be attractive.

High clinical and administrative workload, work-life imbalance, lack of working hour's flexibility and a bad or unwelcoming living environment for the GP and his/her partner are important reasons for leaving the profession. Several policies may help to deal with these working conditions: salaried contracts, part-time-and family friendly jobs, job rotation and dual career policies. Policies allowing for more flexible working schedules are also more likely to delay retirement. The deliverable 2 analysis with leavers also pointed to the issue of work-life balance with GPs feeling being constantly claimed by their patients, by the administrative work and their private life.

Belgian GP, particularly young women, seem more and more reluctant to be providing after-hour services (deliverable 2, "leavers"), although, on average, a Belgian GPs carries about 6 days per year. Night and week-end duties are perceived as an excessive burden, to be done in non-secure conditions. The organisation of deputising services (weeknights and weekends) was a suggestion raised by several interviewees in the deliverable 2 and was also suggested in a recent Belgian study addressing after-hour duties (160)

Implication for Belgium

Because the percentage of women is increasing both in all medical doctors and particularly in GP, policies allowing for better working conditions and better work-life balance should be considered.

- Attractive Locum
- Allow for dual career and more flexible job involvement
- Opt-out for night and Week-end duties, replaced by a deputising service for such shift.
- Salaried contract

Organisation of Health care

The issue of ARR of primary care is somewhat linked to the design of the primary care sector and the overall organisation of health care. Indeed, the D1 concluded that "*the place and organization of primary healthcare, as well as the role of GPs within primary healthcare may influence indirectly physician supply and therefore the shape, the relevance and feasibility of attraction-recruitment-retention-policies*" (D'hoore and Sauwens, 2008). For example, some health care systems do allow for an improved role of a physician assistant or nurse practitioner, allowing the GP to have less administrative tasks to carry on. Belgium is considered, for example as a country with a low level of collaborative relationship compared with other European countries(162).

Several aspects of the organisation of health care have suggested to help tackle the ARR : changing the numerus clausus size and distributions, group practice and redistribution of tasks (including higher coordination with other professionals), payment mechanism, gatekeeping and fundsholding.

Increasing GP supply is not likely as such to reduce shortage. As a consequence, changing the **numerus clausus** by either improving the GP share (currently 43%) or modifying the overall cap is not likely to improve GP retention and recruitment, although it may have an effect on attraction. A recent KCE report shows that the quota of GPs were not fulfilled, with 230 GP slots not being allocated between 2004 and 2006,: the situation is more acute in the North (185 unfulfilled slots) than in the south (45 unfulfilled slots) . However, the numerus clausus is a very controversial policy and it would be interesting to assess how far the stakeholders are in favour of scrapping it. Although scrapping the numerus clausus may not have strong effect on relative attractivity of GP compared with specialist, it may improve overall supply.

Most of Belgian GP are working as stand-alone (163) and, indeed, a European review has shown that Belgium ranks low in **group practice and collaborative teamwork** in comparison with other countries(162). Group practice may be a policy improving not only quality of care, but also allowing more flexible work schedule, helping in accessing supportive resources (secretary, assistant, information technology, legal and fiscal advice, management of facilities, recruitment of administrative staff). To some extent, the idea of the Belgian Impulseo II and the DMG initatives was to foster group practice, without jeopardizing the self-account status or fee-for-service financing basis. The creation of the SISD (Integrated Service of Home Care, 2003) is a funding mechanism for multidisciplinary coordination that may help to better finance the coordination or collaborative work with and around GPs.

Although a very sensible issue, **payment mechanism** of GP should also be considered. The European review shows that many countries (Italy, UK, the Netherlands) have adopted mixed payment system while Germany, France and Belgium have sticked to a fee-for-service payment system. The review carried in the D1 suggests that some GPs, particularly women, would be interested in having a salaried payment system.

<u>Implication for Belgium</u>

- The numerus clausus selection should aim at targeting persons and competences more oriented to general practice such as relational competences, communication competences, and dedication to the communities.
- Create incentive for group practice and providing these with administrative, logistical (and financial support particularly to open new practice (see for example Impulseo II or the subsidy for patient record software).
- Improve incentive for the GPs take-up of collaborative and multidisciplinary work (such as in the SISD).
- Develop mixed payment mechanism with a fix and variable part and allows GPs to develop mixed and dual career. Avoid discouraging GPs involved in non-curative activities. See for example the DMG.

APPENDIX 5.3.SELECTION OF CRITERIA

Criteria from the literature review

Criteria linked to GP:

- Choosing family/general practice
- Income
- Workload
- Flexibility of working time/load, time available for taking holidays/leisure
- Out-of-hours work (garde ou wacht dienst)
- Autonomy of work (médecine libérale) (see Levasseur, Urcam)
- Not working alone, team-work or being networked (see Levasseur, Urcam)
- Time devoted non-clinical work such as administrative and social work (in order to focus on his/her true job)
- Environment of work (community features, services, network)
- Preference for primary care
- Health status of the community

Criteria linked to the society:

- Retaining general practitioners into the profession
- Diminishing geographical disparities in the distribution of GP (accessibility of care for patients living in less populated areas)
- Cost to the society
- Cost of the study of GP compared with cost of the study of specialty medicine
- Diversity of work and diversity of jobs involvements
- Quality of care

Criteria from the qualitative and quantitative study on 7th year students and GP leavers' interviews:

- Team-working (Belang van overleg tussen collega's)
- Qualiy of life (geen Wachtposten)
- Job interest
- Remuneration

Criteria from other research studies

According to previous research on health care rationing (164;165) and MCM in the health domain (166) the following criteria could be proposed :

- Health : how much the option will improve the health status of the population
- Equity: how much the option will improve the distribution of health and/or access into the whole strata of the population and particularly among the underserved or needy.
- Efficacy : how much the option is likely to improve GP retention and GP recruitment
- Cost to the public sector : how much the option will have an impact on public expenditures
- Cost to the households : how much the option will have an impact on households out-of-pocket expenditures
- Practical feasibility : is the option feasible in the Belgian context
- Social acceptability : is the option accepted from a cultural point of view or will it meet resistance from the population

- Professional acceptability : how much the option is likely to meet resistance from the medical profession or how much the profession will adhere to the option
- Self-regulation : how much the option is likely to improve or limit self-regulation by the profession itself

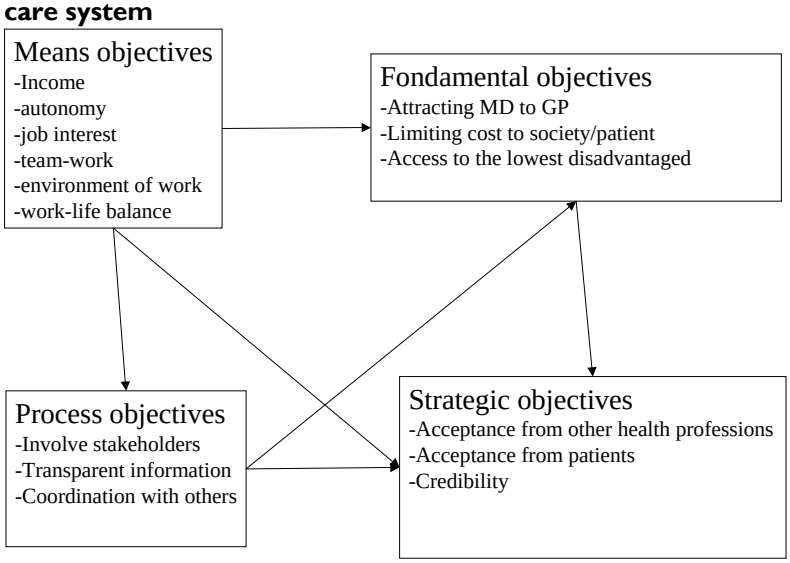
Reference	Topic	Criteria (in decreasing order of importance)
(167)	Tackling the obesity epidemic	Efficacy, social and health benefit, cost, acceptability, practical feasibility
(168)	Commissioning Services for Primary Care Trust	Effectiveness, Importance of the disease, Equity and fairness, Deliverability and time scale, self-care, acceptability, certainty Fit with national targets
(169)	An international comparison of spending priorities in health care	Effectiveness, cost-effectiveness, affordability, safety, individual responsibility, fairness
(170)	Rationing health care	Priority to those in immediate need, health maximisation, fairness
(171)	Priority setting in health care	Needs, lifestyle
(172)	Assess to access to primary care service	Needs, socio-economic factors
(173)	Selection of atypical antipsychotics drug for the treatment of schizophrenia	Efficacy, safety, cost, and adherence
	Analysis of quality in general practice and recommendations	Security of patient, geographical accessibility, clinical efficacy, availability, equity

Combining and grouping the attributes

Broadly there are two methods of combining the attributes: compensatory methods and non-compensatory methods. Compensatory methods assume that the attributes can be traded-off, that is a disadvantage in one attribute can be compensated by an advantage in another attribute. Non compensatory methods assume that the lower value of a (positive) attribute cannot be compensated by a higher value of another attribute (Yoon and Hwang, Multiple attribute decision making).

One methodological option is to group the attributes in big chapters between which few compensation could occur. For example, in a her research on Sustainable Management of Water resources, Nora Van Cauwenbergh, grouped the attributes in 3 groups : environment, economic and social (174). The stakeholders were requested to rate and choose the attribute within each group and no trade-off was allowed between these 3 groups of values.

Figure 1: Objectives of policies to improve general practice role in the health care system



APPENDIX 5.4.DEVELOPMENT AND TESTING OF THE QUESTIONNAIRE

The reliability of the questionnaire was granted though processes: review of previous instruments, cognitive testing, and expert reviews. The following questionnaires were revised:

- Kammi Schmeer, Stakeholder Analysis Guidelines, The World Bank, accessible at http://www1.worldbank.org/publicsector/anticorrupt/politicaleconomy/stakeholderanalysis.htm
- The Our NHS, Our future team has launched two online questionnaires (http://www.ournhs.nhs.uk/2008/01/04/play-your-part-with-our-online-questionnaire/)
- Stakeholder Perceptions Audit, Department of Health 2005.
- Creating the Future: Modernising Careers for Salaried Dentists in Primary Care Stakeholder Consultation Response Report, Department of Health 2006.
- The Key Stakeholder Survey on Human Resources for Health research priorities, WHO
- The Connecticut Health Policy Project
- Nisha Dogra and Olivia Carter-Pokras, Stakeholder views regarding cultural diversity teaching outcomes: a qualitative study, BMC Med Educ. 2005; 5: 37.
- The Alert questionnaire : Sustainable Management of Water Resources by Automated Real time monitoring, Decision Support (174).

Once the lay-out and content of the questionnaire was decided, it was tested through the method of the cognitive testing, a new method which improves the link between the underlying concepts and the questions (175). This method, fully described in Groves et al (176), is based on the direct observation of the way each respondent separately understands and fills in the questionnaire (set up as an electronic version to facilitate the encoding of the answers to the questions). Each respondent was observed by a person sitting next to them while they were filling in the questionnaire. They were asked to read the questions out aloud and to say how they understood (or not) the questions. The person observing them was writing their comments silently and was only talking when the respondent did not understand the question at all. The respondent was then asked to suggest another way of formulating the questions so that the real meaning of the question could be understood. All the respondents could thus freely express themselves about the content of the suggested politics or the criteria as well as about the way those politics or those criteria were formulated. The time to complete the questionnaire was also recorded. This cognitive testing was carried out with different kind of persons: some were GPs with a practice(=3), some were GPs without a practice (=2), some were not working in the general practice but had a general knowledge of the problematic(=3).

The wording of the questions as well as the scale or categories choice were supported by recent advance in item theory research (175) and its particular application to multi-criteria analysis in general (177) and in health (178). Several experts have also revised our questionnaire and given their advice about more specific problematic points in the questionnaire. A few qualitative interviews have also taken place to talk more specifically about the content of the politics and the best way to formulate them.

APPENDIX 5.5.LIST OF INSTITUTIONS OF THE STAKEHOLDERS

Policymakers

Policymakers are individuals and organisations being formally in charge of decision-making. This part of list was elaborated thanks to the recent review of the Belgian health care system (179).

1. Federal level

Legislative bodies:

MP of the Committee for health and social affairs

Executive bodies:

- Federal Public Service Social Affairs
- Federal Public Service Public, Directorate general health care

Federal Public Service Public, Accreditation of health care professionals Commissions

- Federal Public Service Public, Planning commission
- RIZIV-INAMI, department of health care
- RIZIV-INAMI, department of medical evaluation and control
- RIZIV-INAMI, Committee MEDICOMUT
- RIZIV-INAMI, General Council, RIZIV-INAMI
- RIZIV-INAMI, Committee for Health Care Insurance

Consultative bodies:

- Scientific Institute of Public Health
- Multipartite consultation structure for hospital policy
- Belgian Health Care Knowledge Centre
- Superior Health Council

2. Regional and community level

- Ministers of Health (Regions)
- Ministers of Upper-University Education

Directorate general of Welfare or Social Action and Health (both Communities)

3. Others

Political parties

The main sickness funds

Sectional groups

Their main goal is to enhance the interest of their members. These groups are also known as professional groups.

- The Order of Physicians
- Medical Unions

General practice Medical societies (ex: SSMG, Domus Medica)

Medical Academies

Specialty Medical societies (paediatricians, gynaecology)

- Unions of Primary care Centres
- Students association

Cause groups

Their main goal is to promote a particular issue or cause

- Medical Faculties (Deans)
- Academic Centres of General practice
- Medical teaching consultative bodies : CREF

Media

Huisarts nu, actual care, patient care, de artsenkrant, le généraliste, le journal du médecin, revue de la médecine générale

GPs

APPENDIX 5.6.FORMULA OF THE GENERALIZED KAPPA

The generalised kappa is defined by:

$$K = 1 - \frac{nm^2 - \sum_{i=1}^{n}\sum_{j=1}^{k} x_{ij}^2}{nm(m-1)\sum_{j=1}^{k} \overline{p}_j \overline{q}_j}, \qquad (2)A$$

where k = the number of categories, n = the number of subjects rated, m = the number of raters, $\overline{p}_j$ = the mean proportion for category j, and $\overline{q}_j$ = 1 – the mean proportion for category j. This index can be interpreted as a chance-corrected measure of agreement among m raters, each of whom independently classifies each of a sample of subjects into one of a set of mutually exclusive and exhaustive categories. The SAS Macro MAGREE.SAS has been used to compute such kappa coefficient.

APPENDIX 5.7.RELIABILITY ANALYSIS

The following tables provide the results of the reliability analysis.

1. Cronbach alpha to assess the reliability of the ratings
2. Frequency of selected stakeholders (with a score >=4) by groupe type.

Table 1: Reliability of the scoring of the stakeholders: cronbach alpha

	Standardized Variables	
Deleted ranker	Correlation with Total	Alpha
Rkn_1	0.618423	0.747708
Rkn_2	0.575283	0.756103
Rkn_3	0.547334	0.761463
Rkn_4	0.391256	0.790291
Rkn_5	0.542852	0.762317
Rkn_6	0.422116	0.784738
Rkn_7	0.556973	0.759621
Overall Cronbach Alpha		0.792971

Table 2: Group of stakeholders by selection status: results of the scoring

GROUPE	Selection		
Frequency Percent Row Pct Col Pct	No (score <4)	Yes (score >=4)	**Total**
media	9 5.81 90.00 8.18	1 0.65 10.00 2.22	10 6.45
policy	53 34.19 73.61 48.18	19 12.26 26.39 42.22	72 46.45
union	29 18.71 65.91 26.36	15 9.68 34.09 33.33	44 28.39
university	19 12.26 65.52 17.27	10 6.45 34.48 22.22	29 18.71
Total	110 70.97	45 29.03	155 100.00

APPENDIX 5.8.SCORING OF POLICIES BY CRITERIA

Table 3: Scoring of policies by criteria: mean score and standard deviation for all policies

	attractiviy		cost_ben		acceptance		access	
	Mean	Std	Mean	Std	Mean	Std	Mean	Std
Policies								
Better selection of the medical students	5.03	1.44	4.94	1.18	4.72	1.28	5.26	1.33
To develop a Clinical Academic activity for general practice	4.52	1.77	4.13	1.60	4.42	1.47	4.33	1.46
Integrate a GP approach in all Master courses	5.98	1.08	5.49	1.08	5.58	1.23	4.98	1.03
Compulsory training courses in GP for all medical students	6.12	1.03	5.33	1.30	5.51	1.33	5.05	1.12
Average for this topic	5.41	1.51	4.97	1.40	5.06	1.42	4.90	1.29
Increase the consultation fees	5.65	1.26	3.46	1.46	3.72	1.36	3.33	1.39
Capitation in addition to other fee-for-service	5.79	1.29	4.47	1.56	4.13	1.08	4.90	1.09
Combining wage-earning and fee for service	4.90	1.76	3.87	1.40	3.80	1.06	4.46	1.47
Incentives for working in a underserved geographical area	5.27	1.15	4.71	1.49	4.58	1.22	5.97	1.07
Target or quality of care payment in addition to other fee-for-service	4.45	1.89	5.08	1.71	4.24	1.39	4.73	1.40
Average for this topic	5.21	1.57	4.32	1.63	4.10	1.26	4.68	1.54
Support an evolutive career	5.61	1.11	4.60	1.03	4.61	1.08	3.89	1.26
Not to penalize work with regular schedules	5.34	1.35	4.09	1.08	3.99	1.01	3.82	1.37
Groups of professional GPs for on-call	4.88	1.57	3.73	1.32	3.79	1.12	4.38	1.71
Compensate GPs for their continous teaching activities	5.14	1.43	3.49	1.36	3.93	1.26	3.67	1.19
Suppression of the individual duty obligation of on-call	5.33	1.93	3.60	1.86	4.00	1.57	4.35	2.00
Average for this topic	5.26	1.51	3.90	1.41	4.07	1.25	4.02	1.55
Remove the Numerus Clausus	4.11	1.87	2.85	1.56	3.82	1.27	4.48	1.32
Incentive for working in underserved areas	5.16	1.26	4.91	1.27	4.65	1.04	6.16	0.91

	attractiviy		cost_ben		acceptance		access	
	Mean	**Std**	**Mean**	**Std**	**Mean**	**Std**	**Mean**	**Std**
Support local resource agency for GP	4.50	1.58	3.75	1.71	3.87	1.33	4.65	1.41
Create a nurse-assistant master	5.03	1.78	4.86	1.67	4.61	1.53	5.21	1.43
Delegation of specific clinical tasks to other heatlh profesions	4.64	1.72	4.76	1.49	4.93	1.40	4.90	1.47
Delegation of administrative activities	6.25	1.05	4.65	1.67	4.67	1.22	5.47	1.24
GPs sharing a common infrastructure	6.12	0.94	4.97	1.44	4.94	1.16	5.55	1.07
GPs working together	6.14	0.92	5.33	1.16	5.10	1.08	5.85	0.83
Limit the excessive use of the second line	5.64	1.54	5.67	1.61	3.63	1.79	4.89	1.59
Improve the role of the GP in the multidisciplinary team	5.99	0.97	5.51	1.20	5.33	1.37	5.28	1.14
Average for this topic	5.36	1.58	4.72	1.69	4.56	1.44	5.25	1.35

Table 4: Ranking of policies by stakeholder group : mean rank for all policies

	Stakeholder group			Total	
	GP	Policy maker	Interest group		p-values
	Mean rank	Mean rank	Mean rank	Mean rank	
Better selection of the medical students	2.3	2.8	2.8	2.7	0.27
To develop a Clinical Academic activity for general practice	3.6	3.6	3.3	3.4	0.04
Integrate a GP approach in all Master courses	2.0	1.9	1.7	1.8	0.45
Compulsory training courses in GP for all medical students	1.8	1.9	2.1	2.0	0.20
Increase the consultation fees	3.1	2.7	2.5	2.7	0.50
Capitation in addition to other fee-for-service	1.8	2.1	2.0	2.0	0.79
Combining wage-earning and fee for service	3.0	3.0	2.5	2.8	0.98
Incentives for working in a underserved geographical area:	2.8	2.3	2.3	2.4	0.79
Target or quality of care payment in addition to other fee-for-service	2.8	2.3	2.4	2.5	0.36
Support an evolutive career	2.2	1.7	1.5	1.8	0.04
Not to penalize work with regular schedules	2.2	2.1	2.2	2.2	0.62
Groups of professional GPs for on-call	2.9	2.6	3.0	2.9	0.48
Compensate GPs for their continous teaching activities	2.7	3.1	3.3	3.1	0.13
Suppression of the individual duty obligation of on-call	2.0	2.5	2.3	2.3	0.24
Remove the Numerus Clausus	2.2	3.5	3.5	3.1	0.02
Incentive for working in underserved areas : rank	2.0	3.0	2.9	2.7	0.00
Support local resource agency for GP: rank	3.8	4.5	4.3	4.2	0.08
Create a nurse-assistant master : rank	3.2	2.5	2.1	2.6	0.84
Delegation of specific clinical tasks to other heatlh profesions	2.9	2.1	1.9	2.3	0.50

	Stakeholder group			Total	
	GP	Policy maker	Interest group		p-values
	Mean rank	Mean rank	Mean rank	Mean rank	
Delegation of administrative activities	1.9	2.1	2.1	2.0	0.76
GPs sharing a common infrastructure	2.6	2.0	2.0	2.2	0.19
GPs working together	1.7	1.6	1.8	1.7	0.18
Limit the excessive use of the second line	2.0	2.0	2.1	2.1	0.13
Improve the role of the GP in the multidisciplinary team	1.8	1.7	2.0	1.9	0.18

Table 5: Ranking of policies by language group : mean rank for all policies

	Stakeholder language		Total	p-values
	Dutch-speaking	French-speaking		
	Mean rank	Mean rank	Mean rank	
Better selection of the medical students	2.8	2.6	2.7	0.89
To develop a Clinical Academic activity for general practice	3.6	3.3	3.4	0.27
Integrate a GP approach in all Master courses	1.7	2.0	1.8	0.03
Compulsory training courses in GP for all medical students	1.9	2.0	2.0	0.96
Increase the consultation fees	2.9	2.6	2.7	0.18
Capitation in addition to other fee-for-service	1.8	2.2	2.0	0.68
Combining wage-earning and fee for service	2.3	3.3	2.8	0.00
Incentives for working in a underserved geographical area:	2.7	2.2	2.4	0.00
Target or quality of care payment in addition to other fee-for-service	2.4	2.5	2.5	0.72
Support an evolutive career	1.7	1.9	1.8	0.52
Not to penalize work with regular schedules	2.1	2.3	2.2	0.20
Groups of professional GPs for on-call	3.2	2.5	2.9	0.15
Compensate GPs for their continous teaching activities	3.0	3.2	3.1	0.88
Suppression of the individual duty obligation of on-call	2.4	2.1	2.3	0.23
Remove the Numerus Clausus	3.8	2.3	3.1	0.00
Incentive for working in underserved areas	2.8	2.5	2.7	0.59
Support local resource agency for GP	4.3	4.0	4.2	0.89
Create a nurse-assistant master	2.3	2.9	2.6	0.27
Delegation of specific clinical tasks to other heatlh profesions	2.3	2.2	2.3	0.12

	Stakeholder language		Total	p-values
	Dutch-speaking	French-speaking		
	Mean rank	Mean rank	Mean rank	
Delegation of administrative activities	2.0	2.1	2.0	0.11
GPs sharing a common infrastructure	2.2	2.2	2.2	0.98
GPs working together	1.5	1.9	1.7	0.00
Limit the excessive use of the second line	1.9	2.2	2.1	0.54
Improve the role of the GP in the multidisciplinary team	2.1	1.7	1.9	0.55

Table 6: Ranking of policies by gender of the stakeholder : mean rank for all policies

	Sex		Total	p-values
	Men	Women		
	Mean rank	Mean rank	Mean rank	
Better selection of the medical students : rank	2.6	2.8	2.7	0.59
To develop a Clinical Academic activity for general practice : rank	3.4	3.5	3.5	0.53
Integrate a GP approach in all Master courses : rank	1.8	2.0	1.8	0.58
Compulsory clerkships in GP for all medical students : rank	2.0	1.9	2.0	0.55
Increase the consultation fees : rank	2.7	2.7	2.7	0.59
Capitation in addition to other fee-for-service: rank	2.1	1.7	2.0	0.14
Combining wage-earning and fee for service : rank	2.8	2.8	2.8	0.43
Incentives for starting a practice in a underserved geographical area: : rank	2.4	2.6	2.4	0.59
Target or quality of care payment in addition to other fee-for-service: rank	2.3	2.9	2.5	0.05
Support an evolutive career: rank	1.6	2.2	1.8	0.15
Not to penalize work with regular schedules: rank	2.1	2.4	2.2	0.83

	Sex		Total	p-values
	Men	Women		
	Mean rank	Mean rank	Mean rank	
Groups of professional GPs for on-call : rank	3.0	2.4	2.9	0.03
Compensate GPs for their continous teaching activities: rank	3.1	2.9	3.1	0.43
Suppression of the individual duty obligation of on-call: rank	2.4	1.9	2.3	0.22
Remove the Numerus Clausus: rank	3.3	2.6	3.1	0.42
Incentive for working in underserved areas : rank	2.7	2.5	2.7	0.76
Support local resource agency for GP: rank	4.2	4.1	4.2	0.80
Create a nurse-assistant master : rank	2.5	2.7	2.5	0.81
Delegation of specific clinical tasks to other heatlh profesions : rank	2.3	2.3	2.3	0.32
Delegation of administrative activities : rank	2.1	2.0	2.0	0.66
GPs sharing a common infrastructure: rank	2.2	2.1	2.2	0.77
GPs working together : rank	1.8	1.8	1.8	0.60
Limit the excessive use of the second line: rank	2.1	1.9	2.1	0.89
Improve the role of the GP in the multidisciplinary team : rank	1.8	2.0	1.9	0.34

Table 7: Influence of stakeholders' characteristics: OR and p-value

Variable	OR	p value	95%CI
To select the medical students by considering their motivations and social skills			
Stakeholder group:			
GPs	2.22	0.13	(0.80-6.20)
Policy makers	1.07	0.90	(0.39-2.89)
Interest group (ref.)	1.00	.	
Language:			
Dutch-speaking	0.74	0.43	(0.35-1.57)
French-speaking (ref.)	1.00	.	
Network level (score)	0.88	0.46	(0.63-1.23)
Teaching:			
Medical doctor	1.60	0.40	(0.53-4.83)
Other (ref.)	1.00	.	
Power in instit. (score)	1.21	0.19	(0.91-1.62)
Power of institu.(score)	0.79	0.15	(0.57-1.09)
Develop a Clinical Academic activity for GP			
Stakeholder group:			
GPs	0.73	0.55	(0.26-2.05)
Policy makers	0.69	0.47	(0.25-1.88)
Interest group (ref.)	1.00	.	
Language:			
Dutch-speaking	0.73	0.40	(0.34-1.53)
French-speaking (ref.)	1.00	.	
Network level (score)	0.94	0.73	(0.67-1.32)
Teaching:			
Medical doctor	1.56	0.43	(0.52-4.69)
Other (ref.)	1.00	.	
Power in instit. (score)	1.24	0.15	(0.93-1.64)
Power of institu.(score)	0.78	0.12	(0.57-1.07)
Integrate a GP approach in all Master courses			
Stakeholder group:			
GPs	0.32	0.03	(0.11-0.92)
Policy makers	0.86	0.79	(0.28-2.61)
Interest group (ref.)	1.00	.	
Language:			
Dutch-speaking	2.88	0.01	(1.31-6.33)
French-speaking (ref.)	1.00	.	
Network level (score)	1.18	0.38	(0.82-1.68)
Teaching:			
Medical doctor	1.50	0.50	(0.46-4.85)
Other (ref.)	1.00	.	
Power in instit. (score)	0.83	0.20	(0.62-1.11)
Power of institu.(score)	1.23	0.23	(0.87-1.73)
Compulsory clerkships in GP for all students			
Stakeholder group:			
GPs	2.12	0.15	(0.75-6.00)
Policy makers	0.94	0.91	(0.33-2.66)
Interest group (ref.)	1.00	.	
Language:			
Dutch-speaking	0.94	0.87	(0.44-1.99)
French-speaking (ref.)	1.00	.	
Network level (score)	0.92	0.62	(0.64-1.30)
Teaching:			
Medical doctor	0.31	0.04	(0.10-0.96)
Other (ref.)	1.00	.	
Power in instit. (score)	1.02	0.87	(0.77-1.37)
Power of institu.(score)	1.13	0.43	(0.83-1.55)
Increase the consultation fees			

Variable	OR	p value	95%CI
Stakeholder group:			
GPs	0.61	0.35	(0.21-1.72)
Policy makers	0.67	0.44	(0.24-1.85)
Interest group (ref.)	1.00	.	
Language:			
Dutch-speaking	0.75	0.45	(0.36-1.58)
French-speaking (ref.)	1.00	.	
Network level (score)	0.81	0.22	(0.59-1.13)
Teaching:			
Medical doctor	1.42	0.52	(0.49-4.16)
Other (ref.)	1.00	.	
Power in instit. (score)	1.10	0.51	(0.84-1.43)
Power of institu.(score)	0.96	0.78	(0.70-1.30)
Capitation in addition to other fee-for-service			
Stakeholder group:			
GPs	2.49	0.09	(0.88-7.08)
Policy makers	0.87	0.81	(0.30-2.59)
Interest group (ref.)	1.00	.	
Language:			
Dutch-speaking	1.86	0.11	(0.87-3.97)
French-speaking (ref.)	1.00	.	
Network level (score)	0.82	0.28	(0.58-1.17)
Teaching:			
Medical doctor	0.85	0.79	(0.26-2.82)
Other (ref.)	1.00	.	
Power in instit. (score)	1.03	0.84	(0.78-1.36)
Power of institu.(score)	1.00	0.99	(0.73-1.36)
Combining wage-earning and fee for service			
Stakeholder group:			
GPs	0.68	0.46	(0.25-1.89)
Policy makers	0.82	0.73	(0.26-2.57)
Interest group (ref.)	1.00	.	
Language:			
Dutch-speaking	3.54	0.00	(1.61-7.77)
French-speaking (ref.)	1.00	.	
Network level (score)	0.85	0.37	(0.60-1.21)
Teaching:			
Medical doctor	1.88	0.29	(0.59-6.02)
Other (ref.)	1.00	.	
Power in instit. (score)	0.87	0.37	(0.65-1.17)
Power of institu.(score)	1.47	0.02	(1.06-2.02)
Incentives for starting practice in a underserved geographical area			
Stakeholder group:			
GPs	0.29	0.04	(0.09-0.93)
Policy makers	0.84	0.77	(0.27-2.62)
Interest group (ref.)	1.00	.	
Language:			
Dutch-speaking	0.24	0.00	(0.10-0.57)
French-speaking (ref.)	1.00	.	
Network level (score)	1.05	0.81	(0.72-1.51)
Teaching:			
Medical doctor	0.38	0.12	(0.11-1.29)
Other (ref.)	1.00	.	
Power in instit. (score)	1.03	0.85	(0.76-1.40)
Power of institu.(score)	0.85	0.34	(0.60-1.19)
Target or quality of care payment			
Stakeholder group:			
GPs	0.70	0.49	(0.26-1.90)
Policy makers	0.69	0.45	(0.26-1.83)

Variable	OR	p value	95%CI
Interest group (ref.)	1.00	.	
Language:			
Dutch-speaking	1.08	0.85	(0.50-2.31)
French-speaking (ref.)	1.00	.	
Network level (score)	0.96	0.82	(0.70-1.33)
Teaching:			
Medical doctor	0.53	0.25	(0.18-1.55)
Other (ref.)	1.00	.	
Power in instit. (score)	1.18	0.24	(0.90-1.55)
Power of institu.(score)	0.80	0.18	(0.58-1.11)
Allow or to encourage an evolutive career			
Stakeholder group:			
GPs	0.20	0.01	(0.07-0.62)
Policy makers	0.78	0.67	(0.24-2.49)
Interest group (ref.)	1.00	.	
Language:			
Dutch-speaking	1.32	0.49	(0.60-2.92)
French-speaking (ref.)	1.00	.	
Network level (score)	1.10	0.63	(0.75-1.61)
Teaching:			
Medical doctor	1.89	0.30	(0.56-6.41)
Other (ref.)	1.00	.	
Power in instit. (score)	1.08	0.61	(0.80-1.46)
Power of institu.(score)	0.87	0.42	(0.62-1.22)
Not to penalize work with regular schedules			
Stakeholder group:			
GPs	1.68	0.33	(0.59-4.80)
Policy makers	1.24	0.69	(0.43-3.55)
Interest group (ref.)	1.00	.	
Language:			
Dutch-speaking	2.09	0.06	(0.97-4.50)
French-speaking (ref.)	1.00	.	
Network level (score)	0.99	0.98	(0.70-1.41)
Teaching:			
Medical doctor	1.39	0.57	(0.44-4.42)
Other (ref.)	1.00	.	
Power in instit. (score)	0.96	0.77	(0.72-1.27)
Power of institu.(score)	0.92	0.63	(0.67-1.27)
Provincial Groups of professional GPs for on-call duties			
Stakeholder group:			
GPs	1.30	0.63	(0.45-3.75)
Policy makers	1.22	0.72	(0.42-3.59)
Interest group (ref.)	1.00	.	
Language:			
Dutch-speaking	0.27	0.00	(0.12-0.61)
French-speaking (ref.)	1.00	.	
Network level (score)	1.13	0.52	(0.78-1.62)
Teaching:			
Medical doctor	0.14	0.00	(0.04-0.48)
Other (ref.)	1.00	.	
Power in instit. (score)	0.89	0.45	(0.66-1.20)
Power of institu.(score)	1.32	0.10	(0.95-1.83)
Compensate GPs for their continuous teaching			
Stakeholder group:			
GPs	1.67	0.31	(0.62-4.52)
Policy makers	2.37	0.11	(0.82-6.87)
Interest group (ref.)	1.00	.	
Language:			
Dutch-speaking	1.26	0.54	(0.60-2.62)

Variable	OR	p value	95%CI
French-speaking (ref.)	1.00	.	
Network level (score)	1.05	0.80	(0.74-1.47)
Teaching:			
Medical doctor	2.82	0.09	(0.85-9.35)
Other (ref.)	1.00	.	
Power in instit. (score)	1.05	0.75	(0.79-1.38)
Power of institu.(score)	1.13	0.47	(0.81-1.57)
Scrap the individual duty obligation of on-call			
Stakeholder group:			
GPs	2.18	0.14	(0.77-6.20)
Policy makers	0.50	0.21	(0.17-1.48)
Interest group (ref.)	1.00	.	
Language:			
Dutch-speaking	0.76	0.48	(0.36-1.62)
French-speaking (ref.)	1.00	.	
Network level (score)	0.99	0.96	(0.70-1.40)
Teaching:			
Medical doctor	0.25	0.03	(0.07-0.85)
Other (ref.)	1.00	.	
Power in instit. (score)	0.76	0.06	(0.56-1.02)
Power of institu.(score)	1.36	0.07	(0.98-1.89)
Scrap the numerus clausus			
Stakeholder group:			
GPs	7.17	0.00	(2.02-25.42)
Policy makers	0.87	0.82	(0.25-3.02)
Interest group (ref.)	1.00	.	
Language:			
Dutch-speaking	0.19	0.00	(0.08-0.46)
French-speaking (ref.)	1.00	.	
Network level (score)	0.85	0.43	(0.57-1.27)
Teaching:			
Medical doctor	2.80	0.15	(0.70-11.16)
Other (ref.)	1.00	.	
Power in instit. (score)	1.01	0.94	(0.73-1.41)
Power of institu.(score)	0.59	0.01	(0.40-0.86)
Incentive for working in underserved areas			
Stakeholder group:			
GPs	41E11	1.00	(0.00-.)
Policy makers	0.81	0.81	(0.14-4.76)
Interest group (ref.)	1.00	.	
Language:			
Dutch-speaking	0.15	0.03	(0.03-0.82)
French-speaking (ref.)	1.00	.	
Network level (score)	2.65	0.01	(1.24-5.66)
Teaching:			
Medical doctor	0.33	0.25	(0.05-2.21)
Other (ref.)	1.00	.	
Power in instit. (score)	0.60	0.07	(0.34-1.05)
Power of institu.(score)	1.51	0.24	(0.76-3.01)
Support local resource agency for GP			
Stakeholder group:			
GPs	2.79	0.09	(0.85-9.12)
Policy makers	1.11	0.88	(0.29-4.26)
Interest group (ref.)	1.00	.	
Language:			
Dutch-speaking	0.57	0.21	(0.24-1.38)
French-speaking (ref.)	1.00	.	
Network level (score)	0.78	0.27	(0.51-1.21)
Teaching:			

Variable	OR	p value	95%CI
Medical doctor	11.69	0.03	(1.26-108.0)
Other (ref.)	1.00	.	
Power in instit. (score)	0.97	0.88	(0.67-1.42)
Power of institu.(score)	0.98	0.91	(0.67-1.43)
Create a nurse-assistant master			
Stakeholder group:			
GPs	0.22	0.01	(0.07-0.66)
Policy makers	0.82	0.70	(0.29-2.26)
Interest group (ref.)	1.00	.	
Language:			
Dutch-speaking	2.14	0.04	(1.02-4.50)
French-speaking (ref.)	1.00	.	
Network level (score)	1.21	0.27	(0.86-1.69)
Teaching:			
Medical doctor	0.94	0.92	(0.30-2.98)
Other (ref.)	1.00	.	
Power in instit. (score)	0.66	0.00	(0.49-0.88)
Power of institu.(score)	1.47	0.02	(1.07-2.02)
Delegation of some clinical tasks to other existing heatlh profesions			
Stakeholder group:			
GPs	0.19	0.00	(0.07-0.57)
Policy makers	0.38	0.08	(0.13-1.10)
Interest group (ref.)	1.00	.	
Language:			
Dutch-speaking	0.33	0.01	(0.15-0.75)
French-speaking (ref.)	1.00	.	
Network level (score)	0.90	0.57	(0.64-1.28)
Teaching:			
Medical doctor	0.39	0.11	(0.12-1.25)
Other (ref.)	1.00	.	
Power in instit. (score)	0.96	0.78	(0.71-1.29)
Power of institu.(score)	1.29	0.14	(0.92-1.81)
Delegation of administrative activities			
Stakeholder group:			
GPs	1.27	0.65	(0.45-3.57)
Policy makers	0.83	0.73	(0.28-2.44)
Interest group (ref.)	1.00	.	
Language:			
Dutch-speaking	1.14	0.74	(0.53-2.43)
French-speaking (ref.)	1.00	.	
Network level (score)	0.99	0.95	(0.69-1.41)
Teaching:			
Medical doctor	0.66	0.48	(0.20-2.10)
Other (ref.)	1.00	.	
Power in instit. (score)	1.37	0.03	(1.02-1.82)
Power of institu.(score)	1.00	0.98	(0.73-1.38)
To encourage the GPs to have a common infrastructure			
Stakeholder group:			
GPs	0.16	0.00	(0.05-0.47)
Policy makers	1.32	0.62	(0.44-3.98)
Interest group (ref.)	1.00	.	
Language:			
Dutch-speaking	1.03	0.93	(0.48-2.23)
French-speaking (ref.)	1.00	.	
Network level (score)	1.38	0.08	(0.96-1.98)
Teaching:			
Medical doctor	0.67	0.52	(0.20-2.26)
Other (ref.)	1.00	.	
Power in instit. (score)	1.00	0.98	(0.75-1.33)

Variable	OR	p value	95%CI
Power of institu.(score)	1.07	0.68	(0.78-1.47)
To encourage GPs working together			
Stakeholder group:			
GPs	1.64	0.37	(0.56-4.86)
Policy makers	1.31	0.62	(0.44-3.89)
Interest group (ref.)	1.00	.	
Language:			
Dutch-speaking	2.78	0.01	(1.25-6.18)
French-speaking (ref.)	1.00	.	
Network level (score)	0.86	0.38	(0.61-1.21)
Teaching:			
Medical doctor	0.78	0.68	(0.25-2.51)
Other (ref.)	1.00	.	
Power in instit. (score)	1.24	0.15	(0.93-1.66)
Power of institu.(score)	0.89	0.49	(0.64-1.23)
Limit the excessive use of the second line			
Stakeholder group:			
GPs	1.00	1.00	(0.35-2.82)
Policy makers	0.84	0.74	(0.29-2.38)
Interest group (ref.)	1.00	.	
Language:			
Dutch-speaking	1.40	0.40	(0.65-3.02)
French-speaking (ref.)	1.00	.	
Network level (score)	1.03	0.87	(0.73-1.46)
Teaching:			
Medical doctor	0.56	0.33	(0.18-1.78)
Other (ref.)	1.00	.	
Power in instit. (score)	0.88	0.38	(0.65-1.18)
Power of institu.(score)	1.12	0.51	(0.80-1.55)
Improve the role of the GP in the multidisciplinary team			
Stakeholder group:			
GPs	1.37	0.55	(0.49-3.86)
Policy makers	1.42	0.55	(0.45-4.54)
Interest group (ref.)	1.00	.	
Language:			
Dutch-speaking	0.37	0.02	(0.17-0.83)
French-speaking (ref.)	1.00	.	
Network level (score)	0.99	0.95	(0.68-1.44)
Teaching:			
Medical doctor	0.30	0.07	(0.08-1.10)
Other (ref.)	1.00	.	
Power in instit. (score)	1.27	0.12	(0.94-1.72)
Power of institu.(score)	0.91	0.57	(0.65-1.26)

APPENDIX 5.9.INTERVIEW GUIDE IN DUTCH

1. Enkele dagen voor het interview

1. Test het programma twee keer uit en verzeker u ervan dat de gegevens die opgeslaan worden correct zijn.

2. Voorzie het volgende materiaal:

- computer, (draadloze) muis met balletje + matje
- USB stick voor de back-up van de vragenlijst
- Zorg ervoor dat de batterij van de computer opgeladen en in goede staat is;
- Identiteitskaart (voor de Kamerleden en anderen)
- Kopie van de verstuurde brief (document 1)
- Geprinte versie van de interviewgids (document 2)
- Schema van de vragenlijst om te tonen aan de geïnterviewde (document 3)
- Papieren versie van de vragenlijst (document 4): om de vragen luid op te kunnen lezen.
- Papier om notities te nemen

2. Vooraleer te vertrekken naar de stakeholder

- Noteer de identificatiegegevens van te interviewen persoon op de papieren versie van de vragenlijst (of op het aparte blad waar de opmerkingen geschreven zijn)
- Kijk na of je de login en het paswoord van de pc hebt
- Plan het traject
- Zet de computer aan en doe hem dicht (om zo niet te veel tijd te verliezen wanneer u ter plaatse bent → Pas op: Kijk goed na of u het paswoord kent wanneer u werkt met een computer die u niet bekend is!!!

3. Vooraleer aan het interview te beginnen

Wat zeggen?:

- Ga naast de stakeholder zitten.
- Schakel uw GSM uit.
- Bedank de stakeholder voor zijn/haar deelname aan het onderzoek.
- Stel u zelf voor!
- Vraag om de laptop aan te sluiten
- → Klik op de shortcut op de desktop «enquête stakeholders» en voer het nummer van de stakeholder (zie excellijst «list in French and Flemish»), uw naam en de taal van de stakeholder in.
- Schets de context van het onderzoek: KCE-studie over de carrière van huisartsen

"Het Kenniscentrum voor de Gezondheidszorg (KCE) heeft een consortium van zeven Belgische universiteiten, onder supervisie van Prof. Lorant (UCL), een studie betreffende de carrière van huisartsen toevertrouwd. Het project heeft als doel een antwoord te bieden aan 3 verschillende onderzoeksvragen. Deze zijn:

1. Wat maakt het beroep van huisarts aantrekkelijk?

2. Welke zijn de redenen om voor het beroep te kiezen of welke redenen zijn er om het beroep van huisarts te verlaten?

3. Welke beleidsmaatregelen kunnen er voor zorgen dat het beroep, in België, wat aantrekkelijker wordt?

Het doel van dit gesprek is om aan de hand van een semi-open vragenlijst de derde onderzoeksvraag te beantwoorden. We wensen uiteindelijk realistische voorstellen te bekomen die toepasbaar zijn in de Belgische context en die erop gericht zijn het huisartsenberoep aantrekkelijker te maken.

We maakten alvast een lijst met voorstellen die hun oorsprong vinden in Belgisch en internationaal onderzoek. De haalbaarheid van deze voorstellen hangt echter af van de Belgische setting en het is daarom dat we graag uw mening hierover zouden horen."

- Leg uit hoe de stakeholder geselecteerd werd.

"U werd aangeduid als een invloedrijk persoon die een goede en nuttige blik kan werpen op de onderzoeksvraag."

- Leg het verloop van het interview uit.

De vragenlijst is hoofdzakelijk opgesteld uit gesloten vragen, maar u krijgt telkens de mogelijkheid om uw antwoord te motiveren, om nieuwe elementen aan te brengen of om details over de invoering van een maatregel te verduidelijken. Ik zal deze opmerkingen noteren. Dit alles zal een goed uur in beslag nemen.

De vragenlijst bestaat uit 5 delen (toon het schema) aangaande de algemene situatie van de huisartsgeneeskunde in België, de evaluatiecriteria, de beleidsmaatregelen, uw plaats binnen uw organisatie & het gezondheidszorgsysteem en uw relatienetwerk.

Wij willen benadrukken dat u zich in het vormen van een mening niet verplicht moet voelen rekening te houden met de functie dat u bekleedt of de organisatie die u tewerkstelt.

We vragen u om geen enkele vraag open te laten.

Heeft u nog vragen vooraleer we met de vragenlijst beginnen?

To do:

- Coderen van het nummer van de vragenlijst
- De laptop draaien naar de stakeholder zonder het visueel contact met het scherm te verliezen. Je moet op ieder moment weten waar hij/zij zich bevindt in de vragenlijst

4. Tijdens het interview

- Leg de procedure uit: "We lezen de vragen samen en u antwoordt door het geschikte antwoord aan te klikken."

Algemene raad

1. Lees de vragen zoals ze vermeldt staan in de vragenlijst: verander de formulering niet.
2. Blijf neutraal: ontkracht of bevestig de antwoorden niet. Er zijn geen goede of slechte antwoorden.
3. Geef uw eigen mening niet.
4. Geef geen bijkomende informatie die de inhoud van het scenario veranderen. Bijvoorbeeld: het scenario "het verhogen van de honoraria": er mag niet gepreciseerd worden hoe dat precies gefinancierd zal worden (via het remgeld of terugbetaling). Het is aan de stakeholder om zijn/haar idee hieromtrent te vormen.
5. Wanneer verschillende elementen die al geïntroduceerd werden, vermeld worden, noteer deze dan als losse bemerking aangaande de beleidsmaatregel.
6. Kijk de persoon in de ogen
7. Vermijd 'stop'zinnetjes of 'stop'woordjes zoals "dus, nu enz."

8. Spreek langzaam

Precisering bij sommige vragen

1. Vragen over de criteria
   - Neem uw tijd om de vier criteria te lezen.
   - Aan alle 4 100 punten toekennen wanneer ze allemaal even belangrijk zijn.
   - Een waarde 0 toekennen wanneer een criterium niet belangrijk is.
   - Vermeld het zelf in te vullen criterium niet tot na de weging van de vier voorgestelde criteria.
   - Wanneer het criterium dat de geïnterviewde vermeld zich reeds in de voorgestelde criteria bevind, bedank de persoon dan om het te vermelden en maak duidelijk dat het aspect dat hij/zij voorstelde reeds opgenomen is binnen een ander criterium, wijs erop dat hij/zij eraan moet denken wanneer hij/zij de maatregelen evalueert.
   - Onderbreek de persoon wanneer hij/zij begint te scoren vooraleer alle criteria doorgenomen zijn.
2. Vragen omtrent de beleidsmaatregelen

Begeleid uw gesprekspartner. Je moet hem helpen om de orde van de criteria te behouden. Concreter:

- Lees alle beleidsmaatregelen van een bepaald blok voor.
- Verduidelijk bepaalde zaken als de geïnterviewde sommige beleidsmaatregelen niet begrijpt, maar zonder de details omtrent de invoering van de maatregel te veranderen
- "Laten we nu de beleidsmaatregelen evalueren op het criterium over de aantrekkelijkheid"
- Lees de antwoordmogelijkheden voor het eerste vragenblok.
- "Nadat u de eerste kolom beëindigd hebt, mag u de tweede kolom invullen"
- "U hebt de mogelijkheid om de waarden die u eerder gaf (in eenzelfde blok) te veranderen"
- "Geeft u me een teken wanneer je aan de open vragen gekomen bent?"
- "U mag op ieder moment opmerkingen maken over de beleidsmaatregelen"
- Wanneer de persoon niet te vinden is voor een bepaalde maatregel, vraag dan toch om de maatregel te scoren en die dan vervolgens uit te sluiten op de plaats die daarvoor voorzien is.
- Geef niet de mogelijkheid om achteraf, op het einde van de vragenlijst, terug te keren omdat de antwoorden die geregistreerd werden dan gewist worden!

3. Vragen omtrent de ranking

Om de maatregelen te ranken: u moet hem/haar vragen naar een globale evaluatie, alle criteria moeten in overweging genomen zijn. Een gepaste manier om dit te vragen is: "Stel u voor dat u een maatregel zou moeten verdedigen tegenover uw peers/collega's. Welke zou dat dan zijn?"

Het is niet verplicht om een maatregel uit te sluiten

Naar aanleiding van het invloedrijk zijn.

Onder 'invloed hebben' verstaan we de capaciteit van iemand om ideeën te formuleren, om voorstellen te prepareren, om voorstellen van anderen te veranderen of tegen te houden of om de invoering van een maatregel tegen te houden.

5. Te observeren tijdens het interview:

Observeer de volgende elementen en vul het volgmapje aan NA het interview (zie document "List in French and Flemish" op het forum, bladzijde van de "names of stakeholders" kolommen O→S):

- Keert de geïnterviewde terug op de waarden die hij/zij gaf op de criteria van een bepaalde maatregel naar aanleiding van de scores die hij/zij gaf aan andere maatregelen?
- Lijkt de geïnterviewde de vragenlijst te begrijpen?
- Lijkt de geïnterviewde geïnteresseerd in de vragenlijst?
- Lijkt de geïnterviewde te twijfelen op sommige momenten? Welke?

6. Op het einde van het interview

To do:

- Bedanken
- Verkrijgen van de resultaten

"Als u het wenst kunt u een verslag van de resultaten, na publicatie, verkrijgen. Als u dat zou willen, hoe wil u dat dan het liefst ontvangen, via mail of per post?"

- Vertrouwelijkheid

Bij het publiceren van de resultaten zal het niet mogelijk zijn om deze terug te koppelen aan de respondent. De lijst van deelnemers aan de vragenlijst blijft geheel vertrouwelijk en enkel Prof. Lorant heeft er kennis van. Prof. Lorant draagt de verantwoordelijkheid voor de vertrouwelijkheid van de individuele resultaten.

- Contact indien er verdere vragen zijn

Wanneer u het wenst kan u meer informatie over deze studie bekomen. U mag contact opnemen met Professor Vincent Lorant (UCL) 02/764.32.63, Professor Jo Goedhuys (KUL) 016/33.74.83 of 0474/38.83.18 of Dr. Paulus van het Kenniscentrum 02/287.33.90.

→ Geef het blad "KCE research on GP's career" dat op de forum staat aan de stakeholder, het bevat deze 3 inlichtingen (noteer hoe de persoon de resultaat wenst terug te krijgen, mail of post)

- Het gebeurt vaak dat de geïnterviewde nog opmerkingen geeft op het van het interview: het is belangrijk om deze te noteren.

7. Vragen over / problemen met de informatica:

Wanneer de persoon geen arts is, is het mogelijk dat vraag 8 (organisatie type) geblokkeerd raakt gedurende enkele seconden. Panikeer niet! Er zijn verschillende oplossingen: verklein en vergroot daarna het scherm, wacht enkele seconden.

Om de vragenlijst op te starten

Zie desktop: enquête

Wanneer niet alle pagina's van het vragenlijstformulier opgeslagen werden, kan je er automatisch naar terugkeren door de volgende lijn in te geven in de adresbalk:

Op het internet: **http://www.sesa.ucl.ac.be/survey/LookPage.php?enquete=xxxx** (xxxx is het nummer van de vragenlijst)

Locaal: http://localhost/survey/LookPage.php?enquete=xxxx (xxxx is het nummer van de vragenlijst)

Waar worden de vragenlijsten opgeslagen?

C:\xampp\htdocs\survey\Outputs

8. Na het interview, terug op buro: Back-up en stuur de gegevens door

1. Kopieer de vragenlijst op uw USB stick
2. Stuur de gegevens van de vragenlijst via mail door naar Charlotte
3. Vul het volgmapje aan door te antwoorden op de vragen over het verloop van de vragenlijst (zie tabblad follow-up)
4. Ga naar het forum over het project om uw observatie mee te delen aan de andere groepsleden: http://gpdropout.pbwiki.com/

Invite key : kce

APPENDIX 5.10.INTERVIEW GUIDE IN FRENCH

1. Quelques jours avant l'entretien

1. Tester le programme 2 fois et vous assurer que les données enregistrées sont correctes.
2. Prévoir le matériel suivant :
   - ordinateur, souris (sans fil) avec bille + tapis
   - Clé USB pour backup de l'entretien
   - prévoir batterie d'ordinateur chargée et en bonne état
   - carte d'identité (pour les députés et autres)
   - Copie de la lettre envoyée (document 1)
   - Procédure d'enquête imprimée (document 2)
   - schéma de l'entretien à montrer à la personne interviewée (document 3)
   - Copies papier de l'entretien (document 4) : pour lire les questions tout haut et noter les commentaires

2. Avant de partir pour l'entretien

- Notez les identifiants des personnes à enquêter sur la copie papier de l'entretien
- S'assurer que l'on a le login et mot de passe du pc
- Préparer votre trajet
- Allumer l'ordinateur et le refermer (afin de ne pas perdre du temps une fois sur place) →attention : bien s'assurer de connaître le mot de passe si ordinateur inconnu !!!

3. Avant de commencer l'entretien

A dire :

- Asseyez-vous à côté de la personne à interroger.
- Couper votre GSM
- Remercier d'avoir accepté l'entretien
- Se présenter
- Demander à brancher l'ordinateur

→Cliquer sur raccourci du bureau : « enquête stakeholders » et introduire le numéro de l'interviewé (voir feuille excel : « liste in French and Flemish »), le nom de l'intervieweur et le régime linguistique de la personne interviewée

- Présenter le contexte de l'étude : recherche KCE sur la carrière des MG

"Le Centre fédéral d'expertise des soins de santé (KCE) a confié à un consortium de 7 universités belges, sous la supervision du Professeur Lorant (UCL), une étude relative à la carrière du médecin généraliste. Le projet vise à réponses à 3 questions suivantes:

1. Quelle est l'attractivité de la profession de médecin généraliste ?

2. Quelles sont les raisons du choix ou de l'abandon de la profession de médecin généraliste ?

3. Quelles politiques peuvent rendre, en Belgique, cette profession plus attractive ?

L'objectif de l'entretien est d'éclairer la troisième question : elle vise à dégager des propositions réalistes et applicables en Belgique afin d'améliorer l'attractivité de la médecine générale.

Une liste de propositions a été sélectionnée sur base de la recherche belge et internationale. Leur faisabilité dépend cependant du contexte belge. C'est pourquoi nous vous soumettons ces propositions afin d'avoir votre avis à leur propos"

- Expliquer la sélection de l'interviewé

"Vous avez été sélectionné comme personne importante et susceptible d'apporter un regard utile sur cette question".

- Expliquer le déroulement

L'enquête est composée essentiellement de questions fermées tout en vous laissant la possibilité de justifier votre réponse, d'apporter de nouveaux éléments ou de préciser des détails sur la mise en œuvre. Je noterai vos remarques."

Il durera une heure

L'entretien comporte 5 sections touchant à la description du problème, aux critères d'évaluation, aux politiques et à votre place dans le système de soins" (montrer le schéma).

Enfin nous insistons sur le fait que votre avis ne vous engage aucunement eu égard à la fonction que vous occupez ou à l'organisation qui vous emploie.

Nous vous demandons de ne pas sauter de questions.

Avez-vous des questions avant de commencer l'entretien ?

A faire :

- Encoder le numéro de l'enquête
- Tourner l'ordinateur vers l'interviewé sans perdre le contact visuel avec l'écran : vous devez toujours savoir où il en est.

4. Durant l'entretien

- Expliquer la procédure : "nous lisons les questions ensembles et vous répondez par vous -même en cliquant sur la réponse adéquate".

Conseils généraux

1. Lire les questions telles qu'elles apparaissent dans le questionnaire : ne pas changer la formulation.
2. Rester neutre : ne pas infirmer ou confirmer une réponse. Il n'y a pas de bonnes ou mauvaises réponses
3. Ne pas donner votre avis
4. Ne pas donner des informations additionnelles qui viennent modifier le contenu du scenario. Exemple, le scénario "Augmenter les honoraires" : il ne faut pas préciser comment cela sera financé (via les tickets modérateurs ou les remboursements) : c'est à l'enquêté de se faire son idée à ce sujet.
5. Si certains éléments de mise en œuvre sont mentionnés, notez-les comme commentaires libres à propos de la politique
6. Regarder la personne dans les yeux
7. Eviter les phrases ou mots répétitifs comme « et voilà, maintenant, etc »
8. Parler lentement

Précisions à propos de certaines questions

1. Questions sur les critères
   - Prenez votre temps de lire chacun des 4 critères.
   - valeur de 100 à tous si même importance
   - valeur de 0 si pas important
   - Ne mentionnez le critère libre qu'après avoir fait le weighting.

- si le critère mentionné librement se trouve déjà dans un des critères, remercier la personne d'avoir mentionné le critère et lui faire remarquer que cet aspect mentionné se trouve déjà dan un critère, l'inviter à y penser lorsqu'elle évaluera les politiques
- interrompre la personne si elle commence à scorer les critères avant de les avoir tous lus

2. Questions sur les politiques

Entrainer votre interlocuteur. Il faut l'aider à respecter l'ordre des critères. Plus concrètement :

- Lisez d'abord toutes les politiques d'un bloc
- Clarifiez certaines choses si l'enquêté ne comprend pas certaines politiques mais sans modifier les détails de la mise en œuvre de la politique
- "Evaluons maintenant ces politiques sur le critère de l'attractivité"
- Pour le premier bloc, lisez les valeurs de critère
- "Une fois que vous avez fini la première colonne vous pouvez passer à la deuxième"
- "Vous avez la possibilité de modifier les valeurs précédemment attribuées"
- "Signalez-moi lorsque vous arriver aux questions ouvertes"
- "Vous pouvez à tout moment faire des commentaires sur les politiques"
- Si la personne n'est pas d'accord avec une politique, lui demander de scorer cette politique puis d'exclure cette politique à l'endroit prévu
- Ne pas donner la possibilité à la personne de revenir en arrière dans le questionnaire car les réponses enregistrées s'effacent !

3. Questions sur le ranking

Pour les priorités : vous devez lui demander une évaluation globale tous critères confondus. Une manière adéquate d'arriver à cela est : "Imaginez que vous deviez défendre une politique devant vos pairs. Laquelle ce serait ? "

L'enquêté n'est pas obligé d'exclure une politique

A propos de la capacité d'influence.

Nous entendons par influence la capacité d'une personne à formuler des idées, à initier des propositions, à changer ou bloquer les propositions des autres, ou affecter la mise en œuvre d'une politique

5. A observer durant l'entretien :

Observez les éléments suivants et remplissez le fichier de suivi APRES l'entretien :

- Est-ce que l'interviewé revient sur les valeurs de critères à une politique en fonction des scores données à d'autres politiques ?
- Est-ce que l'interviewé semble comprendre le questionnaire ?
- Est-ce que l'interviewé semble intéressé par le questionnaire ?
- Est-ce que l'interviewé semblé hésiter à certains moments ? Lesquels ?

6. A la fin de l'entretien

A dire :

- Remercier pour l'entretien, donner la feuille qui reprend les éléments ci-dessous et voir si la personne a des questions.
- Retour des résultats (S'informer si la personne souhaite avoir un retour des résultats par mail ou par courrier et reprendre l'information dans le fichier de suivi)

"Si vous souhaitez recevoir un compte rendu des résultats après publication, pouvez-vous nous indiquer si vous souhaitez recevoir ce rapport par mail ou par courrier ? "

- Confidentialité

Les résultats publiés ne permettront aucune identification des répondants. La liste des participants à l'enquête restera totalement confidentielle et seul le prof. Lorant en aura connaissance. La responsabilité de la confidentialité des résultats individuels est assumée par le Prof. Lorant.

- Contact en cas de questions supplémentaires

Si vous souhaitez avoir plus d'informations au sujet de cette étude, vous pouvez contacter le professeur Vincent Lorant (UCL) 02/764.32.63, le professeur Jo Goedhuys (KUL) 016/33.74.83 ou 0474/38.83.18 ou le Dr. Paulus au Centre d'Expertise 02/287.33.90.

- Souvent l'interviewé rajoute des commentaires à la fin de l'entretien : il est important de les noter

7. Questions/problèmes informatiques :

Si la personne n'est pas médecin, il est possible que la question 8 (type d'organisation) se bloque quelques secondes. Ne paniquez-pas. Vous avez plusieurs solutions : réduisez puis agrandissez votre écran, attendez quelques secondes.

Pour accéder à l'enquête

Voir bureau : enquête

Si un formulaire n'a pas toute ses pages enregistrées, on peu revenir automatiquement dessus en introduisant cette ligne dans la barre d'adresse :

Sur Internet : **http://www.sesa.ucl.ac.be/survey/LookPage.php?enquete=xxxx** (ou xxxx est le numéro de l'enquête)

En local : http://localhost/survey/LookPage.php?enquete=xxxx (ou xxxx est le numéro de l'enquête)

Où vont les enquêtes enregistrées ?

C:\xampp\htdocs\survey\Outputs

8 . Après l'entretien, de retour chez vous : Backup et transferts des fichiers

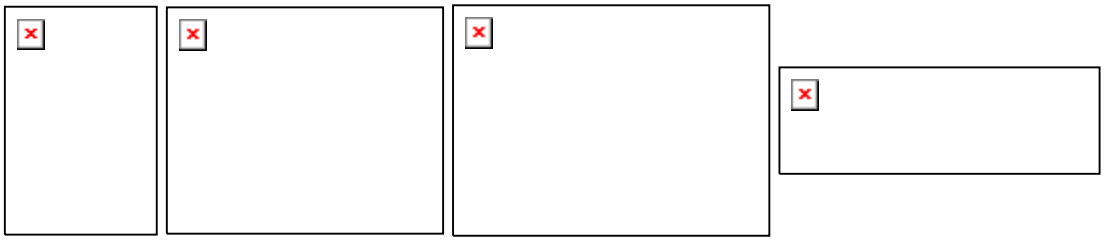
1. Copier l'enquête sur votre clé USB
2. Envoyer les fichiers d'enquête à Charlotte par email
3. Remplissez le fichier de suivi en répondant aux questions sur le déroulement de l'enquête (voir fichier follow-up)
4. Allez sur le forum du projet pour faire part de vos observations aux autres membre du groupe : http://gpdropout.pbwiki.com/

Invite key : kce

APPENDIX 5.11. QUESTIONNAIRE IN FLEMISH

Welkom, hier volgt de vragenlijst met betrekking tot het bevorderen van de huisartsgeneeskunde.

Welke beleidsmaatregelen kunnen, in België, het beroep van huisarts aantrekkelijker maken?



Stakeholder Survey



Volgende

I. Algemene situatie van de huisartsgeneeskunde in België

1. Hoe beoordeelt u de situatie van de huisartsgeneeskunde in België in vergelijking met de specialistische geneeskunde?

	Meer tot / Beter in de huisartsgeneeskunde	Een beetje meer tot / beter in de huisartsgeneeskunde	Gelijk in de huisartsgeneeskunde en de specialistische geneeskunde	Een beetje meer tot / beter in de specialistische geneeskunde	Meer tot / Beter in de specialistische geneeskunde
1. Zijn studenten, na zeven jaar studeren, meer aangetrokken tot de huisartsgeneeskunde of tot de specialistische geneeskunde?	☐	☐	☐	☐	☐
2. Zijn de arbeidsomstandigheden beter in de huisartsgeneeskunde of in de specialistische geneeskunde?	☐	☐	☐	☐	☐
3. Leidt de combinatie werk en privé tot een betere levenskwaliteit in de huisartsgeneeskunde of in de specialistische geneeskunde?	☐	☐	☐	☐	☐
4. Is de verhouding werk en vergoeding beter in de huisartsgeneeskunde of in de specialistische geneeskunde?	☐	☐	☐	☐	☐
5. Zijn de kansen om in het beroep te blijven groter in huisartsgeneeskunde of in de specialistische geneeskunde?	☐	☐	☐	☐	☐
6. Is interesse voor het vak groter in de huisartsgeneeskunde of in de specialistische geneeskunde?	☐	☐	☐	☐	☐

2. Kritische opmerkingen of aanmerkingen?

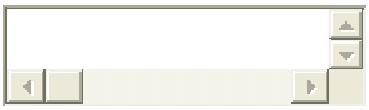
II. De criteria

Wij vragen u nu om beleidsmaatregelen, die gericht zijn op het verbeteren van de situatie van de huisartsgeneeskunde, te evalueren. Dit zal gebeuren in twee stappen. In een eerste stap vragen wij u om de criteria te evalueren en in een tweede stap de beleidsmaatregelen.

3. Stel: U moet een nieuwe beleidsmaatregel evalueren die gericht is op het optimaliseren van de opleiding, de financiering of de organisatie van de huisartsgeneeskunde. Welke zouden de belangrijkste criteria zijn om een nieuwe beleidsmaatregel globaal te evalueren in de huidige situatie?

Duid eerst het criterium aan dat voor u het belangrijkste is en ken het 100 punten toe; duid vervolgens het op één na belangrijkste criterium aan en ken het een deel van 100 punten toe, enz. U mag eveneens 100 punten toekennen aan meerdere criteria of 0 punten toekennen aan criteria die voor u overbodig zijn.
Het totaal van de punten doet er niet.

1. De aantrekkelijkheid van de huisartsgeneeskunde Dit criterium heeft betrekking op de efficiëntie van de beleidsmaatregelen om de studenten warm te maken om te kiezen voor huisartsgeneeskunde, om hen te stimuleren de huisartsgeneeskunde te beoefenen en om in het zorgberoep te blijven. Het houdt eveneens de aanvaarding van de beleidsmaatregel door de huisartsen in.	
2. De kosten & baten voor de samenleving Dit criterium heeft betrekking op de financiële implicaties (op korte of op lange termijn) van de beleidsmaatregel. Dit kan zowel een mogelijke besparing voor de gemeenschap inhouden (bvb. via een verlaging van de hospitalisatie-uitgaven), als mogelijke baten aangaande de gezondheidstoestand van de bevolking of de kwaliteit van de zorgen. Als de maatregel effecten heeft op zowel de kosten als de baten, beschouw dan zijn netto-effect (baten min kosten)	
3. Aanvaarding door andere beroepen in de gezondheidszorg *Dit criterium heeft betrekking op de aanvaarding van de beleidsmaatregelen door de andere actoren zoals specialisten, verpleegkundigen en andere verzorgenden. Dit criterium BEHELST NIET de aanvaarding door de huisartsen zelf .*	
4. Toegankelijkheid van de zorg verleend door de huisartsgeneeskunde. Dit criterium heeft betrekking op de geografische en financiële toegankelijkheid voor de patiënt, de afwezigheid van wachtrijen en de	

vrijheid van patiënt bij het kiezen van een huisarts.	
5. Een ander criterium dat u wenst te vermelden? *Een criterium dat voor u belangrijk is, maar door ons niet vermeld werd.*	

4. Stel: U bent huisarts. Beeld u nu in dat u beleidsmaatregelen zou moeten evalueren vanuit dit uitgangspunt.
Welke zouden de criteria zijn die u in staat zouden stellen de maatregelen te beoordelen vanuit zijn/haar standpunt?

Duid eerst het belangrijkste criterium aan en ken het 100 punten toe, duid vervolgens het op één na belangrijkste criterium aan en ken het een deel van 100 punten toe, enz. Het totaal van de punten doet er niet. U mag eveneens 0 punten toekennen aan criteria die voor u overbodig zijn.	
1. Levenskwaliteit: evenwicht tussen het professionele leven en het privé-leven	
2. Inkomsten	
3. De autonomie van de huisarts in de organisatie van zijn/haar werk	
4. Klinisch belang van het werk (vb. hulp bij administratieve taken)	
5. Samenwerking met andere huisartsen	
6. Werkomgeving: lokaal netwerk, ondersteuning van collega's, de kwaliteit van de leefomgeving.	
7. De invloed van de huisarts op andere beroepen	

>> Bladzijde 3 >>

III.1. Het onderwijs en de opleiding

5. Hieronder vindt u beleidsmaatregelen om de selectie en de opleiding van studenten huisartsgeneeskunde te wijzigen. Zou u deze beleidsmaatregelen kunnen evalueren aan de hand van de hierboven reeds aangehaalde criteria?

Noot : Enkele beleidsmaatregelen die voorgesteld worden bevatten voorbeelden die al geïmplementeerd zijn. Deze voorbeelden dienen enkel om een beleidsmaatregel te illustreren en hoeven uw standpunt met betrekking tot de beleidsmaatregel niet te beïnvloeden.

Antwoordmogelijkheden per criterium:

Effect op de aantrekkelijkheid van het beroep: 0, 1 zeer negatief, 2, 3, 4 geen effect 5, 6, 7 zeer positief

Effect op de kosten & baten voor de samenleving: 0, 1 zeer kostbaar 2, 3, 4 zonder effect 5, 6, 7 besparing

Effect op de aanvaarding door andere beroepen in de gezondheidszorg: 0, 1 zeer ongunstig 2, 3, 4 zonder effect 5, 6, 7 zeer gunstig

Effect op de toegang tot de zorg verleend door de huisartsgeneeskunde: 0, 1 zeer negatief, 2, 3, 4 geen effect 5, 6, 7 zeer positief

	Effect op de aantrekkelijkheid van het beroep	**Effect op de kosten & baten voor de samenleving**	**Effect op de aanvaarding door de andere beroepen in de gezondheidszorg**	**Effect op de toegang tot de zorg verleend door de huisartsgeneeskunde**
1. Bij de selectie van studenten geneeskunde (cfr toegangsexamen) rekening houden met hun motivatie en sociale en communicatieve vaardigheden naast hun kennis van exacte wetenschappen				

	Effect op de aantrekkelijkheid van het beroep	Effect op de kosten & baten voor de samenleving	Effect op de aanvaarding door de andere beroepen in de gezondheidszorg	Effect op de toegang tot de zorg verleend door de huisartsgeneeskunde
2. Het opzetten van Universitaire Huisartsenpraktijken verbonden aan de Academische Centra voor Huisartsgeneeskunde (vgl Universitaire Ziekenhuizen)				
3. Het integreren van de huisartsgeneeskundige aanpak in de lessen van de master-opleiding, ook in de specialistische lessen (door bijvoorbeeld in te gaan op belangrijke problemen vanuit het standpunt van volksgezondheid of door specialisten in verband te brengen met huisartsen).				
4. Het organiseren				

	Effect op de aantrekkelijkheid van het beroep	Effect op de kosten & baten voor de samenleving	Effect op de aanvaarding door de andere beroepen in de gezondheidszorg	Effect op de toegang tot de zorg verleend door de huisartsgeneeskunde
van verplichte huisartsenstages voor alle Masterstudenten Geneeskunde.				

• Heeft u kritische bemerkingen bij de beleidsmaatregelen die voorgesteld werden om de selectie en de opleiding van studenten huisartsgeneeskunde te verbeteren?

1. Bij de selectie van studenten geneeskunde ...

2. Het opzetten van Universitaire Huisartsenpraktijken ...

3. Het integreren van de huisartsgeneeskundige aanpak in meerdere lessen …

4. Het organiseren van verplichte huisartsenstages ...

• Rangschrik drie van de voorgaande beleidsmaatregelen in functie van hun prioriteit (1 zijnde de meest prioritaire).

De MEEST prioritaire	De tweede meest priotaire	De derde meest prioritaire	Uit te sluiten

	Effect op de aantrekkelijkheid van het beroep	Effect op de kosten & baten voor de samenleving	Effect op de aanvaarding door de andere beroepen in de gezondheidszorg	Effect op de toegang tot de zorg verleend door de huisartsgeneeskunde
• Heeft u nog andere beleidsvoorstellen omtrent het onderwijs en de opleiding?				

III.2. De financiering en het honoreringsmechanisme

6. Hieronder vindt u enkele oplossingen om het mechanisme van financiering en honorering in de Belgische Huisartsgeneeskunde te herzien. Zou u deze beleidsmaatregelen kunnen evalueren naar de volgende criteria:

Antwoordmogelijkheden per criterium:

Effect op de aantrekkelijkheid van het beroep: 0, 1 zeer negatief, 2, 3, 4 geen effect 5, 6, 7 zeer positief

Effect op de kosten & baten voor de samenleving: 0, 1 zeer kostbaar 2, 3, 4 zonder effect 5, 6, 7 besparing

Effect op de aanvaarding door andere beroepen in de gezondheidszorg: 0, 1 zeer ongunstig 2, 3, 4 zonder effect 5, 6, 7 zeer gunstig

Effect op de toegang tot de zorg verleend door de huisartsgeneeskunde: 0, 1 zeer negatief, 2, 3, 4 geen effect 5, 6, 7 zeer positief

	Effect op de aantrekkelijkheid van het beroep	**Effect op de kosten & baten voor de samenleving**	**Effect op de aanvaarding door de andere beroepen in de gezondheidszorg**	**Effect op de toegang tot de zorg verleend door de huisartsgeneeskunde**
1. Het verhogen van de honoraria voor consultaties.				
2. Het toekennen van een forfait per patiënt bovenop de andere vergoedingen per prestatie (bijvoorbeeld: Globaal Medisch Dossier).				
3. Het diversifiëren van de				

	Effect op de aantrekkelijkheid van het beroep	Effect op de kosten & baten voor de samenleving	Effect op de aanvaarding door de andere beroepen in de gezondheidszorg	Effect op de toegang tot de zorg verleend door de huisartsgeneeskunde
honoreringsmodaliteiten door het combineren van een salaris en een vergoeding per prestatie.				
4. Het verbeteren van de financiële stimuli om zich te vestigen in regio's waar minder huisartsen ter beschikking zijn.				
5. Het diversifiëren van de honoreringsmodaliteiten door de koppeling aan het behalen van bepaalde doelstellingen (bijvoorbeeld: dekkingsgraad bij screening) of door de koppeling aan de kwaliteit van de geleverde zorg (bijvoorbeeld: diabetes type II).				

	Effect op de aantrekkelijkheid van het beroep	Effect op de kosten & baten voor de samenleving	Effect op de aanvaarding door de andere beroepen in de gezondheidszorg	Effect op de toegang tot de zorg verleend door de huisartsgeneeskunde
• Heeft u kritische opmerkingen over de beleidsmaatregelen die hier voorgesteld werden?	1. Het verhogen van de honoraria ... 2. Het toekennen van een forfait per patiënt bovenop ... 3. Het diversifiëren van de honoreringsmodaliteiten door het combineren ... 4. Het verbeteren van de financiële stimuli om zich te vestigen ... 5. Het diversifiëren van de honoreringsmodaliteiten door de koppeling ...			

• Rangschrik drie van de voorgaande beleidsmaatregelen in functie van hun prioriteit (1 zijnde de meest prioritaire).	De MEEST prioritaire	De tweede meest priotaire	De derde meest prioritaire	Uit te sluiten

	Effect op de aantrekkelijkheid van het beroep	Effect op de kosten & baten voor de samenleving	Effect op de aanvaarding door de andere beroepen in de gezondheidszorg	Effect op de toegang tot de zorg verleend door de huisartsgeneeskunde
• Heeft u nog andere beleidsvoorstellen omtrent het financierings- en honoreringsmechanisme van de huisartsgeneeskunde?				

>> Bladzijde 5 >>

III.3. Het evenwicht tussen werk en privé-leven, de jobtevredenheid en de vestiging

7. Hieronder vindt u beleidsmaatregelen om het evenwicht tussen het professionele leven van de huisarts en zijn/haar privé-leven te verbeteren. Zou u deze beleidsmaatregelen kunnen evalueren aan de hand van de eerder bepaalde criteria?

Antwoordmogelijkheden per criterium:

Effect op de aantrekkelijkheid van het beroep: 0, 1 zeer negatief, 2, 3, 4 geen effect 5, 6, 7 zeer positief

Effect op de kosten & baten voor de samenleving: 0, 1 zeer kostbaar 2, 3, 4 zonder effect 5, 6, 7 besparing

Effect op de aanvaarding door andere beroepen in de gezondheidszorg: 0, 1 zeer ongunstig 2, 3, 4 zonder effect 5, 6, 7 zeer gunstig

Effect op de toegang tot de zorg verleend door de huisartsgeneeskunde: 0, 1 zeer negatief, 2, 3, 4 geen effect 5, 6, 7 zeer positief

	Effect op de aantrekkelijkheid van het beroep	Effect op de kosten & baten voor de samenleving	Effect op de aanvaarding door de andere beroepen in de gezondheidszorg	Effect op de toegang tot de zorg verleend door de huisartsgeneeskunde
1. Het toestaan en/of stimuleren van e en loopbaan met perspectief waarin de ambulante curatieve geneeskunde gecombineerd wordt met andere activiteiten zoals onderzoek, onderwijs, volksgezondheid, ziekenhuizen …				
2. Het beter erkennen en het niet benadelen van huisartsen die deeltijds werken en werken op vastgestelde tijden (bijvoorbeeld door een andere invulling te geven aan de regels van accreditatie).				
3. Het organiseren van provinciale pools van professionele artsen voor vervangingen .				
4. Huisartsen financieren voor activiteiten voor				

	Effect op de aantrekkelijkheid van het beroep	Effect op de kosten & baten voor de samenleving	Effect op de aanvaarding door de andere beroepen in de gezondheidszorg	Effect op de toegang tot de zorg verleend door de huisartsgeneeskunde
accreditatie tijdens de week en overdag.				
5. Het afschaffen van de individuele wachtplicht en vervangen door een professionele dienst zoals een spoeddienst van huisartsen en/of wachtposten.				

	Effect op de aantrekkelijkheid van het beroep	Effect op de kosten & baten voor de samenleving	Effect op de aanvaarding door de andere beroepen in de gezondheidszorg	Effect op de toegang tot de zorg verleend door de huisartsgeneeskunde
• **Heeft u kritische opmerkingen over de beleidsmaatregelen die hier voorgesteld werden?**	1. Het toestaan en/of stimuleren van e en loopbaan met perspectief ...			
	2. Het beter erkennen en het niet benadelen van huisartsen die deeltijds ...			
	3. Het organiseren van provinciale pools van professionele artsen voor ...			
	4. Huisartsen financieren voor activiteiten voor accreditatie ...			
	5. Het afschaffen van de individuele wachtplicht en vervangen door ...			

• **Rangschrik drie van de voorgaande beleidsmaatregelen in functie van hun prioriteit (1 zijnde de meest prioritaire).**	**De MEEST prioritaire**	**De tweede meest priotaire**	**De derde meest prioritaire**	**Uit te sluiten**

	Effect op de aantrekkelijkheid van het beroep	Effect op de kosten & baten voor de samenleving	Effect op de aanvaarding door de andere beroepen in de gezondheidszorg	Effect op de toegang tot de zorg verleend door de huisartsgeneeskunde
• **Heeft u nog andere beleidsvoorstellen omtrent het evenwicht tussen werk en privé-leven, de jobtevredenheid en de vestiging?**				

>> Bladzijde 6 >>

III.4. De organisatie van het gezondheidszorgsysteem

8. Hieronder vindt u beleidsmaatregelen om de plaats van de huisartsgeneeskunde binnen het Belgische gezondheidszorgsysteem te verbeteren.

Antwoordmogelijkheden per criterium:

Effect op de aantrekkelijkheid van het beroep: 0, 1 zeer negatief, 2, 3, 4 geen effect 5, 6, 7 zeer positief

Effect op de kosten & baten voor de samenleving: 0, 1 zeer kostbaar 2, 3, 4 zonder effect 5, 6, 7 besparing

Effect op de aanvaarding door andere beroepen in de gezondheidszorg: 0, 1 zeer ongunstig 2, 3, 4 zonder effect 5, 6, 7 zeer gunstig

Effect op de toegang tot de zorg verleend door de huisartsgeneeskunde: 0, 1 zeer negatief, 2, 3, 4 geen effect 5, 6, 7 zeer positief

	Effect op de aantrekkelijkheid van het beroep	Effect op de kosten & baten voor de samenleving	Effect op de aanvaarding door de andere beroepen in de gezondheidszorg	Effect op de toegang tot de zorg verleend door de huisartsgeneeskunde
1. Het afschaffen van de numerus clausus				
2. Het stimuleren van een billijker geografische spreiding door bvb het verhogen van de stimuli om te werken in regio's waar minder huisartsen ter beschikking zijn.				
3. Het ondersteunen van de ontwikkeling van locale agentschappen (bijvoorbeeld per provincie of per regio) die belast zijn met het bevorderen van de aantrekkelijkheid van het huisartsenberoep en het behoud van huisartsen in het beroep en dit in functie van de locale behoeften (bijvoorbeeld in associatie met de kringen).				
4. Het ontwikkelen van een studierichting voor gevorderde praktijkverpleegkundigen om ondersteuning te bieden aan de huisarts				

	Effect op de aantrekkelijkheid van het beroep	Effect op de kosten & baten voor de samenleving	Effect op de aanvaarding door de andere beroepen in de gezondheidszorg	Effect op de toegang tot de zorg verleend door de huisartsgeneeskunde
(bijvoorbeeld om chronische patiënten op te volgen).				
5. Het stimuleren van het delegeren van verschillende klinische taken aan andere beroepen in de gezondheidszorg (verpleegkundigen, kinesisten enz.).				
6. Het stimuleren van het delegeren van verschillende sociale, fiscale, administratieve of informatica taken aan administratief personeel.				
7. Het stimuleren van huisartsen om infrastructuur of een gemeenschappelijk secretariaat te delen.				
8. Het stimuleren van huisartsen om samen te werken (bijvoorbeeld door eenzelfde patiëntenbestand te beheren of door elk de eigen patiënten te				

	Effect op de aantrekkelijkheid van het beroep	Effect op de kosten & baten voor de samenleving	Effect op de aanvaarding door de andere beroepen in de gezondheidszorg	Effect op de toegang tot de zorg verleend door de huisartsgeneeskunde
behouden).				
9. Het stimuleren van de echelonnering of het financieel ontmoedigen van de overdreven/voorbarige toevlucht naar de tweedelijn.				
10. Het versterken van de rol van de huisarts in het multidisciplinaire overleg.				

	Effect op de aantrekkelijkheid van het beroep	Effect op de kosten & baten voor de samenleving	Effect op de aanvaarding door de andere beroepen in de gezondheidszorg	Effect op de toegang tot de zorg verleend door de huisartsgeneeskunde
• **Heeft u kritische opmerkingen over de beleidsmaatregelen die hier voorgesteld werden?**				

1. Het afschaffen van de numerus clausus ...
2. Het stimuleren van een billijker geografische spreiding door ...
3. Het ondersteunen van de ontwikkeling van locale agentschappen ...
4. Het ontwikkelen van een studierichting voor gevorderde praktijkverpleegkundigen ...
5. Het stimuleren van het delegeren van verschillende klinische taken aan ...
6. Het stimuleren van het delegeren van verschillende sociale, fiscale, ...
7. Het aanmoedigen van huisartsen om infrastructuur of ...
8. Het stimuleren van huisartsen om samen te werken ...
9. Het stimuleren van de echelonnering of het financieel ontmoedigen ...

	Effect op de aantrekkelijkheid van het beroep	Effect op de kosten & baten voor de samenleving	Effect op de aanvaarding door de andere beroepen in de gezondheidszorg	Effect op de toegang tot de zorg verleend door de huisartsgeneeskunde
• Rangschrik drie van de voorgaande beleidsmaatregelen in functie van hun prioriteit (1 zijnde de meest prioritaire).	De MEEST prioritaire	De tweede meest priotaire	De derde meest prioritaire	Uit te sluiten
• Heeft u nog andere beleidsvoorstellen omtrent de organisatie van het gezondheidszorgsysteem?				

>> Bladzijde 7 >>

IV. Identificatie van de stakeholder

9. Hieronder vindt u enkele vragen over uw persoon, uw banden met het gezondheidszorgsysteem en uw functie binnen uw organisatie.

1. Bent u een man of een vrouw?	
2. Tot welke leeftijdsgroep behoort u? 20-30;31-40;41-50;51-60;61+	
3. Bent u arts van opleiding? Ja, ik ben huisarts, ja ik ben specialist, neen ik ben geen huisarts	
4. Indien u arts bent, heeft u een RIZIV nummer?	
5. Indien u een RIZIV nummer heeft, welke zijn de laatste drie cijfers ervan?	
6. Heeft u in het afgelopen jaar de curatieve geneeskunde uitgeoefend?	
7. Hoeveel prestatieboekjes heeft u in het afgelopen jaar ingevuld?	
8. Voor (of met welk) soort organisatie werkt u momenteel hoofdzakelijk? 1. wetgevende macht/Kamerleden 2.federale administratie/leden van ministerieel kabinet 3. Regionale of communautaire administratie 4.INAMI/RIZIV 5.Mutualitetiten 6.Universiteiten 7.Syndicale verantwoordelijken 8.Professionele organisaties of wetenschappelijke organisaties 9.Media	Andere :

10. Ik ben een onafhankelijk huisarts	
11. Wat is, volgens u, de invloed van uw organisatie op de beleidsmaatregelen betreffende de opleiding, de organisatie of de financiering van de huisartsgeneeskunde? 1 zeer belangrijk, 2 belangrijk, 3 gematigd, 4 zwak, 5 zeer zwak	
12. Neemt u, al uw professionele activiteiten in beschouwing genomen, deel aan de beslissingen omtrent het rekruteren van personeel of hun promotie? 1 zeer vaak, 2 vaak, 3 soms, 4 zelden, 5 nooit	
13. Neemt u, binnen deze organisatie, deel aan de budgettaire beslissingen? 1 zeer vaak, 2 vaak, 3 soms, 4 zelden, 5 nooit	
14. Neemt u, al uw professionele activiteiten in beschouwing genomen, deel aan de realisatie van nieuwe activiteiten of aan het invoeren van nieuwe beleidsmaatregelen of programma's? 1 zeer vaak, 2 vaak, 3 soms, 4 zelden, 5 nooit	

V. Relatienetwerk

10. Het gezondheidszorgsysteem in België is gebaseerd op een consultatieve en consensusgerichte aanpak door verschillende actoren.
De politieke oplossingen zijn nauw verbonden met die consensus, daarom vindt u hieronder enkele vragen omtrent uw relaties met de verschillende actoren.

Antwoordmogelijkheden:

1. 1. één keer per week, 2. één keer per maand, 3. enkele keren per jaar 4. één keer per jaar 5. nooit
2. 1. zeer vaak; 2 vaak; 3 soms; 4 zelden; 5 nooit

3. 1. zeer vaak; 2 vaak; 3 soms; 4 zelden; 5 nooit
4. 1. zeer vaak; 2 vaak; 3 soms; 4 zelden; 5 nooit
5. 1 zeer belangrijk, 2 belangrijk, 3 gematigd, 4. zwak, 5. zeer zwak

	Politiek niveau (Parlementsleden, ministers of leden van het ministeriële kabinet)	Administratief / bestuurlijk niveau (Verantwoordelijken van de federale administratie of van parastatalen verbonden met de gezondheidszorg)	Professionele organisaties (Verantwoordelijken van syndicaten of professionele organisaties of van wetenschappelijke verenigingen)	Verantwoordelijken van universiteiten	Media	Mutualiteiten
1. Hoe vaak heeft u persoonlijk contact (ontmoetingen, email, telefoon) met de personen die behoren tot de volgende groepen?						
2. Komt u, over het algemeen, tot een akkoord omtrent beleidsmaatregelen aangaande de						

	Politiek niveau (Parlementsleden, ministers of leden van het ministeriële kabinet)	Administratief / bestuurlijk niveau (Verantwoordelijken van de federale administratie of van parastatalen verbonden met de gezondheidszorg)	Professionele organisaties (Verantwoordelijken van syndicaten of professionele organisaties of van wetenschappelijke verenigingen)	Verantwoordelijken van universiteiten	Media	Mutualiteiten
huisartsgeneeskunde met de volgende groepen?						
3. Steunen de volgende groepen, over het algemeen, uw standpunt of uw beleid?						
4. Steunt u of volgt u, over het algemeen, de standpunten of de beleidsmaatregelen van deze groepen?						
5. Welke is, volgens u, de invloed van deze groepen op de beslissingen die de						

	Politiek niveau (Parlementsleden, ministers of leden van het ministeriële kabinet)	Administratief / bestuurlijk niveau (Verantwoordelijken van de federale administratie of van parastatalen verbonden met de gezondheidszorg)	Professionele organisaties (Verantwoordelijken van syndicaten of professionele organisaties of van wetenschappelijke verenigingen)	Verantwoordelijken van universiteiten	Media	Mutualiteiten
huisartsgeneeskunde treffen?						

11. Omdat deze vragenlijst zich richt tot sleutelfiguren van het gezondheidszorgsysteem, zouden wij zeker willen zijn dat we niemand over het hoofd zien.
Zou u ons daarom, voor elk van de volgende groepen, de namen van maximaal drie personen kunnen noemen die het meest invloedrijk zijn op het vlak van beleidsmaatregelen die de huisartsgeneeskunde treffen?

	Eerste persoon	Tweede persoon	Derde persoon
1. Politiek niveau (Parlementsleden, ministers of leden van het ministeriële kabinet)			
2. Administratief / bestuurlijk niveau (Verantwoordelijken van de federale administratie of van parastatalen verbonden met de gezondheidszorg, de mutualiteiten inbegrepen)			
3. Professionele organisaties (Verantwoordelijken van syndicaten of professionele organisaties of van wetenschappelijke verenigingen)			
4. Verantwoordelijken van universiteiten			
5. In de media			
6. In de mutualiteiten			

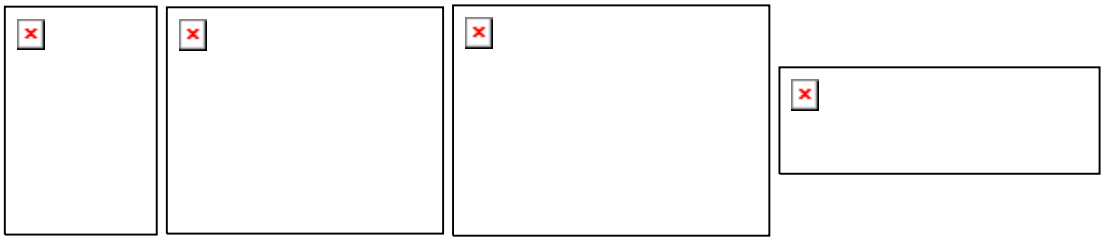
>> Valideren van de vragenlijst >>

APPENDIX 5.12.QUESTIONNAIRE IN FRENCH

Bienvenue sur l'enquête au sujet de politiques de promotion

de la médecine générale.

Quelles politiques peuvent rendre, en Belgique, le profession de médecin généraliste plus attractive ?



Stakeholder Survey

Entrez le numéro de l'enquête	
Introduisez votre nom (nom de l'enquêteur)	
Introduisez le régime linguistique de la personne interrogée	

Suivant

I. Situation globale de la médecine générale en Belgique

1. Comment voyez-vous la situation de la médecine générale par rapport à la médecine de spécialité en Belgique ?

Nous sommes intéressés par VOTRE compréhension de la situation de la médecine générale en Belgique par rapport à celle de la médecine de spécialité.

	Nettement meilleur en médecine générale	Légèrement meilleur en MG	C'est égal en MG ou en SP	Légèrement meilleur en médecine de spécialité	Nettement meilleur en médecine de spécialité
1. Après 7 années d'études, l'attractivité est meilleure en médecine générale ou en médecine de spécialité ?	☐	☐	☐	☐	☐
2. Les conditions de travail sont meilleures en médecine générale ou en médecine de spécialité ?	☐	☐	☐	☐	☐
3. La compatibilité des horaires de travail avec la qualité de vie est meilleure en médecine générale ou en médecine de spécialité ?	☐	☐	☐	☐	☐
4. La rémunération du temps de travail est meilleure en médecine générale ou en médecine de spécialité ?	☐	☐	☐	☐	☐
5. Les chances de rester dans la profession sont meilleures en médecine générale ou en médecine de spécialité ?	☐	☐	☐	☐	☐
6. L'intérêt du travail est meilleur en médecine générale ou en médecine de spécialité ?	☐	☐	☐	☐	☐

2. Commentaires ou observations ?

II. Questions sur les critères

Nous vous demandons maintenant d'évaluer des politiques pour améliorer la situation de la médecine générale. Cela se fera en deux étapes. Dans la première nous demandons d'évaluer les critères et dans la deuxième les politiques.

3. Vous devez évaluer une nouvelle politique visant à optimaliser la formation, le financement ou l'organisation de la médecine générale.
Quels seraient les critères les plus importants pour évaluer globalement une nouvelle politique, dans la situation actuelle ?

Identifiez d'abord le critère le plus important pour vous et attribuez-lui 100 points; identifiez ensuite le deuxième et attribuez-lui une fraction de ces 100 points, etc. Vous pouvez également attribuer 100 points à plusieurs critères ou attribuer la valeur 0 à des critères inutiles pour vous. Le total des points n'importe pas.	
1. Attractivité de la Médecine Générale. Ce critère porte sur l'efficacité de la politique à attirer des étudiants vers le choix de la médecine générale, à les inciter à pratiquer la médecine de famille et à se maintenir dans la profession curative. Il inclut également l'acceptabilité de la politique pour les médecins généralistes	
2. Le coût – bénéfice de la politique pour la société. Ce critère porte sur les implications financières de la politique (à court ou à long terme) , que ce soit l'économie qu'elle occasionne pour la collectivité (via la réduction des dépenses hospitalières) ou encore le bénéfice de cette politique sur l'état de santé de la population ou sur la qualité des soins.Si la politique a des effets à la fois sur le coût et le bénéfice, considérez son effet net (bénéfice moins le coût).	
3. Acceptation par les autres professions de santé Ce critère porte sur l'acceptation des politiques par les autres acteurs tels que les spécialistes, la profession infirmière et les autres soignants. Ce critère ne CONCERNE PAS l'acceptation par les médecins généralistes eux-mêmes.	
4. Accessibilité des soins de Médecine Générale Ce critère porte sur l'accessibilité géographique, l'accessibilité financière pour le patient, l'absence de file d'attente et la liberté de choix du médecin généraliste par le patient.	
5. Autre critère que vous désirez mentionner Un critère que nous n'avons pas mentionné et qui est important pour vous.	

4. Imaginez maintenant que vous deviez évaluer cette politique du point de vue du généraliste.
Quels seraient les critères permettant d'évaluer la nouvelle politique de son point de vue ?

Identifiez d'abord le critère le plus important pour vous et attribuez lui 100 points; identifiez ensuite le deuxième et attribuez lui une fraction de ces 100 points, etc. . Le total des points n'importe pas. Vous pouvez également attribuer la valeur de 0 à des critères inutiles pour vous.	
1. Qualité de vie : équilibre vie professionnelle et vie familiale	
2. Revenu du travail	
3. Autonomie du médecin généraliste dans l'organisation de son travail	
4. Intérêt clinique du travail (ex :aide dans les tâches administratives)	
5. Collaboration et travail avec d'autres médecins généralistes	
6. Environnement du travail : réseau local, soutien des confrères, qualité du milieu de vie	
7. Pouvoir du médecin généraliste par rapport aux autres professions	

III.1. Questions sur l'enseignement et la formation

5. Voici des politiques pour améliorer la sélection et la formation des étudiants en médecine générale.
Pourriez-vous évaluer ces politiques sur les critères suivants :

Note:Certaines politiques comportent des exemples de mesures déjà mises en place. Ces exemples servent seulement à illustrer ces politiques et ne doivent pas préjuger de votre position par rapport à ces politiques.
Nous vous demandons également d'évaluer les effets de ces politiques par rapport à la situation présente.

Possibilités de réponses par critère:

Effet sur l'attractivité de la profession : 0, 1 très négatif, 2, 3, 4 sans effet, 5, 6, 7 très positif

Effet sur le coût-bénéfice pour la société : 0, 1 très coûteux, 2, 3, 4 sans effet, 5, 6, 7 bénéfice élevé

Effet sur l'acceptation par les autres professions de santé : 0, 1 très défavorable, 2, 3, 4 sans effet, 5, 6, 7 très favorable

Effet sur l'accessibilité des soins de médecine générale : 0, 1 très négatif, 2, 3, 4 sans effet, 5, 6, 7 très positif

	Effet sur l'attractivité de la profession	Effet sur le coût – bénéfice pour la société	Effet sur l'acceptation par les autres professions de santé	Effet sur l'accessibilité des soins de Médecine Générale
1. Sélectionner les étudiants de médecine (pour l'attribution des visa) en tenant compte des motivations et compétences sociales et communicationnelles en plus des connaissances en sciences exactes.				
2. Développer une activité clinique universitaire en lien avec les Centres Académiques de Médecine Générale.				
3. Intégrer l'approche de la Médecine Générale dans les cours de Master, y compris dans les cours de spécialité (par exemple en abordant les problèmes prioritaires d'un point de vue de santé publique ou en associant médecins spécialistes et généralistes).				
4. Organiser des stages obligatoires de médecine générale pour tous les étudiants du Master en médecine.				

	Effet sur l'attractivité de la profession	Effet sur le coût – bénéfice pour la société	Effet sur l'acceptation par les autres professions de santé	Effet sur l'accessibilité des soins de Médecine Générale
• Avez-vous des commentaires sur les suggestions de politiques qui viennent d'être faites pour améliorer la sélection et la formation des étudiants en médecine générale ?	1. Sélectionner les étudiants de médecine ... 2. Développer une activité clinique ... 3. Intégrer l'approche de la Médecine Générale dans les cours de Master ... 4. Organiser des stages obligatoires de médecine ...			
• Choisissez les politiques prioritaires (1 étant la plus prioritaire) Mentionnez également UNE politique que vous souhaitez exclure.	**La PLUS prioritaire**	**la seconde prioritaire**	**la troisième prioritaire**	**A exclure**
• Avez-vous d'autres politiques à proposer en matière d'enseignement et de formation ?				

III.2. Financement et mécanisme de rémunération

6. Voici des solutions pour améliorer les mécanismes de financement et de rémunération de la médecine générale en Belgique.
Pourriez-vous évaluer ces politiques sur les critères suivants:

Possibilités de réponses par critère:

Effet sur l'attractivité de la profession : 0, 1 très négatif, 2, 3, 4 sans effet, 5, 6, 7 très positif

Effet sur le coût-bénéfice pour la société : 0, 1 très coûteux, 2, 3, 4 sans effet, 5, 6, 7 bénéfice élevé

Effet sur l'acceptation par les autres professions de santé : 0, 1 très défavorable, 2, 3, 4 sans effet, 5, 6, 7 très favorable

Effet sur l'accessibilité des soins de médecine générale : 0, 1 très négatif, 2, 3, 4 sans effet, 5, 6, 7 très positif

	Effet sur l'attractivité de la profession	Effet sur le coût – bénéfice pour la société	Effet sur l'acceptation par les autres professions de santé	Effet sur l'accessibilité des soins de Médecine Générale
1. Augmenter les honoraires des consultations de médecine générale.				
2. Allouer aux médecins généralistes un forfait par patient en supplément des autres rémunérations à l'acte (par exemple : Dossier Médical Global) .				
3. Diversifier les modalités de rémunération de la médecine générale en combinant salariat et rémunération à l'acte.				
4. Améliorer les incitants financiers à l'installation dans des zones géographiques moins bien couvertes				
5. Diversifier les modalités de rémunération de la médecine générale en rémunérant la réalisation d'objectifs (Exemple : couverture du dépistage) ou la qualité de la prise en charge du				

	Effet sur l'attractivité de la profession	Effet sur le coût – bénéfice pour la société	Effet sur l'acceptation par les autres professions de santé	Effet sur l'accessibilité des soins de Médecine Générale
patient (exemple: prise en charge du diabète de type II)..				

• Avez-vous des commentaires sur les suggestions de politiques qui viennent d'être faites ?

1. Augmenter les honoraires ...
2. Allouer aux médecins généralistes un forfait ...
3. Diversifier les modalités de rémunération de la MG en combinant ...
4. Améliorer les incitants financiers ...
5. Diversifier les modalités de rémunération de la MG en rémunérant ...

• Choisissez les politiques prioritaires (1 étant la plus prioritaire) Mentionnez également UNE politique que vous souhaitez exclure.

La PLUS prioritaire	la seconde prioritaire	la troisième prioritaire	A exclure

• Avez-vous d'autres politiques à proposer dans le domaine des mécanismes de financement et de rémunération de la médecine générale ?

III.3. Equilibre entre travail et vie privée, satisfaction professionnelle et installation

7. Nous voudrions vous proposer des politiques pour améliorer l'équilibre entre la vie professionnelle du médecin généraliste et sa vie privée.
Pourriez-vous évaluer ces politiques sur les critères suivants ?

Possibilités de réponses par critère:

Effet sur l'attractivité de la profession : 0, 1 très négatif, 2, 3, 4 sans effet, 5, 6, 7 très positif

Effet sur le coût-bénéfice pour la société : 0, 1 très coûteux, 2, 3, 4 sans effet, 5, 6, 7 bénéfice élevé

Effet sur l'acceptation par les autres professions de santé : 0, 1 très défavorable, 2, 3, 4 sans effet, 5, 6, 7 très favorable

Effet sur l'accessibilité des soins de médecine générale : 0, 1 très négatif, 2, 3, 4 sans effet, 5, 6, 7 très positif

	Effet sur l'attractivité de la profession	**Effet sur le coût – bénéfice pour la société**	**Effet sur l'acceptation par les autres professions de santé**	**Effet sur l'accessibilité des soins de Médecine Générale**
1. Permettre et/ou encourager une carrière évolutive associant médecine curative ambulatoire à d'autres activités telles que la recherche, enseignement, santé publique, hôpitaux, ….				
2. Mieux reconnaître et ne pas pénaliser le travail à horaires réguliers et à temps partiel des médecins généralistes (par exemple en modulant les règles d'accréditation).				
3. Organiser des pools de médecins professionnels du remplacement .				
4. Financer les médecins généralistes				

	Effet sur l'attractivité de la profession	Effet sur le coût – bénéfice pour la société	Effet sur l'acceptation par les autres professions de santé	Effet sur l'accessibilité des soins de Médecine Générale
pour des activités d'accréditation en semaine et en journée.				
5. Suppression de l'obligation individuelle de garde et remplacement par un service professionnel de type SOS médecins et/ou des postes de garde sécurisés.				

• Avez-vous des commentaires sur les suggestions de politiques qui viennent d'être faites ?

1. Permettre et/ou encourager une carrière évolutive ...
2. Mieux reconnaître et ne pas pénaliser ...
3. Organiser des pools provinciaux de médecins professionnels ...
4. Financer et compenser les médecins généralistes ...
5. Suppression de l'obligation individuelle de garde et ...

• Choisissez les politiques prioritaires (1 étant la plus prioritaire) Mentionnez également UNE politique que vous souhaitez exclure.

La PLUS prioritaire	la seconde prioritaire	la troisième prioritaire	A exclure

• Avez-vous d'autres politiques portant sur la qualité de vie à proposer ?

III.4. Organisation du système de santé

8. Nous voudrions vous proposer des politiques pour améliorer la place de la médecine générale dans le système de soins de santé belge.
Pourriez-vous évaluer ces politiques sur les critères suivants :

Possibilités de réponses par critère:

Effet sur l'attractivité de la profession : 0, 1 très négatif, 2, 3, 4 sans effet, 5, 6, 7 très positif

Effet sur le coût-bénéfice pour la société : 0, 1 très coûteux, 2, 3, 4 sans effet, 5, 6, 7 bénéfice élevé

Effet sur l'acceptation par les autres professions de santé : 0, 1 très défavorable, 2, 3, 4 sans effet, 5, 6, 7 très favorable

Effet sur l'accessibilité des soins de médecine générale : 0, 1 très négatif, 2, 3, 4 sans effet, 5, 6, 7 très positif

	Effet sur l'attractivité de la profession	**Effet sur le coût – bénéfice pour la société**	**Effet sur l'acceptation par les autres professions de santé**	**Effet sur l'accessibilité des soins de Médecine Générale**
1. Supprimer le numerus clausus				
2. Inciter à une distribution géographique plus équitable, par exemple en améliorant les incitants à travailler dans les zones moins bien couvertes.				
3. Soutenir la création d'agences locales (Ex : par province ou par Région) chargée de promouvoir l'attractivité et la rétention de médecins généralistes en fonction des besoins locaux (Exemple : en partenariat avec les cercles).				
4. Développer une autre filière d'enseignement d'infirmières en pratique avancée pour appuyer le médecin généraliste (par exemple dans le suivi des patients chroniques) .				

	Effet sur l'attractivité de la profession	Effet sur le coût – bénéfice pour la société	Effet sur l'acceptation par les autres professions de santé	Effet sur l'accessibilité des soins de Médecine Générale
5. Encourager la délégation de certaines tâches cliniques vers d'autres professions de santé existantes (infirmière, kinésithérapeutes, etc.)				
6. Encourager la délégation de certaines tâches sociales, fiscales , administratives ou informatiques vers du personnel administratif.				
7. Encourager les médecins généralistes à partager une infrastructure ou un secrétariat commun				
8. Encourager les médecins généralistes à travailler ensemble (Exemple : soit en gérant une même patientèle, soit en gardant chacun sa patientèle).				
9. Inciter à l'échelonnement ou décourager financièrement le recours excessif/prématuré à la deuxième ligne				
10. Renforcer le rôle du médecin généraliste dans la concertation pluridisciplinaire.				

	Effet sur l'attractivité de la profession	Effet sur le coût – bénéfice pour la société	Effet sur l'acceptation par les autres professions de santé	Effet sur l'accessibilité des soins de Médecine Générale
• Avez-vous des commentaires sur les suggestions de politiques qui viennent d'être faites ?	1. Supprimer le numerus clausus ... 2. Inciter à une distribution géographique plus équitable ... 3. Soutenir la création d'agences locales ... 4. Développer une autre filière d'enseignement d'infirmières en pratique avancée " ... 5. Encourager la délégation de certaines tâches cliniques ... 6. Encourager la délégation de certaines tâches sociales ... 7. Encourager les médecins généralistes à partager une infrastructure ... 8. Encourager les médecins généralistes à travailler ensemble ... 9. Inciter à l'échelonnement ou décourager financièrement ... 10. Renforcer le rôle du médecin généraliste dans la concertation pluridisciplinaire ...			
• Choisissez les politiques prioritaires (1 étant la plus prioritaire) Mentionnez également UNE politique que vous souhaitez exclure.	**La PLUS prioritaire**	**la seconde prioritaire**	**la troisième prioritaire**	**A exclure**
• Avez-vous d'autres politiques portant sur la qualité de vie à proposer ?				

IV. Identification du stakeholder

9. Nous voudrions savoir qui vous êtes, vos liens avec le système de santé et votre fonction dans votre organisation ?

1. Vous êtes un homme/femme ?	
2. Votre groupe d'âge ? 20-30;31-40;41-50;51-60;61+	
3. De formation, êtes-vous médecin ? Oui Médecin Généraliste/ Oui Médecin Spécialiste /Non je ne suis pas médecin	
4. Si médecin =oui, avez-vous un numéro INAMI ?	
5. Si oui, les trois derniers chiffres de ce numéro Inami sont ?	
6. Au cours de la dernière année, avez-vous pratiqué la médecine curative ?	
7. Au cours de l'année dernière, combien de carnets d'attestations de soins avez-vous rempli ?	
8. Actuellement, pour (ou avec quel) type d'organisation travaillez-vous à titre principal ? 1. Pouvoir législatif/parlementaires 2.Administration fédérale ou cabinet ministériel fédéral 3.Administration régionale ou communautaire ou cabinet ministériel régional/communautaire 4.INAMI/RIZIV 5.Mutuelles 6.Université ou organisations universitaires 7.Responsables syndicaux 8.Associations professionnelles ou sociétés scientifiques 9.Média 10. Je suis Médecin indépendant	Autres :

11. A votre avis, quelle est l'influence de votre organisation sur les politiques touchant à la formation, à l'organisation ou au financement de la médecine générale ? 1 Très importante, 2 importante, 3 modérée, 4 faible, 5 très faible	
12. Dans vos activités professionnelles globalement, participez-vous aux décisions de recrutement du personnel ou à leur promotion ? 1 très souvent, 2 souvent, 3 parfois, 4 rarement, 5 jamais	
13. Dans cette organisation, participez-vous aux décisions budgétaires ? 1.très souvent, 2.souvent, 3 parfois, 4 rarement, 5 jamais	
14. Dans vos activités professionnelles globalement, vous arrivent-ils de participer aux décisions sur la réalisation de nouvelles activités, ou l'adoption de nouvelles politiques ou programmes ? 1 Très souvent, 2 souvent, 3 parfois, 4 rarement, 5 jamais	

V. Réseaux de relations

10. Le système de santé, en Belgique, est fondé sur une approche consultative et consensuelle par les différents acteurs.
Les solutions politiques sont étroitement liées aux consensus possibles entre ces acteurs. Nous vous interrogeons maintenant sur vos relations avec ces acteurs.

Possibilités de réponses :
1. une fois par semaine, 2. une fois par mois, 3. quelques fois sur l'année, 4. une fois sur l'année; 5. jamais
1. Très souvent; 2 Souvent; 3 Occasionnellement; 4 Rarement; 5 Jamais
1. Très souvent; 2 Souvent; 3 Occasionnellement; 4 Rarement; 5 Jamais
1. Très souvent; 2 Souvent; 3 Occasionnellement; 4 Rarement; 5 Jamais
1 Très importante, 2 importante, 3 modérée, 4 faible, 5 très faible

	Niveau politique : parlementaires, ministres ou membres de cabinet ministériel	**Niveau administratif : responsables d'administrations fédérales ou de parastataux liés aux soins de santé**	**Organisations professionnelles : responsables syndicaux ou d' associations professionnelles ou de sociétés scientifiques**	**Responsables universités**	**Média**	**Mutualités**
1. Quelle est la fréquence de vos contacts personnalisés (rencontre, email, téléphone) avec des personnes appartenant aux groupes suivants ?						

	Niveau politique : parlementaires, ministres ou membres de cabinet ministériel	Niveau administratif : responsables d'administrations fédérales ou de parastataux liés aux soins de santé	Organisations professionnelles : responsables syndicaux ou d' associations professionnelles ou de sociétés scientifiques	Responsables universités	Média	Mutualités
2. En général, arrivez-vous à des accords en ce qui concerne les politiques touchant à la médecine générale avec les groupes suivants ?						
3. En général, les groupes suivants soutiennent-ils votre position ou votre politique ?						

	Niveau politique : parlementaires, ministres ou membres de cabinet ministériel	Niveau administratif : responsables d'administrations fédérales ou de parastataux liés aux soins de santé	Organisations professionnelles : responsables syndicaux ou d' associations professionnelles ou de sociétés scientifiques	Responsables universités	Média	Mutualités
4. En général, soutenez-vous ou suivez-vous les positions ou les politiques de ces groupes ?						
5. A votre avis, quelle est l'influence de ces groupes sur les décisions affectant la médecine générale ?						

11. Etant donné que cette enquête s'adresse aux personnes clef du système de santé et de soins, nous souhaiterions nous assurer que nous n'avons oublié personne.
Pourriez-vous citer le nom de maximum 3 personnes les plus influentes sur les politiques affectant la médecine générale pour chacun des groupes suivants ?

	1ère personne	2ème personne	3ème personne
1. Niveau politique : parlementaires, ministres ou membres de cabinet ministériel			
2. Niveau administratif : responsables d'administrations fédérales ou de parastataux liés aux soins de santé			
3. Organisations professionnelles : responsables syndicaux ou d' associations professionnelles ou de sociétés scientifiques			
4. Responsables universités			
5. Parmi les médias			
6. Parmi les mutuelles			

>> Valider le formulaire >>

Stakeholder Survey

Votre questionnaire à bien été enregistré,
Merci pour votre participation.

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