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### Summary

With the percentage of female medical students being 66%, a large potential workforce of female physicians is currently being trained, and with the success rates of female and male medical students being roughly the same, the percentage of women among young doctors is set to rise considerably over the next few years. However, the transition of female physicians to certain specialties and to senior academic and executive positions is lagging behind. Considering the wide gap between the percentage of female physicians in training and the percentage of registered female physicians, this transitional process is fully in progress among general practitioners and medical specialists.

### Career aspirations and career choice

Across the board, women work fewer hours than men. Female medical specialists have greater career motivation and more pronounced ambition (pursuing leading positions and high income) than, for instance, general practitioners.

Female general practitioners, medical specialists, and public health physicians in training value opportunities for part-time work, private and family life, and regular working hours more than men. Men consider career opportunities in their discipline, advice or encouragement from others, and income more important.

Female GPs in training find opportunities for part-time work much more important than male GPs in training: 76% versus 37%. Female PhD students in public health appear to be more drawn to paid employment and part-time jobs. Ninety-six per cent of all female GPs prefer not to work in solo practices and, in addition, prefer to work in smaller practices.

If we take the share of female physicians in training into consideration, an underrepresentation of women in specialties such as orthopaedics, surgery, and cardiology can be expected to persist.

### **Medical students**

The differences between male and female medical students regarding their preferences for particular professional characteristics have an impact on their subsequent career choice. Female students value opportunities for part-time work, building relationships of trust with patients, and communication skill more than male students. Male students value work involving technical precision, skill in handling equipment, high status, improvisation, acute patient care, and high income more than female students. Studies show that contact with clinical practice encourages and motivates residents to choose the specialty of that particular residency. The majority of female medical students with a preference for general practice would like to work part-time versus one in five male medical students.

### Women on boards

Although the number of female medical students and physicians is on the up, the share of women in the higher echelons of healthcare is very low: 6-14%. From a

European perspective, the Netherlands is not doing well at all in terms of the percentage of women professors, ranking among the bottom six out of 27 EU countries and, hence, bringing up the rear, with only Belgium, Ireland, Cyprus, Luxembourg, and Malta doing even worse. In 2008, 11.7% of all professors were female, and this percentage was 12.9% at University Medical Centers.

Less than 6% of academic executives (Executive Boards, or Deans and Directors of KNAW-recognized research schools) are female; only 7% of the members on university Executive Boards is female; only 6.9% of the Executive Boards of University Medical Centers (UMCs) is female. If we take the Executive and Supervisory Boards of all UMCs together, we find 2 female physicians (2.6%) and 19 male physicians (25%).

The number of women in the higher echelons of healthcare also appears to be going down as organizational size goes up: from 31% women in small organizations to 14% in big organizations. The percentage of women among physicians is even lower: there are eighty physicians on the Executive Boards of hospitals, eight of whom are women (10%).

### Conclusion

More and more female physicians are entering the specialty of their choice, and the percentage of women is rising in all medical specialties. And yet, there is a persisting gender gap within the medical disciplines, and the underrepresentation of women in several specialties remains a problem. This gap is also evident in top-ranking positions, with the percentage of women in healthcare top jobs remaining very low at 6-14%.

We will not have more women ending up in influential positions if we do not make an effort. Scientific research and interest groups such as the VNVA are much needed to accomplish gender equality in healthcare. To improve the upward mobility of women, we need a culture change. Besides proper facilities and maternity leave or parental leave replacement regulations, we also need regulations that will help to support full labour participation (childcare, flexible working hours, etc.). Career counselling is of the utmost importance here, as this may help to reinforce the positive effects of full labour participation regulations.

## PART I

GENDER DIFFERENCES IN MEDICAL SPECIALTIES AND CAREER WISHES

## 0. General

Below we present some tables showing the number of registered physicians and physicians in training in a variety of medical professions (Tables 0.1, 0.2 and 0.3). On 1 January 2010, the average percentage of registered female physicians was 37%; the average percentage of female physicians in training was 60%.

In Charts 0.1 and 0.2, the medical professions have been subdivided into subspecialties, both for practising female physicians and for female physicians in training.

Chart 0.3 sketches the percentage of women entering various medical professions over the 1967-2006 period. In 1967, the percentage of newly recognized basic physicians was 18%; in 2006, this had risen to 65%. For GPs, these percentages were 20% in 1977 and 63% in 2006. For medical specialists, there were 12% newly recognized female physicians in 1967, and this had risen to 47% in 2006.

Differences in career wishes and career choices of male and female physicians in training are represented in Charts 0.4 and 0.5. Women value part-time work, private life and family circumstances, and normal working hours much more than men. Men value career opportunities in their discipline, advice or encouragement from other people, and their wages much more than women.

Specialty	М	F	Total
General practitioners	5,389	3,532	8,921
Medical specialists	12,717	6,427	19,144
Public health physicians**	2,489	1,677	4,166
Elderly care physicians	575	900	1,475
Total	21,170	12,536	33,706
	63%	37%	

Table 0.1: number of registered physicians in 2010\*

\* all groups with a specific specialty: figures on 1 January 2010

\*\* profile registers have not been included

Sources: NIVEL (Cijfers uit de registratie van huisartsen – peiling 2010 [GP Registration Figures 2010]); MSRC; SGRC; and Capaciteitsorgaan (Capaciteitsplan 2010. Deelrapport 5: Specialist ouderengeneeskunde [Capacity Plan 2010. Report Section 5: Elderly Care Physician]) Table 0.2: number of physicians in training in 2010\*

Specialty	М	F	Total
General practitioners	463	1,134	1,597
Medical specialists	2,449	3,230	5,679
Public health physicians**	139	93	232
Elderly care physicians	39	145	184
Total	3,090	4,602	7,692
	40%	60%	

\* all groups with a specific specialty: figures on 1 January 2010

\*\* profile registers have not been included

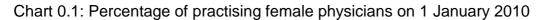
Sources: NIVEL (*Cijfers uit de registratie van huisartsen – peiling 2010 [GP Registration Figures 2010]*); MSRC; SGRC; and Capaciteitsorgaan (*Capaciteitsplan 2010. Deelrapport 5: Specialist ouderengeneeskunde [Capacity Plan 2010. Report Section 5: Elderly Care Physician]*)

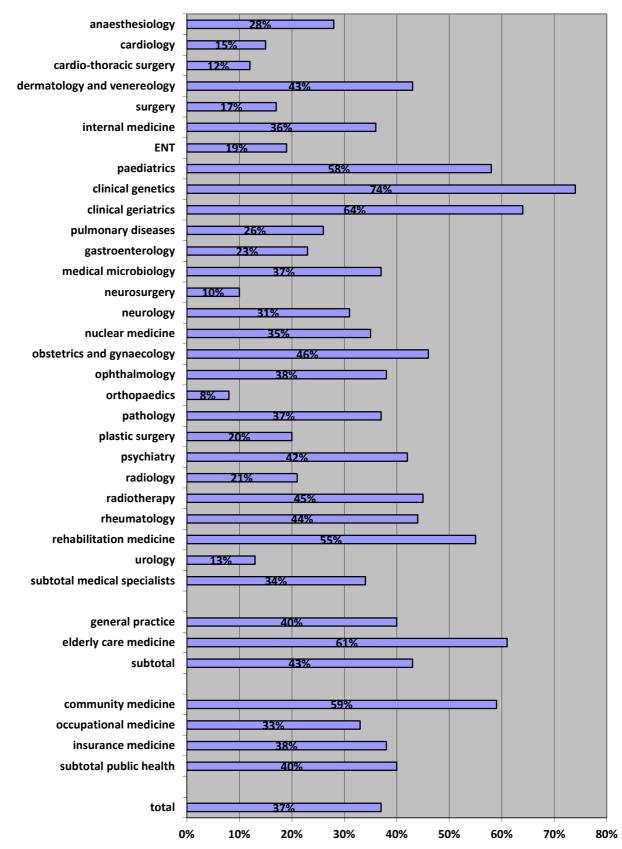
Table 0.3: percentage of women in training in 2010\* and percentage of women in the field in 2010\*

	Percentage of women in training in 2010	Percentage of women specialists registered in 2010
Medical specialists	57%	34%
General practitioners	71%	40%
Public health physicians	40%	40%
Elderly care physicians	79%	61%
Total	60%	37%

\* all groups: figures on 1 January 2010

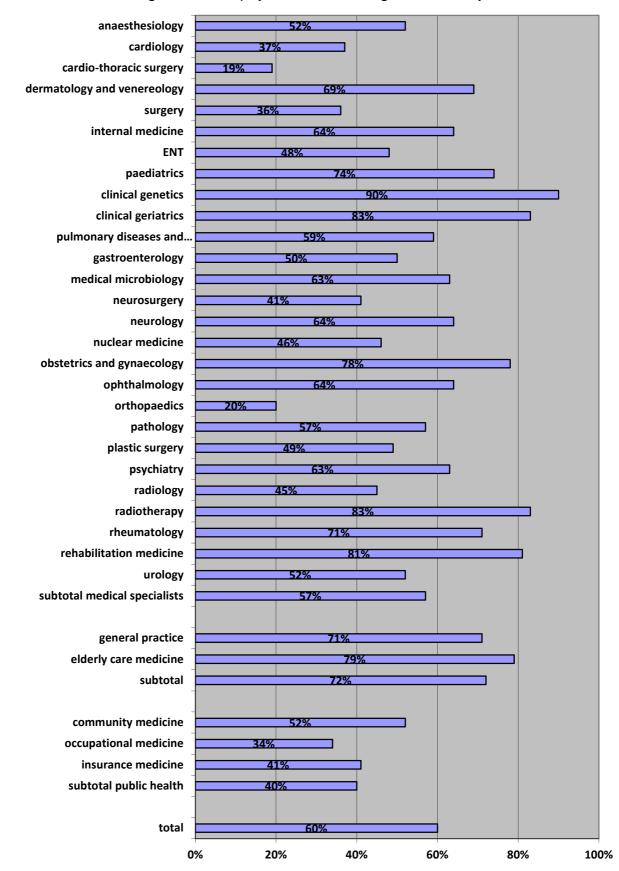
Sources: NIVEL (*Cijfers uit de registratie van huisartsen – peiling 2010 [GP Registration Figures 2010]*); MSRC; SGRC; and Capaciteitsorgaan (*Capaciteitsplan 2010. Deelrapport 5: Specialist ouderengeneeskunde [Capacity Plan 2010. Report Section 5: Elderly Care Physician]*)





Sources: MSRC; NIVEL; SGRC; Capaciteitsorgaan

Chart 0.2: Percentage of female physicians in training on 1 January 2010



Sources: MSRC; NIVEL; SGRC; Capaciteitsorgaan

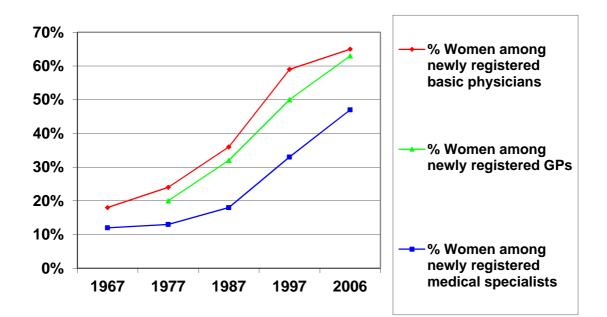


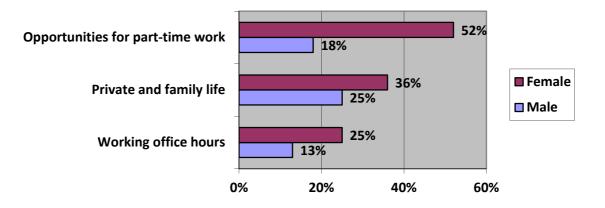
Chart 0.3: Percentage of women entering medical professions

Source: Velden, L. van der, et al. *Doorstroming van vrouwen naar medische specialismen [Transfer of Women into Medical Specialties]*. NIVEL [PowerPoint presentation]

Table 0.4: Average hourly wage of physicians by gender and by age bracket, 2004-2007

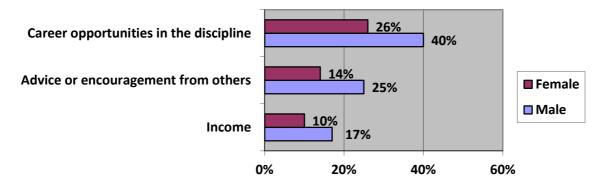
	М	F	М	F	М	F
age bracket	< 30	< 30	30-39	30-39	>=40	>=40
average hourly wage	23.54	17.82	30.04	22.11	39.54	30.80

Source: K. Tijdens (2007). *Lonen van mannen en vrouwen in een aantal beroepen [Wages of Men and Women in Several Professions]*. Amsterdam : Instituut voor ArbeidsStudies, Universiteit van Amsterdam. Report 20/08/2007 Chart 0.4: Career wishes and career choices: differences between male and female GPs, medical specialists, and public health physicians in training (all groups together). What women value more than men.



Source: Soethout, M.B.M., Wal, G. van der, Cate, Th.J. ten (2007). "Carrièrewensen en beroepskeuze van recent afgestudeerde artsen [Career preference and career choice of recent medical graduates]." *Nederlands Tijdschrift voor Geneeskunde* 151(38):2118-23.

Chart 0.5: Career wishes and career choices: differences between male and female GPs, medical specialists, and public health physicians in training (all groups together). What men value more than women.



Source: Soethout, M.B.M., Wal, G. van der, Cate, Th.J. ten (2007). "Carrièrewensen en beroepskeuze van recent afgestudeerde artsen [Career preference and career choice of recent medical graduates]." *Nederlands Tijdschrift voor Geneeskunde* 151(38):2118-23.

## 1. General Practitioners (GPs)

### 1.1 Number of registered male and female GPs

Out of all practising GPs, 40% is female. If we differentiate for their types of positions, the category of GPs employed by another GP (so-called HIDHAs) is showing the highest percentage of women: 83%. Of independently established GPs, 34% is female (Table 1.1.1).

	Independently established			HIDHAs		HIDHAs	Total
	male	female	total	male	female	total	
1980	5,035	220	5,255	110	158	268	5,523
1985	5,426	482	5,908	123	182	305	6,213
1990	5,610	783	6,393	168	240	408	6,801
1995	5,636	1,104	6,740	105	280	385	7,125
1996	5,637	1,160	6,797	100	300	400	7,197
1997	5,657	1,262	6,919	118	349	467	7,386
1998	5,661	1,333	6,994	100	370	470	7,464
1999	5,683	1,412	7,095	118	393	511	7,606
2000	5,689	1,532	7,221	119	429	548	7,769
2001	5,596	1,656	7,252	116	453	569	7,821
2002	5,587	1,753	7,340	118	508	626	7,966
2003	5,549	1,845	7,394	135	595	730	8,124
2004	5,522	1,939	7,461	147	690	837	8,298
2005	5,511	2,033	7,544	169	769	938	8,482
2006	5,460	2,155	7,615	177	809	986	8,601
2007	5,412	2,262	7,674	187	852	1,039	8,713
2008	5,340	2,396	7,736	179	892	1,071	8,807
2009	5,267	2,504	7,771	174	901	1,075	8,846
2010	5,207	2,626	7,833	182	906	1,088	8,921

Table 1.1.1: Number of GPs by type of position and gender on I January (as of 1980)

Source: NIVEL. Cijfers uit de registratie van huisartsen 2010 [GP Registration Figures 2010], p. 8

### 1.2 Full-time / part-time

### GPs – average Full Time Equivalent (FTE)

Table 1.2.1: Average FTE of regular GPs by gender in 2000, 2007, and 2010

	2000	2007	2010*
Male	0.90 FTE	0.86 FTE	0.89 FTE
Female	0.63 FTE	0.57 FTE	0.64 FTE
Total	0.84 FTE	0.76 FTE	0.79 FTE

\* on 1 January 2010

Sources: Capaciteitsorgaan. *Capaciteitsplan 2008 [Capacity Plan 2008]*; NIVEL. *Cijfers uit de registratie van huisartsen 2010 [GP Registration Figures 2010]*, p. 15.

### **1.3 Number of male and female physicians in GP training**

	2005	2006	2007	2008	2009
Amsterdam (UvA)	235	241	232	218	231
Amsterdam (VU)	151	150	161	162	215
Groningen	143	149	166	160	195
Leiden	178	177	187	189	173
Maastricht	121	135	154	152	174
Nijmegen	206	201	221	215	213
Rotterdam	173	197	210	201	224
Utrecht	214	197	213	211	172
Total	1,421	1,447	1,544	1,508	1,597

Table 1.3.1: Number of physicians in GP training by University GP Institute, on 31 December (2005 – 2009)

Source: NIVEL. Cijfers uit de registratie van huisartsen 2010 [GP Registration Figures 2010]

Table 1.3.2: Percentage of women in training on 1 January 2010 and percentage of registered female GPs on 1 January 2010

	Percentage of women in training in 2010	Percentage of female GPs in 2010
GPs	71%	40%

Source: NIVEL. Cijfers uit de registratie van huisartsen 2010 [GP Registration Figures 2010]

Chart 1.3.1 shows that, 20 years after being registered, the percentage of female GPs that is *no longer* registered is beginning to rise much more sharply than the percentage of male GPs.

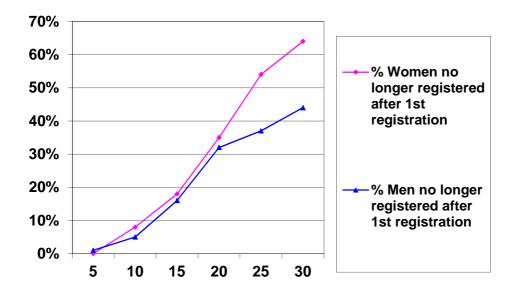
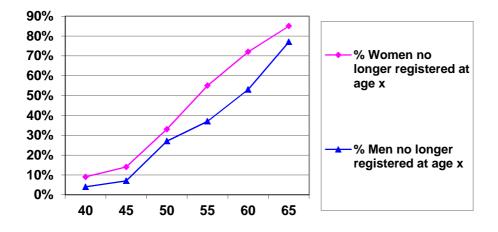


Chart 1.3.1: Exit from General Practice (data from 15-5-2007)

Source: Velden, L. van der, et al. *Doorstroming van vrouwen naar medische specialismen* [*Transfer of Women into Medical Specialties*]. NIVEL [PowerPoint presentation]

Chart 1.3.2 shows that, from the age of 50 onwards, the percentage of women that is no longer registered rises more markedly than the percentage of men.

Chart 1.3.2: Exit from General Practice by age (data from 15-5-2007)



Source: Velden, L. van der, e.a. *Doorstroming van vrouwen naar medische specialismen* [*Transfer of Women into Medical Specialties*]. NIVEL [PowerPoint presentation]

## 2. Medical Specialists

### 2.1 Number of registered male and female medical specialists

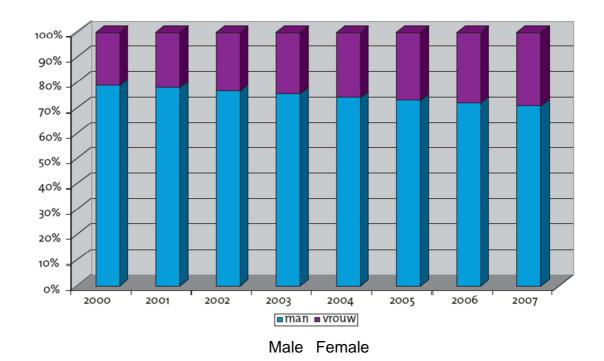


Chart 2.1.1: Registered medical specialists by gender, 2000 - 2007

Of all medical specialists, 66% was male and 34% was female on 1 January 2010, whereas this ratio was 80% male and 20% female at the beginning of this century.

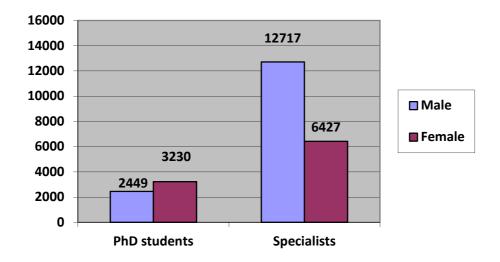
Sources: Capaciteitsorgaan. Capaciteitsplan 2008 [Capacity Plan 2008]; and Capaciteitsorgaan. Capaciteitsplan 2010. Deelrapport 1: Medisch en klinisch technologische specialisten [Capacity Plan 2010. Report Section 1: Medical and Clinical Technological Specialists].

Specialty	М	%	F	%	Total
clinical genetics	29	26 <b>%</b>	81	74%	110
allergology	3	30%	7	70 <b>%</b>	10
clinical geriatrics	62	36%	112	64 <b>%</b>	174
paediatrics	593	42 <b>%</b>	815	58 <b>%</b>	1,408
rehabilitation medicine	205	45 <b>%</b>	252	55 <b>%</b>	457
obstetrics and gynaecology	531	54 <b>%</b>	447	46 <b>%</b>	978
radiotherapy	140	55 <b>%</b>	115	45 <b>%</b>	255
rheumatology	139	56 <b>%</b>	111	44 <b>%</b>	250
dermatology and venereology	270	57 <b>%</b>	204	43 <b>%</b>	474
psychiatry	1,722	58 <b>%</b>	1,249	42 <b>%</b>	2,971
ophthalmology	415	62 <b>%</b>	257	38%	672
medical microbiology	157	63 <b>%</b>	92	37%	249
pathology	247	63 <b>%</b>	145	37%	392
internal medicine	1,274	64 <b>%</b>	713	36 <b>%</b>	1,987
internal medicine / allergology	7	64 <b>%</b>	4	36 <b>%</b>	11
nuclear medicine	99	65 <b>%</b>	53	35 <b>%</b>	152
neurology	574	69 <b>%</b>	256	31 <b>%</b>	830
anaesthesiology	1,159	72%	449	28 <b>%</b>	1,608
pulmonary diseases and tuberculosis	388	74%	137	26 <b>%</b>	525
clinical chemistry	18	<b>75%</b>	6	25 <b>%</b>	24
gastroenterology	282	77%	82	23%	364
radiology	840	<b>79%</b>	219	21 <b>%</b>	1,059
plastic surgery	217	80 <b>%</b>	54	20 <b>%</b>	271
ENT	396	81 <b>%</b>	95	19 <b>%</b>	491
surgery	1,023	83%	203	17%	1,226
cardiology	777	85 <b>%</b>	139	15 <b>%</b>	916
urology	324	87 <b>%</b>	49	13 <b>%</b>	373
cardio-thoracic surgery	121	88 <b>%</b>	17	12 <b>%</b>	138
neurosurgery	122	90 <b>%</b>	13	10 <b>%</b>	135
orthopaedics	582	92 <b>%</b>	51	8%	633
nervous system diseases and disorders	1	100%	0	0%	1
Total	12,717		6,427		19,144

Table 2.1.1: Total number of registered medical specialists on 1 January 2010, listed by female-friendly specialties.

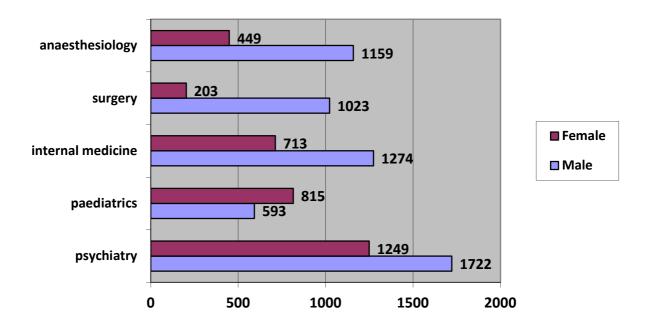
Source: MSRC

Chart 2.1.2: Number of medical PhD students registered in the training register on 1 January 2010 and registered medical specialists on 1 January 2010



Source: MSRC

Chart 2.1.3: Number of registered medical specialists on 1 January 2010 in some major specialties



Source: MSRC

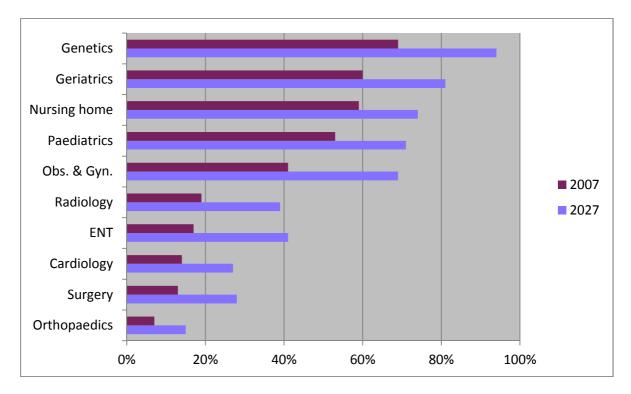


Chart 2.1.4: Increase in percentage of women (%) per specialty

Source: Capaciteitsorgaan

Explanation of Chart 2.1.4: by 2027, the m/f ratio in the specialties of nursing home medicine, paediatrics, and gynaecology & obstetrics is expected to be roughly similar to the current student intake. One-third of these specialists will be male, just like, at present, one-third of all specialists is female. In the specialties of geriatrics and genetics, the percentage of women may rise to over 80% and 90%, respectively. At the same time, women are expected to remain underrepresented in the specialties of orthopaedics (15%), cardiology (27%), and surgery (28%).

Assmann, P. (2009), Selectie aan de poort: is er een keus? [Student selection: do we have a choice?] In: Slager, E. (red.), *Reproductieve geneeskunde, gynaecologie en obstetrie anno 2009*, pp. 866-870.

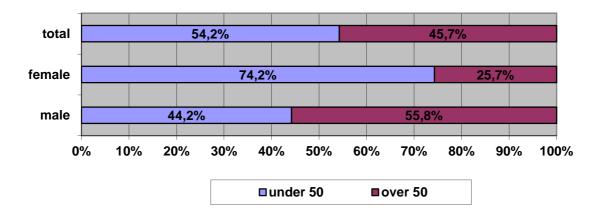


Chart 2.1.5: Medical specialists active under and over 50, 1 January 2010

Source: Capaciteitsorgaan. Capaciteitsplan 2010. Deelrapport 1: Medisch en klinisch technologische specialisten [Capacity Plan 2010. Report Section 1: Medical and Clinical Technological Specialists].

### 2.2 Full-time / part-time

### Medical specialists – average FTE

Table 2.2.1: Average FTE in 2000, 2005, 2007, and 2010 of regular medical specialists by gender

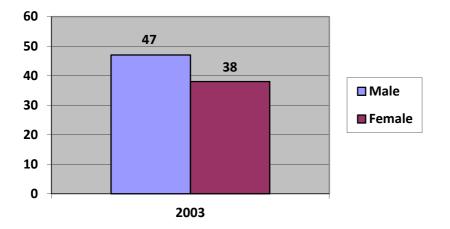
	2000	2005	2007*	2010*
Male	0.96 FTE	0.94 FTE	0.94 FTE	0.94 FTE
Female	0.80 FTE	0.79 FTE	0.79 FTE	0.82 FTE
Total	0.92 FTE	0.90 FTE	0.89 FTE	0.90 FTE

\* 1 January 2007 and 2010

Sources: Capaciteitsorgaan. Capaciteitsplan 2008 [Capacity Plan 2008]; and Capaciteitsorgaan. Capaciteitsplan 2010. Deelrapport 1: Medisch en klinisch technologische specialisten [Capacity Plan 2010. Report Section 1: Medical and Clinical Technological Specialists].

### Medical specialist: average number of hours or full-time / part-time

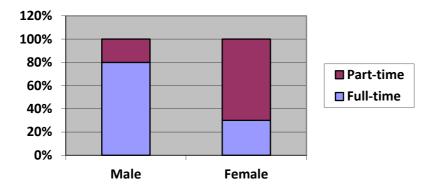
Chart 2.2.1: Average number of hours worked by male and female specialists in general and university hospitals



Source: Meijer, et al. (2005). *Medisch-specialist in perspectief [Medical Specialists in Perspective].* Utrecht : MSRC, p. 66.

Chart 2.2.2 shows that 80% of men work full-time against 30% of women.

Chart 2.2.2: Full-time – part-time ratio for male and female medical specialists in general and university hospitals (2003 questionnaire results).



Source: Meijer, et al. (2005). *Medisch-specialist in perspectief [Medical Specialists in Perspective].* Utrecht : MSRC, p. 66.

Table 2.2.2: Part-time factor and Full Time Equivalents per specialty, 1 January 2010. Listed by FTE for women per discipline (high to low). On average, men have 0.94 FTE jobs and women 0.82 FTE jobs.

Specialty	male	female	total	FTE
cardio-thoracic surgery	0.95	0.89	0.94	115
neurosurgery	0.94	0.88	0.93	115
surgery	0.97	0.87	0.96	1,050
urology	0.93	0.85	0.92	320
obstetrics and gynaecology	0.95	0.84	0.90	810
pathology	0.91	0.84	0.88	315
plastic surgery	0.92	0.84	0.90	210
cardiology	0.94	0.83	0.92	785
medical microbiology	0.93	0.83	0.90	200
neurology	0.94	0.83	0.91	710
orthopaedics	0.93	0.83	0.92	545
psychiatry	0.93	0.83	0.89	2,400
radiology	0.95	0.83	0.93	870
internal medicine	0.93	0.82	0.89	1,585
nuclear medicine	0.94	0.82	0.90	120
radiotherapy	0.94	0.82	0.88	205
ENT	0.91	0.81	0.89	390
clinical genetics	0.92	0.81	0.84	85
pulmonary diseases and tuberculosis	0.94	0.81	0.90	440
gastroenterology	0.94	0.81	0.91	290
rheumatology	0.91	0.81	0.86	205
anaesthesiology	0.92	0.80	0.89	1,280
dermatology and venereology	0.92	0.80	0.87	375
rehabilitation medicine	0.93	0.80	0.86	370
paediatrics	0.91	0.79	0.84	1,070
ophthalmology	0.91	0.79	0.86	520
clinical geriatrics	0.95	0.78	0.84	145
total medical specialties	0.94	0.82	0.90	15,525
clinical physics	0.96	0.94	0.95	270
clinical chemistry	0.98	0.91	0.96	250
clinical pharmacology	0.96	0.87	0.91	345
total clinical technological specialties	0.97	0.89	0.94	865

Source: Capaciteitsorgaan. Capaciteitsplan 2010. Deelrapport 1: Medisch en klinisch technologische specialisten [Capacity Plan 2010. Report Section 1: Medical and Clinical Technological Specialists], p. 106.

# 2.3 Number of male and female physicians in medical specialist training

Table 2.3.1: Total number of medical PhD students registered in the training register on 1 January 2010. Listed by female-friendly specialties.

Specialty	М	F	% F	Total
clinical genetics	5	45	90%	50
clinical geriatrics	16	80	83%	96
radiotherapy	14	68	83%	82
rehabilitation medicine	22	96	81%	118
obstetrics and gynaecology	61	219	78%	280
paediatrics	65	181	74%	246
rheumatology	29	71	71%	100
dermatology and venereology	42	95	69%	137
internal medicine	245	445	64%	690
neurology	110	199	64%	309
ophthalmology	46	83	64%	129
medical microbiology	26	44	63%	70
psychiatry	263	452	63%	715
pulmonary diseases and tuberculosis	95	136	59%	231
pathology	48	63	57%	111
anaesthesiology	175	193	52%	368
urology	52	57	52%	109
gastroenterology	83	83	50%	166
plastic surgery	47	46	49%	93
ENT	57	52	48%	109
nuclear medicine	25	21	46%	46
radiology	186	153	45%	339
neurosurgery	19	13	41%	32
cardiology	219	131	37%	350
surgery	254	142	36%	396
orthopaedics	216	55	20%	271
cardio-thoracic surgery	29	7	19%	36
Total	2,449	3,230		5,679
	43%	57%		

Source: MSRC

In 1984, when the national selection procedure first took place, only men enrolled in the urology training programme. In 2008, the gender distribution in this discipline was exactly equal. In 2009, this picture changed radically: 18 women against 7 men.

Source: Loo, R. van de, Witjes, F. (2009). "Nieuwe instroom en vernieuwd competentieprofiel: resultaten keuzeprocedure 2009 [New intake and renewed competency profile: results of the 2009 choice procedure]." *De Urograaf* (October), p. 3.

Fifteen years after their first recognition, the percentage of women that is *no longer* registered begins to rise much more sharply than the percentage of male medical specialists (Chart 2.3.1).

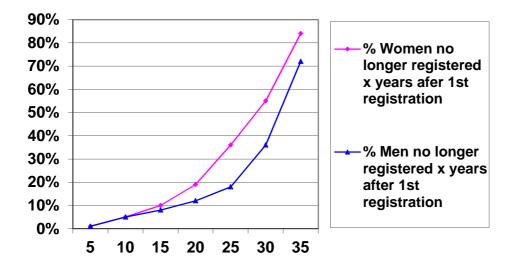
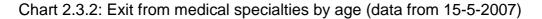
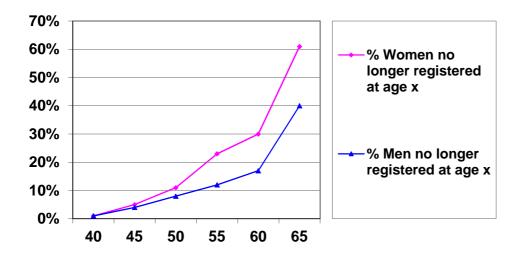


Chart 2.3.1: Exit from medical specialties (data from 15-5-2007)

Source: Velden, L. van der, e.a. *Doorstroming van vrouwen naar medische specialismen* [*Transfer of Women into Medical Specialties*]. NIVEL [PowerPoint presentation]

From the age of 50 onwards, the percentage of women that is no longer registered rises much more sharply than the percentage of male medical specialists (Chart 2.3.2).





Source: Velden, L. van der, e.a. *Doorstroming van vrouwen naar medische specialismen* [*Transfer of Women into Medical Specialties*]. NIVEL [PowerPoint presentation]

## 3. Public health physicians

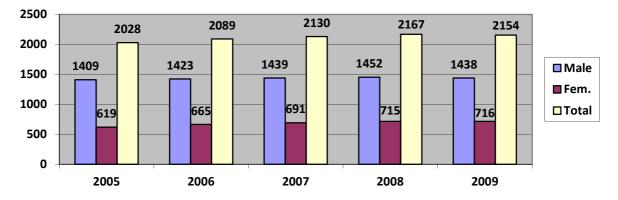
Most public health physicians work in employment. Not all of them are registered as specialists, as the organizations employing them do not always require this and as the public health physicians training programme only receives funding for a limited group of students. In addition, a series of changes in legislation has affected this group of specialists.

Occupational medicine: because of a change in Health and Safety legislation in July 2005, employers were no longer obliged to link up with a Health & Safety service. This decreased the need for trained occupational physicians, which, in its turn, virtually wiped out student intake.

In insurance medicine, there is similar legislative insecurity about the long term. The number of physicians in training has dropped because there is a surplus of insurance physicians. Many insurance physicians, moreover, retrained as occupational physicians.

The Community Medicine programme takes four years, starting with a two-year subject cluster programme, leading to a KNMG profile registration (which is not yet a full BIG registration). This is followed by a more encompassing advanced two-year Community Medicine programme, leading to full registration as a Community Medicine physician in accordance with the Individual Health Care Professions Act (BIG). There are 7 profiles or subject cluster programmes: Youth Healthcare, Policy & Advice, Public Healthcare Allocation and Advice, Medical Environmental Studies, Forensic Medicine, Infectious Diseases, and Tuberculosis. Physicians not operating in any one of these subject clusters - such as researchers - can take a flexible programme.

### 3.1 Number of registered male and female public health physicians



### Chart 3.1.1: Occupational medicine

Data on 31 December (2005-2009) for all specialties

### Source: SGRC Annual Reports

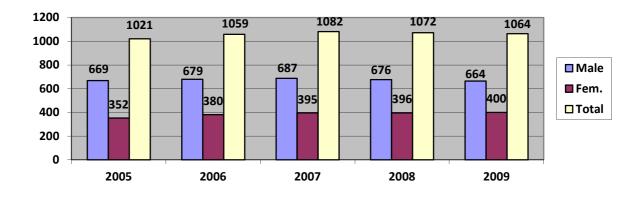
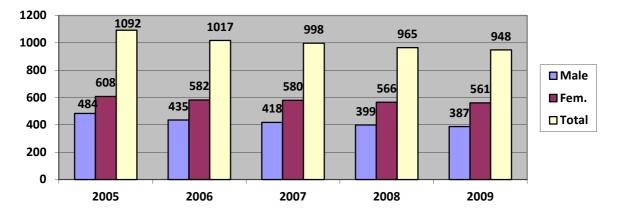


Chart 3.1.2: Insurance medicine

Source: SGRC Annual Reports





Profile registers have been excluded.

Source: SGRC Annual Reports

### 3.2 Full-time / part-time

Table 3.2.1: Average appointment of male and female public health physicians in 2007

	Male	Female	Total
Occupational physicians	0.90 FTE	0.70 FTE	0.84 FTE
Insurance physicians	0.90 FTE	0.70 FTE	0.83 FTE
Community physicians	0.72 FTE	0.53 FTE	0.56 FTE
Other community physicians	0.90 FTE	0.70 FTE	0.90 FTE
Totaal	0.89 FTE	0.64 FTE	0.80 FTE

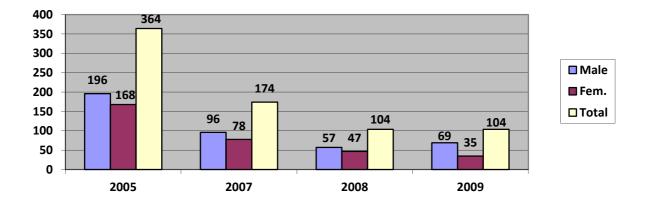
Source: Velden, L.F.J van der, en L. Hingstman (2008). Raming benodigde instroom per medische en tandheelkundige vervolgopleiding 2009-2019/2025 [Estimate of Required Student Intake into Advanced Medicine and Dentistry Programmes 2009-2019/2025]. NIVEL

### 3.3 Number of male and female public health physicians in training

Table 3.3.1: Percentage of women in training on 1 January 2010 and percentage of women in the field on 1 January 2010

	% Women in training in 2010	% Women in 2010
Public health physicians	40%	40%

Source: SGRC



### Chart 3.3.1: Occupational medicine

Data on 31 December (2005, 2007-2009) for all specialties

Source: SGRC Annual Reports. Figures for 2006 are not available.

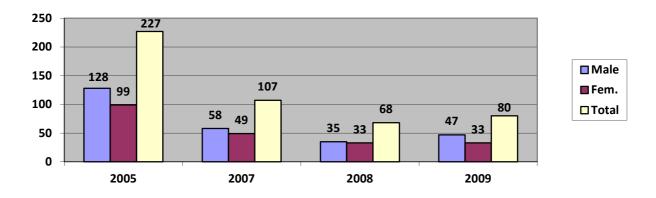


Chart 3.3.2: Insurance medicine

Source: SGRC Annual Reports. Figures for 2006 are not available.

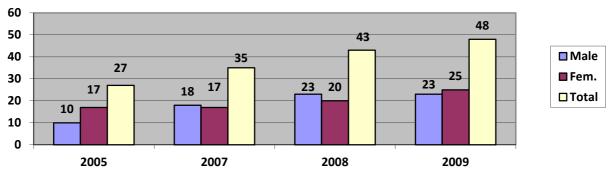
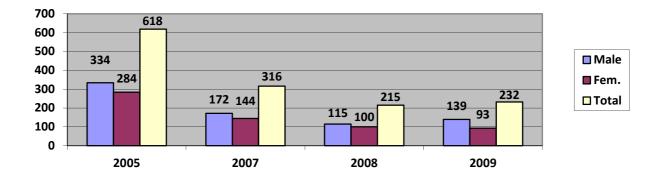


Chart 3.3.3: Community medicine

Profile registers have been excluded.

Source: SGRC Annual Reports. Figures for 2006 are not available.





Source: SGRC Annual Reports. Figures for 2006 are not available.

## 4. Elderly Care Physicians

### 4.1 Number of registered male and female elderly care physicians

Table 4.1.1: Percentage of women in the total number of registered elderly care physicians (1 January of the year concerned)

Year	2005	2006	2007	2008	2009	2010
Number of people	1,256	1,275	1,325	1,395	1,447	1,475
Percentage of women	59%	60%	60%	60%	61%	61%

Source: Capaciteitsorgaan. Capaciteitsplan 2010. Deelrapport 5: Specialist ouderengeneeskunde [Capacity Plan 2010. Report Section 5: Elderly Care Physician].)

## 4.2 Full-time / part-time

	2008
Male	0.91 FTE
Female	0.76 FTE
Average	0.83 FTE

Table 4.2.1: Average FTE of elderly care physicians by gender in 2008

Source: Prismant

### 4.3 Number of male and female elderly care physicians in training

Year	2005	2006	2007	2008	2009
PhD intake	96	91	88	86	85
Total number of PhDs*	201	200	184	162	184
Percentage of women	72%	66%	68%	68%	79%

Table 4.3.1: Programme intake and programme capacity

\* on 31 December

Source: Capaciteitsorgaan. Capaciteitsplan 2010. Deelrapport 5: Specialist ouderengeneeskunde [Capacity Plan 2010. Report Section 5: Elderly Care Physician].

Table 4.3.2: Exit destinations of resigning elderly care physicians

	Male	Female	Total
Management position	34%	4%	17%
Other medical position in elderly care	2%	20%	12%
Other medical position	37%	42%	41%
Retirement	20%	14%	16%
Disability benefits	2%	4%	3%
Abroad	0%	8%	4%
Motherhood	0%	4%	2%
Other/Unknown	5%	4%	4%

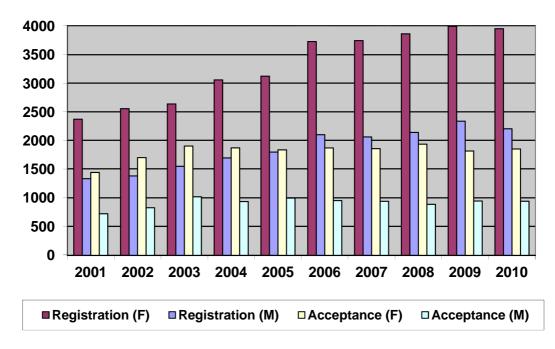
Source: Capaciteitsorgaan. Capaciteitsplan 2008 [Capacity Plan 2008], p. 224.

## 5. Medical Students

### 5.1 Number of men and women

Chart 5.1.1 shows that approximately 66% of the new intake of medical students is female.

Chart 5.1.1: Registration and acceptance of medical students (M/F) in the 2001 - 2010 period



Source: Informatie Beheer Groep [Information Management Group] (IBG).

### 5.2 Students' wishes

In the academic year 2002-2003, Rademakers et al. conducted a survey among all medical students at VUMC and UMCU (n=2,928) with a response rate of approximately 80%. The students were asked to specify for 47 professional characteristics how they would appreciate these as part of their future profession.

Data analysis of the total research population (n=2,326) showed that differences between men and women remained significant throughout their entire training period for only 8 out of 47 professional characteristics. These were the following:

- knowledge of psychosocial and cultural backgrounds (f>m)
- skill at handling equipment (m>f)
- long-term relationships with patients (f>m)
- talk (f>m)
- jobs requiring technical precision (m>f)
- building relationships of trust with patients (f>m)
- opportunities for part-time work (f>m)
- high income (m>f)

The top five of professional characteristics that women find more attractive than men is: opportunities for part-time work; young patients; building relationships of trust with patients; long-term relationships with patients; and communication skill.

The top five of professional characteristics that men find more attractive than women is: jobs requiring technical precision; skill at handling equipment; high status; improvisation; and high income.

Source: Rademakers, J.J.D.J.M. et al (2008). "Verschillen in belangstellingsprofielen van vrouwelijke en mannelijke studenten geneeskunde [Differences in female and male medical students' interest profiles]." *Tijdschrift voor Medisch Onderwijs.* 27(4): 171-180.

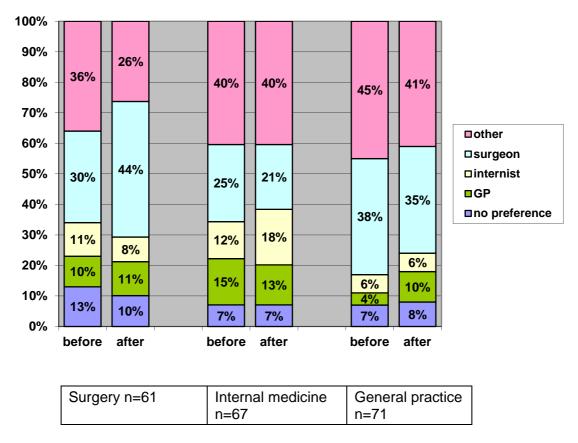
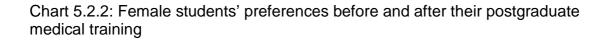
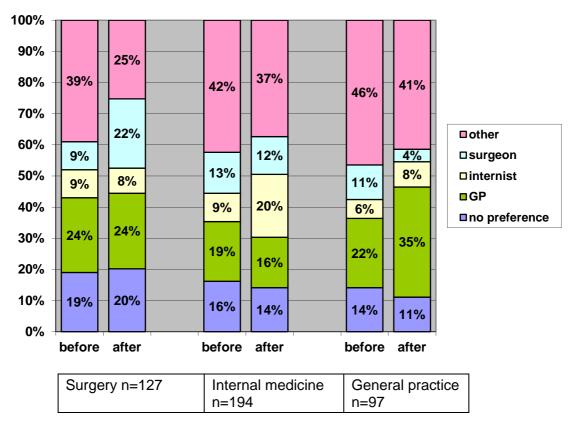


Chart 5.2.1: Male students' preferences before and after their postgraduate medical training

Source: Maiorova, T. (2009). *The role of gender in medical specialty choice and general practice preferences*. PhD thesis. Maastricht : Universitaire Pers Maastricht, p. 73.

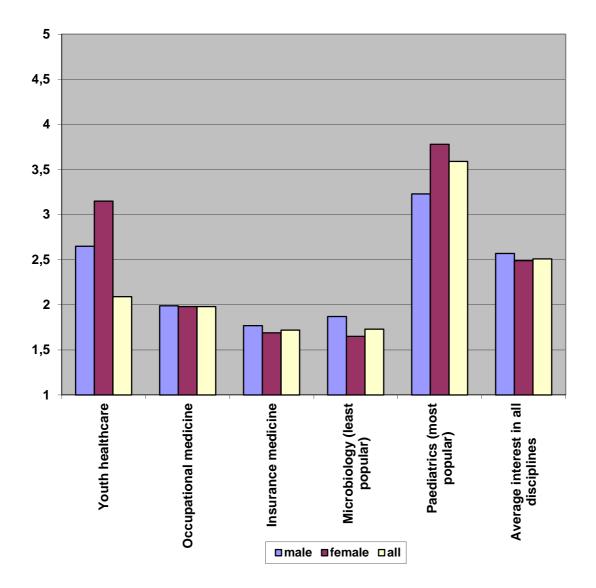




Source: Maiorova, T. (2009). *The role of gender in medical specialty choice and general practice preferences*. PhD thesis. Maastricht : Universitaire Pers Maastricht, p. 73.

In 2002, all 1,474 VUMC students (so all cohorts together) received a questionnaire on their medical specialty preference. The response rate was 93%. The least popular specialty was microbiology; the most popular specialty was paediatrics (Chart 5.2.3).

Chart 5.2.3: Average interest in three specialties in public health, microbiology, and paediatrics.



Source: Soethout, M.B.M. (2007), *Career preference of medical students and career choice of recent graduates*. (PhD thesis VU), pp. 88-89.

In 2006 and 2007, all 657 first-year RUNMC medical students received a questionnaire to establish gender differences relating to specialty preference and work motivation. The response rate was 94%.

Chart 5.2.4 shows that the top three of specialty preferences of female first-year medical students was: paediatrics (19.2%), surgery (9.8%), and general practice (8.2%).

The top three of specialty preferences of male first-year medical students was: surgery (25.5%), general practice (7.4%), and paediatrics (7.4%).

What is striking here is that the percentage of male students indicating a preference for surgery is two and a half times the percentage of female students. Not a single male student expressed a preference for gynaecology. Forty per cent of first-year students have no clearly defined specialty preference; in particular the female students in this group greatly value attractive working hours.

The female students particularly valued the work-life balance, whereas the male students found career opportunities much more important.

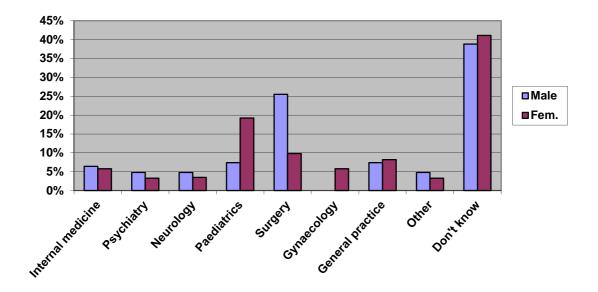


Chart 5.2.4: Gender differences in specialty preference

Source: Tongeren-Alers, M. van, et al (2011), "Are new medical specialty preferences gendered? Related motivational factors at a Dutch medical school". [Accepted for publication]

In 2009, all 329 RUNMC medical students in their final year were also asked to complete a questionnaire. The response rate was 93.6%.

Chart 5.2.5 shows that the top three specialty preferences of female students upon completing their training are: general practice (37.4%), internal medicine (11.3%), and surgery (7.4%).

The top three specialty preferences of male students upon completing their training are: general practice (26.9%), surgery (24.4%), and internal medicine (7.7%).

What is striking is that the percentage of male students with a preference for surgery is three times higher than the percentage of female students. In addition, it is striking that 12% of final-year students had no clearly defined specialty preference.

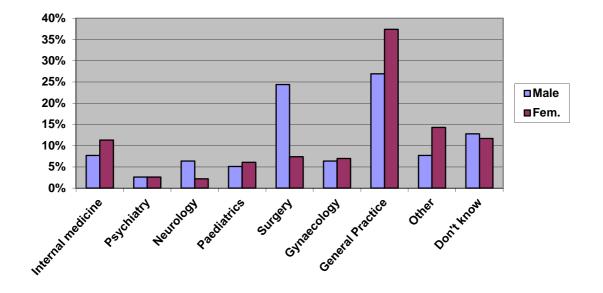


Chart 5.2.5: Gender differences in specialty preference

Source: Pepping, T. (2009). Gender associated specialty preferences in Dutch final year medical students, p. 11.

Upon completing their training, female students with a preference for surgery value income and technical skills more than female students with a preference for general practice or a non-surgery specialty. These last two groups value direct patient contacts much more than those who opt for surgery.

Female students with a preference for general practice value the work-life balance and attractive working hours more than female students who opt for a hospital-based specialty. Out of all female students, those who opt for general practice value research opportunities the least.

All female students with a preference for surgery and non-surgery specialties consider the substance of their work very important.

Upon completing their training, male students with a preference for surgery find technical skills very important. They value the substance of their work and direct patient contacts less than male students with a preference for non-surgery specialties or general practice. Male students who opt for non-surgery specialties value technical skills less than those who prefer general practice and surgery.

All male students with a preference for general practice value patient contacts and the substance of their work. They attach greater importance to attractive working hours than male students with a preference for a hospital-based specialty.

Two-thirds of the female medical students and one-fifth of the men with a preference for general practice would like to work part-time (Table 5.2.1). Most female students with a preference for surgery or non-surgery specialties wanted to work full-time (72.7% versus 68.6%).

Table 5.2.1: Percentages of male and female sixth-year medical students and their preference for full-time or part-time work, presented for each specialty

		Men		Women		
	Surgery	Non- Surgery	General Practice	Surgery	Non- Surgery	General Practice
Full-time	100%	70.6%	81.0%	72.7%	68.6%	32.6%
Part-time	0%	29.4%	19.0%	27.3%	31.4%	67.4%

Source: Pepping, T. (2009). Gender associated specialty preferences in Dutch final year medical students.

## 6. Physicians' Career Wishes

#### 6.1 General

Besides the feminization of the medical profession, the trend among both male and female physicians is to work fewer hours. This trend towards part-time work is in sharp contrast with growing demands for healthcare services and the short supply of doctors. What family-friendly staffing regulations would be most appropriate for combining the demands of the labour market (external pressure) with health institutional (internal) strategies?

Family-friendly regulations that focus on reduced labour participation (part-time work, part-time training programmes, leave regulations, etc.) have a negative effect on the working hours of female physicians. Family-friendly regulations that focus on full labour participation (day care, flexible working hours, teleworking, etc.) do not have a negative effect on the working hours of female physicians and would, therefore, be a more appropriate approach in dealing with the negative effects of feminization. Regulations focusing on full labour participation require organizations to be flexible in how they design labour processes but, with employees working more hours, also offer greater cost-efficiency.

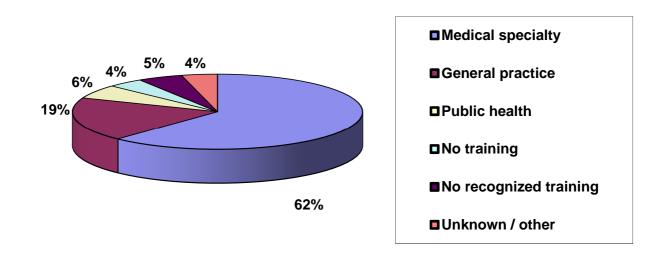
Female physicians who feel supported in achieving their career goals are more motivated to work hard to achieve those goals, which includes their readiness to work more hours. Career support reinforces the positive effects that full labour participation regulations may have on working hours. When female physicians are supported in easing the work-life balance, this affects the positive effects that full labour participation regulations may have, possibly because it unintentionally reinforces their caring role and, hence, increases their preference for part-time work.

Source: Pas, B., et al (2011), "Feminisation of the medical profession: a strategic HRM dilemma? The effects of family-friendly HR practices on female doctors' contracted working hours." *Human Resource Management Journal*. First published online: 6 January 2011

URL: http://onlinelibrary.wiley.com/doi/10.1111/j.1748-8583.2010.00161.x/full

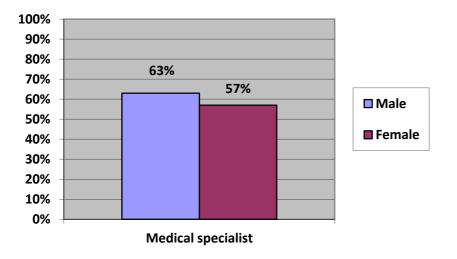
#### 6.2 Medical graduates

Chart 6.2.1: Wishes of medical graduates relating to their medical specialization



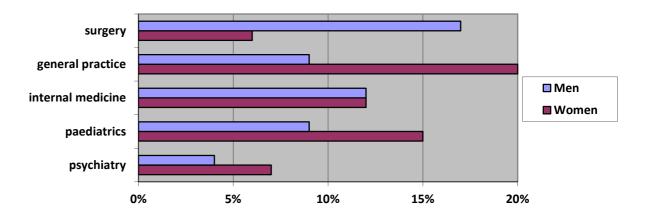
Source: Lugtenberg, M. et al. (2005). Artsen en hun carrièrewensen [Physicians and their Career Wishes]. NIVEL.

Chart 6.2.2: Percentage of male and female medical graduates opting for medical specialization training (based on studies done between 2000 and 2005)



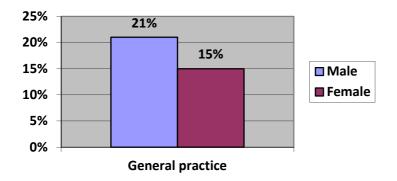
Source: Lugtenberg, M. et al. (2005). Artsen en hun carrièrewensen [Physicians and their Career Wishes]. NIVEL, pp. 17-18.

Chart 6.2.3: Specialty preference of 760 medical graduates (%), who graduated from VU University Amsterdam and Utrecht University in the period 1 July 1999 – 30 June 2002. The research population received a written questionnaire 4 months after graduation at the earliest and 3 years and 4 months after graduation at the latest. The female medical graduates prefer general practice (20%) and paediatrics (15%). The male medical graduates prefer surgery (17%) and internal medicine (12%).



Source: Soethout, M.B.M. (2007), *Career preference of medical students and career choice of recent graduates*. (PhD thesis VU), p. 56.

Chart 6.2.4: Male and female medical graduates opting for general practice (based on studies done between 2000 and 2005)



Source: Lugtenberg, M. et al. (2005). Artsen en hun carrièrewensen [Physicians and their Career Wishes]. NIVEL, pp. 17-18.

# Compared to average medical graduates, medical graduates who prefer a **medical specialty** attach

In psychiatry:

- greater importance to: normal working hours in training (men), opportunities for part-time training, working in employment, and fixed working hours in the profession (women)
- less importance to: curing people (men).

In a surgical specialty:

- greater importance to: curing people, more opportunities for scientific work, publishing (men), research (women)
- less importance to: the availability of sufficient intake capacity, opportunities for part-time work, day care while training and working (thought they do consider this important).

In a non-surgical specialty:

- greater importance to: a clearly defined group of patients (men)
- less importance to: the likelihood of normal working hours and part-time training programmes (though they do consider this important)

In a supporting specialty:

- greater importance to: the delivery of quality care, a good private life (men), the substance of the profession (women)
- less importance to: human contact.

When compared to average medical graduates, medical graduates who prefer **general practice**, attach

- greater importance to part-time work (women), a profession with a generalist character, being an entrepreneur
- less importance to: working in a team, making a career (women), scientific research / pursuing a doctorate / publications (men).

When compared to average medical graduates, medical graduates who prefer **public health**, attach:

In Community Medicine:

- greater value to: regular working hours (women) and part-time work (women) both in training and in professional practice.

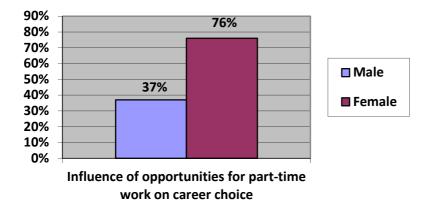
In Occupational and Insurance Medicine:

- greater value to: favourable working hours and working conditions (men); training-related factors such as sufficient intake capacity and favourable timetables in training (women).

Source: Lugtenberg, M. et al. (2005). Artsen en hun carrièrewensen [Physicians and their Career Wishes]. NIVEL, p. 20.

#### **6.3 General Practitioners**

Chart 6.3.1: GPs in training: opportunities for part-time work are a major priority in the career choice of female GPs in training



Source: Soethout, M.B.M., Wal, G. van der, Cate, Th.J. ten (2007). "Carrièrewensen en beroepskeuze van recent afgestudeerde artsen [Career preference and career choice of recent medical graduates]." *Nederlands Tijdschrift voor Geneeskunde* 151(38): 2118-23.

Whereas it was mainly women who had part-time jobs in the late eighties, part-time work has meanwhile become more common for both men and women. In the 1997-2007 period, the percentage of female GPs working part-time rose from 74% to 87%; however, the percentage of male GPs working part-time doubled in the same period: from 19% to 41%.

Source: Berg, M.J. van den (2010), Workload in general practice (PhD thesis Tilburg), p. 53.

Table 6.3.1: Favourable factors in their careers often mentioned by female GPs in sub-top positions

Factors
Domestic arrangements and social support (n=9, 8f/1m)
A network (n=8, 5f/3m)
Enjoying the profession (n=8, 5f/3m)
Possession of certain qualities (n=6, 3f/3m)
Motivation (n=5, 4f/1m)
(Executive) experience (n=5, 2f/3m)
Ambition (n=5, 3f/2m)

Source: Jong, G. de, Lagro-Janssen, A. (2004). Barsten in het glazen plafond. Een studie naar gender en leiderschap binnen de huisartsgeneeskunde in Nederland [Cracks in the Glass Ceiling: A Study of Gender and Leadership in General Practice in the Netherlands]. Nederlands Huisartsen Genootschap.

A study by Vanweehaeghe (see Table 6.2.2) shows that there are significant differences between male and female GPs regarding their sense of vocation, job satisfaction, and responsibility vis-à-vis patients: female GPs value such aspects considerably more than their male colleagues. For male GPs, financial reasons come first.

		TOTAL PH				
Motivation		male	female	effect size	p-value	
Financial reasons		n = 116	n = 199	-0.046	0.413	
	mean					
	rank	163.36	154.87			
		n = 116	n = 203	-0.171	0.002	
Sense of vocation,	mean					
job satisfaction	rank	141.62	170.50			
		n = 115	n = 196	-0.121	0.033	
Responsibility vis-à-	mean					
vis patients	rank	142.23	164.08			
Occupation		n = 109	n = 186	-0.063	0.280	
	mean					
	rank	154.83	144.00			
		n = 108	n = 181	-0.047	0.423	
Lack of other career	mean					
perspectives	rank	150.00	142.01			
		n = 106	n = 181	-0.023	0.701	
Fear of losing official	mean					
GP recognition	rank	146.37	142.61			
Expansion and		n = 111	n = 180	-0.022	0.704	
growth of GP	mean					
surgery	rank	143.64	147.45			

Table 6.3.2: Motivation of established GPs by gender (by means of the Mann-Withney U test).

Source: Vanweehaeghe, S. (2009). *Genderstudie huisartsenberoep [Gender Study of the Profession of General Practitioner]*, part 2, p. 38.

#### Solo GP practice and group GP practice

In the 80s and early 90s, between 10%-20% of men indicated they preferred to run a solo practice, but in the late 90s this figure slowly decreased to 3%-15%. In the 80s, only 1%-8% of women indicated they preferred to run a solo practice, and by 2001 this figure had gone down to virtually 0%.

The percentage of GPs working in a group practice went up from 28% in 1980 to 73% in 2005 (66% of all male GPs and 93% of all female GPs).

Source: Maiorova, T. (2009). *The role of gender in medical specialty choice and general practice preferences*. PhD thesis. Maastricht : Universitaire Pers Maastricht, pp. 30-31 and 62.

Out of the group of 442 GPs who are looking for a practice of their own, the majority prefer to work in a group practice: 53% of men and 56% of women. Relatively more men than women prefer to work in a solo practice (4% and 1%, respectively) (Table 6.3.3).

Table 6.3.3: Kind of practice preferred by GPs looking for a practice of their own, on 1 January 2010\*

	Male		Fema	Female		Total	
	abs	%	abs	%	abs	%	
Solo practice	6	4.3	3	1.0	9	2.0	
Duo practice	52	36.9	123	40.9	175	39.6	
Group practice	75	53.2	167	55.5	242	54.8	
No preference	8	5.7	8	2.7	16	3.6	
Total	141	100.0	301	100.0	442	100.0	

\* only GPs who were looking for a practice and responded

Source: NIVEL. Cijfers uit de registratie van huisartsen – peiling 2010 [GP Registration Figures 2010], p. 29.

#### Size of GP practice

In the 1982-2000 period, 16% of female GP graduates said they preferred a practice with fewer than 1,500 patients, whereas only 2% of the men said so. Male GPs prefer a practice with at least 2,500 patients more often than female GPs (31% versus 9%, respectively). Within the average GP practice size, men preferred bigger practices than women (2,000-2,499 patients versus1,500-1,999 patients).

Source: Maiorova, T. (2009). *The role of gender in medical specialty choice and general practice preferences*. PhD thesis. Maastricht : Universitaire Pers Maastricht, pp. 30-31 and 62.

The above is confirmed by NIVEL. There are major differences between men and women in terms of GP practice size: the average practice size preferred by men is 2,314 and that of women is 1,935 (Table 6.3.4).

Table 6.3.4: Preferred practice size of GPs looking for a practice of their own, on 1 January 2010\*

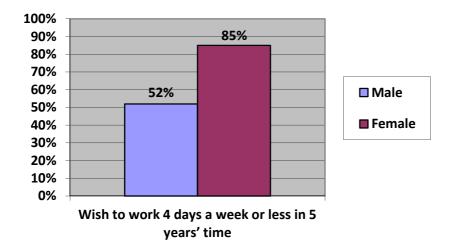
	Male		Fema	Female		Total	
	abs	%	abs	%	abs	%	
< 1,750	5	3.5	89	29.6	94	21.3	
1,750-1,999	7	5.0	38	12.6	45	10.2	
2,000-2,249	32	22.7	69	22.9	101	22.9	
2,250-2,499	25	17.7	27	9.0	52	11.8	
2,500 or more	52	36.9	45	15.0	97	21.9	
No preference	20	14.2	33	11.0	53	12.0	
Total	141	100.0	301	100.0	442	100.0	

\* only GPs who were looking for a practice and responded

Source: NIVEL. Cijfers uit de registratie van huisartsen – peiling 2010 [GP Registration Figures 2010], pp. 30-31.

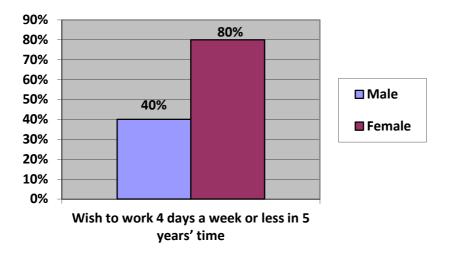
#### 6.4 Medical specialists

Chart 6.4.1: Medical specialists in training: approximately 70% of respondents in training wished to work 4 days a week or less in 5 years' time.



Source: Soethout, M.B.M., Wal, G. van der, Cate, Th.J. ten (2007). "Carrièrewensen en beroepskeuze van recent afgestudeerde artsen [Career preference and career choice of recent medical graduates]." *Nederlands Tijdschrift voor Geneeskunde* 151(38): 2118-23.

Chart 6.4.2: Medical specialists *not* in training: 70% of respondents wished to work 4 days a week or less in 5 years' time.



Source: Soethout, M.B.M., Wal, G. van der, Cate, Th.J. ten (2007). "Carrièrewensen en beroepskeuze van recent afgestudeerde artsen [Career preference and career choice of recent medical graduates]." *Nederlands Tijdschrift voor Geneeskunde* 151(38): 2118-23.

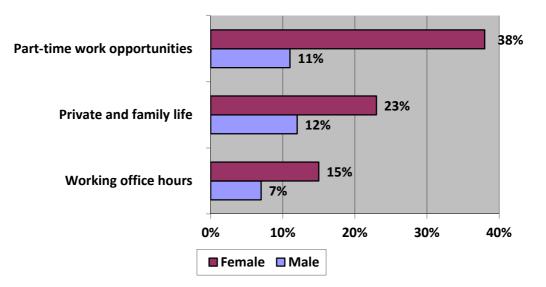


Chart 6.4.3: Medical specialists in training: factors determining career choice

Source: Soethout, M.B.M., Wal, G. van der, Cate, Th.J. ten (2007). "Carrièrewensen en beroepskeuze van recent afgestudeerde artsen [Career preference and career choice of recent medical graduates]." *Nederlands Tijdschrift voor Geneeskunde* 151(38): 2118-23.

Self-employed specialists on average work more hours than salaried specialists: more than half of those working for general hospitals work 50 hours a week or more, whereas only 29% of salaried specialists do so. An exception is UMC specialists, approximately 60% of whom work more than 50 hours a week. A specialist's average working week is well over 50 hours a week in more than half of all cases.

All specialists indicate they prefer to work fewer hours: 'Physicians working 50 hours or more a week prefer a 45-47 hour working week. Physicians working 45 hours a week want to work 3 to 5 hours a week less.'

Source: Medisch specialisten willen korter werken [Medical specialists want to work fewer hours]. Mednet (8 February 2010).

#### Female specialists' career aspirations are high

What is striking in Table 6.4.1 is that in terms of ambition level (the top jobs and the best pay, etc.) both male and female RUNMC specialists have very high scores, with an average score of 4.3 (on a five-point scale, 1 representing 'strongly disagree'). Compared to other occupational groups (including medical ones, such as GPs), this score may be interpreted as very high.

None of the shown means between men and women differed significantly. A mean score of 3.2 represents a neutral attitude towards career aspects and other aspects of life, meaning the career is neither a core issue nor a side issue. Both male and female specialists have neutral career strategies, meaning they may have formulated some strategy for themselves but do not pursue clearly defined, plan-based career paths. This may be due to the character of the medical career in general: to obtain a particular position, medical professionals are expected to follow a tenure track, which requires relatively little strategic effort of those involved.

Table 6.4.1: mean scores on career motivation for male and female specialists at UMC St Radboud. Five-point scale, 1 representing 'strongly disagree'.

	Ambition	Career identity	Career strategy
Men	4.3	3.2	3.2
Women	4.2	3.2	3.3
Total	4.3	3.2	3.3

#### Equal work, unequal pay

Women do as well as men in terms of publications but land fewer top jobs. There is a wide pay gap between male and female medical specialists over 40, despite their same number of years' work experience. This requires further study.

Source: Pas, B.R. (2009). Vrouwen en carrière in het UMC st Radboud: een nonissue of een nulmeting? Rapportage onderzoek Arts en Carrière in het UMC St Radboud [Female Careers at Radboud University Nijmegen Medical Centre: A Non-Issue or a Baseline Study? Report of a Physician Careers Study at Radboud University Nijmegen Medical Centre].

#### The paradox of the ideal employee in the family-friendly working environment

Table 6.4.2: Score relating to ideas on work-life culture; all differences found between mean scores of men and women were significant.

	Career support	Work-life balance support	Career impediments*
Men	3.8	3.7	2.6
Women	3.6	3.5	2.4
Total	3.7	3.6	2.5

\* This is a reverse scale, with 1 representing 'strongly agree'.

Explanation of the Table above:

• *career support* refers to the degree to which respondents felt they were supported in their careers and career goals by colleagues and superiors;

• *work-life balance support* refers to the degree to which respondents felt they were supported in establishing or preserving a proper balance between their work and their private lives;

• *career impediments* refers to the degree to which respondents felt that if they availed themselves of part-time work regulations, for example, this would affect their career opportunities.

With a mean score over 3 on a 5-point scale for career support and work-life balance support, we can say that male and female physicians do feel supported in their careers and their work-life balance. However, female physicians feel significantly less supported in their careers and career goals by colleagues and superiors than their male counterparts. They also feel less supported in their efforts to establish or preserve a healthy balance between their work and their private lives; and they are more convinced than their male colleagues that, if they make use of work-life regulations such as part-time work or flexible working hours, this will negatively affect their careers.

With regard to the career impediments they experience, it is evident that both men and women perceive the culture to be an impediment if they consider making use of work-like regulations such as working part-time or if they are not prepared to work overtime on a structural basis.

Source: Pas, B.R. (2009). Vrouwen en carrière in het UMC st Radboud: een nonissue of een nulmeting? Rapportage onderzoek Arts en Carrière in het UMC St Radboud [Female Careers at Radboud University Nijmegen Medical Centre: A Non-Issue or a Baseline Study? Report of a Physician Careers Study at Radboud University Nijmegen Medical Centre].

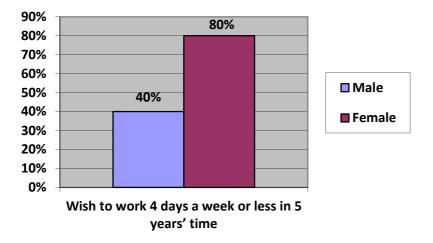
#### 6.5 Public health physicians

Neither professional associations (KAMG, NVAB, and NVVG) nor research institutes (NIVEL and Capaciteitsorgaan) have any information on the career wishes of public health physicians, and the little information we have been able to retrieve, indicates we do not know much about the wishes of public health PhD students either. A 1999 study by Wiegers & Hingstman showed that 70% of female public health physicians were working part-time:

Though data on the wishes of public health physicians are not available, our discussion of influential factors already showed that public health physicians often opt for this profession because it holds out more part-time opportunities, both in training and on the job. The study by Wiegers & Hingstman (1999), moreover, shows that opportunities for working in paid employment and in part-time jobs have helped to persuade public health students to opt for this profession. We may assume, therefore, that this group is interested in working in paid employment and in part-time jobs.

Source: Lugtenberg, M. et al. (2005). Artsen en hun carrièrewensen [Physicians and their Career Wishes]. NIVEL, p. 24.

Chart 6.5.1: Public health physicians *not* in training: 70% of respondents wished to work 4 days a week or less in 5 years' time.



Source: Soethout, M.B.M., Wal, G. van der, Cate, Th.J. ten (2007). "Carrièrewensen en beroepskeuze van recent afgestudeerde artsen [Career preference and career choice of recent medical graduates]." *Nederlands Tijdschrift voor Geneeskunde* 151(38): 2118-23.

## 6.6 Elderly Care Physicians

The professional association NVVA, the Elderly Care Physician programme at VU University Amsterdam, NIVEL, and Prismant had no information on the career wishes of elderly care physicians.

# PART II

## Women on Boards

## 7. Professor M/F

In this Chapter, we will provide an overview of the number of female professors, associate professors, assistant professors, and PhD students. We will also deal with the glass ceiling and the appointment procedures for professors in various disciplines.

Chart 7.1 and Table 7.1 show that Radboud University Nijmegen, University of Amsterdam, and Leiden University have the highest percentage of female professors. The Universities of Technology have fewer female professors, but it is striking that the percentage of female professors at Delft far outstrips that of Eindhoven.

Chart 7.2 shows that, in terms of the percentage of female professors, the Netherlands is not doing at all well from a European perspective: it finds itself among the bottom six out of 27 EU countries and, hence, bringing up the rear, with only Belgium, Ireland, Cyprus, Luxembourg, and Malta doing even worse.

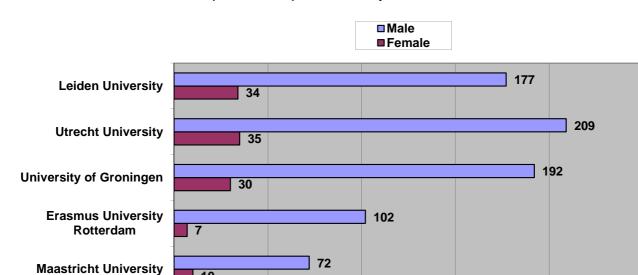


Chart 7.1: Number of female professors per university. Ultimo 2008

Professors Monitor 2009]. Stichting de Beauvoir [et al.].

Source: Gerritsen, M., et al. (2009). Monitor vrouwelijke hoogleraren 2009 [Women

**University of Amsterdam** 

VU University Amsterdam

**Radboud University** 

Nijmegen

**Tilburg University** 

**Delft University of** 

Technology

**Eindhoven University of** 

Technology

**University of Twente** 

Wageningen University

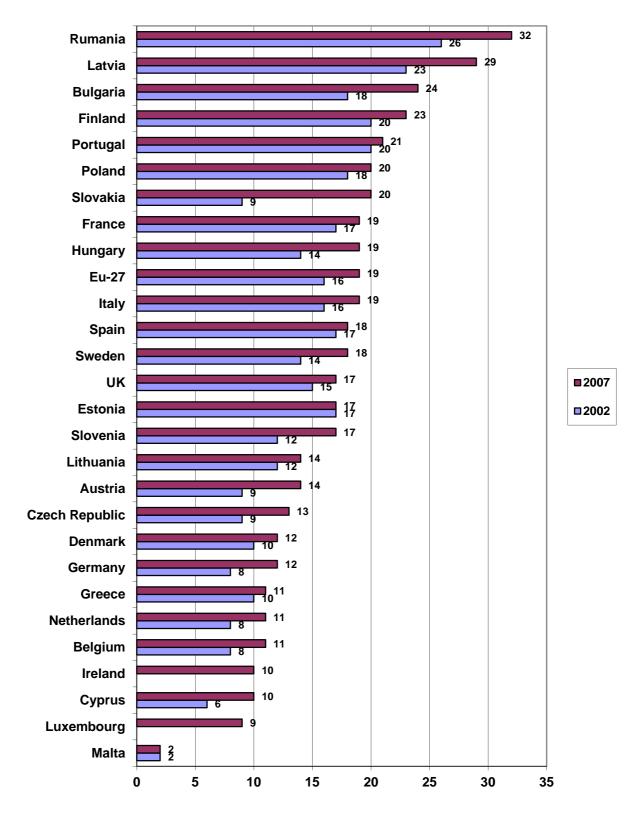
**Open University** 

	2003	2008
Radboud University Nijmegen	12.8%	16.7%
University of Amsterdam	13.5%	16.5%
Leiden University	14.2%	16.3%
Utrecht University	9.0%	14.3%
University of Groningen	8.9%	13.4%
Maastricht University	5.2%	12.2%
Open University	11.2%	11.0%
VU University Amsterdam	6.8%	10.5%
Wageningen University	9.5%	9.9%
Tilburg University	8.0%	9.9%
Delft University of Technology	3.1%	7.0%
Erasmus University Rotterdam	6.1%	6.6%
University of Twente	3.9%	5.8%
Eindhoven University of Technology	1.5%	1.6%
Total	8.6%	11.7%

Table 7.1: Percentage of female professors at Dutch universities in 2003 and 2008, ranked by female-friendly environment

Source: Gerritsen, M., et al. (2009). *Monitor vrouwelijke hoogleraren 2009 [Women Professors Monitor 2009]*. Stichting de Beauvoir [et al.].

Chart 7.2: Percentage of female professors (Grade A academic positions) in 27 EU countries in 2002 and 2007



Source: She Figures 2009, EC, DG Research, WiS database, 2009.

On the total number of academic staff and all academic positions, the percentage of women went up between 1999 and 2009. As positions on the academic ladder move up, however, the percentage of women is going down (see Chart 7.3).

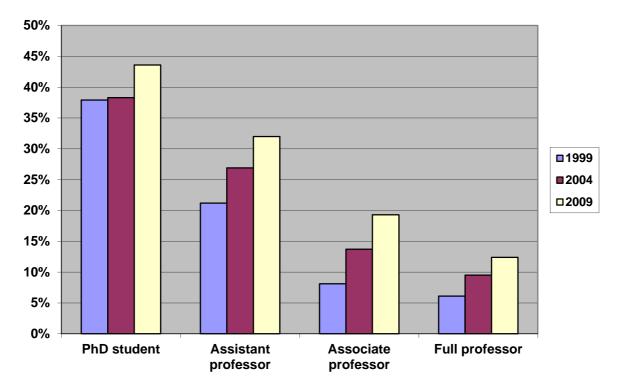


Chart 7.3: Percentage of women in academic positions, by position.

Excluding research assistants and the HOOP domain of Health

Source: VSNU, WOPI, date 31 December

Though the percentage of women in various academic positions still remains low, a positive trend is evident. For assistant professors, we see an increase from 15% in 1990 to over 30% in 2008 (see Chart 7.4).

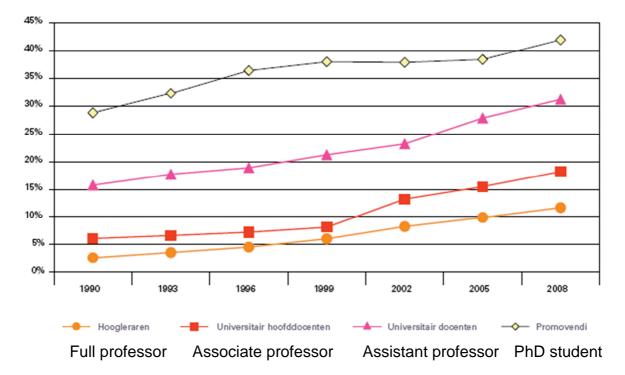


Chart 7.4: Development of the percentage of women by academic position between 1990 and 2008

Source: Gerritsen, M., et al. (2009). *Monitor vrouwelijke hoogleraren 2009 [Women Professors Monitor 2009]*. Stichting de Beauvoir [et al.].

Tables 7.2 - 7.5 are about the Glass Ceiling Index (GCI), which measures the thickness of the glass ceiling between categories of academic positions. A GCI over 1.0 is indicative of impediments to upward mobility: the glass ceiling. The higher the GCI, the harder it is to move up to higher-level positions.

Table 7.2: Development of the Glass Ceiling Index. **Women.** Ultimo 2003, 2005, and 2008

	Associate professor/ Full professor	Assistant professor Associate professor	PhD student / Assistant professor
2003	1.6	1.8	1.6
2005	1.6	1.8	1.4
2008	1.6	1.7	1.3

There are impediments to women at all stages, but the glass ceiling is the thickest between assistant professor and associate professor positions. Even though the GCI is slightly lower between associate professor and full professor positions (1.6), moving up from associate professor to full professor positions continues to be a hard step for women to take.

Source: Gerritsen, M., et al. (2009). *Monitor vrouwelijke hoogleraren 2009 [Women Professors Monitor 2009]*. Stichting de Beauvoir [et al.].

Table 7.3: Development of the Glass Ceiling Index. Men. Ultimo 2003, 2005, and 2008

	Associate professor/ Full professor	Assistant professor / Associate professor	PhD student / Assistant professor
2003	0.9	0.9	0.8
2005	0.9	0.9	0.9
2008	0.9	0.8	0.8

In the 2003-2008 period, GCI was below 1.0 for men and for all career moves.

Source: Gerritsen, M., et al. (2009). *Monitor vrouwelijke hoogleraren 2009 [Women Professors Monitor 2009]*. Stichting de Beauvoir [et al.].

The GCI indicates at which transition in female careers policy would need to be adjusted in each field of study (see Table 7.4).

		2003	
	Associate professor/	Assistant professor /	PhD student / Assistant
	Full professor	Associate professor	professor
Agriculture	1.1	1.6	2.6
Nature	1.5	2.0	2.2
Technology	1.6	3.2	1.8
Economics	2.1	2.2	1.8
Law	2.5	1.5	1.2
Behaviour & Society	1.5	1.6	1.9
Language & Culture	1.7	1.1	1.9
Various	1.0	2.3	1.2
Total	1.6	1.8	1.6

Table 7.4: Glass Ceiling Index for women by field of study. Ultimo 2003 and 2008.

		2008	
	Associate professor/ Full professor	Assistant professor / Associate professor	PhD student / Assistant professor
Agriculture	1.2	2.2	1.9
Nature	1.5	1.7	1.9
Technology	1.5	2.8	1.4
Economics	1.5	2.5	1.4
Law	2.1	1.3	1.3
Behaviour & Society	1.5	1.6	1.5
Language & Culture	1.7	1.1	1.6
Various	1.9	1.6	1.3
Total	1.6	1.7	1.3

Source: Gerritsen. M. et al. (2009). *Monitor vrouwelijke hoogleraren 2009 [Women Professors Monitor 2009]*. Stichting de Beauvoir [et al.].

Table 7.5 shows that the glass ceiling is the thickest for transitions from associate professor to full professor positions in eight out of fourteen universities. At the three Universities of Technology and Wageningen University, the transition from assistant professor to associate professor positions is a major impediment to women.

	Associate professor/ Full professor	Assistant professor / Associate professor	PhD student / Assistant professor
Leiden University	1.5	1.4	1.4
Utrecht University	1.8	1.4	1.4
University of Groningen	1.6	1.5	1.3
Erasmus University Rotterdam	2.7	1.7	1.3
Maastricht University	1.7	1.8	1.4
University of Amsterdam	1.2	1.7	1.3
VU University Amsterdam	2.1	1.6	1.4
Radboud University Nijmegen	1.3	1.4	1.8
Tilburg University	1.8	1.7	1.7
Delft University of Technology	1.1	2.5	1.4
Eindhoven University of Technology	4.0	2.7	1.6
University of Twente	1.8	2.8	1.0
Wageningen University	1.2	2.3	1.9
Open University	2.9	1.4	1.2
Total	1.6	1.7	1.3

Table 7.5: Glass Ceiling Index by university. Ultimo 2008.

Source: Gerritsen. M.. et al. (2009). *Monitor vrouwelijke hoogleraren 2009 [Women Professors Monitor 2009]*. Stichting de Beauvoir [et al.].

The last section of this Chapter deals with appointment procedures for professorships in the various disciplines. In particular access to the academic top is virtually unexplored territory in the Dutch context.

Chart 7.5 'shows the development of the percentages of potential female candidates and the percentages of female nominations per academic discipline. There are several differences between the disciplines: developments in Technology, Economics, and Behaviour & Society are fairly flat, albeit at different levels. These data do not show a disproportionate female dropout from the selection process. The percentages of women in the disciplines of Health, Language & Culture, Law, and, to a lesser extent, Nature are showing a downward trend. In Agriculture, there is a remarkable upward trend: the percentage of women is increasing at each step of the process. All this means that the percentages of successful male and female applications differ for each discipline, as also shown in Table 7.6 below.'

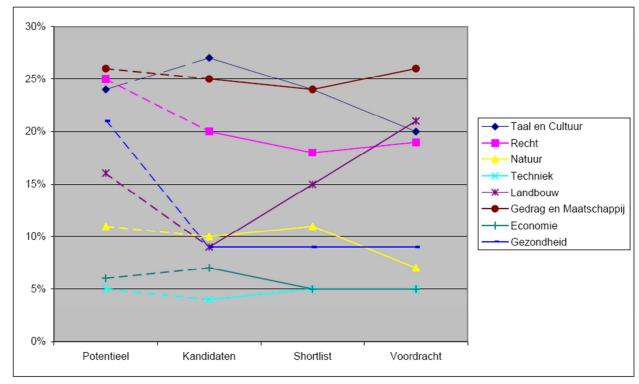


Chart 7.5: Percentage of women as potentials, candidates (general and shortlisted) and eventual professorship nomination

Potential Candidates Shortlist Nominations

Taal en cultuur	Language & Culture
Recht	Law
Natuur	Nature
Techniek	Technology
Landbouw	Agriculture
Gedrag en Maatschappij	Behaviour & Society

Economie	Economics
Gezondheid	Health

Source: Brink. M. van den. et al. (2006). Gender & Excellence: een landelijk onderzoek naar benoemingsprocedures van hoogleraren [Gender & Excellence: A National Study of Professorial Appointment Procedures].

Table 7.6: Percentage of successful candidates M/F by discipline

	Successful candidates M (%)	Successful candidates F (%)
Language & Culture	15	10
Law	26	24
Nature	26	16
Technology	43	50
Agriculture	12	35
Behaviour & Society	21	22
Economics	32	21
Health	50	49

Source: Brink. M. van den. et al. (2006). Gender & Excellence: een landelijk onderzoek naar benoemingsprocedures van hoogleraren [Gender & Excellence: A National Study of Professorial Appointment Procedures].

Table 7.7 presents a survey of the distribution of chairs over men and women. There is a significant gender gap: there are more women with personal chairs and fewer with strategic chairs.

Table 7.7: Survey of nominated professors M/F by type of chair 1999-2003

	Functional	Personal	Strategic	
Male	548	78	124	750
	(87%)	(80%)	(92%)	(100%)
Female	81	19	11	111
	(13%)	(20%)	(8%)	(100%)
Total	629	97	135	861
	(100%)	(100%)	(100%)	(100%)

The first two columns in Table 7.8 show the number of candidates and nominations by gender. These figures show that more men than women successfully complete their application procedure: 28% of men and 21% of women. Women particularly do not do well in the fields of Economics (-11%) and Nature (-10%). We can also see, however, that women are successful in the fields of Agriculture and Technology, where they may be catching up.

	Can	didates	Nominations		ominations % Successful applications		M/F difference
	М	F%	Μ	F	М	F	%
Language & Culture	421	155 (27%)	65	16 (20%)	15.4%	10.3%	-5.1%
Law	267	67 (20%)	68	16 (19%)	25.5%	23.9%	-1.6%
Nature	319	37(10%)	84	6 (7%)	26.3%	16.2%	-10.1%
Technology	221	10 (4%)	96	5 (5%)	43.4%	50.0%	6.6%
Agriculture	215	20 (9%)	26	7 (21%)	12.1%	35.0%	22.9%
Behaviour & Society	260	85 (25%)	54	19 (26%)	20.8%	22.4%	1.6%
Economics	176	14 (7%)	57	3 (5%)	32.4%	21.4%	-11.0%
Health	355	35 (9%)	176	17 (9%))	49.6%	48.6%	-1.0%
	2,234	423 (16%)	626	89 (12%)	28%	21%	-0.7%

Table 7.8: Success scores of candidates: % of male and female candidates

Women are more likely to be shortlisted 'because some committee members are sympathetic towards female candidates. The percentage of women that is actually nominated after the interview is significantly lower than the percentage of men, as Table 7.9 shows: almost 60% of shortlisted male candidates are nominated, in contrast with 50% of women. This difference is significant. The women are more successful in the fields of Agriculture, Behaviour & Society, and Law.' Women are considerably less likely to be nominated in the fields of Nature and Language & Culture.

	Shortlisted candidates		Nominations		% Successful applications		M/F difference	
	М	F (%)	М	F	Μ	F	%	
Language & Culture	142	46 (24%)	65	16	45.8%	34.8%	-11.0%	
Law	139	30 (18%)	68	16	48.9%	53.3%	4.4%	
Nature	138	17 (11%)	84	6	60.9%	35.3%	-25.6%	
Technology	133	7 (5%)	96	5	72.2%	71.4%	-0.8%	
Agriculture	71	13 (15%)	26	7	36.6%	53.8%	17.2%	
Behaviour & Society	119	38 (24%)	54	19	45.4%	50.0%	4.6%	
Economics	86	5 (5%)	57	3	66.3%	60.0%	-6.3%	
Health	234	23 (9%)	176	17	75.2%	73.9%	-1.3%	
	1,062	179 (14%)	626	89	59%	50.0%	-9.0%	

Table 7.9: Success scores of candidates: % of shortlisted candidates

Table 7.10 shows that there is no difference between male and female professors in terms of job size. As the majority of nominated professors have an 0.8 FTE appointment or over, there is no gender difference here. 'There may be a selection effect at work here. Women who consciously opt to have an academic career and wish to create the best possible conditions to achieve it may be following the classic career path: high dedication, full-time job, and no care obligations. It seems likely that women who do not choose to pursue such a path drop out in earlier stages.'

	<0.4 FTE	0.5-0.7 FTE	0.8-1.0 FTE	Total
Male	215	61	441	717
	(30%)	(9%)	(62%)	100%
Female	29	11	69	109
	(27%)	(10%)	(63%)	100%
Total	244	72	510	826
	(30%)	(9%)	(62%)	100%

Table 7.10: Number of appointments by gender and job size

Table 7.11 present an overview of female potential per discipline. There is a substantial female potential in the fields of Behaviour & Society (26%), Law (25%), Language & Culture (24%), and Health (21%). The other disciplines, particularly Technology (5%), Economics (6%), and Nature (11%) are lagging behind.

Table 7.11: Percentage of female potential: associate professors and female professors appointed per discipline. Analysis by Gender & Excellence. CBS. VSNU-WOPI-1999 t/m 2004.

Discipline	Female potential (%)	Female associate professors (%)	Female professor appointments (%)
Language & Culture	24	21	16.4
Law	25	24	14.3
Nature	11	7	7.6
Technology	5	4	6.9
Agriculture	16	8	10.8
Behaviour & Society	26	17	21.5
Economics	6	8	7.0
Health	21	14	9.7

### 8. Number of Female Medical Professors

Table 8.1: Percentage of female professors at university medical centers. Benchmark	
dates: 31 December 2008 – July 2009	

	Male	Female	Total	% Women
Leiden University Medical Center	126	23	149	15.4%
University Medical Center Utrecht	112	18	130	13.8%
University Medical Center Groningen	149	28	177	15.8%
Erasmus MC	153	21	174	12.1%
University Hospital Maastricht	127	13	140	9.3%
Academic Medical Center UvA	133	21	154	13.6%
VU University Medical Center	122	18	140	12.9%
Radboud University Nijmegen Medical Centre	122	12	134	9.0%
Total	1,044	154	1,198	12.9%

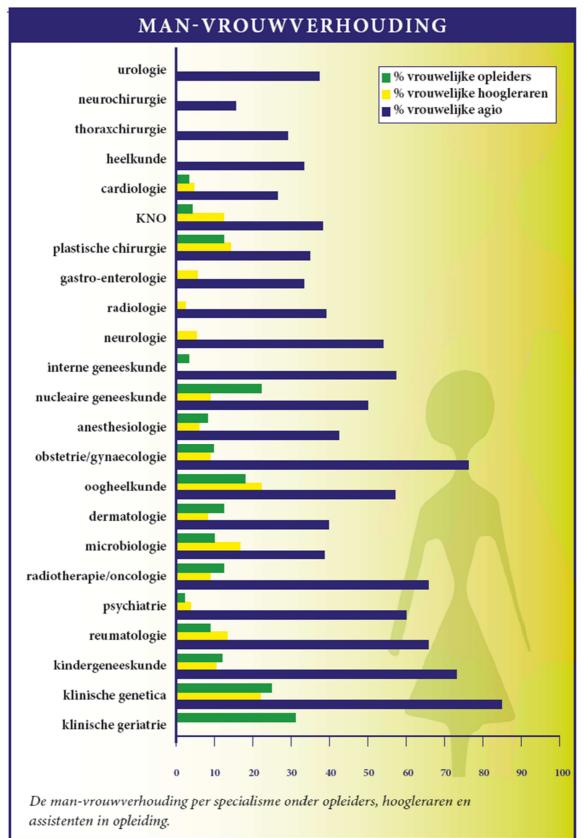
Source: Gerritsen, M., et al. (2009). *Monitor vrouwelijke hoogleraren 2009 [Women Professors Monitor 2009]*. Stichting de Beauvoir [et al.].

Table 8.2: Number of professors that are department heads at university medical centers, by gender. Benchmark dates: 31 December 2008 – July 2009.

		Number of professors that are department heads			
	Male	Female	Total	% Women	
Leiden University Medical Center	37	2	39	5.1%	
University Medical Center Utrecht	35	4	39	10.3%	
University Medical Center Groningen	34	5	39	12.8%	
Erasmus MC	48	1	49	2.0%	
University Hospital Maastricht	36	4	40	10.0%	
Academic Medical Center UvA	37	11	48	22.9%	
VU University Medical Center	37	5	42	11.9%	
Radboud University Nijmegen Medical Centre	41	2	43	4.7%	
Total	305	34	339	10.0%	

Source: Gerritsen, M., et al. (2009). *Monitor vrouwelijke hoogleraren 2009 [Women Professors Monitor 2009]*. Stichting de Beauvoir [et al.].

Chart 8.1: Gender distribution among instructors, professors, and medical residents per specialty (the data in the Table are from 2004-2005)



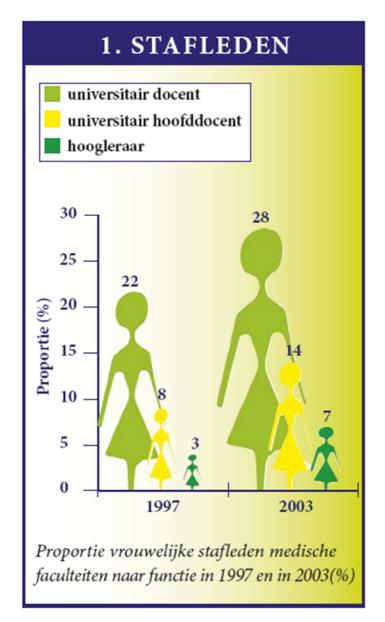
Source: Takkenberg, J.J.M., et al, (2005). "Vrouwen gezocht voor topfuncties [Wanted: women in top-ranking positions]." *Medisch Contact* 60(11): 452-454 (18-03-2005).

Vrouwelijke opleiders = female instructors Vrouwelijke hoogleraren = women professors Vrouwelijke agio = female medical residents

urologie	urology
neurochirurgie	neurosurgery
thoraxchirurgie	thoracic surgery
heelkunde	surgery
cardiologie	cardiology
KNO	ENT
plastische chirurgie	plastic surgery
gastro-enterologie	gastroenterology
radiologie	radiology
neurologie	neurology
interne geneeskunde	internal medicine
nucleaire geneeskunde	nuclear medicine
anesthesiologie	anaesthesiology
obstetrie/gynaecologie	obstetrics and gynaecology
oogheelkunde	ophthalmology
dermatologie	dermatology
microbiologie	microbiology
radiotherapie/oncologie	radiotherapy / oncology
psychiatrie	psychiatry
reumatologie	rheumatology
kindergeneeskunde	paediatrics
klinische genetica	clinical genetics
klinische geriatrie	clinical geriatrics

# 9. Percentage of Female Assistant Professors, Associate Professors, and Full Professors at Medical Faculties

Chart 9.1: Percentage of female members of staff at medical faculties by position in 1997 and in 2003 (%)



universitair docent = assistant professor universitair hoofddocent = associate professor hoogleraar = full professor

Source: Takkenberg, J.J.M., et al. (2005). "Vrouwen gezocht voor topfuncties [Wanted: women in top-ranking positions]." *Medisch Contact* 60(11): 452-454 (18-03-2005).

## **10. Gender distribution at University Medical Centers**

The figures in Tables 8.1 and 8.2 (Chapter 8) related to the period from 31 December 2008 up until July 2009. The figures in Table 10.1 below relate to 31 December 2006. Comparison shows that there have been many changes:

	2006	2009
University Hospital Maastricht		
PDH	4%	10.0%
Erasmus MC		
PMS	0%	12.1%
University Medical Center Groningen		
PMS	10%	15.8%
PDH	4%	12.8%
University Medical Center Utrecht		
PDH	4%	10.3%
Radboud University Nijmegen Medical Cent	re	
PMS	2%	9.0%
VU University Medical Center		
PMS	9%	12.9%
PDH	6%	11.9%

In some cases, there has been a downward trend:

University Medical Center Utrecht		
PMS	15%	13.8%
Radboud University Nijmegen Medical Ce	ntre	
PDH	6%	4.7%

Table 10.1: Percentage of women that are University Medical Specialist (UMS), Professor/Medical Specialist (PMS), and Professor/Department Head (PDH). Data: 1 January 2007

% F	AMC	AZM*	EMC*	UMCG	UMCU	VUMC*	RUNMC	UMCs
UMS	40%	34%	39%	33%	40%	39%	34%	37%
PMS	13%	7%*	0%*	10%	15%	9%*	2%	8%
PDH	21%	4%	3%	4%	4%	6%	6%	7%

\* at AZM, EMC, and VUMC, there were eight female professors who were not included in the above Table because they held an endowed chair. They are also medical specialists. Abbreviations:

- University Medical Specialist (UMS)

- Professor/Medical Specialist (PMS)

- Professor/Department Head (PDH)

Source: Business Plan DIVAS (Diversiteitsbevordering door Vrouwelijke Academische Specialisten [The Promotion of Diversity by Female Academic Specialists]). Nijmegen, April 2009; en Verheijen, J.L.C.M. (2008). *Benchmark loopbaanontwikkeling [Benchmarking the Career Development]*. p. 12.

## The Glass Ceiling

The Glass Ceiling Index is always expressed as a number between 0 and 100: the higher the number, the thicker the glass ceiling, and, hence, the more impediments to upward mobility.

This Benchmark presents calculations for the glass ceiling between PhD (low-level) positions and MS/UMS (mid-level) positions, and between MS/UMS (mid-level) and PMS/PDH (top-level) positions.

Table 10.2 shows that the glass ceiling between PhD and MS/UMS positions is the thickest at University Medical Center Groningen (UMCG), VU University Medical Center (VUMC), and University Hospital Maastricht (AZM).

UMC	% PhD male	% PhD female	PhD total	glass ceiling	% MS/UMS male	% MS/UMS female	MS/UMS total
AMC	48.4	51.6	434	17.0	57.2	42.8	446
AZM	50.7	49.3	292	30.6	65.8	34.2	269
UMCG	48.4	51.6	380	33.5	65.7	34.3	449
Erasmus MC	47.7	52.3	426	22.0	59.2	40.8	544
LUMC							
UMCU	43.9	56.1	440	26.4	58.7	41.3	431
RUNMC	47.4	52.6	439	26.6	61.4	38.6	433
VUMC	41	59	376	32.0	59.9	40.1	327
UMC total	46.6	53.4	2,787	26.6	60.8	39.2	2,899

Table 10.2: The glass ceiling (date: 31 December 2006)

Abbreviations: PhD = intern MS = Medical Specialist UMS = University Medical Specialist PMS = Professor/Medical Specialist PDH = Professor/Department Head

Source: Verheijen, J.L.C.M. (2008). *Benchmark loopbaanontwikkeling* [Benchmarking the Career Development], p. 13.

Table 10.3 shows that the glass ceiling between MS/UMS and PMS/PDH positions is the thickest at Erasmus MC (EMC), Radboud University Nijmegen Medical Centre (RUNMC), and University Hospital Maastricht (AZM). The glass ceiling between MS/UMS and PMS/PDH positions is considerably thicker than the glass ceiling between PhD and MS/UMS positions. In other words: the glass ceiling is the thickest for female medical specialists who aspire to becoming professors.

UMC	% MS/UMS male	% MS/UMS female	MS/UMS total	glass ceiling	% PMS/PDH male	% PMS/PDH female	PMS/PDH total
AMC	57.2	42.8	446	62.6	84.0	16.0	81
AZM	65.8	34.2	269	84.5	94.7	5.3	57
UMCG	65.7	34.3	449	75.5	91.6	8.4	72
EMC	59.2	40.8	544	95.1	98.0	2.0	50
LUMC				nk			
UMCU	58.7	41.3	431	79.4	91.5	8.5	71
RUNMC	61.4	38.6	433	90.4	96.3	3.7	81
VUMC	59.9	40.1	327	81.0	92.4	7.6	66
UMC total	60.8	39.2	2,899	80.3	92.3	7.7	477

Table 10.3: The glass ceiling (date: 31 December 2006)

Source: Verheijen, J.L.C.M. (2008). *Benchmark loopbaanontwikkeling* [Benchmarking the Career Development ], p. 14.

# 11. Number of Women in Top-Ranking Healthcare Management Positions

# Gender distribution in top-ranking healthcare management positions in institutions in the Netherlands

'Two years ago, the Dutch government formulated target figures for the number of women in top-ranking management positions in the government, education, the corporate world, and the police.<sup>1</sup> Remarkably enough, it did not do so for the healthcare sector, which may be due to the fact that the Emancipation Monitor indicates that, at 30 per cent, the number of women in the upper echelons of the health and welfare sector is quite high when compared with other branches. However, this percentage is low when we take into consideration that 80% of all healthcare staff is female.<sup>2</sup> Moreover, these figures pertain to the combined health and welfare branch; the percentage is lower for the healthcare sector by itself.

The number of women in top-ranking healthcare management positions also proves to go down as the organizational size goes up: from 31% in small to 14% in big organizations (see Chart 11.1).<sup>3</sup> Among physicians, the number of women is even lower: there are 80 physicians on the Executive Boards of hospitals, 8 of whom are female (10%).<sup>4</sup> Not even 6% of academic managers is female (see Chart 13.1).<sup>5</sup>

Source: Assmann, P. (2009), Gezocht: bestuurlijke top m/v. Androgyn leiderschap in de zorg nog ver weg [Wanted: top management m/f: androgynous leadership in healthcare a long way off]. *Medisch Contact* 64(27):1202-1206.

<sup>&</sup>lt;sup>1</sup> Meer kansen voor vrouwen: emancipatiebeleid 2008-2011. Emancipatienota 2007 [More opportunities for women: equal opportunities policy 2008-2011. Emancipation Memorandum 2007]

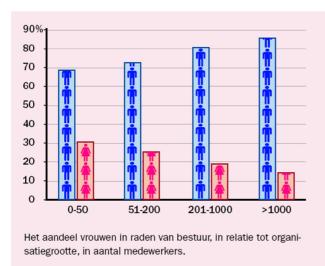
<sup>&</sup>lt;sup>2</sup> Emancipatiemonitor 2008 [Emancipation Monitor 2008].

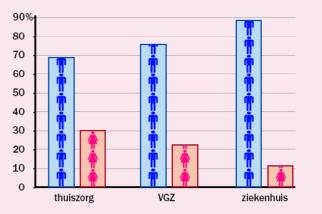
<sup>&</sup>lt;sup>3</sup> Brethouwer, W. (2008). The angel in de top. De angel in de boardroom : onderzoek naar *m/v* verschillen in raden van toezicht en raden van bestuur in de zorgsector [The Sting in the Boardroom: Exploring *M/F* Differences in Supervisory Boards and Executive Boards in the Healthcare Sector]. Marketresponse, 3 October 2008.

<sup>&</sup>lt;sup>4</sup> Vereniging van Nederlandse Vrouwelijke Artsen [Association of Dutch Female Physicians] (VNVA) / Nederlandse Vereniging van Bestuurders in de Zorg [Dutch Association of Healthcare Directors] (NVZD) / Februari 2009.

<sup>&</sup>lt;sup>5</sup> Landelijk Netwerk Vrouwelijke Hoogleraren [Dutch Network of Women Professors] (LNVH). URL: www.lnvh.nl.

Chart 11.1: Percentage of women on Executive Boards of some healthcare organizations. Data: 2007 or 2008





Het aandeel vrouwen in raden van bestuur, in respectievelijk thuiszorg, Verstandelijk Gehandicapten Zorg (VGZ) en ziekenhuizen.

#### Thuiszorg = home care Verstandelijk Gehandicapten Zorg (VGZ) = Care of the mentally disabled Ziekenhuis = hospital

Source: MarketResponse, commissioned by: Vrouwen hogerop, brengt balans in de top [Women Moving up to Create a Better Balance at the Top].

# 12. The M/F Wage Gap in Top-Ranking Positions in Healthcare Institutions in the Netherlands

## Average Executive Board salaries

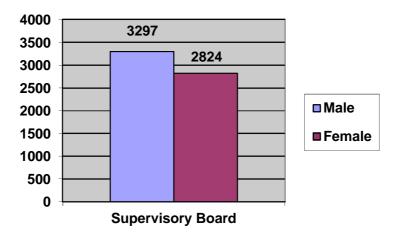
180000 160000 140000 125763 120000 100000 60000 60000 20000 0 Executive Board

Chart 12.1: Women on Executive Boards earn 17% less than men

Average annual salary (€) - 2006

### **Average Supervisory Board salaries**

Chart 12.2: Women on Supervisory Boards earn 14% less than men



Average annual salary (€) - 2006

Source: Brethouwer, W. (2008). The angel in de top. Of ... De angel in de boardroom : onderzoek naar m/v verschillen in raden van toezicht en raden van bestuur in de zorgsector [The Sting in the Boardroom: Exploring M/F Differences in Supervisory Boards and Executive Boards in the Healthcare Sector]. MarketResponse, 3 October 2008 [PowerPoint presentation]

# **13. Women in Influential and Policymaking Bodies**

#### How many women are in executive positions now?

Table 13.1 shows that the percentage of women is the lowest in the most prestigious positions: those of Dean and Director of Research Institute. Women more often have positions as Directors of Education Institutes, which have lower status as, in general, academic research is more highly valued than academic teaching, and academics are mainly assessed on their research qualities.

Table 13.1: Gender distribution in academic executive at universities and the percentage of women in academic executive positions. Ultimo 2008.

	Men	Women	% Women
Dean	54.4	3.0	5.2%
Director of Education Institute	33.5	10.6	24.0%
Director of Research Institute	14.8	1.0	6.3%
Director of Capacity Group	3.0	1.5	32.6%
Total academic management	105.8	15.0	12.4%

Source: Gerritsen, M., et al. (2009). *Monitor vrouwelijke hoogleraren 2009 [Women Professors Monitor 2009]*. Stichting de Beauvoir [et al.].

What is striking in Table 13.2 is that women are greatly underrepresented on university Executive Boards: only 3 out of a total of 41 board members are female, which amounts to 7%. Women have better representation on university Supervisory Boards, with 31% of board members being female.

	Executiv	/e Board	Supervis	ory Board
	Men	Women	Men	Women
Leiden University	2	1	3	2
Utrecht University	2	1	4	1
University of Groningen	3	0	3	2
Erasmus University Rotterdam	3	0	3	2
Maastricht University	3	0	4	1
University of Amsterdam	2	1	3	1
VU University Amsterdam	3	0	7	2
Radboud University Nijmegen	3	0	4	3
Tilburg University	2	0	5	2
Delft University of Technology	3	0	3	2
Eindhoven University of Technology	3	0	4	2
University of Twente	3	0	4	1
Wageningen University	3	0	3	1
Open University	3	0	3	2
Total	38	3	53	24

Table 13.2: Gender distribution in university Executive Boards and Supervisory Boards. July 2009.

Source: Gerritsen, M., et al. (2009). *Monitor vrouwelijke hoogleraren 2009 [Women Professors Monitor 2009]*. Stichting de Beauvoir [et al.].

Less than 6% of all academic managers is female (see Chart 13.1).

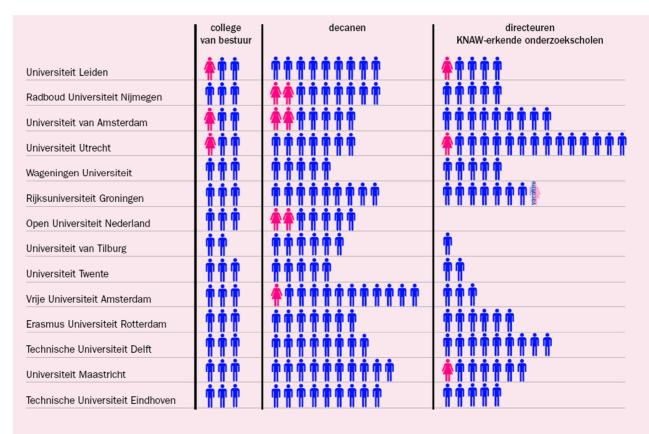


Chart 13.1: Proportion of women on academic boards (Executive Boards, Deans, and Directors of KNAW-recognized Research Schools). Figures: March 2008

Aandeel vrouwen in besturen wetenschap.

#### College van Bestuur = Executive Boards

Decanen = Deans

Directeuren KNAW-erkende onderzoekscholen = Directors of KNAW-recognized Research Schools

Source: Landelijk Netwerk Vrouwelijke Hoogleraren [Dutch Network of Women Professors] (LNVH).

What is striking in Table 13.3 is the high scores in the Medical Sciences and the Humanities. There are remarkably few female managers in the Social and Behavioural Sciences, even if the number of female employees in these fields is high, also in higher academic positions.

	Men	Women	Total	% Women
Humanities	5	4	9	44%
Social and Behavioural Sciences	6	1	7	14%
Physics	5	0	5	0%
Chemical Sciences	4	1	5	20%
Physical Sciences	4	0	4	0%
Earth and Life Sciences	8	1	9	11%
Medical Sciences	3	5	8	63%
Technical Sciences	4	1	5	20%
Science for Global Development	5	2	7	29%
Netherlands National Computing Facilities				
(NCF) foundation	4	1	5	20%
Total	48	16	64	25%

Table 13.3: Gender distribution in the NWO Divisions and Board of Directors by Division. June 2009.

Source: Gerritsen, M., et al. (2009). *Monitor vrouwelijke hoogleraren 2009 [Women Professors Monitor 2009]*. Stichting de Beauvoir [et al.].

In 2006, only 8% of all medical professors were female (see Table 13.4).

With regard to the boards of medical professional associations, 40% of the board of the National Association of Physicians in Employment (LAD) and half the central board is female. In 2009, 45% of the society board of the Dutch Physicians Society was female. In other professional associations, the percentage of female managers is 40% or below.

On the boards and councils of policymaking bodies, the percentage of men ranges between 60%-80%. Only the Council for Public Health and Health Care has more or less equal numbers of men and women.

Among funding agencies, ZonMw is a positive exception, with more women (5) than men (4) on its board. In the other funding agencies, the percentage of male members on the board is over 60%.

On the editorial boards of journals, only the *Tijdschrift voor Gezondheidswetenschappen* has an equal representation of men and women.

Field	Unit	Total	M <sub>6</sub>	GP (m) <sup>7</sup>	Other phys. (m) <sup>8</sup>	F <sup>9</sup>	GP (f) <sup>10</sup>	Other phys. (f) <sup>11</sup>	Source
Science	Professor of Medicine	563	518 (92%)	n.a.	n.a.	45 (8%)	n.a.	n.a.	1
	Professor of General Practice	25	21	21	0	4	4	0	2
	Head of GP programme	8	6	6	0	2	2	0	3
Boards	KNMG	13	11	1	7	2	0	2	4
	LHV	5	4	3	0	1	1	0	5
	LAD Executive Committee	5	3	0	3	2	0	2	6
	LAD Central Board	12	6	1	5	6	0	6	6
	NVAB	10	7	0	6	3	0	3	7
	NVVA (Supervisory Board)	7	5	0	5	2	0	2	8
	NVVG (General Board)	4	1	0	1	3	0	3	9

Table 13.4: Women in influential and policymaking medical bodies (2006-2009)

<sup>6</sup> Aantal mannen

<sup>7</sup> Aantal mannelijke huisartsen

<sup>8</sup> Overige mannelijke artsen

<sup>9</sup> Aantal vrouwen

<sup>10</sup> Aantal vrouwelijke huisartsen

<sup>11</sup> Overige vrouwelijke artsen

Field	Unit	Total	M <sup>6</sup>	GP (m) <sup>7</sup>	Other phys. (m) <sup>8</sup>	F <sup>9</sup>	GP (f) <sup>10</sup>	Other phys. (f) <sup>11</sup>	Source
	NVVG (Executive Committee)	4	4	0	4	0	0	0	9
	Ass. of Medical Specialists (Executive Committee)	2	1	0	1	1	0	1	10
	Ass. of Medical Specialists (Board)	7	6	0	6	1	0	1	10
	NHG (Society Board in 2009)	18	10	10	0	8	8	0	11
	NHG (Society Board in 2007)	23	12	12	0	11	11	0	12
	NHG (Board)	1	1	1	0	0	0	0	11
	NHG (Supervisory Board)	5	4	2	0	1	1	0	11
Policy	Health Council (Medicine Consultation Group)	21	15	1	14	6	1	3	13
	Health Ministry (Secr. General and Directors General)	5	4	0	0	1	0	0	14
	NZA (Executive Board)	3	2	0	0	1	0	0	15
	NZA (Advisory Council)	11	8	0	0	3	0	1	16
	RGO (Advisory Council on Health Research)	15	9	1	5	6	0	3	17
	RVZ (Council for Public Health and Health Care)	9	5	0	2	4	0	1	18
Funding Agencies	Asthma Foundation (Supervisory Board)	6	4	0	2	2	0	0	19
	Asthma Foundation (Advisory Council)	8	5	0	2	3	0	1	20
	Diabetes Foundation	7	5	0	1	2	0	0	21

Field	Unit	Total	M <sup>6</sup>	GP (m) <sup>7</sup>	Other phys. (m) <sup>8</sup>	F	GP (f) <sup>10</sup>	Other phys. (f) <sup>11</sup>	Source
	(Supervisory Board)								
	Diabetes Foundation (Scientific Advisory Council)	16	13	1	12	3	0	3	21
	KWF (Board)	5	4	0	0	1	0	1	22
	KWF (Social Council)	11	7	0	1	4	0	0	22
	KWF (Scientific Council)	24	20	0	16	4	1	0	22
	Dutch Heart Foundation (SB)	6	6	0	2	0	0	0	23
	Dutch Heart Foundation (Management- Team)	4	3	0	0	1	0	1	23
	NWO (General Board)	4	3	0	0	1	0	0	24
	NWO (Board)	4	3	0	0	1	0	0	24
	ZonMw* (Board)	9	4	0	3	5	1	1	25
Editorial Boards	Huisarts en Wetenschap	8	7	7	0	1	1	0	26
	Medisch Contact (chief editors)	3	3	1	0	0	0	0	27
	NTvG Board	35	27	2	23	8	1	6	28
	Tijdschrift voor Gezondheids- wetenschappen (TSG) (chief editors)	2	2	0	1	0	0	0	29
	Tijdschrift voor Gezondheids- wetenschappen (TSG) (editors)	14	7	0	1	7	0	0	29

\* ZonMw: in 2001, the disciplines of Medical Sciences and Health Research Netherlands merged into ZonMw.

Survey of sources:

- 1. Verheijen, Eindverslag benchmark loopbaanontwikkeling. 2006 data.
- 2. NHG (May 2009)
- 3. SVUH website (April 2009) http://www.svuh.nl/
- 4. KNMG website (February 2009)
- 5. LHV website (February 2009)
- 6. LAD website (February 2009)
- 7. NVAB website (February 2009)
- 8. NVVA website (February 2009)
- 9. NVVG website (February 2009)
- 10. Association of Medical Specialists (May 2009)
- 11. NHG website (May 2009)
- 12. NHG website (February. 2009)
- 13. Health Council website (February 2009)
- 14. VWS website (September 2009)
- 15. NZA website (March 2009)
- 16. NZA website (March 2009). 2007 data
- 17. RGO website (March 2009)
- 18. RVZ website (February 2009)
- 19. Website (April 2009). 2007 data. http://www.astmafonds.tv/2007/Organisatie/Bestuur\_en\_organisatie
- 20. Website (April 2009) 2007 data
- 21. DF website (March 2009)
- 22. KWF website (March 2009)
- 23. NH website (March 2009)
- 24. NWO website (March 2009)
- 25. ZonMw website (March 2009)
- 26. Journal info (February. 2009)
- 27. Medisch Contact Website (March 2009)
- 28. NTvG website (March 2009)
- 29. Data by requested e-mail: 22-4-2009

Table 13.5 shows that men (80%-100%) dominate the Executive and Supervisory UMC boards. Proportions are only more or less equal on the Supervisory Boards of the University Medical Center Utrecht (UMCU), the Leiden University Medical Center (LUMC) and the Radboud University Nijmegen Medical Centre (RUNMC). On all UMC Executive Boards and Supervisory Boards, there are only 2 female physicians and 19 male physicians (25%).

	Executive Board					Supervisory Board				
		Phys		Phys			Phys		Phys	
	Male	(M)	Fem.	(F)	Tot.	Male	(M)	Fem.	(F)	Tot.
LUMC	4	1	0	0	4	3	1	2	0	5
UMCU	4	3	0	0	4	4	1	3	1	7
UMCG	4	2	0	0	4	4	0	1	0	5
Erasmus MC	3	2	1	0	4	4	1	1	1	5
AZM	3	1	0	0	3	4	0	1	0	5
AMC-UvA	2	1	1	0	3	4	0	0	0	4
VUMC	4	2	0	0	4	7	0	2	0	9
RUNMC	3	2	0	0	3	4	2	3	0	7
Total	27	14	2	0	29	34	5	13	2	47

Table 13.5: Gender distribution in UMC Executive Boards and Supervisory Boards. February 2009

Source: UMC websites. The 2007 UMCU and RUNMC annual reports have also been consulted.

The specialties of Gynaecology and Psychiatry each have two female instructors (Table 13.6). Cardiology, Internal Medicine, and Paediatrics have one female instructor each. The remaining four major specialties do not have any female instructors.

									Total	
	AMC	AZM	UMCG	Erasmus MC	LUMC	UMCU	RUNMC	VUMC	Μ	F
Anaesthesia- logy	М	М	М	М	М	М	М	М	8	0
Cardiology	V	М	М	М	М	М	М	М	7	1
Gynaecology	М	М	V	М	М	М	V	М	6	2
Surgery	М	М	М	М	М	М	М	М	8	0
Internal Medicine	М	М	М	М	M**	М	V	М	7	1
Paediatrics	М	М	М	М	V	М	М	М	7	1
Neurology	М	М	М	М	М	М	М	М	8	0
Psychiatry	М	М	М	М	М	V	V**	M*	6	2
Radiology	М	М	М	М	М	М	М	М	8	0

Table 13.6: A-instructors of the major specialties

\* no A-programme; VUMC collaborates the Buiten-Amstel Community Mental Healthcare branch (where the A-instructor is located)

\*\* two vacancies; the deputy instructors have been entered here

Source: MSRC Recognized programmes per specialty (13 September 2010).

Table 13.7: Causes of shortage of women in top-ranking positions

Causes
Psychological impediments in women (n=16)
Hard to combine family, practice, and career demands (n=9)
Application procedures (n=8)
Men are at an advantage (they are more assertive; their careerism is taken for granted; they
have been established in the profession for longer) (n=6) *
Women embark on their careers later / their career planning is not right (n=5)
One women in a group amounts to no woman (n=4)
Cultural differences (n=4)
Bad facilities (particularly day care) (n=4)
No, there are no obvious impediments to women (n=3)
Women are not asked (n=2)
Men feel threatened (n=2)

\* each example was mentioned twice

Source: Jong, G. de & A. Lagro-Janssen (2004). Barsten in het glazen plafond. Een studie naar gender en leiderschap binnen de huisartsgeneeskunde in Nederland [Cracks in the Glass Ceiling: A Study of Gender and Leadership in General Practice in the Netherlands]. Nederlands Huisartsen Genootschap.

Table 13.8: Causes of shortage of women in top-ranking positions in General Practice

#### Factors

General Practice can be easily combined with family demands, which is why women choose it and abandon other career aspirations. (n=4, 3v/1m)

The traditional GP is a man who works many hours a day. (n=4, 2v/2m)

A GP is pretty autonomous; everyone wants their own workplace; there is little hierarchy. (n=3, 3v/0m)

Men have outnumbered women in General Practice for a very long time. (n=3, 3v/0m)Female GPs with a career face the triple demands of family, practice, and career. This combination is a tough one. (n=3, 2v/1m)

GPs value communication more than power and prestige and, hence, do not identify with management or policymaking positions. (n=2, 2v/0m)

Source: Jong, G. de & A. Lagro-Janssen (2004). Barsten in het glazen plafond. Een studie naar gender en leiderschap binnen de huisartsgeneeskunde in Nederland [Cracks in the Glass Ceiling: A Study of Gender and Leadership in General Practice in the Netherlands]. Nederlands Huisartsen Genootschap.

Take note: the research population consisted of 18 Dutch physicians (11 women and 7 men, ages ranging between 47 and 66 years), and virtually all were in full-time employment. Out of these, 6 had a career in management, 4 had a career in policymaking, and 8 had academic careers.

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