Health Professionals Report 2022 (Beta version) : Capacity, Accessibility and Production

Speciality of Interest : Gynaecologist

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## Introduction

### Introduction

This report provides a comprehensive overview per medical specialty working within the Belgian health insurance system, within hospital and ambulatory settings.

Professional perspective :

• Aspects covered are: capacity, production (numbers and financials), subspecialties, replacement rates. Those aspects are described by gender, age, geographical distribution, type of activity, workplace, evolution.

Patient perspective :

• Accessibility and frequentation are described by gender, age, social status, geographical distribution, evolution.

### **Data Sources & Transformations**

This report draws insights from the "Doc P" database, encompassing patients who sought care in Belgium and claimed insurance reimbursement. The database spans from accounting years :

- 2012 to 2022 for health professionals
- 2018 to 2022 for health professionals subspecialties
- 2018 to 2021 for insured coverage and patient frequentation

Each studied year N is coupled with socio-demographic data on providers as of December 31 N. Provider activity is estimated converting reimbursement amounts into hourly workload, with those surpassing a certain reimbursement threshold being treated as 1 FTE.

To address GDPR (General Data Protection Regulation) compliance for small cell data, numbers from fewer than 5 registered providers have been hided.

### **Additional information**

For official information regarding the number of healthcare providers :

- NIHDI : please click <u>here</u>
- MOH : please click <u>here</u>

### Contact

appropriatecare@riziv-inami.fgov.be

### **Key Variables & Metrics**

Healthcare professional perspective (specialty is determined by grouping <u>NIHDI competency codes</u>) :

- analysis.
- reimbursed or working place.

### Patient perspective :

- contacts/insured), patient frequentation (number contacts/patient).

A KPI (Key Performance Indicator) color system is used in this report. It is shown as

- Grey for contextual information
- Green for positive performance compared to starting year
- Red for negative performance compared to starting year

### **Limitations & Assumptions**

- patient analysis is N-1 in order to present relevant data.

• <u>Demographic characteristics</u> are age (groups by 10Y), sex (M/F), contact address (not working place), communication language (Dutch/French), convention status (full, partly), activity status (>1 intervention/year), type of prestation (see <u>NIHDI nomenclature</u>). • <u>Numeric characteristics</u> are number of professionals (all providers registered within INAMI-RIZIV), number and cost of (reimbursed) prestation. Evolution is available since 2012 for professionals figures and since 2018 for the study of their activity.

• FTE (full-time equivalent) is calculated to determine the workload of a healthcare provider (= total reimbursements by provider in a given year divided by the median amount of reimbursements for providers aged 45 to 54 in the same specialty, see Annex 1). FTE values are capped at 1. The FTE for employed doctors in medical homes was estimated at 0.81 per doctor because the actual FTE cannot be evaluated given the absence of activity registration. Medical homes are not included in the productivity calculation. General practitioners with "Fee for Service" in the title specifies that doctors and patients in medical homes are excluded from the

• Working place : distinction is made between private, polyclinic, day hospitals, or hospital stays, depending on the place of prestation. • <u>Subspecialty Clusters</u> : Healthcare providers within a specialty can be clustered based on ([sub] group of similar) nomenclature codes

• Indicators of Density : FTE/10.000 insured; total activity/FTE; reimbursement/FTE, number of patients/FTE.

• Demographic characteristics are age (group by 10Y), sex (M/F), address of residence (not treatment place !) (by region, province, etc.), social status (normal and preferential regime [BIM])), type of specialty contacted during the year.

• Patients Indicators : insured coverage (% at least 1 contact) (N.B. Specialist in training included), insured frequentation (number of

• Professional density : contact address and working place can be in different regions, provinces, etc. which can explain differences in density between Brussels region (working place) and peripherical contact address (Brabant). By standardizing the metrics to a consistent population size, it enables fair comparisons across different regions or provinces. It has not been done in this report. • Patient analysis uses actual care years, not accounting years, unlike other analyses. If the analysis year is N, the last available year for

• The calculation of FTEs may be impacted by modifications of competency codes over the years. A change within a specialty affects the median of reimbursements and thus generates breaks in the evolution of FTEs (see the recognition of nephrologists since 2022 for internal medicine). The median value changes depending the year (see Annex 1). In addition it is not adjusted for inflation.



## Speciality Metrics and Comparison : Gynaecologist and Surgical group

This sheet compares the specialty of interest (left) with a larger but similar group (right).

	Gynaecologist				
Code Competence	Description				
10340	Specialist in gynaecology and obstetrics				

	Gynaecologist	Surgical group
# N SubSpecialities	1	10
# N Total	1,947	11,066
# N Active	1,590	8,498
# Full-Time Equivalent (FTE)	1,051	5,905
€ Expenses per FTE	€ 238,854	€ 326,732
65+	% Active % FTE   28% 9%	% Active % FTE   25% 7%
	% Active % FTE	% Active % FTE
Convention	49% 42%	72% 70%
Accreditation	80% 90%	77% 86%

## Surgical group Profession

Acute and Emergency Anaesthesiology General Surgery Neurosurgery Ophthalmology Surgery Orthopaedics Otorhinolaryngology Plastic Surgery Stomatologist



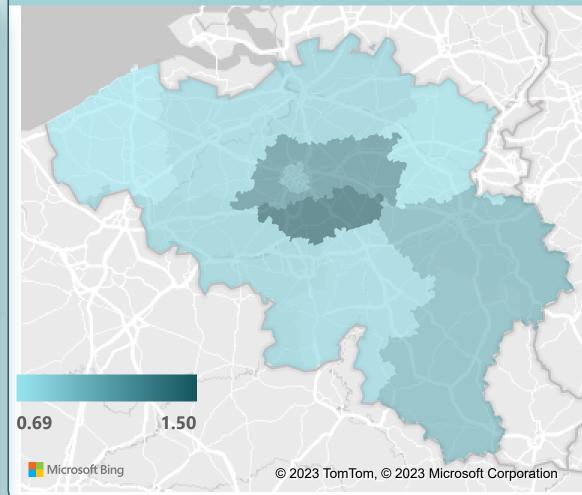
## Geographical Accessibility (2022) : Gynaecologist

Geographical accessibility is measured by density, calculated by dividing the number of FTE (Full Time Equivalent) per 10.000 insured and comparing the results between provinces and regions.

### Indicators :

- Geographical distribution which enables to check for homogeneity ;
- Evolution since 10 years and growth rate within the time period ;
- Comparison between FTE density and insured density to detect correlation.

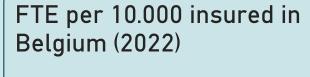
## FTE per 10.000 insured by Province (2022)



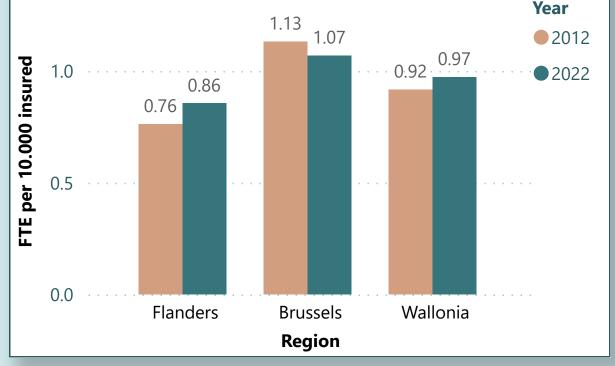
## Provi West-Vlaa Oost-Vlaa Antwerpe Limburg Vlaams-B Brussels Brabant V Hainaut Namur Liège Luxembou **Total**

# E FTE I 1.5 1.0 1.0 1.0 1.0

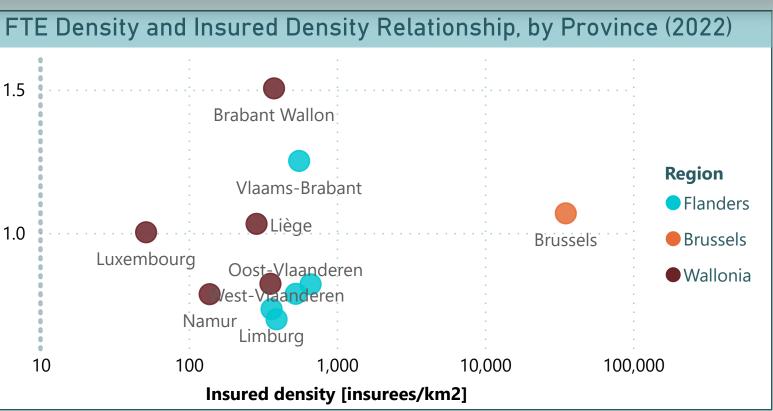
# FTE per 10.000 insured, by Region (2012 vs 2022)



**0.91**~ 2012: 0.85 (+7.62%)



Demographic Information by Province (2022)							
vince	#FTE	Density (FTE per 10.000 insured)	%65+ (FTE)	%Women (FTE)			
anderen	86		6%	66%			
anderen	124	0.79	7%	68%			
en	157	0.82	7%	71%			
	65		9%	72%			
Brabant	147	1.25	5%	71%			
	123	1.07	11%	66%			
Wallon	62	1.50	11%	71%			
	111	0.82	14%	58%			
	40	0.79	7%	75%			
	115	1.03	12%	64%			
ourg	23	1.00	6%	62%			
	1,051	0.91	<b>9%</b>	67%			





2022

65+

55-64

Financial accessibility is measured by the number of conventioned FTE (Full time equivalent) by 10.000 insured. Convention means that the professional is committed to respect prices determined in the NIHDI convention. This agreement can occur partly (at specific hours during the week) or totally (all the working hours).

### Indicators :

0%

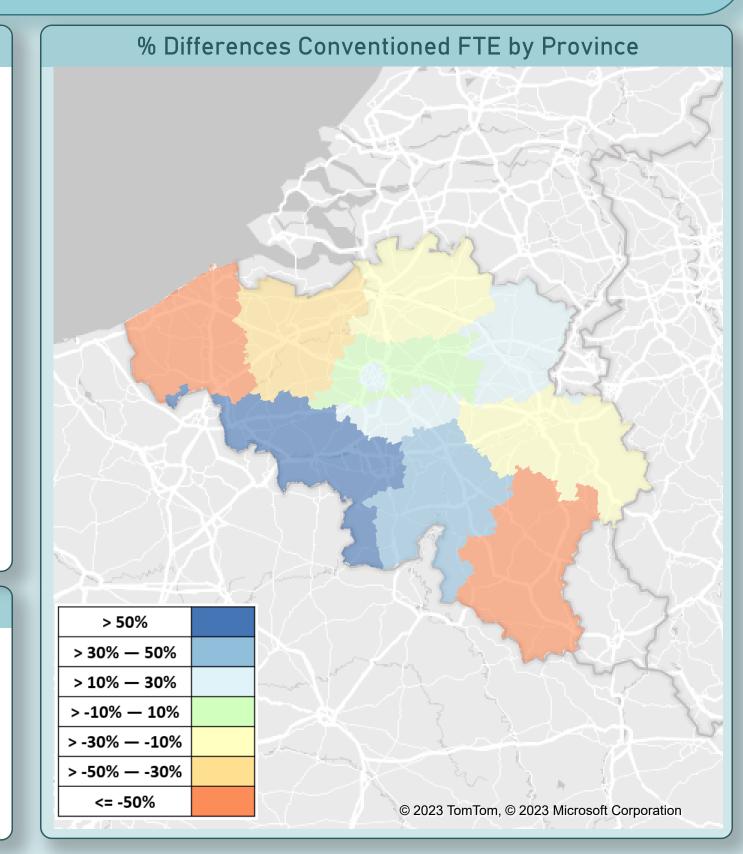
-34

35-44

- % FTE meeting the criteria / total FTE
- Financial accessibility is gauged by conventioned FTE (Full Time Equivalent) per 10,000 insured.

	Demographic Information by Province					rovince		
% Conventioned FTE (2022) <b>42%</b> 2012: 40% (+4.56%)		Province	Density (FTE per 10.000 insured)	Density (Conventioned FTE per 10.000 insured)	% Conventioned FTE			
					West-Vlaanderen	0.70	0.12	18%
					Oost-Vlaanderen	0.79	0.22	28%
					Antwerpen	0.82	0.24	29%
			d FTE by		Limburg	0.73	0.36	49%
La	nguage	e and	Regime		Vlaams-Brabant	1.25	0.57	46%
Language	e Part	Full	Total		Brussels	1.07	0.57	53%
FR	21%	31%	52%		Brabant Wallon	1.50	0.74	49%
NL	12%	21%	33%		Hainaut	0.82	0.64	78%
Total	16%	26%	42%		Namur	0.79	0.46	58%
					Liège	1.03	0.35	34%
					Luxembourg	1.00	0.09	9%
					Total	0.91	0.38	42%
Evolution of Conventioned FTE by Age (2012 vs 2022)								
50%	57%	49%		47%		37% 33%	······ 42%·····	41% <b>Year</b> • 2012

45-54





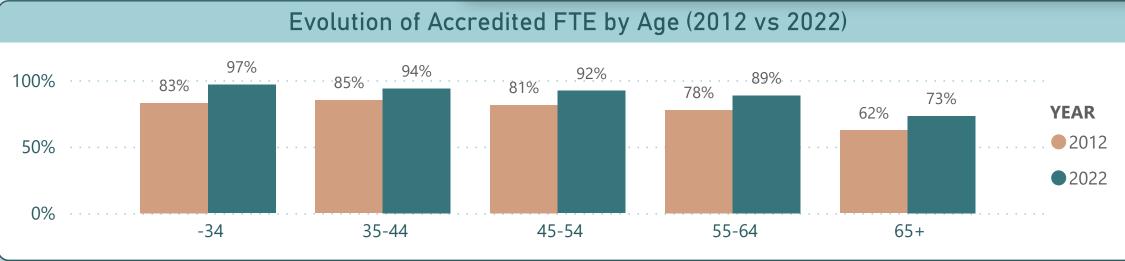
CPD (continuing professional development) is measured by accreditation criteria.

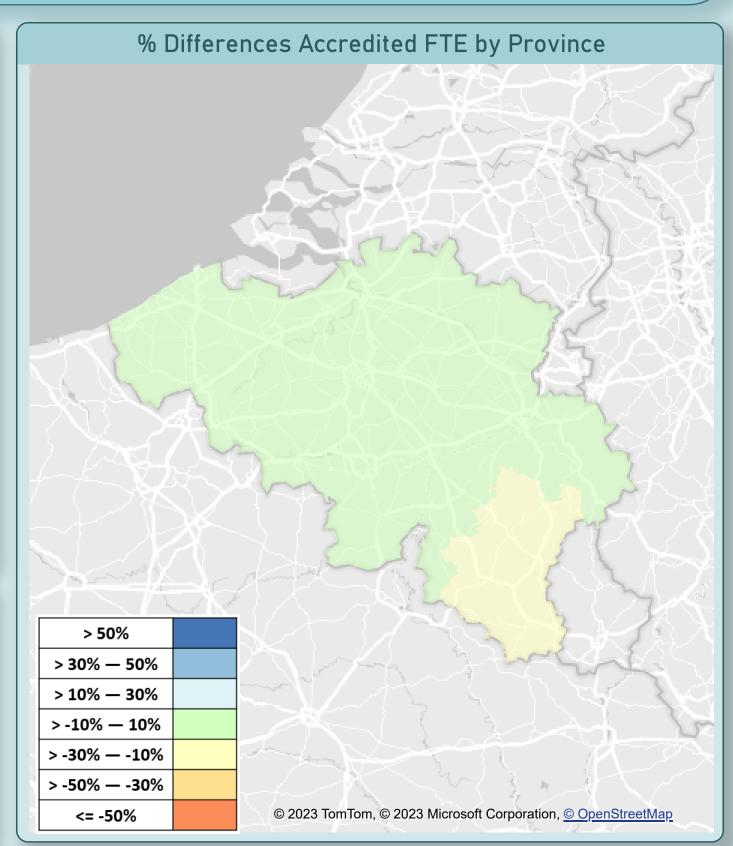
Accreditation means that the professional meets several CPD (continuous professional development) criteria (which indicates the will for quality of care).

### Indicator :

• % FTE meeting the criteria / total FTE

					Demographic Information by Province				
% Accredited FTE (2022) <b>90%</b> 2012: 80% (+12.4%)		90%				Province	Density (FTE per 10.000 insured)	Density (Accredited FTE per 10.000 insured)	% Accredited FTE
			)		West-Vlaanderen	0.70	0.68	97%	
					Oost-Vlaanderen	0.79	0.71	91%	
					Antwerpen	0.82	0.80	97%	
% Accredited FTE by Language		Limburg	0.73	0.68	93%				
	and	Gend	er		Vlaams-Brabant	1.25	1.12	89%	
Language	F	Μ	Total		Brussels	1.07	0.89	84%	
FR	88%	82%	86%		Brabant Wallon	1.50	1.37	91%	
NL	95%	93%	94%		Hainaut	0.82	0.74	90%	
Total	92%	88%	90%		Namur	0.79	0.76	97%	
					Liège	1.03	0.85	83%	
					Luxembourg	1.00	0.81	81%	
					Total	0.91	0.82	90%	







## Subspecialties Activity and Working Place (2022) : Gynaecologist

Total reimbursement (2022) € 251.15M 2012: € 220.17M (+14.07%) Reimbursement by FTE (2022) € 238,854

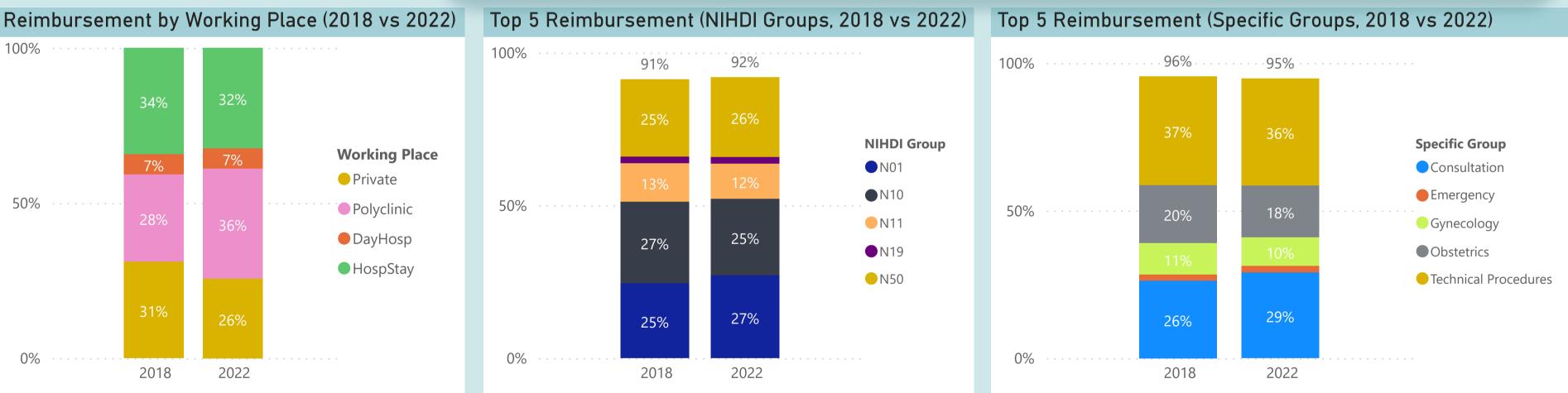
The level of activity is measured by the total reimbursement amount of the specialty. The distribution of the reimbursement by specialty allows to distinguish different types of activity which are grouped to study what kind of procedures they are doing and where. The type of activity is described by 2 criteria: the place of work and the nature of the activity:

• The place of work is the place where the activity takes place (private, polyclinic, day hospital, hospital stay).

• The nature of the activity is described according to 2 logics of grouping. The traditional distribution of reimbursements within NIHDI (N01 contacts, N20 surgery, etc.) and a specific, more detailed breakdown to identify sub-specialties within the specialty (i.e. cardiac surgery within surgery). Indicators :

- Reimbursement (in [Million] Euros) for the specialty
- Reimbursement (in Euros) / FTE

• % Reimbursement (in Euros) by category / total reimbursement (in Euros) The evolution provides information on the stability of the patterns of the activity comparing year N with N-4.



NIHDI Group	Description	Specific Group	Description
N01	Consultations visits and medical advices	Consultation	Consultation
N10	Deliveries - surgical assistance	Emergency	Emergency
N11	Gynecology and obstetrics	Gynecology	Surgery (Gynecologic-) : Gynecology
N19	Urgent technical services - Art 26 §1 +1ter + pseudos	Obstetrics	Surgery (Gynecologic-) : Obstetrics
N50	X-ray diagnosis	Technical Procedures	Technical Procedures

2012: € 236,537 (+0.98%)



Subspecialties are identified by their working place and type of activity (see previous page): the assignment of a health care provider to a sub-specialty depends first on the type of activity exercised. An active provider with at least 10% of reimbursements in a type of activity is considered specialized in this activity. However, the most complex activities (eg transplantation) are not subject to a minimum threshold. If no particular activity has been identified for the speciality, the assignment is made on the criterium of the workplace: hospital, polyclinic, private. If there is no clear distinction between the different locations, then the cluster is named "Mixed". Clusters less than 5 FTE or less than 0,5% of total FTE are left out. Comparison of clusters helps to understand differences in nature of work. Indicators :

- % FTE by type of cluster
- % type of activity (in Euro ) / total reimbursement (in euro) by cluster

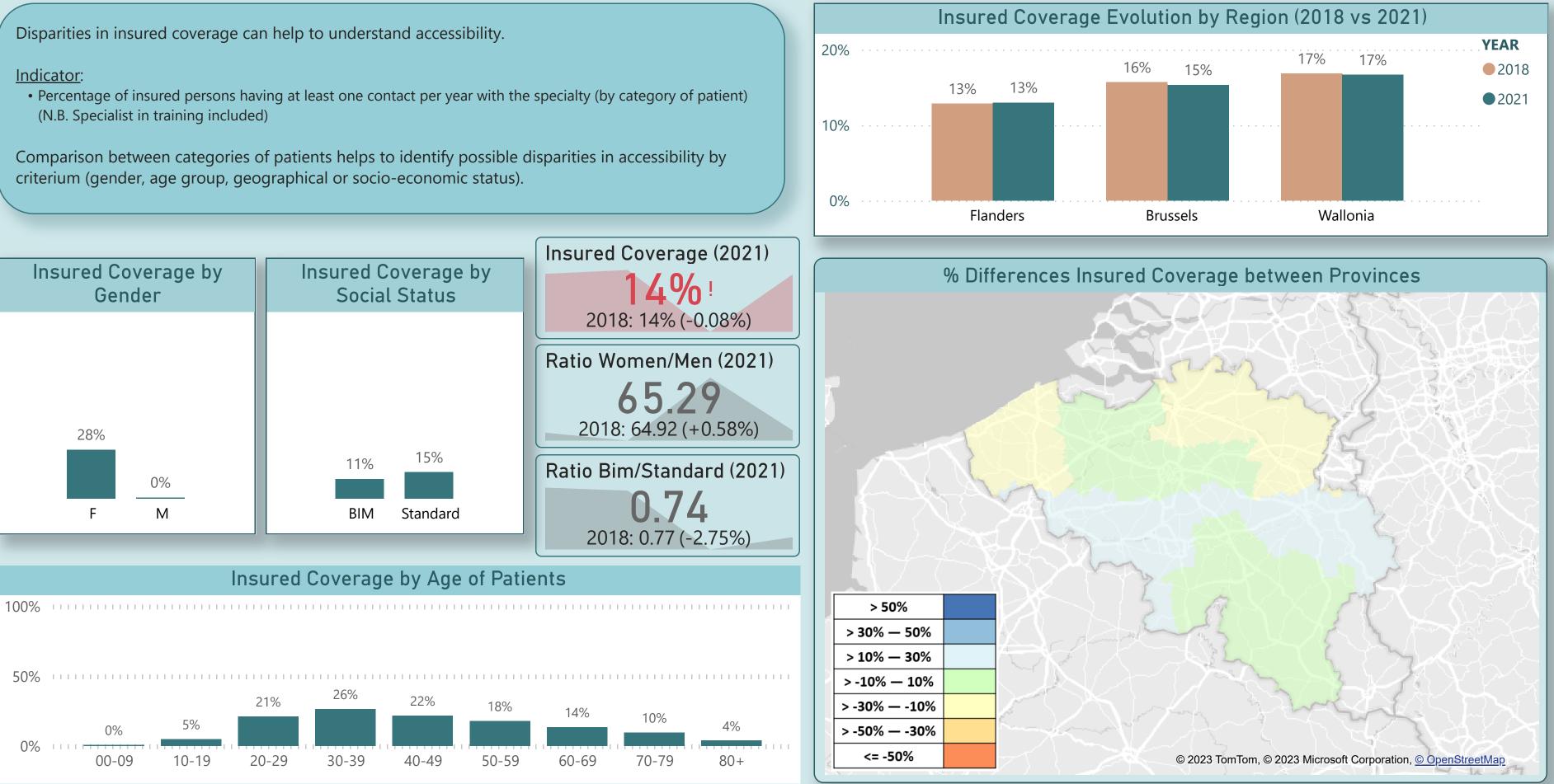
FTE and median Reimbursement by Subspeciality							
Subspecialty	#FTE Cluster	% Total FTE	Median Reimb				
Obstetrics	551	52%	€ 196K				
Breast surg.	28	3%	€ 149K				
Mixed	399	37%	€ 201K				
Polyclinic	30	3%	€ 136K				
Private	52	5%	€ 102K				







## Accessibility, Insured Coverage (2021) : Gynaecologist





## Accessibility, Patient Frequentation (2021) : Gynaecologist

Frequentation of patients (number of contacts) is a complementary measure to understand accessibility.

Indicator : number of contacts (by category op patient) is respectively divided

- per insured

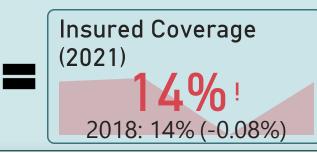
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Flanders

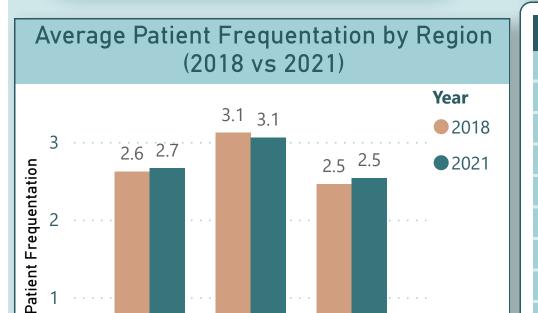
- per patient (insured who at least has one contact with health provider)

Category of patients are defined by several criteria : gender, social status, age group, geographic residence, evolution.

Insured Frequentation (2021)0.392018: 0.38 (+1.63%)



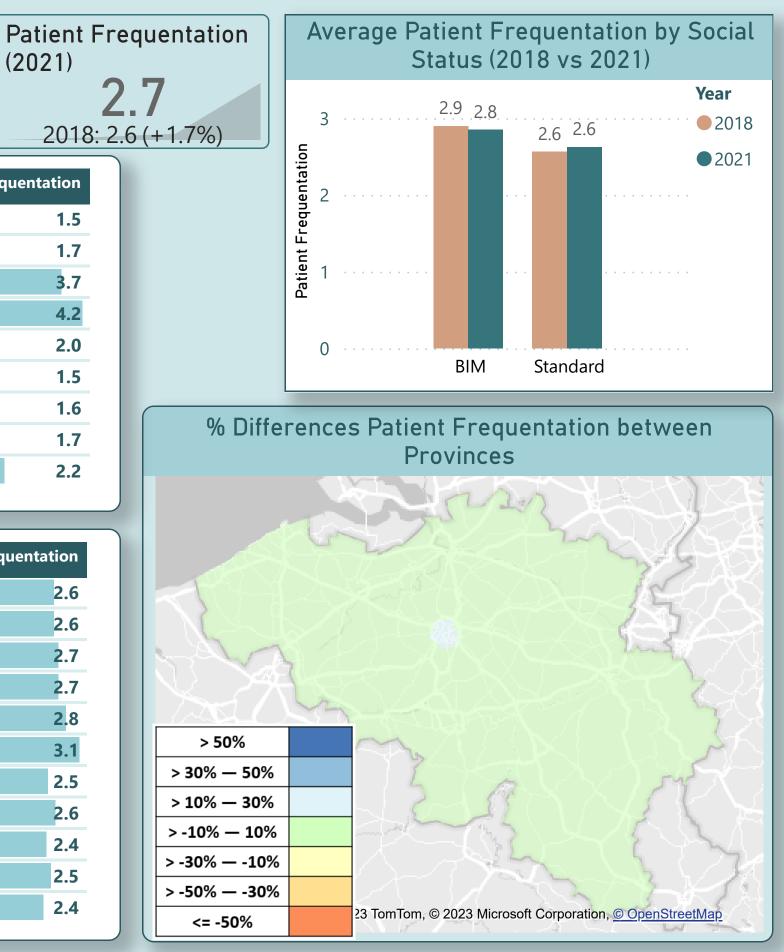
Age Class Patients	Insured Frequentation	Insured Coverage	Patient Frequentat
00-09	0.00	0%	
10-19	0.08	5%	
20-29	0.78	<mark>2</mark> 1%	
30-39	1.12	26%	
40-49	0.45	<mark>22</mark> %	
50-59	0.28	18%	
60-69	0.21	14%	
70-79	0.17	10%	
80+	0.09	4%	



Brussels

Wallonia

Province	Insured Frequentation	Insured Coverage	Patient Frequentati
West-Vlaanderen	0.34	13%	
Oost-Vlaanderen	0.35	13%	
Antwerpen	0.35	13%	2
Limburg	0.30	11%	2
Vlaams-Brabant	0.39	14%	2
Brussels	0.47	15%	3
Brabant Wallon	0.44	18%	2
Hainaut	0.44	17%	
Namur	0.38	15%	2
Liège	0.44	17%	2
Luxembourg	0.38	15%	2





Workload by specialty provides insights into the work volume per year of the specialty by FTE and their patient base population (Individual patients are allocated to one single professional per specialty per year to build the patient base population for each single professional/ provider) (N.B. Specialist in training are excluded).

Indicators (by province)

- Workload : contacts / FTE
- Patient base population: Patients / FTE
- Patient base population turnover : Providers/ patient
- Contacts per patient per provider
- Average age of total contacts per FTE

Limitation : contact address of health professionals can be different than the location of patients. This can explain differences in workload results (contact/FTE, patients/FTE) and lead to misinterpretation for geographical criteria (province) especially for small numbers of working professionals. Also if the number of FTE by cell is inferior to 5, contacts per FTE and patients per FTE have been hided.

## Average Contacts per FTE (2021) 4,187 2018: 4,388 (-4.59%)

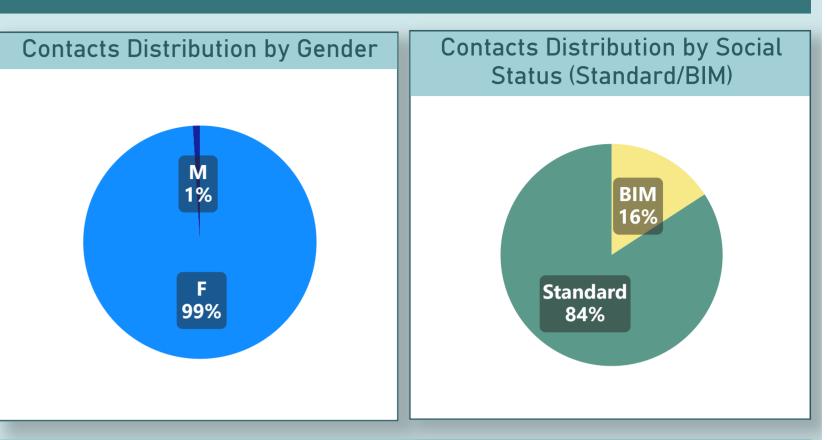
# Average Patients per FTE (2021)



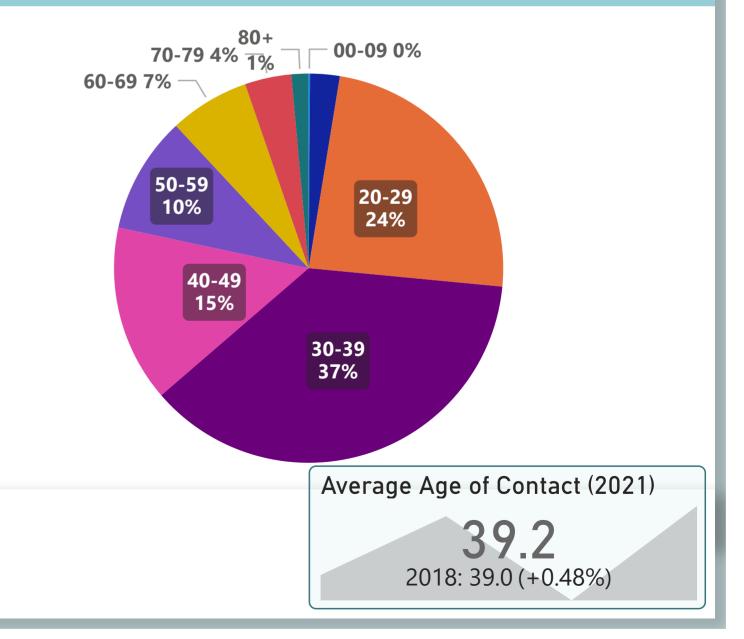


Average Contacts per Patient and Provider (2021) 1.9 2018: 1.9 (-1.09%)

Province	Contacts per FTE	Patients per FTE	Contacts per Patient and Provider
West-Vlaanderen	4853	1868	2.0
Oost-Vlaanderen	4474	1723	2.0
Antwerpen	4364	16 <mark>3</mark> 8	2.0
Limburg	41 <mark>82</mark>	15 <mark>63</mark>	1. <mark>9</mark>
Vlaams-Brabant	3052	1092	1. <mark>9</mark>
Brussels	41 <mark>5</mark> 4	1 <mark>358</mark>	1.9
Brabant Wallon	2917	1181	1 <mark>.</mark> 8
Hainaut	5214	1987	1.9
Namur	<b>474</b> 8	1943	1 <mark>.</mark> 8
Liège	<b>42</b> 13	1673	1 <mark>.</mark> 8
Luxembourg	3771	15 <mark>71</mark>	1. <mark>9</mark>

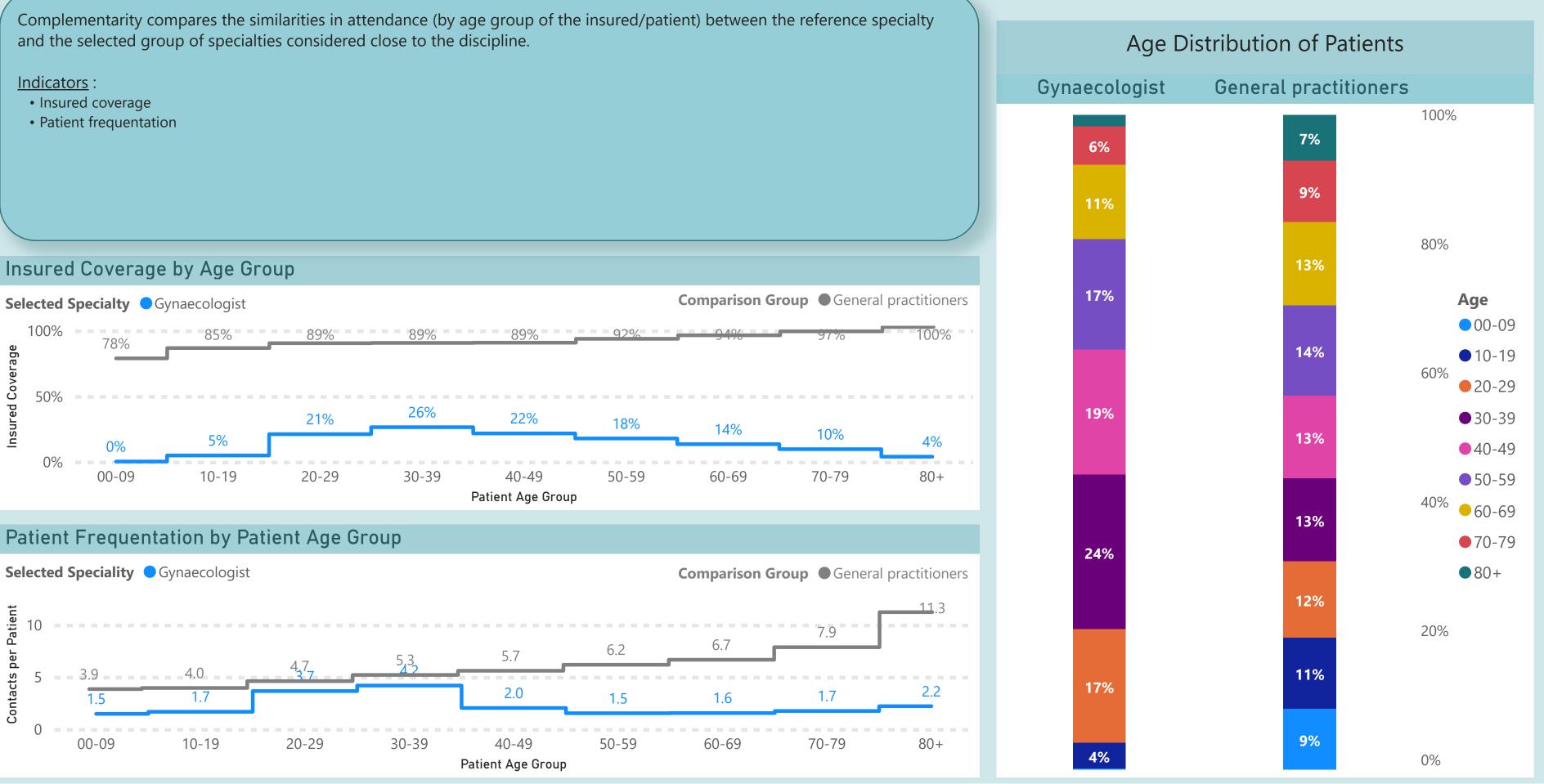


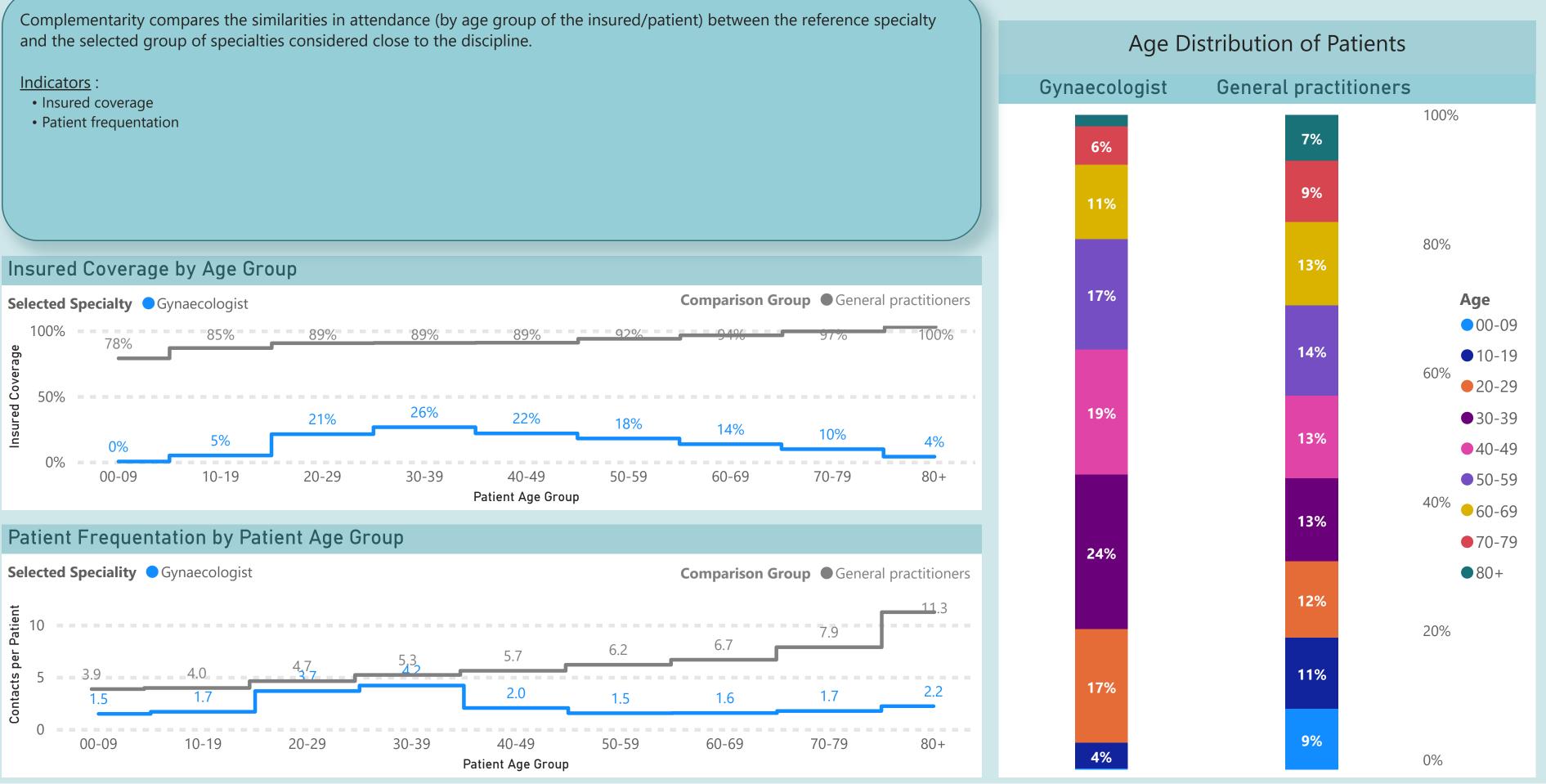
## **Contacts Distribution by Age of Patients**





## Complementarity with its similar group (2021) : Gynaecologist







## Evolution of the Workforce Demography (2022) : Gynaecologist

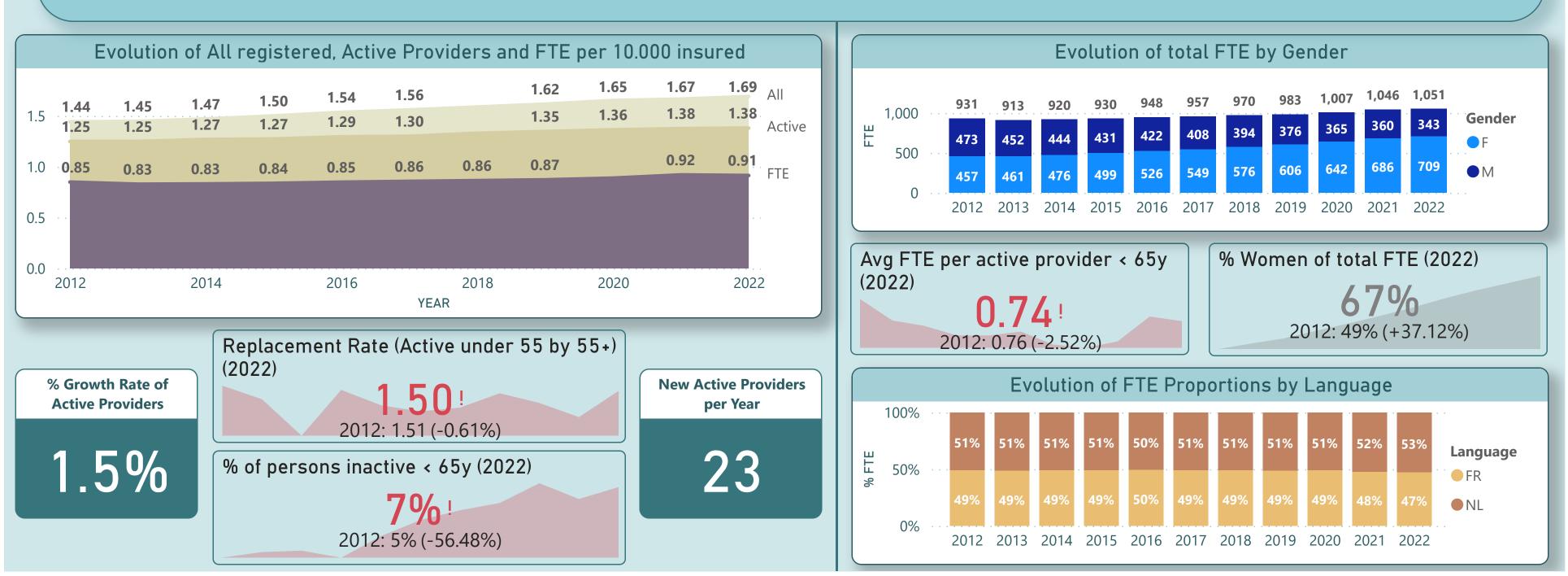
Healthcare workforce demographics presents active professionals engaging in more than one activity per year on the <u>left side</u> of the page, while Full-Time Equivalents (FTE) are displayed on the <u>right side</u>. The analysis spans the past decade and is segmented by professional characteristics such as age class, gender, and language. <u>Active indicators</u> (Left):

- Number of Actives (>1 prestation /accounting year) and its % growth rate
- Replacement Rate: Active professionals above 55 years compared to those below 55 years.
- Inactivity: % of inactive professionals in relation to the total.

• New Active Providers per Year: Annual influx of new providers (derived from linear regression to estimate the average rate) <u>FTE indicators</u> (Right):

• Equal proportion of gender: Indicates the percentage of women FTE in relation to the total FTE.

• Average FTE: Indicates the level of activity by dividing the FTE below 65 years with the total active workforce.



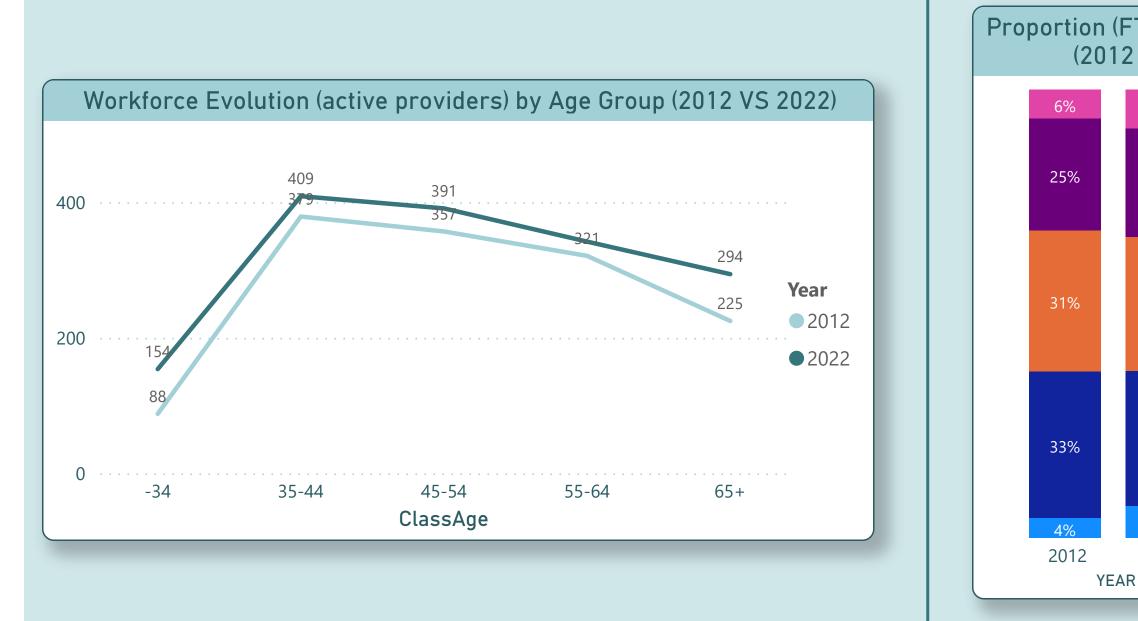


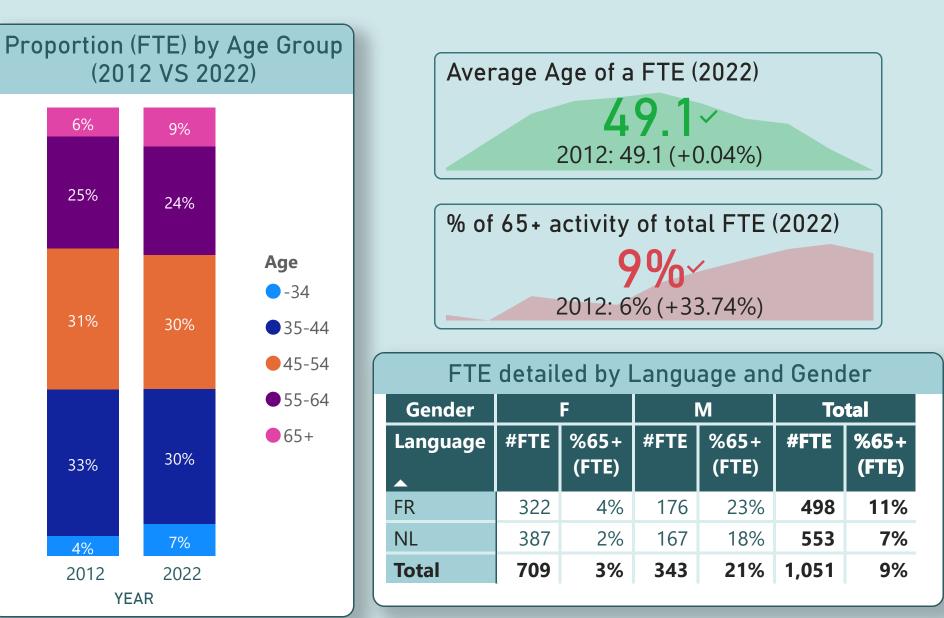
## Demographic Evolution by Age Group (2022) : Gynaecologist

Demographic evolution by age group and activity of older professionals (provides information on the demographic stability).

Indicators :

- Trend in agegroup distribution (active/FTE),
- Age FTE : calculates the average of a professional's age multiplied by their corresponding Full-Time Equivalent (FTE) value.
- Contribution of older practitioners to the overall activity: % 65+ FTE/ Total FTE







FTE (full-time equivalent) is calculated to determine the workload of a healthcare provider (= total reimbursements by provider in a given year divided by the median of reimbursements for providers aged 45 to 54 in the same specialty). The median amount of reimbursement for providers aged 45 to 54 is calculated each year. See the evolution over the ten past years. It is not adjusted for inflation.

FTE values are capped at 1. See the the comparison per active providers by sex, language and age group. N.B. The FTE for employed doctors in medical homes was estimated at 0.81 per doctor because the actual FTE cannot be evaluated given the absence of activity registration.

