

1.1. Usual Provider Continuity index ≥ 0.75 (% of patients with 3 or more contacts with GP in last two years) (QC-2)

1.1.1. Documentation sheet

Description	Proportion of patients that visited their usual general practitioner (GP) at least three out of four times during the last two years. The Usual provider continuity (UPC) index measures the proportion of encounters conducted by the patient's most frequently consulted GP (i.e. usual GP).
Calculation	Numerator: number of patients (children and adults) with a UPC index ≥ 0.75 Denominator: total number of patients (children and adults) with encounters with GPs UPC index calculation for each patient: Numerator: number of encounters with the usual GP during the last two years (children and adults) Denominator: total number of encounters with GPs during the same period (children and adults)
Rationale	A longitudinal relationship between physician and patient has been shown to encourage communication, improve satisfaction, medication compliance, stimulate receipt of preventive services and decrease hospital admissions and emergency department visits for patients with chronic disease. ¹ There are several measures of longitudinal continuity, with UPC as one of the most commonly used index. ²⁻⁸ The advantage of this indicator is its easy interpretation.
Data source	IMA – AIM data
Technical definition	Nomenclature codes for GPs encounters (consultation and home visits, out-of-hour visits excluded): 101010, 101032, 101076, 103110, 103132, 103213, 103235, 103316, 103331, 103353, 103412, 103434, 103515, 103530, 103552, 103913, 103935, 103950, 104112, 104134, 104156, 104355, 104370, 104650, 104672, 101135, 101990. Usual GP: the GP consulted most frequently or the more recent one if two GPs were consulted at the same frequency during the period. Period: Two years; one year may not be long enough for some patients to have a total of three visits and therefore might biased the results. Categories: <ul style="list-style-type: none">• Very low continuity if $UPC < 0.25$;• Low continuity if $0.25 \leq UPC < 0.5$• Intermediate continuity if $0.5 \leq UPC < 0.75$



- High continuity if $0.75 \leq \text{UPC} < 1$
- Maximum continuity or exclusivity if $\text{UPC} = 1$

Exclusion criterion:

- Patients with < 3 encounters with GP during the period of two years.

Long term care: For long term care, definitions of the IMA – AIM have been used (<http://atlas.aim-ima.be/base-de-donnees>, see statistics on care for older people).

Limitations	A growing number of patients are served by different GPs in a single practice or a group of GPs with a relative longitudinal continuity but the GPs belonging to the same practice or group cannot be identified. Patients followed by medical houses were excluded because their number of GP visits cannot be currently identified. Some patients were excluded from the analysis because they had less than three visits during a two year period. Children are more often managed by paediatricians than by GPs.
International comparability	Not available
Dimensions	Continuity (Longitudinal); Ambulatory care
Related indicators	Coverage of global medical record in the population
Reviewer	Pascal Jonckheer (KCE)

Results

Belgium

In 2021, among patients with 3 or more contacts with GP in last 2 years, 30.9% had an exclusive encounters ($\text{UPC}=1$) with the same GP and around 11% had an $\text{UPC}<0.5$. The proportion of patients with a high continuity index ($\text{UPC} \geq 0.75$) was 60.3%. The higher the number of encounters with a GP over the last two years, the lower is the proportion of individuals with exclusivity. However, if we consider an UPC threshold of high continuity ($\text{UPC} \geq 0.75$) instead of maximum ($\text{UPC}=1$), the continuity increased with the number of encounters (Table 1).

When excluding teleconsultations, the proportion of patients with a high continuity index was higher than when including all types of GP visits (62.9% vs 60.3%), which was due to a higher proportion of patients with maximum continuity (36.9% vs 30.9%).

The proportion of patients having a high continuity with their GP slightly decreased between 2010 and 2021 (Figure 1). The decrease in the proportion of patients having a high continuity index in 2010-2021 was greater in Flanders than in Brussels or Wallonia.

Analysis by demographic characteristics and socio-economic status

Although, there are no major differences by sex concerning the proportion of patients with a high continuity index, men seem to have more often an exclusive continuity with their usual GP than women (32.9% vs 29.2%, Table 1). This is related to the fact that men had less encounters with a GP than women in 2021. The age group of 65-84 years had the highest proportion of exclusive relationship with their GP (39.2%). However, if we consider the threshold of $UPC \geq 0.75$, the proportion of patients with high continuity increases continuously with age starting from 20 years old. Among individuals aged 65 years and above, patients receiving home care have the highest proportion of exclusivity with general practitioners, followed by patients without long term care and finally patients in institutions. The repartition of the high continuity index is not the same since patients receiving home care have the highest proportion of patients with high continuity (77.0%) followed closely by patients in institutions (64.6%). The lowest proportion of patients with high continuity is found in patients without long term care (59.6%).

A higher proportion of patients with lower socio-economic level (measured by patients entitled to increased reimbursement) had a high continuity

(64.8%) with their GP compared to patients without increased reimbursement (59.2%).

Regional comparison

The proportion of individuals with exclusivity was higher in Wallonia (37.0%), followed by Brussels (33.0%) and then Flanders (27.6%; Table 1). This was also the case for the proportion of individuals with a high continuity index (Wallonia: 68.0%, Brussels: 60.3% and Flanders: 56.4%). An analysis by district (Figure 1) showed that Hasselt and Mechelen had the lowest proportion of patients with a high continuity index (51.2% and 52.0%, respectively) while Tournai-Mouscron has the highest (73.0%).

Impact of the COVID-19 pandemic

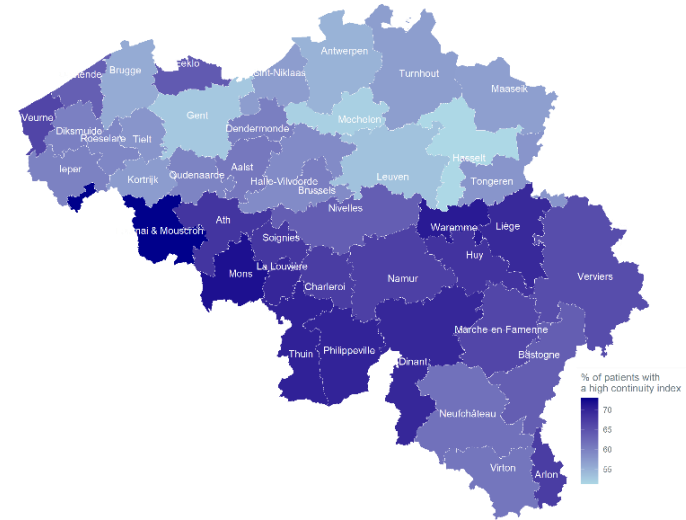
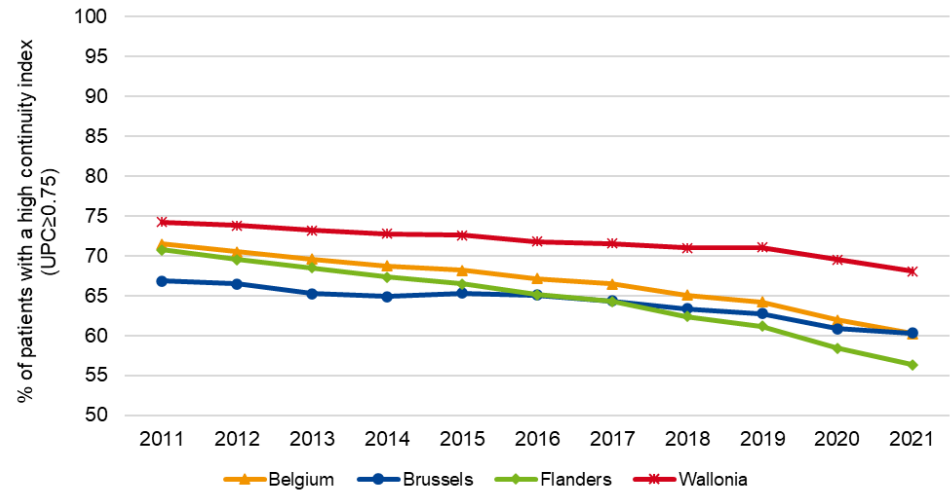
The proportion of patients having a high continuity index continued to decrease during the COVID-19 pandemic, and possibly at a higher rate (Figure 1).


Table 1 – Proportion of patients in the different Usual Provider Continuity (UPC) categories, by patient characteristics (2021-2022)

Characteristics	UPC <0.25	0.25≤UPC<0.50	0.50≤UPC<0.75	0.75≤UPC<1	UPC=1	UPC≥0.75
Belgium	0.3	10.4	29.1	29.3	30.9	60.3
Encounter number						
3 to 7 visits	0.3	9.9	31.6	18.4	39.9	58.3
8 to 12 visits	0.3	10.8	28.1	31.7	29.2	60.9
> 12 visits	0.3	10.7	26.8	40.7	21.5	62.2
Gender						
Male	0.3	10.0	28.7	28.1	32.9	61.0
Female	0.3	10.8	29.4	30.4	29.2	59.6
Age group (in years)						
00-19	0.6	15.7	35.4	21.9	26.4	48.3
20-34	0.6	16.4	35.5	24.8	22.7	47.5
35-64	0.2	9.3	28.9	30.1	31.5	61.7
65-84	0.0	4.6	20.9	35.2	39.2	74.4
≥85	0.0	4.6	20.4	40.4	34.6	75.0
Long term care (65 years and over)						
Nursing care at home	0.0	4.1	19.0	43.2	33.7	77.0
Nursing home	0.1	7.7	27.6	45.1	19.6	64.6
No long term care	0.3	10.7	29.4	28.5	31.1	59.6
Increased reimbursement						
No	0.3	10.8	29.8	28.5	30.6	59.2
Yes	0.2	8.9	26.1	32.9	31.9	64.8
Region						0.0
Brussels	0.3	10.1	29.3	27.3	33.0	60.3
Flanders	0.3	12.4	30.9	28.7	27.6	56.4
Wallonia	0.1	6.5	25.4	31.1	37.0	68.0

Source: IMA–AIM data

Figure 1 – Proportion of individuals with high continuity index (UPC≥0.75), by region (2010-2021) and patient's district (2021)





Key points

- **In 2021, 60.3% of patients had a high continuity index, meaning that at least three out of four encounters were with their usual GP during the last two years. An exclusive relationship (encounters with the same GP everytime) was observed for only 30.9% of patients.**
- **The proportion of patients with a high continuity index increased with the number of encounters with a GP during the last two years. The opposite relationship was observed for exclusive relationship.**
- **The proportion of patients having a high continuity with their GP increased continuously with age starting from 20 years old.**
- **A higher proportion of patients with lower socio-economic level (entitled to increased reimbursement) had a high continuity index compared with patients without increased reimbursement.**
- **Wallonia had the highest proportion of patients with a high continuity index (68.0%), followed by Brussels (60.3%) and then Flanders (56.4%).**
- **The proportion of patients having high continuity with their GP decreased between 2010 and 2021 and this decline was even more pronounced in Flanders.**

References

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