

## All reproduction is prohibited but direct link to the document is accepted:

https://www.irdes.fr/english/issues-in-health-economics/293-funding-forand-access-to-hearing-aids-in-europe.pdf

# Funding for and Access to Hearing Aids in Europe: A Comparison among France, England, Belgium, and Sweden

Sylvain Pichetti, Alice d'Estève de Pradel, Maude Espagnacq (IRDES)

Funding for and access to hearing aids were compared across four European countries. In France and Belgium, purchases are mainly private, whereas in Sweden and England, the public sector manages centralised purchases via a system of calls for tenders with free or almost free distribution to the users. The reform entitled « 100% Santé Audiologie » ("100% Healthcare for Hearing Aids") in France provides a broad range of hearing aids that are accessible without out-of-pocket payments for the patient owing to funding by the public insurance scheme and complementary healthcare schemes, and the existence of a capped purchase price. In Sweden, all the ranges are available in the public system, and the patient contribution is zero or insignificant, but the disadvantages of the system are limited supplies and waiting lists. In England, the National Health Service (NHS) provides free access to a limited supply of hearing aids at a relatively low cost for the NHS, without public complementary coverage for the private market. Belgium has opted for funding equivalent to that of France, but it is based solely on public insurance. This system, with no price regulation and with a high level of coverage, appears to provoke an inflationist situation with regard to sale prices, which results in higher out-of-pockets payments for patients than those observed in France.

Since the reform, which has resulted in a significant improvement in access to hearing aids, France has been in a better position than the other countries studied. A number of issues for the future have been identified: avoiding a situation in which "no charge" for the user leads to expensive commercial practices for the community, managing the available basket of hearing aids without out-of-pocket payments for patients while integrating technical progress, and ensuring that the complementary insurance premiums of elderly persons remain financially accessible.

n European countries, the prevalence of hearing impairments is high due to the ageing of the population, and this prevalence is increasing. Between 10% and 15% of Europeans have declared that they have a hearing problem (KCE, 2020; Socialstyrelsen, 2021; Drees, 2024), but the number of users is

highly variable depending on the country: from 34% in Belgium to 53% in the United Kingdom, with Sweden and France at an intermediary level (37% and 46%, respectively, in 2022). The average age of Europeans who have a hearing aid is 70, whereas 90% of English persons and 80% of French persons who

have a hearing aid are aged 65 years or older (DREES, 2024), and the proportion is equivalent in Belgium. However, the need for hearing aids also concerns a younger population, who are old enough to be students or workers and may require specific funding to be able to acquire more sophisticated aids (see Inset, p.2).



The people who want to have a hearing aid can choose between different types of aids. In European markets, entry-level hearing aids provide basic sound processing with a limited range of options. As a general rule, they are not equipped with the latest technology and only work with batteries.

Mid- and high-range aids have the latest available technologies, which provide more sophisticated sound processing and a larger range of options. They benefit from advanced signal processing, which improves comprehension in noisy environments, innovative technologies (motion sensors, artificial intelligence, etc.), better sound quality with higher memory bandwidth than basic models, connectivity to smartphones, and remote adjustment. In addition, these models may be fitted with a rechargeable battery. The differentiation between the mid- and high-range aids depends on the number of activated options.

The costs for the users vary greatly depending on the range, as well as within the same range across countries, as each country has specific approaches to the funding and provision of these aids. In this con-



## Other sources of funding for hearing aids in France for persons with a disability

People who are eligible to receive the disability compensation benefit (Prestation de compensation du handicap, PCH) can use it to obtain a complement to the public funding (that is, people suffering from bilateral deafness under the age of 60). The first level of funding is still provided by the mandatory health insurance scheme, with a contribution of 240 euros (i.e., 60% of the reimbursement base rate of 400 euros). For hearing loss under 70 dB, the PCH covers the copayment for the hearing aid, i.e., 160 euros, which takes the public funding up to 400 euros. For hearing loss in excess of 70 dB, the PCH reimburses the copayment and adds 200 euros, which brings the public funding to 600 euros. The complementary health insurance scheme may complement this statutory funding if the user contribution is greater than copayment (already covered by PCH), and this

is covered by the policy. For children under the age of 20, the coverage is a mandatory 1,400 euros per ear, regardless of the category of hearing aid (in or not in the *« 100% Santé »* care basket), with 60% covered by the National public health insurance. The complementary health insurance scheme may, in the framework of responsible policies, increase its reimbursement to 1,460 euros for aids that are not part of the *« 100% Santé »* scheme.

People with a disability involved in a professional career or an employment access scheme can approach the Association for the Management of Resources for the Inclusion of Disabled People (Association de gestion du fonds pour l'insertion professionnelle des personnes handicapées, AGEFIPH) and ask them to help fund the purchase of a hearing aid up to 850 euros for one aid and 1,700 euros for two.

text, this study aims to compare the level of funding of hearing aids and user out-of-pockets payments in four European countries (France, Belgium, England, and Sweden) for different ranges of hearing aids. We, together with French experts – academic experts and hearing care professionals who are familiar with practices outside France – selected nine models representing all the levels of hearing aid available in the examined countries to facilitate comparison.

This method neutralises the price differences that result from hearing aids of variable qualities. The data relating to price, the level of public funding, and user out-of-pockets payments were gathered by experts in the four countries, initially questioned remotely via a questionnaire, and subsequently questioned in person during study trips carried out in 2022 and 2023 (see Inset Methods). These aids are representative examples of prices and funding and do not reflect the entire market in audio prostheses in each country (see Table 1, and Table 2, p.6).

Belgium is characterised by a private market in which many vendors ensure the distribution of hearing aids by freely determining their prices (see Figure 1, p.4). A flat-rate public reimbursement price of 858 euros¹, funded solely by the mandatory public health insurance scheme, enables adult users to cover or reduce their out-of-pocket payments. While 98%² of the Belgian population has complementary health coverage, the latter is not used to fund the acquisition of hearing aids for the adult population.

## **M**ETHODOLOGY

The methodology of the project entitled « Comparaison européenne et évolution dans le financement des aides techniques pour les personnes en situation de handicap » (COMPATEC), a French research project that aims to compare the prices and out-of-pocket payments of different assistive devices, is based on a qualitative approach that combined a remote approach (the sending of questionnaires) and an on-the-ground approach adopted during study trips (Belgium in February 2022, Sweden in October 2022, and England in April 2023). These approaches involved questioning hearing aid specialists and performing observations in hearing aid shops and care facilities. The remote questionnaire focused on the following themes: personal information; means of acquiring the hearing aid (purchase, rental, etc.); funding of the hearing aid; support and follow-up; and the existence of national producer of technical aids (Pichetti et al., to be published).

The investigative work focused on remote questionnaires and interviews with specialists during study trips, which led us to talk to at least five specialists per country, irrespective of the investigation method.

The public expenditures devoted to the distribution of assistive devices and the out-of-pocket payments paid by the users were compared across the four countries. In France and Belgium, we identified the amount of public funding for each model of hearing aid on the basis of positive lists of hearing aids. In Sweden and England, we identified the prices proposed in response to the calls for tenders.

The hearing aids featured in the study were selected by a group of French experts consisting of academic experts and hearing care specialists. The public expenditures and out-of-pocket payments of the users were recorded for nine models of hearing aids distributed across the four countries.

To consider the differences in living standards across countries, the public expenditures or public prices and user out-of-pocket payments were recalculated to take into account the spending power indices of the Organization for Economic Cooperation and Development (OECD) 2022 (Summers et al., 2018).

Which is equivalent to 903 euros in purchasing power parity (PPP).

https://www.oecd.org/en/publications/health-ata-glance-2023 7a7afb35-en.html

### **T1**

#### Comparison of the funding and user out-of-pocket payments devoted to hearing aids according to countries/regions (in PPP¹) – Aids corresponding to '100% Santé Audiologie' in France

	Private i	markets (no pi	rice regulation)	Public markets (price regulation via calls for tenders)								
	Cover f hearing		out-of-pocket payments	Unit price paid by the public purchaser / User out-of-pocket for a hearing aid payments								
	No public funding											
	Make and model of hearing aid France <sup>a</sup> Belgium <sup>a</sup>		Belgium <sup>a</sup>	Sweden <sup>b</sup> (region of Stockholm)	Sweden <sup>b</sup> (region of Scania)	England (NHS) <sup>a</sup>						
RIC (Receiver in-canal-mini hearing aid)	OTICON Siya RIC	€1,033	Suggested retail price: €1,395	€134 Bernafon Zerena 5 Minirite €67	126€ Bernafon Alpha 9 Minirite €95	Private sector price: €1,000						
CIC/IIC/ITE (In-the-ear)	SIGNIA Silk 3NX	€1,033	Suggested retail price: €1,395	€166 Bernafon Zerena 5 Custom	126€ Bernafon Alpha 9 €95	Private sector price: €1,450						
BTE (Behind-the-ear)	PHONAK B30 P	€1,033	903€ <b>€492</b> Suggested retail price: €1,395	€166 Bernafon Zerena 5 BTE €67	126€ Bernafon Alpha 9 MNB	50€ (€417 entire cost including follow-up)						

<sup>&</sup>lt;sup>1</sup> In Purchasing Power Parity (PPP).

Notes: All the models listed alongside the prices in the table are equivalents of the reference model. The figures correspond with the amount in euros after taking into account the differences in living standards in the different countries offset by the spending power indices of the Organization for Economic Cooperation and Development (OECD), 2022.

2022 spending power index: France (92), Belgium (95), the United Kingdom (105), Sweden (108). The calculations are in base 100. Example: for France, €950 in French prices represents 950\*100/92= €1,033 in Purchasing Power Parity (PPP). Source: OCDE, 2022. https://stats.oecd.org/lndex.aspx?DataSetCode=CPL

#### Sources

France: various Internet sites consulted in 2022: <u>Laboratoires-unisson.com</u>; <u>vivason.fr</u>; <u>ideal-audition.fr</u>

Belgium: Véronique Monteyne (Louvain) in November 2021 and Marie Baeckelandt in October 2023 (recommended prices). User contributions: the National Institute for Sickness and Invalidity Insurance (INAMI).

Sweden: [Stockholm] Information provided by the hearing aid provision units Hjälpmedel Stockholm and KommSyn (prices in response to the latest calls for tenders dating from October 2022). Websites: Vardgivarguiden.se; kommsyn.se • [Scania] horsellinjen.se; vardgivare.skane.se • [Södermanland] Annelie Söderbäck, department head in a hearing aid centre in Sörmland (prices of the latest calls for tenders dating from June 2023).

England: [NHS] Adrian Davis (prices in response to the latest calls for tenders dating from April 2023) • [Private market] uk-hearing.co.uk consulted in May 2023.

In France, a private market also provides extensive access to a broad range of hearing aids. Funding is based on combined funding by mandatory national public health insurance and complementary health insurance, resulting in zero out-of-pocket payment for the users for a defined basket of hearing aids. Since the implementation of the reform entitled « 100% Santé Audiologie » ("100% Healthcare for Hearing Aids") in 2019, a maximum sales price of 950 euros (that is, 1,033 euros in purchasing power parity, PPP)), including access to hearing aids, maintenance, and adjustments for four years, has been imposed on the « 100% Audiologie » ("100% Healthcare for Hearing Aids") basket of hearing aids, while free prices continue to apply to hearing aids not included in the basket.

Sweden and England, which are highly regulated public systems, enable free or virtually free access to a more limited supply of hearing aids in terms of diversity and quality, which may lead certain insured persons to purchase hearing aids on the private market, which is characterised by free market prices, without public funding (England) or with very low public funding (a voucher is provided in two regions in Sweden; see Figure 2, p.5).

## Private purchases of hearing aids in France and Belgium

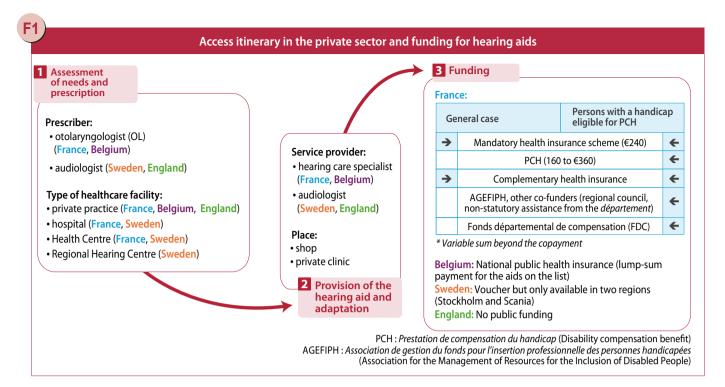
In France and Belgium, the distribution of hearing aids is entrusted to several sellers operating on a private market. A doctor's prescription is required to receive a reimbursement for a hearing aid. Hearing care professionals serve users in private stores, where they provide them with hearing aids that match their needs (see Figure 1, p.4).

In France, before 2019, all hearing aids were subject to free market prices: the average price was 1,500 euros, and the social security base rate for reimbursement was set at 199.71 euros. Apart from covering the patient's copayment, the complementary health insurance policies reimbursed the out-of-pocket payment in a variable manner (DREES, 2024). Before the reform, the users generally had to pay significant out-of-pocket payments, which impeded their access to these aids.

The "100% Healthcare for Hearing Aids" reform, which was imple-

a In France and Belgium, the expense includes the cost of the hearing aid and follow-up in the framework of the user's care pathway over a four-year period.

b In Sweden and England, the price only covers the cost of the hearing aid. In England, the entire cost including follow-up was recalculated by the authors.



mented gradually between 2019 and 2021, divided the market into two parts, with, on the one hand, the basket known as « 100% Santé » and, on the other hand, the free basket. This reform was complemented by a doubling of the funding by the mandatory health insurance scheme, whose base rate for reimbursement increased to 400 euros in 20213, and an obligation for the complementary health insurance schemes to cover the out-of-pocket payment in the "100% Healthcare for Hearing Aids" basket, which have prices capped at 950 euros<sup>4</sup>. The mandatory public health insurance scheme reimburses 60% of the base rate for reimbursement set at 400 euros per ear, that is, 240 euros, and complementary health insurance companies cover the copayment of 710 euros<sup>5</sup>.

In the free basket, the prices are not restricted, and the reimbursement by the mandatory public health insurance is identical to that applied to the « 100% Santé » (240 euros). The responsible contracts have no obligation to reimburse a sum greater than

the patient's copayment (160 euros). Hence, the minimal sum covered is 400 euros, and the reimbursement by the complementary health coverage is capped at 1,460 euros (i.e., a total maximal reimbursement of 1,700 euros) to ensure that excessive funding does not provoke price increases (DREES, 2024).

As the prevalence of hearing deficiency increases with age, the users who need to purchase a hearing aid are more often elderly and do not generally have access to company healthcare coverage, whose rates are usually lower and involve at least half of the premiums being paid by the employer. Hence, they have to pay for insurance policies in the individual insurance market to benefit from zero out-of-pocket payments in the framework of the "100% Healthcare for Hearing Aids" scheme. For these individual policies, the tariffication of the premium in relation to age results in considerably higher premiums than those they would pay in the framework of a group policy obtained via an employer. For an insured person aged 85, the average monthly premium of an individual policy is 146 euros, whereas it is 33 euros for an insured individual aged 20 or 27 euros for a person insured under a group policy<sup>6</sup>.

Before the reform, 447,000 patients obtained a hearing aid in 2019, and 773,000 in 2021, 40% of whom obtained it under the *« 100% Santé »* ("100% Healthcare for Hearing Aids") scheme, which represents an increase of 73%, reflecting increased use of hearing aids (CNAM, 2022).

Belgium has no price regulation but fixes the reimbursement amounts for hearing aids listed on a positive list. For certain aids, the price corresponds to the lump-sum amount, and 25% of the users opt for those hearing aids (KCE, 2020), which is a lower proportion than that of the purchases in the *« 100% Santé »* basket in France. The lump-sum payment is updated to match inflation (903 euros if one takes into account the PPP<sup>7</sup>) for all the hearing aids

<sup>&</sup>lt;sup>3</sup> i.e., 435 euros in purchasing power parity (PPP)).

The sales price was initially capped at 1,300 euros in 2019, and then gradually decreased over time: 1,100 euros in 2020 and 950 euros in 2021.

The reimbursement of 950 euros represents 1.033 euros in PPP.

According to a survey aimed at companies that provide complementary health coverage schemes, namely, the 2021 DREES "OC" survey, the average monthly premium of a group policy is 68 euros, and the employer's participation is on average 60%, according to the Protection sociale complémentaire d'entreprise (PSCE) survey conducted in 2017 by the DREES and the IRDES, i.e., an average monthly cost of 27 euros for the insured person.

This amount applies to adult persons under the age of 65. The reimbursement amounts vary slightly with age for minors and persons over the age of 65. For those over 65, the reimbursement amount is 860 euros in purchasing power parity (PPP), which is slightly less than the rate for younger persons.



The research project entitled « Comparaison européenne et évolution dans le financement des aides techniques pour les personnes en situation de handicap » (COMPATEC) was funded by the National Institute of Health and Medical Research of France (Institut national de la santé et de la recherche médicale, INSERM) in the framework of a call for projects submitted to the Institut pour la recherche en santé publique (IRESP) in 2019. This research project led to the drafting of an IRDES report (Pichetti et al., to be published)

on the list8. Consequently, although distribution via the private market and global funding in France and Belgium are relatively similar, the means of funding are different. In Belgium, it is more based on national solidarity via funding from the state health insurance scheme, whereas in France, the sources of funding are mixed. The "100% Healthcare for Hearing Aids" scheme is a quarter funded by mandatory public health insurance contributions, which are proportional to one's income, and three quarters of it is funded by complementary health insurance contributions, which vary with age.

In the public sector, a system of centralised purchases of hearing aids via regional calls for tenders in Sweden and national calls for tenders in England

In Sweden and England, the public regulator distributes the available hearing aids, generally without additional out-of-pocket payments for the users. In Sweden, regional hearing centres handle only the stocking and provision of hearing aids. Needs assessment is conducted within clinics, in which a number of hearing care professionals work, selecting the most appropriate hearing aid that matches the environment in which the patient uses the device.

In England, audiology departments order hearing aids, as needed, from the NHS catalogue. The centres are supplied as a result of calls for tenders, which cover all the orders for a number of years, as the volumes are based on forecasts. For the regulator who drafts the calls for tender, the idea is to restrict the orders to a limited range of models to increase the volumes and thereby lower prices, which reduces the diversity of the supply. In this framework, the public purchaser selects the most economically advantageous offerings, without negotiation, on the basis of objective criteria communicated beforehand to the manufacturers.

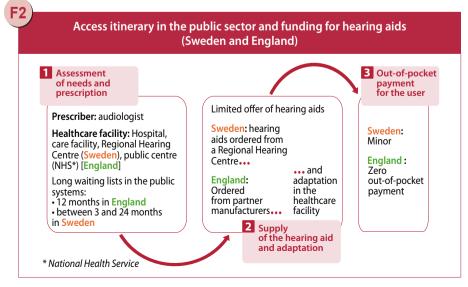
In England, the NHS issues a call for tenders at the national level, and manufacturers position themselves to respond effectively. With respect to hearing aids, approximately seven major manufacturers participate in this process, although they are not all selected each time. The calls for tenders that are issued at the national level do not guarantee a homogenous supply throughout England. Indeed, integrated care boards (ICBs) have established a range of hearing aids that are covered and distributed to users, depending on their budgets and priorities, which often vary from one geographic area to another.

Regulation via calls for tenders results in prices that decrease in proportion to the volumes ordered. In England, the NHS purchases very large quantities of hearing aids for the entire country, approximately 1.5 million per year for

the 4.9 million persons concerned, which enables prices to be negotiated that vary between 50 euros for entrylevel aids and 111 euros (in PPP) for the most sophisticated aids; these prices only apply to the aid itself, without including the four years of maintenance and adjustment, as is the case with the French and Belgian prices. In comparison, in France, in the context of strong growth in volume, 1.7 million hearing aids were sold in 20229, for a population of 6.6 million persons who suffer from hearing impairments<sup>10</sup>. England has therefore opted for large-volume purchases, facilitating the greatest possible access to entry-level aids.

In Sweden, regional calls for tenders for hearing aids were introduced in 2010, and five major manufacturers participated. The budget for a call for a tender is calibrated according to the population of potential beneficiaries, its estimated growth, the previous budget, and the prescriptions given over the last four to six years. The available supplies are very heterogeneous across regions, creating situations of inequity that are criticised

Source: Eurotrack: <a href="https://www.ehima.com/">https://www.ehima.com/</a>



https://www.inami.fgov.be/fr/professionnels/professionnels-de-la-sante/audiciens/ liste-des-appareils-auditifs-remboursables<sup>9</sup> Source: National Association for Medical Technology Industries (Syndicat national de l'industrie des technologies médicales, SNITEM), 2023-

**T2** 

## Comparison of the funding and user out-of-pocket payments devoted to hearing aids according to countries/regions. Mid- and high-range models

to hearing aids according to countries/regions. Mid- and high-range models												
	Private markets (no price regulation)				Public markets (price regulation via calls for tenders)							
	Cover for a User out-of-pocket payments			Unit price paid by the public purchaser / User out-of-pocket for a hearing aid payments								
		l No	t covered by the p	ublic health insurance scheme Not listed in the public offering								
		France <sup>a</sup>	Belgium <sup>a</sup>	Sweden (region of Stockholm) <sup>b</sup>	Sweden (region of Scania) <sup>b</sup>	Sweden (region of Södermanland) <sup>b</sup>	Sweden (region of Norrbotten) <sup>b</sup>	England (NHS) <sup>a</sup>				
		ecommended ail price		suggested il price								
Mid range												
RIC (Receiver in-canal-mini hearing aid)	OTICON More 2	€435 €744 <sup>c</sup> RRP: €1,179	SRP: €2,368	€119 PHONAK Audéo M70-RT	€126 PHONAK Audéo M90-RT		111€ OTICON More 1 Minirite T	Private sector price: €2,190				
CIC/IIC/ITE (In-the-ear)	STARKEY Muse iQ i2000	€435 €750 <sup>C</sup> RRP: €1,185	€903 €1,465 SRP: €2,368	Maximum observed private price: £2,040 Amount of the	rice: Amount of the voucher: €150	Maximum observed private price:	112€ RESOUND Quattro 9 ITE	Private sector price: €1,670				
BTE (Behind-the-ear)	SIGNIA Motion 5nx	<b>858€</b> <sup>c</sup> RRP: €1,293	SRP: €2,368	voucher: €200	126€ SIGNIA Motion 13 7Nx		131€ SIGNIA Motion 7X	Information unavailable				
High range												
RIC (Receiver in-canal-mini hearing aid)	PHONAK Audéo Paradise 90R	€1,076 <sup>C</sup> RRP: €1 511	€903 €1,950 SRP: €2,853	€143 SIGNIA Charge & Go 7X	126€ SIGNIA Charge & Go	€126	144€	Private sector price: €1,969				
CIC/IIC/ITE (In-the-ear)	WIDEX Moment 440 CIC	€1,130 <sup>C</sup> RRP: €1,293	SRP: €2,853	€176	126€	Maximum observed private price:	108€	Private sector price: €2,008				
BTE (Behind-the-ear)	STARKEY Livio AI 2400 BTE	€1,076 <sup>C</sup> RRP: €1,511	SRP: €2,853	€176 WIDEX Moment BTE  €67	126€ WIDEX Moment BTE	€2,040  No voucher	128€ RESOUND Omnia RU977 DWC	€111 but an inferior non-rechargeable model Private sector cost: €2,043				

a In France, Belgium and England, the expense includes the cost of the hearing aid and follow-up in the framework of the user's care pathway over a four-year period.

Notes: All the models listed alongside the prices in the Table are equivalents of the reference model. The figures correspond with the expenditure in euros after taking into consideration the different costs of living between the countries offset by the spending power indices of the Organization for Economic Cooperation and Development (OECD), 2022.

2022 spending power index: France (92), Belgium (95), The United Kingdom (105), Sweden (108). The calculations are in base 100. Example: for France, €400 in French prices represents 400\*100/92= €435 in Purchasing Power Parity (PPP). Source: OECD, 2022. https://stats.oecd.org/Index.aspx?DataSetCode=CPL

#### Sources

 $\textbf{France:} \ Various\ Internet\ sites\ consulted\ in\ 2022: \underline{Laboratoires-unisson.com}; \underline{vivason.fr}; \underline{ideal-audition.fr}$ 

Belgium: Véronique Monteyne (Louvain) in November 2021 and Marie Baeckelandt in October 2023 (recommended prices). User contributions: INAMI.

Sweden: [Stockholm] Information provided by the hearing aid provision units Hjälpmedel Stockholm and KommSyn (prices of the latest calls for tenders dating from October 2022). Sites: <a href="Varadgivarguiden.se">Varadgivarguiden.se</a>; <a href="Varadgivarguiden.se">kommsyn.se</a> (Scania) <a href="Varadgivarguiden.se">horsellinjen.se</a>; <a href="Varadgivarguiden.se">varadgivarg.skane.se</a> (Södermanland) Annelie Söderbäck, department head in a hearing aid centre in Sörmland (prices of the latest calls for tenders dating from June 2023).

England: [NHS] Adrian Davis (prices of the latest calls for tenders dating from April 2023) • [Private market] uk-hearing.co.uk consulted in May 2023.

b In Sweden, the expense only includes the cost of the hearing aid. The private price indicated in several places corresponds to the price of the most expensive hearing aid on the market, which belongs to the high-range, without any specifications relating to the model; 5 Public funding of €240 by the mandatory health insurance scheme and minimal cover of the copayment by the complementary health insurance scheme (i.e., €160), for a total cost of €400, or €435 if one takes into account Purchasing Power Parity (PPP). This is a scenario of minimal reimbursement by the complementary health insurance scheme.

in Sweden (Socialstyrelsen, 2016). In addition, the prices resulting from public calls for tenders for hearing aids vary greatly according to the region: the region of Scania, which orders large volumes, has prices between 6% and 28% lower than the prices in the region of Stockholm (see Table 1). However, even in Scania, the prices obtained in the calls for tenders for a range of hearing aids equivalent to the French « 100% Santé » (126 euros in PPP) basket are higher than those negotiated by the NHS (between 50 and 111 euros), which orders the aids at the national level (see Table 1). The out-of-pocket payments are much lower for the users, who only pay the cost of a consultation to obtain their hearing aid, even though this sum varies from one region to another (between 63 euros and 95 euros in PPP).

In addition to this public system, a private hearing aid market is emerging, but in a very disparate way that depends on the geographical area - more easily in densely populated areas than in more remote rural areas. The regions of Stockholm and Scania, in which there is an extensive network of private clinics<sup>11</sup>, have introduced a very successful voucher system: more than 90% of the users purchased their hearing aids with a voucher (150 euros in Scania and 200 euros in Stockholm, in PPP). The voucher only covers 10% of the price of hearing aids on the private market (approximately 2,000 euros), with the remaining 90% being paid by the users. In other regions, the market share of hearing aids bought in the private sector is very low, as there is no voucher to encourage users to opt for private offerings.

In Sweden and England, the variability in hearing aid offerings by public authorities is extensive, which is highly criticised by many associations (Motability, 2022). In both countries, a supply chain via the private market has emerged over recent years, which attracts a wealthier clientele via the far broader offerings than in the pub-

lic sector and the desire to avoid long waiting lists in the public centres. In England, private-sector sales accounted for 21% of the acquisitions of hearing aids in 2023<sup>12</sup>. The prices on the private market range from 1,700 euros to 2,200 euros in PPP for the models mentioned in this study, and they are paid for entirely by the users.

A French "100% Audiology" basket that is completely funded and more diversified than the Swedish and English public offerings

The French and Belgian coverages, which include both the provision of the hearing aid and the visits to adjust the aid over a four-year period, were compared to the costs in England by adding the cost of the device to that of the adjustment visits (see Table 1). In contrast, in Sweden, only data related to the prices paid by the regions in regional calls for tenders were obtained, as information about the total cost, including adjustment visits, was unavailable. The English public expenditures that cover the cost of the prosthesis and the associated services is 417 euros (see Table 1) for aids equivalent to the French « 100% Santé Audiologie », that is, approximately half of the coverage provided in France and Belgium. The NHS only covers behind-the-ear (BTE) hearing aids, which are more visible than receiver in-canal-mini hearing aids (RICs) and in-the-ear (ITEs and ITCs) hearing aids but compensate for a broad spectrum of hearing loss, ranging from slight to severe and even profound, in regard to more severe conditions. The behind-the-ear hearing aids are also more robust and ergonomic than the in-the-ear hearing aids are. The decision by the NHS to focus their orders on these aids is therefore pragmatic, even if it does not match the "aesthetic" demand of the population, which prefers more discreet devices.

However, the Swedish public market is more open, as it provides both behind-the-ear and in-the-ear hearing

aids, even though, according to the experts questioned, the aids in question date from the penultimate generation. In comparison, the French and Belgian markets provide people with access to all kinds of hearing aids, including those that are entirely publicly funded. However, the hearing aids entirely funded by the NHS, such as those in the French « 100% Santé » basket, are not rechargeable. The quality of the hearing aids available in England has improved over recent years, but the NHS's calls for tenders do not always include the most discreet devices, such as in-theear hearing aids. Of course, the latter are not necessarily suitable for all hearing loss conditions - only slight and medium hearing loss - and have few options, but their discretion is likely to encourage their use, which may result in positive effects on the health of the users concerned. At the entry level of the market, the quality of the French and Belgian baskets is equivalent and represents mid-range aids from five years ago. The quality of the Swedish public basket is lower than that of the private French and Belgian baskets but higher than that of the English public basket.

For high-range hearing aids, the funding depends on the level of coverage provided by the complementary health insurance schemes in France

In France, the prices of hearing aids outside the « 100% Santé Audiologie » basket are still unregulated. In the free basket, which is selected by 60% of the French users (DREES, 2024), the funding by the mandatory health insurance scheme (60% of 400 euros, i.e., 240 euros) is complemented by reimbursement via complementary health coverage — which includes at least the copayment, that is, 160 euros — which constitutes a minimum basis for coverage of 400 euros<sup>13</sup>.

<sup>&</sup>lt;sup>11</sup> There are 54 private clinics in Stockholm and 13 in Scania.

British Irish Hearing Instrument Manufacturers Association, 2023 data

<sup>&</sup>lt;sup>13</sup> i.e., 435 euros in purchasing power parity (PPP).

This basic coverage is greater than before because of the doubling of the base rate for reimbursement. Other sources of funding may be sought by disabled persons (see Inset).

For these types of hearing aids, the French situation seems to be the most favourable if one compares all the private markets (see Table 2) because even though Belgian public funding is greater (in the event of a complementary health insurance scheme solely covering the copayment), the price of the aids in Belgium is much greater14 for the entire market, resulting in higher out-of-pocket payments for Belgian users. Hence, the Starkey Muse iQ model is associated with a maximum out-of-pocket payment of 750 euros in France, 1,465 euros in Belgium, 1,670 euros in England on the private market, and between 1,800 and 2,000 euros in Sweden on the private market, depending on the region (see Table 2).

Even though vouchers are provided in Stockholm and Scania to help with the purchase of hearing aids on the private market, they barely cover 10% of the cost, which means that there are large out-of-pocket payments. The voucher or "free choice" system introduced in Sweden, which provides a cheque to buy a hearing aid on the private market, has been highly successful in both regions, which are the only regions to have implemented the scheme to date, out of the 21 regions in Sweden. Ninety-three percent of the prescriptions for hearing aids relate to "free choice" in Stockholm. This approach illustrates the limits of the traditional system of hearing aid provision – less diversified than in the private sector - which is characterised by long waiting lists (from three months to two years depending on the region). In the regions of Stockholm and Scania, these waiting lists disappeared from 2009-2010 because of the "free choice" approach. Given the limited implementation of this system and the lack of regulation, the Swedish voucher has had mixed results.

In England, the NHS does not provide mid- or high-range aids. Furthermore, in contrast with Sweden, a private system has emerged, but there is no voucher provided. Persons who purchase their aids on the private market are able to acquire sophisticated devices that cost between 2,000 and 2,200 euros for the mid- and high-range models selected in our sample, with no public coverage (see Table 2).

However, when mid- and high-range hearing aids are provided in Sweden, users must pay for a non-reimbursed consultation, which replaces the out-of-pocket payment. This almost comprehensive coverage is possible because the public authorities buy the hearing aids at very low prices in calls for tenders. The Swedish regions pay between 110 euros and 130 euros for selected models of mid-range hearing aids and between 110 euros and 150 euros for higher-range hearing aids, but these prices do not cover any adjustments and repairs carried out over a four-year period, a service automatically included in the French and Belgian prices (see Table 2). Nevertheless, the volume of models offered focuses on a small number of models, to the detriment of freedom of choice. Hence, the regulator targets standard needs to the detriment of specific needs, which raises questions about equity of access for persons who have needs that are not covered by the routinely proposed supply.

For these models (not included in the « 100% Santé » basket) that are provided freely in Sweden, the out-ofpocket payments in France, for the same models, may seem to be high when the insured person's complementary health insurance only covers the copayment. The complementary health insurance schemes can be more generous in the coverage they provide for hearing aids. Group policies provide the greatest coverage for hearing aids, but they concern only 10% of the beneficiaries over the age of 65, even though the latter are the most likely to purchase a hearing aid. Users over the age of 65 are more often covered by individual policies that provide only half the coverage available to those people on group schemes, which represents a difference in cover of approximately 800 euros (DREES, 2024).

\* \* \*

In France, the situation of the users who choose the « 100% Santé » basket has improved because their outof-pocket payments are now zero if they have a complementary health insurance scheme. In addition, the French « 100% Audiologie » basket is more diversified than the basket funded by the Swedish regions and the English public system. Indeed, the English public system only offers behind-the-ear models, whereas the « 100% Audiologie » basket provides access to all the models - both in-theear hearing aids and mini behind-theear aids. The French experts questioned considered that the aids in the « 100% Audiologie » basket are equivalent to the mid-range models that existed five years beforehand. The quality of the English public basket seems to be lower because the devices concerned are ten years behind, according to the English specialists questioned. In Sweden, the basket that matches the scope of the « 100% Santé » scheme is more diverse and of better quality than the English basket. The quality of the Belgian hearing aids reimbursed by the Belgian national public health insurance (Institut national d'Assurance maladie invalidité, INAMI) is roughly equivalent to the French basket. The common characteristic of these countries is that they make financially viable aids that enable people to engage in a two-person conversation in a quiet environment, that is, aids that are not truly suited to a social or professional situation.

While Sweden, England, and Belgium achieve funding with regard to hearing aids via national solidarity, the solidarity-based approach of the « 100% Santé » French scheme is not

<sup>&</sup>lt;sup>14</sup> There are 54 private clinics in Stockholm and 13

universal: it is based on funding by private insurance companies, which pass on the costs to the insured persons and exclude those who have no complementary health coverage. This system may increase the premiums for the individual policies of elderly persons linked to increased risk, as the premiums of these policies are based on age and the use of hearing aids increases with age. Hence, the premiums for the individual policies of persons over the age of 65 greatly increased between 2019 and 2021 (DREES, 2024). The « 100% Santé » scheme may have contributed to this increase, although it is not solely responsible.

In France, the system of funding of mid- and high-range aids, as part of the "free" basket, also seems to be better placed than the other funding models from the private circuits of all of the compared countries, including when one takes into account the scenario of minimal reimbursement in France, which is a reimbursement by the mandatory health insurance scheme of 240 euros, and the coverage of solely the copayment by the complementary health insurance coverage in the case of responsible policies. In Belgium, the high lump-sum payment does not compensate for the higher prices for the same models, which means that Belgian users have larger out-of-pocket payments. Public funding in the private market is nonexistent in England, whereas in Sweden, it is based on a voucher that covers 10% of the purchase price of the hearing aids in only two regions. When the mid- and high-range aids are made available in Sweden, the user out-of-pocket payments are very low. However, the diversity of the available models is very limited given the approach of the calls for tenders, which focuses on ordering a small number of models, and access to the

public system leads to waiting lists that are prejudicial to the users.

In France, the funding of the hearing aids not in the « 100% Santé » basket depends on the level of guarantees provided by the complementary insurance. Since the implementation of the « 100% Santé Audiologie » convergence has observed in the levels of coverage of the entry-level individual policies, which tend to be closely linked to the « 100% Santé » coverage, which leads to a reduction in the coverage provided by the mid-level policies and an increase in the coverage provided by the policies with the best coverage (DREES, 2024). These observations seem to be coherent with economic theory, which, in the context of competition between insurers in the presence of adverse selection (Rotschild and Stiglitz, 1976), predicts a segmentation of the market between the high-risk and low-risk profiles. The latter tend to avoid taking out insurance for the free basket to keep costs to a minimum, whereas the high-risk

profiles choose effective coverage but reveal their greater risk to the insurer, which takes this into account in establishing the rates.

Access to hearing aids has significantly improved owing to the reform, which has created a favourable situation in France compared with the other countries studied. After an initial phase of dynamic growth in the volume of aids, which may be seen as a form of "catching up", several issues for the future have been identified: ensuring that the notion of "free of charge" for the user does not lead to costly commercial practices for the community; dynamic management of the basket of care for the available aids without out-of-pocket payments to integrate technical developments; and ensuring that the complementary health insurance premiums of elderly persons remain financially accessible. With respect to this, a report from the Senate has proposed the idea of extending the Complementary health solidarity (CSS) in accordance with a person's age (Iacovelli, 2024).

## OR FURTHER INFORMATION

- Autorité de la concurrence (2016), Quelles pistes pour améliorer la concurrence dans le secteur des audioprothèses en France?
- Cnam (2022). « Améliorer la qualité du système de santé et maîtriser les dépenses. Propositions de l'Assurance maladie pour 2023. Rapport au ministre chargé de la Sécurité sociale et au Parlement sur l'évolution des charges et des produits de l'Assurance maladie ». Juillet.
- Cour des Comptes (2022). « La réforme du 100 % Santé. Communication à la Commission
- affaires sociales du Sénat ». Juillet.
- Drees (2023). Les dépenses de santé en 2022. Résultats des comptes de la santé.
- Drees (2024). La complémentaire santé. Acteurs, bénéficiaires, garanties. Panoramas de la Drees Santé, Edition 2024.
- lacovelli X. (2024). Complémentaires santé, mutuelles: l'impact sur le pouvoir d'achat des Français. Rapport du Sénat, 24 septembre 2024.
- Igas (2021). « Evaluation de la filière auditive ». Igas n° 2 021-046R, novembre 2021.

- KCE (2020). Remboursement des appareils et implants auditifs. Centre fédéral d'expertise des soins de santé.
- Motability and the Wheelchair Alliance (2022). "An Economic Assessment of wheelchair Provision in England". Frontier Economics.
- Pichetti S., d'Estève de Pradel A., Espagnacq M. (2024, à paraître). « Comparaison européenne et évolution dans le financement des aides techniques pour les personnes handicapées », Rapport Irdes.
- Rothschild M., Stiglitz, J. (1976). "Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information". The Quarterly Journal of Economics, 90(4), 629-649. https://doi.org/10.2307/1885326
- Socialstyrelsen (2016). "Hjälpmedel i kommuner och landsting: En nationell kartläggning av regler, avgifter, tillgång och förskrivning" (Aides dans les municipalités et les conseils de comté: une enquête nationale sur les règles, les frais, l'accès et la prescription).
- Socialstyrelsen (2021). Uppdrag statistik på hiälpmedelsområdet-slutrapport.



INSTITUT DE RECHERCHE ET DOCUMENTATION EN ÉCONOMIE DE LA SANTÉ • 21-23, rue des Ardennes 75019 Paris • Tél. : 01 53 93 43 02 • www.irdes.fr • Email : publications@irdes.fr •

Director of the publication: Denis Raynaud • Technical senior editor: Anne Evans • Associate editor: Anna Marek • Translators: David and Jonathan Michaelson (JD-Trad) • Layout compositor: Damien Le Torrec • Reviewers: Anne Penneau and Marc Perronnin • ISSN: 2498-0803.