

*Research article*

УДК: 340

DOI:10.17323/2713-2749.2024.2.80.96

---

---

# The French Telemedicine System: Challenges, Procedures and Difficulties



**Guillaume Rousset**

Jean Moulin Lyon 3 University, 1C Avenue des Frères Lumière, CS 78242 69372  
Lyon Cedex 08, France,  
guillaume.rousset@univ-lyon3.fr

---



## Abstract

In France, telemedicine has been developing rapidly for several years, in response to economic, technical and legal challenges. The aim of the article is to present the broad outlines of the system that has been put in place, from a number of angles. The first deals with the problems to which telemedicine is proposed as a response. These problems are essentially what are known as “medical deserts”. Telemedicine is presented as a tool for compensating for the absence or shortage of healthcare professionals in a given area. This system would then promote reliable access to healthcare for the population. While this is a laudable objective, a more detailed analysis casts doubt on whether this result will be achieved. The second angle of this reflection concerns the conditions and procedures for implementing telemedicine. This involves looking at the players involved in order to determine what type of person can be mobilized, in terms of both the type of healthcare professional involved and the type of patient concerned. It is also a question of determining where a telemedicine procedure should be carried out, which shows the diversity of possibilities: where can the booths be set up and, more generally, where should the patient be on this occasion? The third and final angle of this contribution deals with the question of the risks that the practice of telemedicine may generate for patients over and above the benefits that can be imagined.

---



## Keywords

France; healthcare system; access to care; medical deserts; healthcare professionals; technology.

---

---

**For citation:** Rousset G. (2024) The French Telemedicine System: Challenges, Procedures and Difficulties. *Legal Issues in the Digital Age*, vol. 5, no. 2, pp. 80–96. DOI:10.17323/2713-2749.2024.2.80.96

## Introduction

For several years now France, like many other countries, has been experiencing a boom in telemedicine [Gallois F., Raully A., 2019]; [Sauer F., 2011].<sup>1</sup> Boosted by the health crisis linked to Covid-19 [Cayol A., 2020]; [Sebai J., El Manzani Y., 2023], this practice is the focus of much attention, including that of the highest public authorities, with the President of the Republic, Emmanuel Macron, again very recently encouraging its increased development to enable doctors to benefit from more available medical time.<sup>2</sup>

However, essential it may be, it is important to define what telemedicine is at the outset, before examining the various ways in which it can be implemented. This point makes it possible to deal with the necessary conceptual delimitation, but also, and more importantly, to determine the scope of the study. The term telemedicine has been directly enshrined and defined since the law of 21 July 2009 no. 2009-879<sup>3</sup>, by article L. 6316-1 of the Public Health Code; it states that “telemedicine is a form of remote medical practice using information and communication technologies. It puts a medical professional in contact with one or more healthcare professionals, with each other or with the patient and, where appropriate, with other professionals providing care to the patient. It makes it possible to establish a diagnosis, to ensure, for a patient at risk, preventive monitoring or post-treatment monitoring, to request a specialist opinion, to prepare a therapeutic decision, to prescribe products, to prescribe or carry out services or procedures, or to monitor the patient’s condition”. It should be noted, however, that in the texts, certain synonyms for telemedicine are used, such as telehealth or telecare.

---

<sup>1</sup> Dossier La telemedicine. *Revue de droit sanitaire et social* 2020/3. Available at: <https://documentation.ehesp.fr/> (accessed: 24.05.2023)

<sup>2</sup> Macron E. Conférence de presse de M. Emmanuel Macron, président de la République, sur les priorités du nouveau gouvernement en matière d’école, d’ordre public, d’économie, de natalité, d’égalité des chances, d’écologie, de services publics et de santé. Paris, le 16 janvier 2024.

<sup>3</sup> Law no. 2009-879 of 21 July 2009 portant réforme de l’hôpital et relative aux patients, à la santé et aux territoires, JORF n° 0167 du 22 juillet 2009.

Behind the term “telemedicine”, there are, in reality, a variety of concepts: teleconsultation, in which a medical professional consults a patient remotely; tele-expertise, in which a medical professional seeks the opinion of one or more other health professionals remotely on the basis of their training or expertise; remote monitoring, in which a medical professional interprets health data relating to a patient’s follow-up remotely and makes decisions about the patient’s care; remote medical assistance, that enables a medical professional to provide remote assistance to another healthcare professional to carry out a procedure; medical regulation that enables a healthcare professional to question patients remotely in order to organize emergency medical assistance. Certain issues and problems converge or are even identical for these different components. But these convergences are not systematic, if only in the way they are treated by the media, with attention being focused much more frequently on teleconsultation than on the other elements (even if, to further confuse the issue, teleconsultation is seen referred to as telemedicine...).

Telemedicine is one aspect of e-health and telehealth, as defined by the European Commission [Babinet O., Isnard Bagnis C., 2020].<sup>4</sup> These actions are also part of the implementation of health networks and platforms, as well as digital health territories.

On the basis of these elements, two questions appear to be of primary importance, making it possible to ask, firstly, what problems and issues telemedicine is supposed to respond to, and secondly, how the system should be envisaged. These points will enable us to deal successively with the “why” and the “how”.

## **1. Telemedicine: a Response to What Problems and Issues?**

Traditionally, telemedicine has been presented as a response to what are known in France as “medical deserts”. This notion is more of a political slogan than a legal one, so it is essential to clarify it.

### **1.1. An Appropriate Response to a Misleading Concept?**

Medical deserts are areas where there are not enough healthcare professionals to meet the health needs of the resident population. The idea

---

<sup>4</sup> Dossier E-santé et nouvelles technologies. Les Tribunes de la santé 2010/4 (n° 29). Available at: <https://documentation.ehesp.fr/> (accessed: 16.10.2022)

is simple to grasp, but the expression used poses a problem. First of all, in terms of form, we need to look at the two terms that make up the expression, because both are problematic, as we began to write in health.

On the one hand, the word ‘desert’ conjures up an idea of aridity, referring to elements that are lacking in considerable numbers, which can be misunderstood in the case we are interested in. In this case, the only aridity that exists is in terms of the density of healthcare professionals, without there necessarily also being demographic, social or economic aridity. To put it another way, the expression “medical desert” conjures up the image of the small country village where there is nothing left: after the school, post office and bakery close, the doctor’s surgery closes too. Of course, this is part of the reality [Battesti Ch., Delhomme I., 2023], but medical deserts should not be reduced to this, since they also affect economically or socially dense areas that are rich in population. One example is peri-urban areas where there is a high population density, but a potentially impoverished economic fabric and, in our case, an insufficient presence of healthcare professionals [Schmidt N., 2017].<sup>5</sup> Beyond this, it is quite possible to have areas that are very dense socially and economically, but which are poor in healthcare professionals. In urban areas in general, and even in town centres, it is sometimes very difficult to find a doctor in certain specialties, particularly an ophthalmologist, or a doctor with affordable fees (i.e. in sector 1), without the area being arid demographically, socially and economically [Fichaux J., 2022]; [Schmidt N., 2017].<sup>6</sup>

In view of all these factors, telemedicine must be a response that can be applied throughout the country, i.e. in all areas that can be described as medical deserts. However, it may be difficult to install telemedicine sys-

---

<sup>5</sup> Some passages are worth quoting: “After rural areas and big cities, the third type of medical desert is the poor suburbs. There are 40 times more specialists per 10,000 inhabitants in the 7th arrondissement of Paris than in La Courneuve, where there are only 1.6 per 10,000 inhabitants. You might say that, after all, the people of La Courneuve only have to take the RER to get to the 7th arrondissement. But there are many reasons why they can’t, not least the fact that most of the doctors in the 7th arrondissement charge higher fees than their peers, which limits access to the most disadvantaged”.

<sup>6</sup> Once again, some passages are worth reproducing here: “Medical deserts can also be created where we least expect them. This is particularly the case in very large cities like Paris. Because young doctors find it hard to set up practice in the city, to find a practice of sufficient size at affordable prices, a medical desert is created, which is quite paradoxical given France’s medical history. This means that when people move to a new town, they have difficulty finding a referral doctor. They have to wait until they have their first child to get back into the medical monitoring circuit, with a gynecologist who will refer them to a colleague, and so on. But for the many young people who move to Paris, particularly to work, it remains more complicated”.

tems in rural areas that are also sometimes digital deserts, i.e. areas where internet access is not good enough or at least not sufficient to enable this technological activity [Durat (de) G., 2017]. If it is the case, it means that telemedicine is not an appropriate response for this type of territory.

Secondly, the use of the word “medical” in conjunction with the term “desert” suggests that only the medical profession is affected, whether in the strict sense (doctors) or in the broad sense (doctors, midwives, dental surgeons). In reality, it is all healthcare professions that can be affected by these inequalities, whether medical, paramedical or pharmaceutical. The most emblematic example, beyond that of doctors, but still within the medical professions, is that of dental surgeons, since the latest negotiations on agreements between the Health insurance and the unions in this profession bear witness to a real awareness of the seriousness of these inequalities and the need to introduce corrective tools, such as selective agreements [Duguet S., 2023]; [Manus J.-M., 2022]. As far as the paramedical professions are concerned, the case of physiotherapists is relevant, this profession being newly subject to a stronger form of regulation in response to these issues of professional distribution.<sup>7</sup> Even pharmacists are beginning to be affected, despite the fact that historically this profession has had the fewest demographic and distribution problems [Nayrac C., 2023]. Nor should we forget, beyond the false anecdotal appearance, the animal health professional who is the veterinarian [Manus J.-M., 2020]; [Chabas C., 2019]. Beyond these professions, of course, the medical profession is the focus of much attention, which is logical since the doctor is the prescriber and his presence (or absence) has major consequences for the activity of other professionals (why would a private nurse set up in an area with no doctors?). However, just because this profession is important in this respect does not mean that it should overshadow other professions. For all these reasons, it is reasonable to argue that the expression “medical desert” is more media hype than science, more a slogan (albeit a clear one) than an academic concept. Author of the article prefers the expression “territorial inequalities in health”, which, although not enshrined in legislation, at least has the merit of being more precise, constituting an additional term alongside social inequalities and economic inequalities in health.

---

<sup>7</sup> Arrêté 21 August 2023 portant approbation de l’avenant n° 7 à la convention nationale organisant les rapports entre les masseurs-kinésithérapeutes libéraux et l’assurance maladie signée le 3 avril 2007, JORF n° 0196 du 25 août 2023, texte n° 28.

Whatever expression is used, it is an important indication that the French system of telemedicine, which will be described later, poses a problem because it focuses solely on the medical professions, i.e. doctors, midwives and dental surgeons. By excluding all the paramedical professions such as nurses and physiotherapists, telemedicine can only solve part of the problem in question.

## **1.2. An Appropriate Response to an Uncertain Concept?**

Secondly, what about the substance of medical desert? It certainly does not correspond to a legal concept. Although it features prominently in the various legal texts in the form of measures designed to combat it, the term is not used explicitly by the legislative or regulatory authorities. Based on the analysis of certain authors, the medical desert could be a false concept, a false problem or, at the very least, a problem whose scale is decreasing.

Firstly, a false notion. This is how one author somewhat provocatively and therefore attractively entitled his article, basing his analysis essentially on two arguments. The first relates to the difficulty of determining with certainty the number of healthcare professionals, in this case doctors, as both sources and results vary, which has an effect on the assessment of their distribution across the country and, even more so, on their inadequacy in terms of the extent of the population's healthcare needs. As the author puts it "[...] it is therefore not possible at this time to make real estimates of the "time available to doctors by specialty", which places a heavy burden on estimates of the real capacity to meet demand" [Carlioz P., 2016: 63]. The second argument is based on the recent nature of the phenomenon. It is stated that it was not until 1992 that the first questions appeared about geographical inequalities in health. On the contrary, it was the totally opposite idea of a "medical plethora" that was vigorously denounced for a much longer period of time, i.e. many decades, from 1900 until the end of the 1980s. This suggests that, historically speaking, medical deserts are a minor phenomenon because they are completely new.

Then, a false problem. For another author, this would be the issue of medical deserts, a concept which he says no one really knows what it covers [Vallancien G., 2012]. Rather than using our own words to describe the analysis, we think it more appropriate to quote certain passages, which deserve to be mentioned especially for their clarity, whatever one may think of them: "So we panic, we alert and we complain, but aren't the French used to ringing the general practitioner's bell for a yes or a no? The same people who complain about not having the ambulance service on their doorstep won't

hesitate to drive 25 kilometers to *Ikea* at the weekend! A crazy society that no longer knows what its priorities are. Not seeing the doctor's plaque hanging on the village house is seen as a loss and a risk! And yet there's no evidence that living far from a doctor is dangerous, as the islanders themselves are well aware, as they never make the headlines. So, do we need a doctor in every one of France's 36,000 communes to ensure quality prevention and care? Do we have to satisfy every mayor, every member of parliament and every senator who is up for re-election? When will we dare to carry out a fundamental review of the organization of our country's health cover, going beyond hackneyed recipes, ineffective incentives and ill-conceived coercion? Whatever its relevance, this analysis is worth considering for several reasons. Firstly, because it is completely different from the usual approach to the subject, which is interesting in principle. Secondly, and more importantly, because it allows us to reflect on the degree of access to healthcare that the population should have, but also on the type of criteria to be applied: should we take a spatial approach, asking ourselves how far a citizen should be from a healthcare professional? Or a temporal approach that asks how far away a citizen should be from the first healthcare professional? Or is it a combination of both approaches? These issues raise the question of the criteria for determining medical deserts, i.e. the method to be used, a subject we will address later.

Finally, a shrinking problem. Unlike the previous two, this idea is not the brainchild of an author, but of an institution, which is more surprising and, in fact, even more interesting. This institution is the Direction de la recherche, des études, de l'évaluation et des statistiques (DREES), which is the ministerial statistical service responsible for health and social affairs, under the supervision of several ministries, including the Ministry of Health. This relativisation emerges from several of the studies carried out. The first of these dates from 2010 and provides some very clear information: "According to the Gini index for the population, pharmacies and private GPs are very well distributed across mainland France. They are respectively the 1<sup>er</sup> and 3<sup>e</sup> facilities and services for which there is the best match with the population, out of the 137 in the database. Their level of relevance to the population is close to that observed for hairdressing salons (2<sup>e</sup> facilities) or bakeries (4<sup>e</sup> facilities). The catchment areas or 'cantons-ou-villes' (for large conurbations) are relatively equal in terms of the density of pharmacies and private GPs".<sup>8</sup> The comparison with hairdressers or bakers is interesting,

---

<sup>8</sup> DREES. Comptes nationaux de la santé 2009. Ministère de l'emploi, du travail et de la santé. Coll. Etudes et statistiques, 2010, p. 42. Available at: <https://sante.gouv.fr> (accessed: 12.05.2022)

and echoes the comments made earlier by Guy Vallancien. But is this an observation specific to these two healthcare professions, and does it not reveal a general trend for all professions? Surprisingly, the rest of the DREES report is broadly in line with the first quotes: “The other healthcare professionals generally referred to as primary care (masseurs, physiotherapists, dental surgeons and nurses) are ranked, according to the Gini index, between 14<sup>e</sup> and 24<sup>e</sup> of the facilities and services best suited to the population. In this sense, they are similar to local services like banks, supermarkets or restaurants. The direct-access specialist doctors studied (in ophthalmology, pediatrics and gynecology) rank between 56<sup>e</sup> and 66<sup>e</sup> among the facilities best suited to the population, which is comparable to secondary schools or gendarmeries”.<sup>9</sup> The same report draws a clear conclusion: “this phenomenon is rather limited: either there are few medical deserts, or they are of limited size”.<sup>10</sup> The second work by DREES is based on a study published shortly afterwards, in 2012, in which the institution states that “inequalities in the geographical distribution of doctors have decreased significantly over the last 20 years, both between regions and between departments within the same region”,<sup>11</sup> which is quite clear from the maps presented.<sup>12</sup> Admittedly, this idea does not appear in later editions of the DREES work, and honesty obliges us to point out that several other documents drawn up by DREES, notably at a later date, do not go in the same direction [Polton D., 2021]; [Lapinte A., Legendre B., 2021]. Nonetheless, it is particularly interesting to read, from a public pen, elements that tend to qualify the conventional discourse on the reality and scale of medical deserts. Is this the sign of a divergent analysis or of a cyclical trend that does not reflect a general trend? This would need to be refined, but it is nonetheless instructive. This work is also taken up in an article written by Olivier Véran, a doctor who was a Member of Parliament at the time of writing, but has since become... the Minister for Health, who clearly asks: “Do medical deserts exist? [Véran O., 2013], concluding that “the term ‘sandbox’ would seem to be more appropriate than ‘medical desert’, given their size and organization, which is closer to a leopard print than an extensive desert...”.

---

<sup>9</sup> Ibid.

<sup>10</sup> DREES. Comptes nationaux de la santé 2009, Ministère de l’emploi, du travail et de la santé. Coll. Etudes et statistiques, 2010, p. 42. Available at: <https://sante.gouv.fr> (accessed: 12.05.2022)

<sup>11</sup> DREES. Les médecins au 1er janvier 2012. Etudes et Résultats n° 796, mars 2012. Available at: <https://sante.gouv.fr> (accessed: 28.07.2021)

<sup>12</sup> Ibid.

It is therefore possible that the public authorities are promoting a solution in response to a problem that does not quite exist, or at least not in the way we think about. Be that as it may, this is a politically appropriate and low-risk approach, since it makes it possible to achieve an objective (developing access to care) without generating hostility from the professionals who provide this care, since freedom of establishment is respected in this case. It is also interesting to note that this tool is sometimes presented as an (almost) magical solution, as the words of the President of the French-speaking Academy of Telemedicine and e-Health illustrate: “As a matter of urgency, our duty is to launch a CALL for General Mobilization (a “Marshall” Plan) for a great cause by decreeing that any citizen, even in the most isolated places, will have an answer, in less than 20 minutes, to his anguished question “But what’s wrong with me?” with care worthy of the name. With the deployment of telemedicine, by combining our medical excellence, our unrivalled capacity for innovation and a strong political will, France can achieve its ambitions. The challenge of equitable access to healthcare is now within reach. It’s come to turn action into achievements for the greater good of all. Today and for tomorrow’s future generations. We can do it, and we owe it to them! [Alajouanine G., 2022].

Beyond this idealistic or even messianic discourse, it is important to realize that telemedicine can be used in a number of ways to respond to medical deserts [Babinet O., Isnard Bagnis C., 2021: 147]. In fact, this technique addresses the two main difficulties encountered in terms of territorial inequalities, which are spatial and temporal. The spatial difficulty means that a medical desert is characterized by an insufficient supply of healthcare professionals in a given area, who then move to other areas [Durupt M., 2016]. In this case, there are no professionals in the patient’s place of residence. The temporal difficulty is different, since here the healthcare professional is well established but is causing patients to take too long to make an appointment because of an imbalance between availability and the number of patients. The problem is therefore temporal rather than geographical, since the healthcare professional is well established in the area, but appointment times are excessive. Telemedicine is an interesting response to these difficulties, since it has the force of abolishing the geographical parameter, since the professional can be consulted wherever he or she is based or wherever the patient lives. So, it doesn’t matter if a patient doesn’t have any healthcare professionals in the area in which they live, they can access care via telemedicine whatever happens. Telemedicine can also solve the problem of time, since various financial incentives enable healthcare professionals to offer a range of services in addition to those available in the traditional way.

## **2. Telemedicine: What Methods, What Risks?**

If the French telemedicine system is to be analyzed as effectively as possible, it is essential to ask two questions: how should the system be set up? and what risks might the use of telemedicine generate?

### **2.1. Methods of Implementation**

There are two important dimensions to these procedures, that are not exhaustive [Bourdairé-Mignot C., 2011]. The first concerns the players involved, in order to determine what type of person may be involved, corresponding to the “who”. It covers several dimensions, relating successively to the type of healthcare professional involved and the type of patient concerned.

As far as the type of healthcare professional is concerned, there is technically a wide variety of possibilities, potentially involving both medical professionals (doctors, midwives, dental surgeons) and paramedical professionals (nurses, physiotherapists, speech therapists, chiropodists, etc.) or pharmaceutical professionals, especially dispensing pharmacists. Of course, the relevance of telemedicine varies according to the type of procedure carried out and therefore the type of professional involved. For example, a lot of technical procedures cannot be carried out without the physical presence of the patient and the technical mobilization of the body and the organ in question. However, the French authorities have taken a restrictive approach, restricting the scope of teleconsultation to the medical professions. It means, a contrario, that the paramedical professions, as well as the pharmaceutical professions, are excluded from the scheme and that no telemedicine act can be performed for them. Should this be seen as an exclusion justified by the technical factors explained above, or as a political choice aimed at not developing telemedicine too extensively right away, given the reluctance that this technique may possibly arouse? Everyone will answer according to analytical grid.

In addition, for healthcare professionals authorized to carry out their activities using telemedicine, it is important to ask whether this practice method can be used for all medical procedures or just some. Can or should certain procedures be excluded? Taken to the extreme, the case of certain countries such as Australia shows that telemedicine could be envisaged (but ultimately not adopted) in the context of medical assistance in dying, which

is legal in that country.<sup>13</sup> On a related but distinct subject, the question has also arisen as to whether certain prescriptions can be limited when they are carried out as part of a consultation on TV. Two cases were studied. The first, which was finally adopted as part of a bill, would have enabled the Minister for Health to limit or prohibit the prescription of certain drugs by telemedicine in the event of a supply shortage. This approach was censured by the French Constitutional Council, that ruled that these provisions violated the principle of equality before the law in that they could have had the effect of “depriving a patient of the possibility of being prescribed a medicine necessary for his or her state of health on the sole grounds that he or she has consulted a doctor remotely” [Cordier C., 2023]. The second case, which has been retained, limits the prescription of work stoppages to a maximum of three days (initial stoppages and any extensions) when this takes place via teleconsultation, essentially if the prescriber is not the attending physician [Law no. 2023-1250].<sup>14</sup> This is justified by the fact that if a patient requires a longer period of leave from work or its renewal, an in-depth face-to-face examination is necessary to ensure that the correct diagnosis is made.

The second question relating to the “who” concerns the type of patient who can benefit from teleconsultation. Should this dematerialized procedure be envisaged for all types of patients, in other words, for all types of consultation? Or should we restrict this type of practice to certain health needs, certain consultations and therefore certain patients? The French public authorities have opted to open the door to all types of consultation as long as they fall within the remit of the medical professions mentioned above, i.e. doctors, midwives and dental surgeons.

Once these two issues have been addressed, another fundamental question concerns the relationship between these two players through the way in which telemedicine is carried out. Does a consultation on TV, for example, involve a consultation carried out solely remotely, with no physical contact and no professional presence with the patient? Or should a healthcare professional act as a technical intermediary between the patient and the healthcare professional? This intermediary professional would be physically close to the patient, for example to direct the camera, adjust the technical procedures and, more generally, ensure that the patient gets to grips with the

---

<sup>13</sup> Australie: l’utilisation de la téléconsultation dans le cadre de l’«aide volontaire à mourir» est illégale. *Généthique*, 30 novembre 2023.

<sup>14</sup> Law no. 2023-1250 of 26 December 2023 de financement de la sécurité sociale pour 2024, JORF n° 0299 du 27 décembre 2023, texte n° 1.

gondola for an effective consultation. The answer to this question is a major one, because if we accept the presence of a professional as an intermediary, it means that telemedicine is not totally disembodied, that it is not just an exchange at a distance. In this case, telemedicine is another way of being in contact with a healthcare professional, without excluding his or her physical presence, at least in a general and absolute sense. In France, the model adopted is not to choose between these possibilities, but rather to retain both. It is therefore possible to have the consultation both with the presence of an intermediary healthcare professional and without any presence of this type, the meeting being totally virtual between the professional and the patient.

The other important dimension is no longer a question of “who” but of “where”. Determining where a telemedicine procedure is to be carried out shows the diversity of possibilities: where can the booths be set up and, more generally, where should the patient be for the procedure? This could be at the patient’s home, a potentially pleasant and comfortable situation for the patient, since he or she does not have to travel, solving the problems of transport and time available. However, this does raise the fundamental question of the quality of the patient’s computer equipment and Internet connection, as well as the conditions in which the consultation takes place, for example in terms of the brightness required for the professional to capture images and interpret elements correctly, particularly in a dermatology consultation.

The second possibility corresponds to a place of care. Since there are no doctors’ surgeries, TV consultation could, as a matter of principle, be carried out, for example, in a health establishment, provided that it is located in the patient’s place of residence. The idea of a paramedical practice seems unreasonable, since it is difficult to imagine the presence of a paramedical practice in an area where there is no paramedical practice (why would a nurse, for example, set up practice in an area where there is no doctor, i.e. where there is no prescriber for the procedures she has to carry out?) The only credible location under these conditions is the dispensing pharmacy, if there are any in this area, which, as we have said, is by its very nature subject to territorial inequalities in health.

The third possibility is not a place of care, but a place of public service in the sense, for example, of an administration [Renaudie O., 2013]. This possibility is not frequently mentioned, but it seems an interesting one, given that the territorial coverage of public services, while not perfect, is not yet in the majority of cases deficient. In this category, the avenue most frequently put forward concerns the mobilization of rail and/or bus stations. While not

an administration in themselves, they are a form of public service that could be in keeping with the spirit of access to healthcare in under-served areas. The geographical distribution of railway stations suggests to the promoters of these solutions that they would be a suitable location for providing the population with good access to telemedicine. However, it should not be forgotten that there are some areas of mainland France, albeit in a minority, that have no railway stations at all, as shown by the case of the Ardèche department (it does have bus stations).

The last avenue is the one that raises the most questions, with the case of retail outlets. Several projects have been envisaged based on the installation of telemedicine booths in supermarkets, especially the Monoprix shop. This would mean the coexistence of places dedicated to mass consumption, operated by profit-making companies on the one hand, and, on the other, gondolas whose purpose is to provide access to care, prevention and treatment, through procedures funded by the social security system with a view to public health. Everyone will judge the relevance of this coexistence, but it is certain that the French medical association (*Ordre National des Médecins*) saw it as highly problematic and contrary to various provisions of the code of medical ethics, favoring a form of commercialization and consumerization of healthcare, an analysis we share.

Whatever answer is chosen, the question will then arise as to the procedures to be followed, particularly in terms of the players involved, referring back to the question already addressed of whether or not it is necessary to have an intermediary healthcare professional who, in the telecab, will assist the patient so that the teleconsultation can take place under the best possible conditions. In France, everything is still open to discussion, but a major public health agency, the *Haute Autorité de Santé*, has established four guidelines: to ensure the quality, continuity and safety of care; to promote access to care, by ordering care that complements face-to-face care; to preserve face-to-face care; and to avoid any commercial abuses. On this basis, the agency makes three recommendations in this respect: the location of telemedicine equipment must guarantee accessibility, quality and safety of care; the operator must ensure that the equipment functions properly; and a person responsible for the telehealth equipment must be present on site.

## **2.2. The Risks Involved**

First of all, it is necessary to consider the risks that telemedicine-based care may generate for patients, over and above the benefits in terms of ac-

cess to care that we have imagined earlier in this contribution. To help us think about this, it is useful to refer to a study carried out by researchers at several British universities (Oxford and Plymouth, with the support of the Nuffield Trust), which indicates that teleconsultations can expose patients to potentially fatal errors or delays in diagnosis [Payne R., Clarke A., Swann N. et al., 2023]. Let's be clear about the work we are doing: we are obviously not saying that telemedicine creates risks and that conventional care does not generate any, since, of course, any form of care involves various dangers. On the contrary, the aim is to demonstrate that telemedicine creates specific or increased risks. This is the case with the elderly and younger people who, because of their greater communication difficulties, are most exposed to a risk linked to an inadequate patient/doctor relationship and inappropriate information gathering.

In France, this theme is clearly important enough to become the subject of a question put by a member of parliament to the Minister of Health.<sup>15</sup> The comments are enlightening and deserve to be reported: “Insurers have in fact increased their civil liability premiums by explicitly mentioning the increase in claims caused by teleconsultation. According to studies carried out by the insurance industry, remote appointments present an increased risk of the practitioner being called into question, necessitating the intervention of the insurer. The most common grounds for dispute include underestimation the seriousness of the patient's state of health from a distance and prescribing inappropriate treatment. While the aim was to improve the supply of healthcare, the increase in premiums risks weakening the professionals who engage in teleconsultations by increasing their costs. Has your ministry identified this problem and, if so, are any measures planned to prevent teleconsultation from affecting doctors' insurance premiums?”. The response from then Minister for Health, Agnès Firmin Le Bodo, was reassuring, but the question remains.

This is also what emerges from a recent study carried out in France by Agence de presse médicale, which one commentator analyses severely: “A survey carried out by the health insurance scheme in the Ile-de-France region reveals significant differences between the practices of GPs in private practices and those of doctors working for platforms dedicated to teleconsultation”, showing “disproportionate prescriptions, with a large number of

---

<sup>15</sup> Lemoine P. Question n° 420 relative à l'assurance des professionnels de santé. XVIe législature, session ordinaire de 2023–2024, première séance du mardi 28 novembre 2023.

consultations billed illegally with night or Sunday surcharges”, but also that “doctors, unable to carry out a proper clinical examination, play it safe and prescribe 2.5 times more antibiotics than GPs in their practices”. What’s more, “almost 20% of consultations are followed by a new consultation during the week, often in person” [Prudhomme C., 2023].

## Conclusion

Of course, telemedicine should not be reduced to a source of risks [Vioujas V., 2015] since, according to another study, telemedicine can be virtuous by enabling the development of an activity that is more respectful of the environment. In fact, compared with activities whose traditional organization contributes significantly to energy consumption and waste production, telemedicine reduces the need for patients to travel for consultations that have significant positive effects [Ravindrane R., Patel J., 2022]. However, there is a great deal at stake here, particularly in terms of the responsibility of both healthcare professionals and public authorities, a subject that would justify an article in its own right [Grynbaum L., 2011]; [Corgas-Bernard, 2014]; [Paley-Vincent C., Gombault N., 2011].



## References

1. Alajouanine G. (2022) Lettre ouverte au Président de la République pour un Grand Chantier «Zéro Déserts Médicaux!» Académie francophone de télé-médecine et de e-santé, 24 janvier.
2. Babinet O., Isnard Bagnis C. (2020) La e-santé en question(s). Rennes: Presses de l’EHESP, 144 p.
3. Babinet O., Isnard Bagnis C. (2021) Les déserts médicaux en question(s). Rennes: Presses de l’EHESP, p. 147.
4. Battesti Ch., Delhomme I. (2023) L’accès aux soins se dégrade dans les zones rurales. *Insee Flash Pays de la Loire*, n° 137, 14 mars.
5. Bourdaire-Mignot C. (2011) Téléconsultation: quelles exigences? Quelles pratiques? *Revue de droit sanitaire et social*, p. 1003.
6. Carlioz P. (2016) La fausse notion de ‘‘désert médical’. *Review Generale de Droit Medical*, n° 58, mars 2, p. 61.
7. Cayol A. (2020) L’adaptation du système de santé français face à la pandémie de Covid-19 par le développement des usages de la télé-médecine. *Droit, Santé et Société*, no.1, p. 25.
8. Chabas Ch. (2019) Les vétérinaires ruraux, espèce en voie de raréfaction. *Le Monde*, 7 mars.

9. Cordier C. (2023) Les sages censurent une dizaine d'articles du PLFSS mais valident les objectifs de dépense. *Hospimedia*, 22 décembre.
10. Corgas-Bernard C. (2014) Responsabilité civile médicale et nouvelles pratiques numériques: l'exemple de la télémédecine. *Les Petites affiches*, n° 162-163-164, p. 27.
11. Duguet S. Déserts médicaux : la régulation de l'installation des dentistes inquiète les médecins. *Public Sénat*, 25 juillet 2023.
12. Durat (de) G. (2017) Déserts médicaux et numériques: la double peine. *Les Echos*, 23 août.
13. Durupt M., Bouchy O. et al. (2016) La télémédecine en zones rurales : représentations et expériences de médecins généralistes. *Santé Publique*, no. 4, p. 487.
14. Fichaux J. (2022) Les déserts médicaux s'étendent de plus en plus en milieu urbain. *Club santé social*, 26 juillet.
15. Gallois F., Raully A. (2019) Le développement de la télémédecine au prisme des référentiels de politiques publiques. Une cartographie de trois nations européennes. *Politiques & management public*, no. 3, p. 275.
16. Grynbaum L. (2011) La responsabilité des acteurs de la télémédecine. *Revue de droit sanitaire et social*, p. 996.
17. Lapinte A., Legendre B. (2021) Renoncement aux soins: la faible densité médicale est un facteur aggravant pour les personnes pauvres. *Études et résultats*, n° 1200.
18. Manus J.-M. (2020) Après les déserts médicaux, les déserts vétérinaires?. *Revue Francophone des Laboratoires*, n° 520, mars, p. 19.
19. Manus J.-M. (2022) Les déserts médicaux concernent aussi les soins dentaires. *Revue Francophone des Laboratoires*, n° 539, fév., p. 17.
20. Marié R. (2024) Du renforcement de la prévention à l'amélioration de l'accès aux soins. *Droit social*, n° 3, p. 230.
21. Nayrac C. (2023) L'ordre des pharmaciens pointe une démographie fragile et se pose en force de proposition. *Hospimedia*, 11 juillet.
22. Paley-Vincent C., Gombault N. (2011) Télémédecine, réglementation et responsabilité. *Revue Responsabilité*, déc., n° 44, p. 10.
23. Payne R., Clarke A., Swann N. et al. (2023) Patient safety in remote primary care encounters: multimethod qualitative study combining Safety I and Safety II analysis. *British Medical Journal of Quality & Safety*, 28 November. DOI: doi: 10.1136/bmjqs-2023-016674.
24. Polton D., Chaput H., Portela M. (2021) Remédier aux pénuries de médecins dans certaines zones géographiques — Les leçons de la littérature internationale. *Les dossiers de la DREES*, n° 89.
25. Prudhomme C. (2023) Téléconsultations: dire stop aux cabines de télémédecine. *L'Humanité*, 18 décembre.
26. Ravindrane R., Patel J. (2022) The environmental impacts of telemedicine in place of face-to-face patient care: a systematic review. *Journal of Medical Internet Research*, vol. 9, no. 1, pp. 28-33.

27. Renaudie O. (2013) Télémedecine et téléservice public. *Revue française d'administration publique*, no. 2, p. 381.
  28. Sauer F. (2011) Europe et télésanté. *Revue de droit sanitaire et social*, p. 1029.
  29. Schmidt N. (2017) Entretien — Les déserts médicaux se créent aussi là où on ne les attend pas. Entretien avec Emmanuel Vigneron, géographe. *Observatoire des inégalités*, 18 août.
  30. Sebai J., El Manzani Y. (2023) Adoption de la télémédecine par les professionnels de santé publics français pendant la pandémie de COVID-19. *Management and Prospective*, no. 2, p. 13.
  31. Vallancien G. (2012) Il faut en finir avec le faux problème des déserts médicaux. *Les Echos*, 1<sup>er</sup> et 2 juin.
  32. Véran O. (2013) Des bacs à sable aux déserts médicaux : construction sociale d'un problème public. *Les Tribunes de la santé*, no. 2, n° 39, p. 77, 79.
  33. Vioujas V. (2015) La télémédecine: entre expérimentations réussies et généralisation au ralenti. *Revue de droit sanitaire et social*, p. 681.
- 

**Information about the author:**

G. Rousset — Senior Lecturer, Director, Centre for Research in Law and Management of Health Services.

The article was submitted to editorial office 08.07.2024; approved after reviewing 11.07.2024; accepted for publication 11.07.2024.