

Health Professionals Report : Capacity, Accessibility and Production

Specialty of Interest : General Internal Medicine (without Nephrology)

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### Introduction

#### Introduction

This report provides a comprehensive overview per healthcare 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, geography, type of activity, workplace, 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:

- 2022 to 2023 for health professionals
- 2022 to 2023 for health professionals subspecialties

Each studied year N is coupled with socio-demographic data on providers as of December 31 N.

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

### Contact

appropriatecare@riziv-inami.fgov.be

#### **Additional information**

For official information regarding the number of healthcare providers :

NIHDI : please click FR | NL
MOH : please click FR | NL

#### **Key Variables & Metrics**

Healthcare professional perspective (specialty is determined by grouping NIHDI competency codes):

- <u>Demographic characteristics</u> are age (groups by 10Y), sex (M/F), working address (or contact address if not available), communication language (Dutch/French), convention status (full, partly), activity status (>1 intervention/year), type of prestation (see <u>NIHDI</u> nomenclature).
- <u>Numeric characteristics</u> are number of professionals (all providers registered within INAMI-RIZIV), number and cost of (reimbursed) prestations.
- <u>FTE (full-time equivalent)</u> 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 (lump sum financing) was estimated at 0.82 per doctor because the actual FTE cannot be evaluated given the absence of activity registration. Medical homes with lumpsum are not included in the productivity calculation. General practitioners with "Fee for Service" in the title specifies that doctors and patients in medical homes with lumpsum are excluded from the analysis. Weighted conventioned FTE refers to the adjusted calculation where FTEs for partially conventioned providers are multiplied by 0,5.
- 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 reimbursed or working place.
- Indicators of Density: FTE/10.000 insured, total activity/FTE, reimbursement/FTE, number of patients/FTE.

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**

- Professional density: metrics in this report were not standardized to a consistent population size, which means comparisons between regions or provinces may not be entirely fair or accurate.
- 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 on the year (see Annex 1).



## Speciality Metrics and Comparison (2023): General Internal Medicine (without Nephrology)

This sheet compares the specialty of interest (left) with comparison group (right).

### **General Internal Medicine (without** Nephrology)

Competency Code	Description
10580	Internal Medicine Specialists
10584	Internal Medicine Specialists with recognition in functional and professional rehabilitation for the disabled
10589	Internal Medicine Specialists with a special professional title in Emergency Medicine

	General Internal Medicine (wit	Internal Pathology
# N SubSpecialities	1	13
# N Total	1,044	9,346
# N Active	598	7,538
# Full-Time Equivalent (FTE)	369	5,194
€ Expenses per FTE	291,524	427,666
65+	% Active % FTE 18% 12%	% Active % FTE 14% 8%
Convention	% Active % FTE 95% 97%	% Active % FTE 79% 78%
Weighted Convention  Accreditation	94% 94% 67% 81%	76% 74% 84% 92%

### **Internal Pathology**

# Profession

Cardiologist Dermatologist Endocrinologist Gastroenterologist General Internal Medicine Geriatrician Hematologist Medical Oncologist Neurologist Physical Medicine Pulmonologist

Radiotherapist Rheumatologist

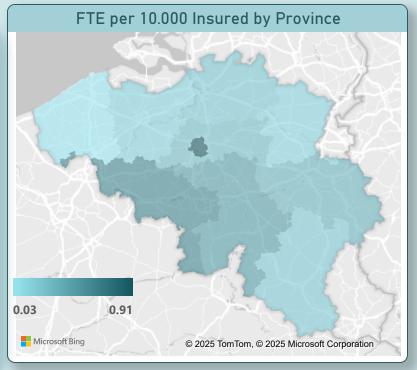


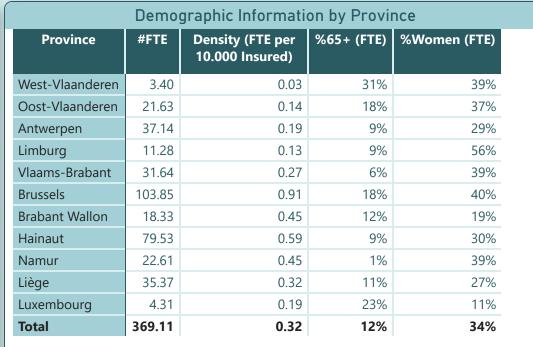
### Geographical Accessibility (2023): General Internal Medicine (without Nephrology)

Geographical accessibility is measured by density, calculated as the number of FTE (Full Time Equivalent) per 10.000 insured and comparing the results between provinces and regions. Metrics in this report were not standardized to a consistent population size.

#### <u>Indicators</u>:

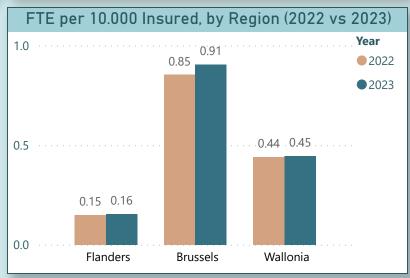
- Geographical distribution which enables to check for homogeneity.
- Evolution over 4 years and growth rate within that period.
- Comparison of number of FTE and number of insured to detect correlation.

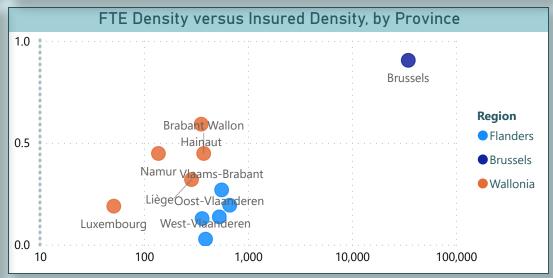




FTE per 10.000 Insured in Belgium (2023)

**0.32** 2022: 0.31 (+3.25%)







### Financial Accessibility (2023): General Internal Medicine (without Nephrology)

Financial accessibility is measured by the number of weighted conventioned FTE (Full time equivalent) by 10.000 insured. Weighted conventioned FTE refers to the adjusted calculation where FTEs for partially conventioned providers are multiplied by 0,5.

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). The conventioned FTE for partially conventioned providers is calculated as half of their total FTE.

## Indicators :% FTE meeting the criteria / total FTE

• Financial accessibility is gauged by weighted conventioned FTE (Full Time Equivalent) per 10.000 insured.

## % Weighted Conventioned FTE (2023)

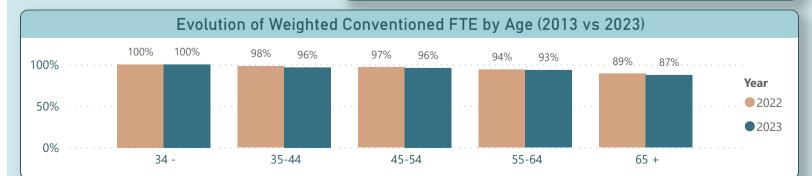
**94%** ! 2022: 95% (-0.91%)

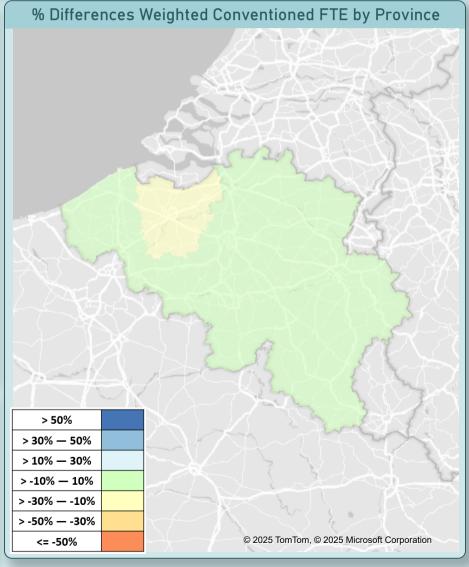
# % Conventioned FTE by Language and Regime

Language	Part	Full	Total	Weighted
FR	1%	95%	97%	96%
NL	4%	86%	95%	91%
Total	2%	92%	97%	94%

Dem	mographic information by Province				
Province	Density (FTE per 10.000 Insured)	Density (Weighted Conventioned FTE per 10.000 Insured)	% Weighted Conventioned FTE		
West-Vlaanderen	0.03	0.03	100%		
Oost-Vlaanderen	0.14	0.11	84%		
Antwerpen	0.19	0.18	95%		
Limburg	0.13	0.13	100%		
Vlaams-Brabant	0.27	0.23	86%		
Brussels	0.91	0.84	93%		
Brabant Wallon	0.45	0.41	91%		
Hainaut	0.59	0.59	99%		
Namur	0.45	0.45	100%		
Liège	0.32	0.30	95%		
Luxembourg	0.19	0.19	100%		
Total	0.32	0.30	94%		

Domographic Information by Province







## Continuous Professional Development (2023): General Internal Medicine (without Nephrology)

CPD (continuous 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).

#### <u>Indicator</u>:

• % FTE meeting the criteria / total FTE

% Accredited FTE (2023)

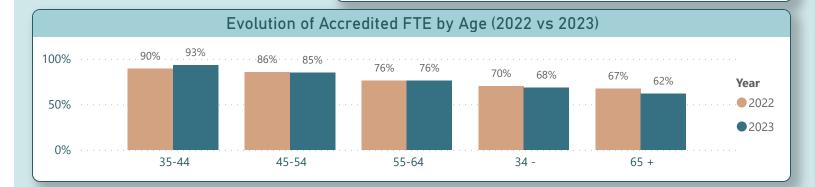
8 1 %
2022: 81% (+0%)

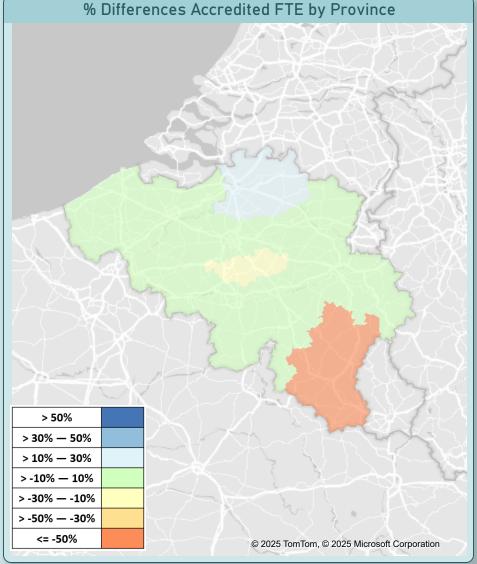
# % Accredited FTE by Language and Gender

Language	F	M	Total
FR	84%	75%	78%
NL	92%	86%	88%
Total	86%	78%	81%

Demograph	nic Inf	ormation	by	Province
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Province	Density (FTE per 10.000 Insured)	Density (Accredited FTE per 10.000 Insured)	% Accredited FTE
West-Vlaanderen	0.03	0.02	88%
Oost-Vlaanderen	0.14	0.11	83%
Antwerpen	0.19	0.18	91%
Limburg	0.13	0.10	81%
Vlaams-Brabant	0.27	0.22	81%
Brussels	0.91	0.75	82%
Brabant Wallon	0.45	0.27	60%
Hainaut	0.59	0.50	84%
Namur	0.45	0.33	74%
Liège	0.32	0.25	78%
Luxembourg	0.19	0.06	31%
Total	0.32	0.26	81%







### Subspecialties Activity and Working Place: General Internal Medicine (without Nephrology)

Reimbursement by FTE (2023)

**294,197** 2022: 301,661 (-2,47%)

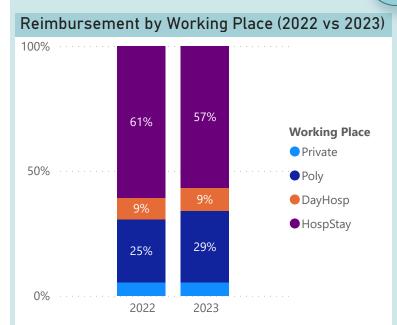
The level of activity is measured by the total reimbursement amount of the specialty. The distribution of the reimbursement by specialty allows to distinguish different types of activity which are grouped to study what kind of procedures are done and where. The type of activity is described by 2 criteria: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

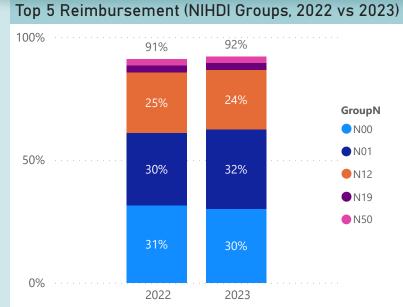
- The place of work is the place where the activity takes place (private, polyclinic, day hospital, hospital stay).
- The nature of the activity is described according to 2 logics of grouping. The traditional distribution of reimbursements within NIHDI (N01 contacts, N20 surgery, etc.) and a specific, more detailed breakdown to identify sub-specialties within the specialty (i.e. cardiac surgery within surgery).

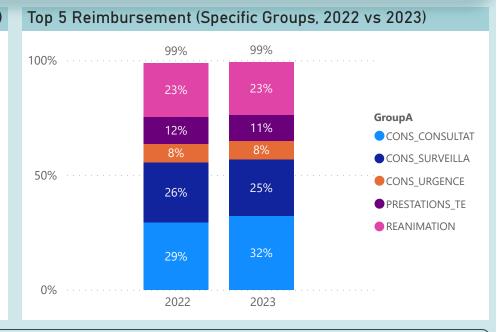
#### Indicators:

- Reimbursement (in 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.







<b>Description</b>
Supervision of hospitalized beneficiaries
Consultations visits and medical advices
Resuscitation
Urgent technical services - Art 26 §1 +1ter + pseudos
X-ray diagnosis

GroupA	Description
CONS_CONSULTAT	Consultation
CONS_SURVEILLA	Monitoring
CONS_URGENCE	Emergency
PRESTATIONS_TE	Technic prest.
REANIMATION	Intensive Care

### Subspecialties Activity and Working Place (2023): General Internal Medicine (without Nephrology)

Subspecialties are identified by the working place and/or type of activity (see previous page): the assignment of a health care provider to a sub-specialty prioritizes the type of activity exercised. In general, the type of activity with the most reimbursements, if the amount exceeds 10% of reimbursements in all types of activity, determines the specialty of the health care provider. If no particular activity was identified for the specialty, the assignment was done 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:

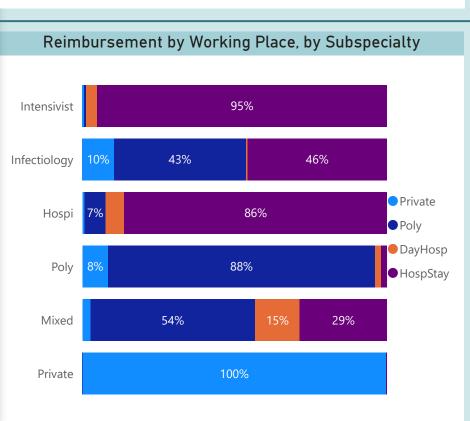
- % FTE by type of cluster
- % type of activity (in Euro ) / total reimbursement (in euro) by cluster

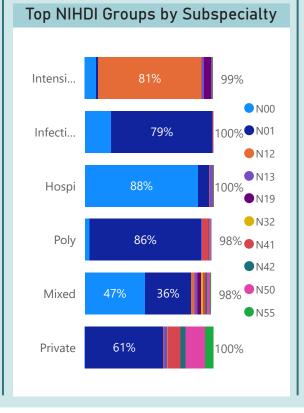
# FTE and median Reimbursement by Subspecialty

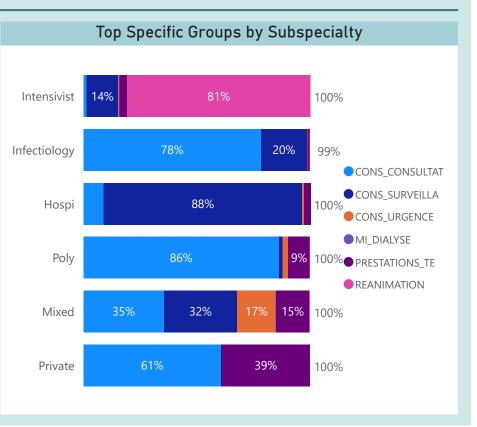
Subspecialty	FTE	Reimb per Provider
Intensivist	125	330,026
Infectiology	20	100,768
Hospi	18	129,339
Poly	18	110,285
Mixed	164	220,337
Private	19	106,544













### Evolution of the Workforce Demography: General Internal Medicine (without Nephrology)

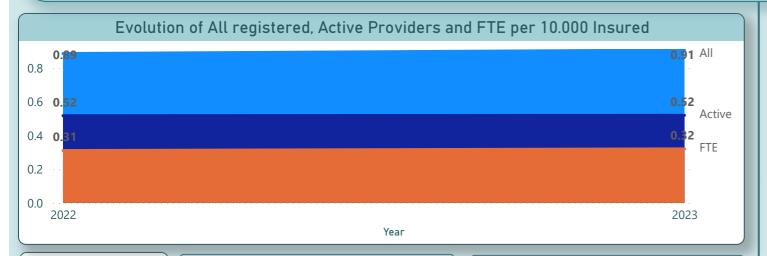
Healthcare workforce demographics present active professionals having more than one activity per year on the <u>left side</u> of the page, while Full-Time Equivalents (FTE) are displayed on the <u>right side</u>. The analysis spans the past decade and is segmented by professional characteristics such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

### Active indicators (Left):

- Number of Actives (>1 prestation /accounting year) and its % growth rate over the past 5 years.
- Replacement Rate: Active professionals above 55 years compared to those below 55 years.
- Inactivity: % of inactive professionals in relation to the total.

#### FTE indicators (Right):

- Equal proportion of gender: Indicates the percentage of female 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.





0.0%

% Growth Rate of NL Active Providers

1.8%

Replacement Rate FR (Active under 55 by 55+) (2023)

1.46× 2022: 1.35 (+8.04%)

Replacement Rate NL (Active under 55 by 55+) (2023)

1.23~

2022: 1.17 (+5.75%)

% of FR Inactive Providers < 65y (2023)

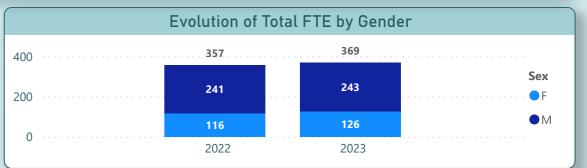
**22%** 2022: 20% (+7.01%)

I Inactive Providers 4 6

% of NL Inactive Providers < 65y (2023)

34%

2022: 32% (+7.72%)

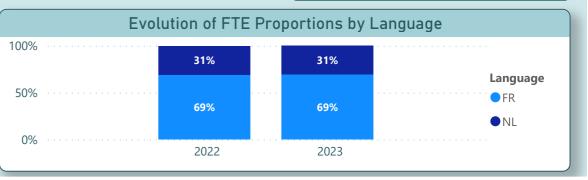




2022: 0.65 (+2.13%)

% Female among total FTE (2023)

34%
2022: 33% (+4.84%)



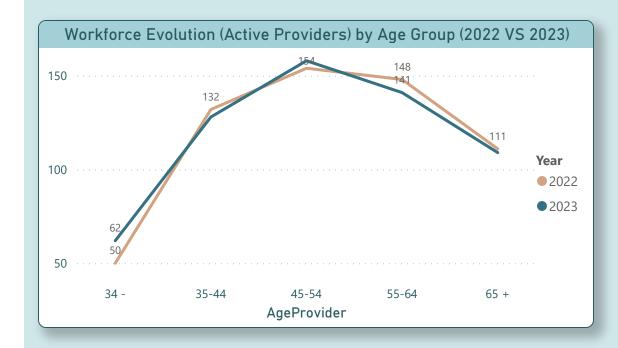


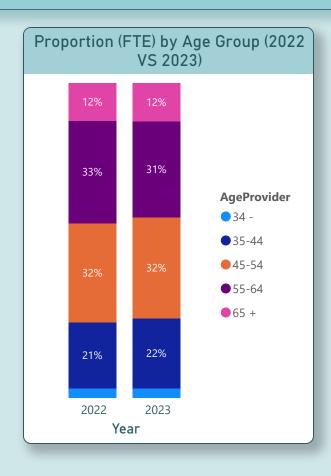
### Demographic Evolution by Age Group (2023): General Internal Medicine (without Nephrology)

Demographic evolution by age group and activity of professionals above 65 years (provides information on the demographic stability).

#### Indicators:

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





Average Age of a NL FTE (2023)

53.2!
2022: 53.7 (-0.95%)

Average Age of a FR FTE (2023)

Average Age of a FR FTE (2023)

51.7

2022: 51.7 (+0.06%)

% of 65+ Activity of total FTE (2023)

2022: 12% (+1.06%)

FTE by Language				
Language	#FTE	%65+ (FTE)		
FR	255.95	12%		
NL	113.15	13%		
Total	369.11	12%		



## Annex 1: FTE Details (2023): General Internal Medicine (without Nephrology)

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. Evolution is not adjusted for inflation.

FTE values are capped at 1. See the comparison per active provider by sex, language and age group.

N.B. The FTE for employed doctors in medical homes (lump sum financing) was estimated at 0,82 per doctor because the actual FTE cannot be evaluated given the absence of activity registration.

Avg FTE per Active Provider (2023)

**U.62** 2022: 0.60 (+2.81%)

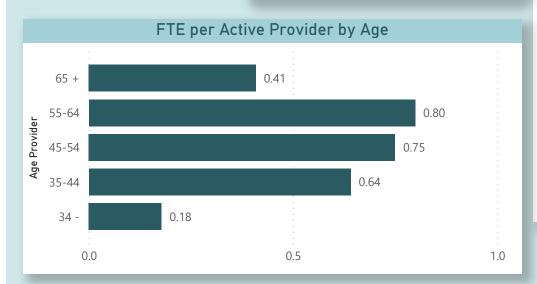
Language and Gender			
Language	F	M	Total
FR	0.52	0.65	0.60

0.66

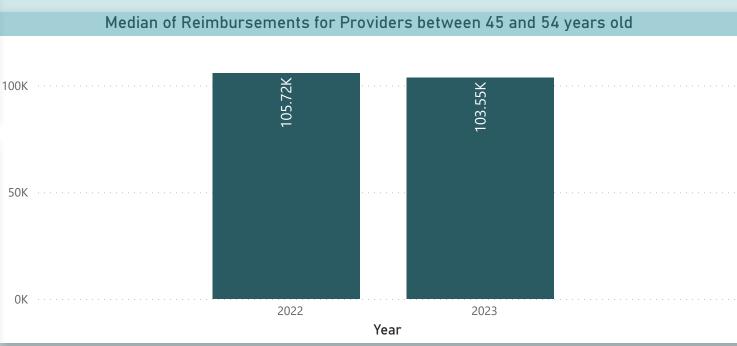
0.62

0.62 0.68

0.55 0.66



**Total** 





### Annex 2: Type of Practice (2023): General Internal Medicine (without Nephrology)

Type of practice (FTE) by age group and region. Evolution and trends

### 5 types of practices are represented:

- Nursing home: represents care facilities for the elderly or individuals requiring psychiatric care.
- Group: represents collective practices or facilities where professionals work together (ex: medical house with lumpsum, mental health center, day care center, public pharmacies, medical laboratories, bandagist/orthopedist workshops, physiotherapy office).
- Hospital: represents hospitals or medical establishments (ex: general hospitals, psychiatric hospitals, hospital pharmacies)
- Solo: represents individual practitioners or private addresses.
- Other: represents facilities or organizations not falling into the above categories (ex: tariff office, organizations with a registered business number)

N.B. Not Available (NA) values are decreasing over time as the database becomes increasingly complete.

