



# Master of Public Health

Master de Santé Publique

## Deprescribing in France: a multi-stakeholder survey to inform public debate

---

**Dr. Sergio OLIVEIRA FORMOSO, PhD**

MPH2 HPM 2024-2025

**Location of the practicum:**

EHESP-CNRS, SciencesPo-LIEPP - Paris, France

**Professional advisor:**

Dr. Odessa PETIT-DIT-DARIEL, PhD – EHESP-CNRS

**Academic advisor:**

Dr. Matthias BRUNN, PhD - SciencesPo-LIEPP

# Acknowledgements

Reflecting on these past years, I am convinced that I have made the right decision to take a year to pursue a Master's in Public Health. Some said that I was lost and I needed to stop and focus on working, instead of continuing my education a step further. But the more I reflect on this, the more I am convinced that this is the right path to follow in my life sciences and innovation career. I think I have been able to combine what I am passionate about: science, health and innovation, with policy, management, and applied politics. I now feel prepared to bridge the gap by collaborating effectively with others, getting them onboard with projects, and advancing together to reach shared goals so that we can make an impact and improve people's health and well-being.

Change and crises are unpredictable in our time and field, and I have more than ever learnt that we must be flexible and determined as public health professionals to put a shared vision on people's benefit back in the centre of the agenda.

This year was an opportunity to explore and discover, to expand my understanding, to get mad with the world again, to calm down and discuss, to reach consensus, to learn from others' experiences. This was a great year.

I feel grateful to have worked with Dr. Matthias Brunn and Dr. Odessa Petit-dit-Dariel in this deeply interesting project. It required guidance and patience, and an overall explanation of some topics more than once. But we did it, and I could complete this study and explore a small bit of the French system of care deeply.

I obviously cannot finish without thanking my family for being so understanding and supportive throughout this journey, especially my husband, with whom I spent endless nights and days debating and ideating plans and ideas.

<b>Table of contents</b>	pp
<b>Acknowledgements</b> .....	2
<b>Table of contents</b> .....	3
<b>List of figures</b> .....	4
<b>List of tables</b> .....	4
<b>Abstract</b> .....	5
<b>Résumé</b> .....	6
<b>1. Introduction</b> .....	7
1.1 Contextualisation of the problem.....	7
1.1.1. Socioeconomic context.....	7
1.1.2. State of health and medication use.....	8
1.1.3. Sustainability and the toll of medicines on the environment.....	9
1.2. Political context and policy framework for deprescribing in France.....	10
1.2.1. Healthcare system governance.....	10
1.2.2. Government priorities in health.....	10
1.2.3. Groups of interest and priorities.....	11
1.3. Attitudes and perceptions around deprescribing.....	11
1.4. Barriers and facilitators: spotting and opportunity.....	13
1.4.1. Knowledge, information, and training.....	13
1.4.2. Change factors: resistance, communication and collaboration.....	13
1.4.3. Resources.....	15
1.4.4. Other barriers.....	16
1.5. Problem statement, aims, and objectives.....	16
1.5.1. Problem statement.....	16
1.5.2. Aims and objectives.....	17
<b>2. Methodology</b> .....	17
2.1. Study design, setting and sampling.....	17
2.2. Questionnaire development and structure.....	18
2.3. Data collection and analysis.....	19
2.4. Ethics.....	20
<b>3. Results and discussion</b> .....	20
3.1. Response analysis.....	20
3.2. General knowledge and training.....	21
3.3. Change factors: resistance, communication, and collaboration.....	23
3.4. Resources: tools, data, and time.....	25
3.5. Policies and support.....	27
3.6. Opportunities.....	28
3.7. Limitations of this work.....	32
<b>4. Conclusions and recommendations</b> .....	32
<b>Appendices</b> .....	34
<b>References</b> .....	50

# List of figures

**Figure 1:** Response rate and answer variability according to the different categories for each key stakeholder group..... 21

**Figure 2:** Share of responses of key stakeholder groups on the opportunities of deprescribing in terms of improving quality of life, its positive economic impact, and its contribution to a clean, sustainable future..... 30

# List of tables

**Table 1:** Share of responses of key stakeholder groups on the opportunities of deprescribing in terms of improving quality of life, its positive economic impact, and its contribution to a clean, sustainable future..... 22

**Table 2:** List of organisations (national, departmental and local) initially researched..... 34

**Table 3:** List of publications used to inform the design of the survey ..... 35

**Table 3:** Consensus analysis using the Policy Delphi Methodology..... 47

**Table 4:** Granular mapping and stakeholders’ consensus..... 49

# Abstract

**Background:** In France, the ageing population and rising multimorbidity led to polypharmacy and inappropriate medication use. This poses significant health, economic, and environmental challenges for the country. Deprescribing is an appropriate solution to tackle this issue, but France lacks a national deprescribing framework and faces a series of implementation barriers shared across stakeholders.

**Objective:** This study explored stakeholder attitudes, barriers, and facilitators towards deprescribing in France, to understand where alignment is possible to move deprescribing forward. It also assessed stakeholders' perceptions around the clinical, economic, and environmental impacts of deprescribing, to inform novel policy development and implementation.

**Methods:** An exploratory survey gathered perspectives from key stakeholders (healthcare professionals, patients, academia, policymakers, and the pharmaceutical industry). A 32% response rate was obtained. Consensus and agreement were analysed using an adapted Policy Delphi method.

**Results:** Significant gaps exist around knowledge and training. Barriers for deprescribing are shared between countries and healthcare systems. Stakeholders highlighted patient resistance, communication and interprofessional/intersectoral collaboration, low availability and access to resources (time, human, information), misaligned policy, and outdated regulatory frameworks as important barriers. Regardless, deprescribing is seen across stakeholders as an opportunity to improve patient safety and quality of life, as well as a safe practice with a positive impact in addressing the economic burden of the healthcare system and improving the environmental sustainability of the healthcare system.

**Conclusions:** This study provides critical evidence for designing stakeholder-responsive deprescribing policies in France. While stakeholders recognise the multifaceted benefits of deprescribing, implementation barriers and multistakeholder resistance limit innovation in this area and its widespread use as routine clinical practice.

**Keywords:** deprescribing; medication use; inappropriate medication; France; public health; stakeholder alignment; health policy.

# Résumé

**Contexte** : En France, le vieillissement de la population et la multimorbidité ont entraîné une polypharmacie et des usages inappropriés de médicaments. Cette situation pose des défis majeurs sur les plans sanitaire, économique et environnemental. La déprescription constitue une solution pertinente pour répondre à ce problème, mais la France ne dispose pas d'un cadre national dédié et se heurte à une série d'obstacles à sa mise en œuvre, partagés par l'ensemble des parties prenantes.

**Objectif** : Cette étude a exploré les attitudes, les freins et les facteurs facilitateurs relatifs à la déprescription en France, afin d'identifier les points d'alignement possibles pour faire progresser cette pratique. Elle a également évalué les perceptions des parties prenantes quant aux impacts cliniques, économiques et environnementaux de la déprescription, dans le but d'alimenter l'élaboration et la mise en œuvre de nouvelles politiques.

**Méthodes** : Une enquête exploratoire a recueilli les points de vue des acteurs clés (professionnels de santé, patients, milieux universitaires, décideurs politiques et industrie pharmaceutique). Le taux de réponse s'est élevé à 32 %. Les niveaux de consensus et de convergence des opinions ont été analysés au moyen d'une méthode Delphi adaptée aux politiques publiques.

**Résultats** : Importantes lacunes en matière de connaissances et de formation ont été mises en évidence. Les obstacles à la déprescription sont similaires d'un pays à l'autre et d'un système de santé à l'autre. Les participants ont souligné comme freins majeurs : la résistance des patients, les difficultés de communication et de collaboration interprofessionnelle et intersectorielle, la faible disponibilité et l'accès restreint aux ressources (temps, effectifs, données), une politique non coordonnée et des réglementations obsolètes. Néanmoins, la déprescription est perçue par toutes les parties prenantes comme une opportunité d'améliorer la sécurité des patients et leur qualité de vie, tout en constituant une pratique sûre à même de réduire le poids économique du système de santé et d'en accroître la durabilité environnementale.

**Conclusions** : Cette étude fournit des données essentielles pour la conception de politiques de déprescription adaptées aux attentes des parties prenantes en France. Si ces dernières reconnaissent les bénéfices multiples de la déprescription, les obstacles à son déploiement et les résistances multi-acteurs freinent l'innovation dans ce domaine et limitent son adoption comme pratique clinique courante.

**Mots-clés** : déprescription ; utilisation des médicaments ; médicament inapproprié ; France ; santé publique ; alignement des parties prenantes ; politique de santé.

# 1. Introduction

The population is ageing, and people are living longer and with comorbidities due to an increase in non-communicable and chronic diseases. As a consequence, and most evidently in adult population groups, overtreatment, polypharmacy, and the use of inappropriate medications are common problems in Western societies (Scott *et al.*, 2015; Japelj *et al.*, 2024). Deprescription is proposed as one appropriate mechanism to address this issue. A term coined by Michael Woodward in 2003, and since extensively researched in France by Patrice Queneau, deprescribing has been later defined by Emily Reeve as “the process of withdrawal of an inappropriate medication, supervised by a healthcare professional, with the goal of managing polypharmacy and improving outcomes” (Woodward, 2003; Queneau, 2004; Reeve *et al.*, 2015).

Deprescribing has been demonstrated to be a safe practice associated with positive health outcomes and increased quality of life linked to fewer adverse drug reactions, hospitalisations, falls, and mortality (Reeve, Thompson and Farrell, 2017). Additionally, deprescribing has been associated with a decrease in drug costs and reduced utilisation of healthcare services, contributing positively to the fiscal sustainability of the healthcare system (Carollo *et al.*, 2024). Beyond economic and health benefits, deprescribing also supports environmental sustainability as it contributes to the reduction of pharmaceutical waste and carbon emissions (Giunchi *et al.*, 2025; Niemi *et al.*, 2025).

## 1.1. Contextualisation of the problem

### 1.1.1. Socioeconomic context

France is the second most populous country in the European Union (EU), with approximately 67 million people in 2025. According to data from INSEE (2025), approximately 15 million individuals are categorised as old adults (+65 years old), around 22 % of the total population. Furthermore, data from OECD (2023) reveal that 46 % of older adults live with multiple chronic conditions, and between 25-30 % of them report limitations in performing daily activities.

France has the second-highest current healthcare expenditure relative to GDP in the European Union. According to data from Eurostat (2021), France recorded €314 billion in health expenditure, corresponding to approximately €4,600 per inhabitant (unadjusted to purchasing power) and accounting for 11.9 % of total GDP. Moreover, according to data provided by

DREES (2024), this lump sum increased to €325 billion. Indeed, with population ageing and more susceptibility to non-communicable diseases to pollution and lifestyle choices (tobacco, diet, alcohol, and low physical activity), the major shares in the increase in health expenditures are due to consumption of healthcare and medical goods (+5.6 %) and long-term care expenses (+6.2%).

### **1.1.2. State of health and medication use**

In France, data shows that only around 20% of consultations in a year are prescription-free (Richard *et al.*, 2023), and approximately 43 % of older adults are exposed to potentially harmful or inadequate practices involving the prescription of inappropriate medicines and polypharmacy (Drusch, Zureik and Herr, 2023). In economic terms, France spent €33 billion on medicines in 2023, approximately €491 per inhabitant (DREES, 2024). This figure reflects a 3.1 % increase compared to expenses in 2022, according to data provided by Leem (2025).

The health burden associated with inappropriate prescribing practices is another important aspect which evidences the need to develop and implement strategies for deprescribing. In France, adverse drug reactions are twice as frequent in older adults (+65 years old) and might end up in hospitalisation in 20-30 % of the cases. Strikingly, around 50 % of these hospitalisations are avoidable as they are linked to inappropriate prescribing, inappropriate indications, or non-compliance with contraindications or dosage/time of the treatment (Laroche, Roux and Grau, 2017; Laroche and Grau, 2021). Additionally, research shows that for each patient inappropriately prescribed or under polypharmacy, each additional medication increases 8.6 % the risk of the appearance of new undesirable effects (Van Der Hooft *et al.*, 2005). Furthermore, these patients also show a decline in everyday functioning and poorer physical performance, including an increased risk of falls that varies significantly (13-40 %) according to different studies (Etangsale and Ratiney, 2019; Akin *et al.*, 2024). In the same line, inappropriate prescribing has been linked to a decrease in cognitive abilities, especially in patients with dementia (Park *et al.*, 2017; CM *et al.*, 2018; Godoi *et al.*, 2025). Less frequently, and still contested, these practices can lead to malnutrition, non-adherence, and death (Corban, 2021).

Most of the inappropriate deprescribing practices are associated with non-communicable diseases, including cardiovascular problems, gastrointestinal disorders, blood coagulation disorders, pain and inflammatory syndromes, diabetes, cancer and mental health problems (Corban, 2021). In France, the most frequently prescribed medicines include

antihypertensives, proton pump inhibitors, antithrombotic agents, analgesics, anxiolytics, antidepressants and hypnotics (Simó Miñana, 2012).

### **1.1.3. Sustainability and the toll of medicines on the environment**

Another significant yet understudied consequence of the inappropriate use of medicines is its environmental impact. According to the 2023 report from The Shift Project, the carbon footprint from the health sector in France is estimated at 49 million tonnes of carbon dioxide equivalent, 8 % of the total national footprint. Of those, 14.5 million tonnes (approximately 29 %) are directly related to the impact of medicines. Reports also show that from approximately 13,500 tonnes of unused medicines in 2023, only 8,500 tonnes were collected through Cyclamed for safe collection and disposal (ADEME, 2023; CYCLAMED, 2023). This means that approximately 37 % of unused medicines were probably left behind, polluting soil and water, increasing the possibility of entering the human food chain and being a public health risk (OECD, 2019).

France is intensifying its legislative efforts to protect the environment and is committed to reducing the environmental impact of its healthcare sector. There have been no further advancements regarding the use of certain environmentally degradant chemicals in the production of medicines due to their exemption under the European Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH Protocol) (Ministère de la Transition Écologique, 2018). However, the country is accelerating the implementation of policies and measures to adapt its healthcare sector to mitigate its impact on climate and biodiversity, with an important focus on reducing its carbon footprint, as established in the *Stratégie Nationale de Santé 2023-2033 du Ministère des Solidarités et de la Santé*.

In alignment with the “France – Green Nation Strategy” launched in 2023, a number of initiatives have been implemented to advance the sustainability of the sector, including the Interministerial Task Force on the Ecological Planning of the Healthcare System and the Environmental Health Roadmap of the *Haute Autorité de Santé*. Its objective is to incorporate an environmental perspective within every facet of the healthcare system, from health technology assessment, procurement, and research to public health guidelines and outreach, as well as to improve quality metrics under the ONE Health framework (Gouvernement de France, 2023; Ministère des Solidarités et de la Santé, 2023).

## **1.2. Political context and policy framework for deprescribing in France**

### **1.2.1. Healthcare system governance**

The French healthcare system is highly centralised, with strong state stewardship and pluralism in its healthcare provision (Or and Gandré, 2021). The French healthcare system is governed by four main actors (Brunn and Hassenteufel, 2021; Or *et al.*, 2023). The *Ministère du Travail, de la Santé, des Solidarités et des Familles* sets national strategies and priorities via the *Direction Générale de la Santé* (DGS). The *Haute Autorité de Santé* (HAS) is responsible for evaluating medical technologies, issuing clinical practice guidelines, and validating public health recommendations as an independent scientific body. It also has key competencies in the design and validation of deprescribing policies (HAS, 2024). The *Caisse Nationale d'Assurance Maladie* (CNAM) acts as the central policy enforcer and reimbursor for prescriptions (Tabuteau, 2016). Finally, the *Agences Régionales de Santé* (ARS) are responsible for regional planning and delivery of health. These structures implement national policy at the local level, allocate funding, oversee public health campaigns, and monitor the performance of the system. Recent reforms emphasise their focus on the implementation of digital health strategies, the management of chronic diseases and the coordination of care (Ministère des Solidarités et de la Santé, 2019). These structures contain the *Observatoires du Médicament, des Dispositifs médicaux et de l'Innovation Thérapeutiques* (OMEDIT), important actors for developing and implementing deprescribing as they produce guidance for a safer, more efficient, and evidence-based medication use (OMEDIT Loire).

### **1.2.2. Governmental priorities in health**

Cost-containment and proportionality are political priorities in health policy and politics in France following the 2008 recession (Brunn *et al.*, 2018). With pharmaceutical spending in 2023 rising to approximately €33 billion, this accounted for 10% of the national health expenditure (DREES, 2024). As a result, the administration introduced important measures to lower these numbers, including monetary ceilings for drug purchases, reimbursement delisting of low therapeutic benefit drugs, and the promotion of generics and biosimilars (Legal and Planel, 2018; Rodwin, 2020).

Therefore, encouraging the wide implementation of deprescribing is fundamental. The *Stratégie Nationale de Santé 2023-2033* highlights the importance of rationalising medication use to act on medication-related harm. However, to date, there is no comprehensive, nationwide framework in place to ensure systematic deprescribing or medication review. The

only national initiative identified in this search is the formal incorporation of the concept of “deprescribing” into the 2024 agreement between CPAM and unions representing general practitioners and pharmacists, aimed at promoting the safe and rational use of medications through public campaigns (Megerlin, Bouvenot and Queneau, 2025).

### **1.2.3. Groups of interest and priorities**

The role of interest groups in France was studied in-depth by Perera (2022). In her work, she describes the French system as complex, heterogeneous and fragmented, where coalitions are unstable and lead to multiple crises, conflicts and protests. Here we present the three main groups with a stance on the topic. First, professional unions representing clinicians and pharmacists, including the *Syndicats de Médecins Libéraux* and the *Ordre National des Pharmaciens*. This stakeholder group wields considerable power and influence in the French political sphere (Buton, 2024), tends to advocate for professional autonomy over political mandate, and greatly influences the legislative to shape healthcare reforms (Bras, 2008). Second, patient advocacy groups, including *France Assos Santé*. These groups influence public opinion, promote patient safety, defend the rights of patients and are central actors in public health campaigns and, in principle, allies in promoting deprescribing. Finally, the pharmaceutical industry, mainly represented by *Leem*, lobbies for favourable tax policies, deregulation, and the wide protection of the sector, which may conflict with the implementation of deprescribing more widely. Our work tries to understand if strong coalitions could be formed according to the views, attitudes and perceptions of the different interest groups to advance efforts and policies on deprescribing.

### **1.3. Attitudes and perceptions around deprescribing**

The literature describes a common paradigm shared across many countries regarding how patients and caregivers perceive deprescribing. For example, in Korea, Lee *et al.* (2022) found that patients appreciate being well-informed and having a sound understanding of their medications. Moreover, they found that if a clinician suggested deprescribing, patient acceptability increased regardless of their concerns about discontinuing their medication. Navid *et al.* (2021) found similar results in the United States, adding that patients prefer to be involved in decisions about their medicines. Interestingly, age and gender might influence patients' willingness to deprescribe, but meaningful associations are yet to be corroborated (Oktora, Edwina and Denig, 2022; Alshammari *et al.*, 2024). On the other hand, perceived knowledge may be problematic when adhering to deprescribing plans. (McLaren *et al.*, 2022) explored this issue and found that caregivers who perceived themselves as knowledgeable

about why medication was needed also showed important knowledge gaps around the risks of it. They discovered that some even decided to stop their relatives' medication, without coordinating with their medical team or considering a deprescribing plan.

Comfort and habit also shape patients' willingness to deprescribe. Some find it easier to continue with medication rather than change to healthier life habits (Vidonscky Lüthold *et al.*, 2025). Others feel anxiety and think that their medication is essential to continue with a normal life. Regardless of the information they may be told regarding the potential harm, they consider that stopping their medications would lead to unforeseen adverse effects and the recurrence of their symptoms (Ramsdale *et al.*, 2024). These perceptions are common when dealing with pain disorders, when patients believe that the risk of discontinuing medication is higher compared to that associated with continuing with it (Lozano *et al.*, 2025). When this complex relationship is not managed well, patients perceive that the system is not there to help them, but to stigmatise them (McAuliffe Staehler and Palombi, 2020).

Some healthcare professionals may also perceive deprescribing as a risky practice, which makes them feel uncomfortable and stressed (Anderson *et al.*, 2017). The literature couples this perception with uncertainty issues around who holds responsibility for implementing these actions, while information gaps and time constraints complicate building trust with their patients and understanding their needs (Krist *et al.*, 2017; Légaré *et al.*, 2018; Kwame and Petrucka, 2021). Moreover, some worry about the impact of adverse effects of medications on their patients, but feel the pressure to continue specialist prescribing (Wermeling *et al.*, 2014; Duncan, Duerden and Payne, 2017; Gerlach *et al.*, 2020). This last idea was challenged by Hoffmann and Del Mar (2017), who are convinced that professionals overstate the advantages of medications over the potential health risks. In any case, the general perception is that professionals prescribe according to biased guidelines designed to promote active prescribing (Hung, Kim and Pavon, 2024; Robinson-Barella *et al.*, 2024). Finally, personal views also influence how professionals perceive the use of medicines, especially when dealing with patients with cancer or terminal illnesses (Paque *et al.*, 2019; Tjia *et al.*, 2023; van der Waal *et al.*, 2024). In these scenarios, most professionals prefer to prioritise mitigating patient harm and working for their well-being over their personal views (Pickering *et al.*, 2022).

What remains of great interest is the power of pharmaceutical marketing and its educational sponsorships in modelling the attitudes and beliefs of healthcare professionals around deprescribing, especially in France (Lieb and Scheurich, 2014; Goupil *et al.*, 2019; Khazzaka, 2019; Al Thabbah *et al.*, 2022; Molina *et al.*, 2022).

#### **1.4. Barriers and facilitators: spotting an opportunity**

Studying and recognising the various attitudes and perceptions of key stakeholders around deprescribing can help identify and understand the key factors that act as barriers and facilitators for deprescribing. Literature shows that these factors are shared across most countries and healthcare systems and can be turned into actions to enable the design and implementation of better deprescribing guidelines and policies (Gillespie, Harrison and Mullan, 2018; Charbonneau *et al.*, 2024).

##### **1.4.1. Knowledge, information and training**

Knowledge is fundamental to addressing deprescribing, and there is a general agreement on the need for evidence-based education and practice among professionals (Hoffmann and Del Mar, 2017; Williams *et al.*, 2021). Research shows that there is a lack of foundational education on deprescribing issues at both the graduate and postgraduate levels, and has identified deficiencies in continuous education and professional programs (Farrell *et al.*, 2023; Lawrence *et al.*, 2025). Acting at this level has the potential to encourage professionals to “think outside the box”. For example, Riordan *et al.* (2017) demonstrate the positive impact of training clinicians on advanced pharmacology issues and the subsequent decrease in the number of prescriptions, while Holliday *et al.* (2017) discuss the influence of education on opioid harm and pain management towards decreasing pain prescriptions. Patients also report a generalised lack of knowledge around their medications, specifically around their associated risks, which hampers their ability to identify problems and start conversations with their healthcare team about deprescribing (Williams *et al.*, 2021).

Knowledge is directly linked to information, which must be trustworthy to empower informed decision-making and to uphold accountability. Barriers to information hamper patients’ ability to communicate (Abou *et al.*, 2022; Nagham J Ailabouni *et al.*, 2022), and are linked to an increase in patient hesitancy and a tendency to seek clinical information online or from unreliable media, family and acquaintances (Zhou *et al.*, 2025). Moreover, this affects healthcare professionals as it is directly linked to the erosion of trust with their patients (te Paske *et al.*, 2023).

##### **1.4.2. Change factors: resistance, communication and collaboration**

Despite the evidence on the safety of deprescribing, resistance to both change and the adoption of novel, patient-centred prescribing standards persists (Hilmer and Gnjdic, 2018;

Ibrahim *et al.*, 2021; Amy M. Linsky, 2024; Okafor *et al.*, 2024). Literature argues that this may be rooted in the culture of prescribing to which healthcare professionals and patients are accustomed (Okeowo *et al.*, 2023). For Pohontsch *et al.* (2017), the problem is that general practitioners face pressure from both patients and specialists to continue prescribing potentially unsafe medications. Others discuss arguments that reject the evidence on improvements in quality of life over safety concerns (Doherty *et al.*, 2020), and defend clinical autonomy over top-down management or cost-containment measures and rationing (Britten, 2001)

Communication barriers exist at multiple levels, from the healthcare system itself to the community, and deeply affect the implementation and acceptability of deprescribing initiatives (Fried *et al.*, 2025). Indeed, the literature identifies communication style and language as key issues for action, especially when dealing with patients and caregivers (Turner *et al.*, 2018; Green *et al.*, 2020; Geddis-Regan *et al.*, 2021; Peat *et al.*, 2022). It reinforces the need to adopt a patient-centric communication approach in which patients feel empowered through proactive discussions about the real use and utility of medications (van der Waal *et al.*, 2024).

Some suggestions are, for example, initiating conversations around the risks and benefits, and the side effects and long-term impact of medication (Green *et al.*, 2021); avoiding terms such as “*effort*” or “*cost*”, and discussions around prognosis and life expectancy (Fasth *et al.*, 2025). Importantly, Moth *et al.* (2021) highlight the importance of encouraging constructive communication between clinicians and both caregivers and relatives. Doing so would make it possible to build a solid clinical scheme based on updated medical history and patient perceptions, which would considerably help in the clinical decision-making process and simplify the implementation of a targeted deprescribing plan.

Interprofessional collaboration is fundamental to implementing these deprescribing initiatives (Robiner, Tumlin and Tompkins, 2013; Sinnige *et al.*, 2016; Teichman and Wan, 2021; Carollo *et al.*, 2024; Perron, 2024). When collaboration issues arise, friction and failure often also appear. For example, Mavrodaris and Philp (2013) suggest that implementing deprescribing plans would be difficult when family doctors are required to do this process alone, without specialists on board. Moth *et al.* (2021) have suggested that doctor-nurse collaborations are essential in this area, because nurses and assistants are among the healthcare professionals who spend most time with patients on a day-to-day basis.

### 1.4.3. Resources

Evidence-based guidance and protocols are fundamental to the rollout of deprescribing practices. Professionals are especially interested in innovative, up-to-date tools to facilitate shared decision-making, such as information technology systems to perform structured and individualised medication review sessions (Sutton *et al.*, 2020; Vaseur *et al.*, 2024; Alshatti *et al.*, 2025). But high-quality, data-driven resources are difficult to access, especially in highly fragmented and privatised systems, and most resources are biased in selection, which hinders their applicability and credibility (Woodford, 2024; Lawrence *et al.*, 2025). In addition to this, professionals also complain about the lack of access to updated patient records (Saka and Osineye, 2024; Elshazly *et al.*, 2025) which further complicates the implementation of deprescribing and increases the perception of deprescribing as a risky practice that can lead to negative patient outcomes and legal consequences (Barnett and Kelly, 2017; Alrawiai, 2023). Thus, most professionals end up adhering to old-fashioned, disease-specific guidelines which do not necessarily fit the needs of their patients, are incomplete or are not tailored to the different stages of life (Tsigas *et al.*, 2013; Heinrich, Hurley, *et al.*, 2022; Alshatti *et al.*, 2025).

Human resources are fundamental when implementing deprescribing in practice. For example, research suggests that low staffing levels, especially among nurses and clinical pharmacists, diminish the time available for comprehensive medication reviews, collaboration and patient handovers, creation of multidisciplinary teams, and health education activities. These studies also touch on the importance of psychologists and social workers for the successful implementation of deprescribing initiatives (Ellis *et al.*, 2015; Dhuny, Foley and Jennings, 2021; Abou *et al.*, 2022; Heinrich *et al.*, 2023; Lee *et al.*, 2023). Moreover, most countries have outdated regulatory frameworks that tightly limit the competencies of old-style health-allied professions, blocking the development of future multidisciplinary professionals and consequently hindering efforts to implement innovative practices (Nicholson and Stone, 2013; Karwaki, 2020).

Finally, the literature identifies time constraints as an important barrier for deprescribing (Okeowo *et al.*, 2023). Healthcare professionals have seen how the time they are allowed to allocate to each of their patients has been reduced in the interest of productivity and cost savings (Freedman *et al.*, 2021). Consequently, professionals work against the clock, with tight sessions with patients and a general lack of time to properly engage in medication reviews, deprescribing initiatives, or additional training (Mejías-Trueba *et al.*, 2023; Quek *et al.*, 2023). Patients feel this lack of time with their healthcare teams, which translates to little time for discussing their concerns about medications with them and no support to engage in well-

managed deprescribing plans, especially for older adults and impaired patients (Bloomfield *et al.*, 2020).

#### **1.4.4. Other barriers**

Other barriers have been identified and largely depend on the system of care and legislation. For example, the organisation of healthcare systems, in particular the extent to which they are fragmented, rigid, or operate with multiple providers, might work against incentivising efforts to improve medication management (Gillespie, Harrison and Mullan, 2018; Linsky *et al.*, 2019). In France, the fragmentation of the system translates into a heterogeneous implementation of deprescribing policies due to the absence of binding mechanisms at a national level (Nagham J. Ailabouni *et al.*, 2022; Daunt, Curtin and O'Mahony, 2023). Finally, the financial stress on the healthcare system and insufficient resources are discussed as possible barriers to deprescribing (Heinrich, McHugh, *et al.*, 2022; Shapoval *et al.*, 2025). On this point, for example, healthcare professionals consider that a funding increase for their practices would facilitate the incorporation of deprescribing as a routine practice, although they concede that this is not one of the main barriers (Conklin, Farrell and Suleman, 2019; Dhuny, Foley and Jennings, 2021).

### **1.5. Problem statement, aims and objectives**

#### **1.5.1. Problem statement**

The ageing population, multimorbidity and prescribing attitudes have led to a high prevalence of inappropriate prescriptions and polypharmacy in France. Among the different strategies that exist to respond to this problem, “deprescribing” targets clinical practices and is considered safe, cost-saving, and environmentally beneficial. This practice is subject to stakeholders' attitudes and perceptions, as their views directly influence the design of new policies and increase their acceptability and implementation.

Furthermore, France lacks a comprehensive framework to promote deprescribing and to ensure routine medication reviews. Implementation barriers stem from divided political priorities, fragmented governance, and the influence of key stakeholders. We lack studies that confront the views of these different stakeholders on this subject, as most of the literature focuses on how healthcare professionals and patients behave in this regard. This is particularly important in the French context of fragmented representation of interested groups, where conflict and competition often block coalition formation (Brunn, 2020). Similarly, no studies

associating deprescribing with environmental and sustainability factors have been identified, as most studies focus on healthcare outcomes and economic analysis. We therefore look to enhance the understanding of these attitudes and barriers to identify opportunities to advance in the systematic implementation of deprescribing policies.

### **1.5.2. Aims and objectives**

A survey was developed for the purposes of this study to gather more evidence to understand the different attitudes, barriers, and enablers towards deprescribing among key stakeholders in France. We also aim to assess stakeholders' views on the relationships between deprescribing and clinical, economic, and environmental considerations. The objective of this work is to provide critical insights into how these considerations, alongside common barriers and facilitators discussed in previous research, influence deprescribing acceptance in France. The results of this work are intended to guide policymakers and healthcare professionals in developing deprescribing policies that are responsive to stakeholder needs.

We aim to respond to our main research question: *“What factors influence stakeholder acceptance and implementation of deprescribing policies in France?”* by exploring three additional sub-questions:

- How do stakeholders perceive the clinical risks and benefits of deprescribing, and how does this influence their willingness to adopt it?
- To what extent do economic factors, such as cost-saving and financial barriers, shape stakeholders' attitudes toward deprescribing?
- How aware are stakeholders of the environmental impact of their prescribing attitudes, and what role does sustainability play in their support for deprescribing policies?

## **2. Methodology**

### **2.1. Study design, setting and sampling**

An exploratory research survey was designed to provide critical insights into the factors influencing deprescribing acceptance in France. We selected five key stakeholder groups for this work: healthcare professionals, patients including caregivers, academia including research institutions, policymakers including government, public institutions and regulators, and the pharmaceutical industry.

The survey was conducted in France from April 1 to May 19, 2025. Participants were selected to represent the views of the aforementioned stakeholders. A web-based stakeholder mapping was performed, advised by experienced academics and scholars, based on information extracted from the literature on deprescribing. From the different options, entities were selected considering either the most deprescribed medications, the most inappropriately prescribed medications, or those representing the voices of individuals affected by diseases that benefit most from the reduction or elimination of medications, such as the *Association de malades cardiaques* or *Advocacy France - association d'usagers en santé mentale*. Furthermore, entities representing various healthcare providers, unions, health authorities, insurers, and academic groups were included, amongst others, including *Federation de medicines de France*, *DGS*, *ARS*, *Fédération de mutuelles de France* and *Inserm groups*. These actors were selected because they defend and represent different important views that shape the French health policy sphere (Or *et al.*, 2023). A total of 110 participants were initially identified in our search provided in **Appendix 1**.

## **2.2. Questionnaire development and structure**

The different domains of interest for this work around deprescribing were represented through questions around general knowledge, clinical outcomes, economic outcomes, environmental outcomes, alignment and importance to public health, and general and specific barriers and enablers. These domains reflect common trends observed in the literature following searches performed in PubMed and Scopus from 2010 onwards. A list of the articles that were used to inform the questionnaire is provided in **Appendix 2**. The questions aimed to cover points relevant to each stakeholder and that were shared across them as much as possible, without compromising relevance. The content validity of the survey was assessed by a panel of 5 key informants who were not invited to participate in the study.

The final survey, shown in **Appendix 3**, contains approximately 30 questions for each stakeholder and is designed to be completed in about 10-15 minutes. Most of the questions are closed-ended and can be answered in a bimodal YES/NO manner or using a 1-to-5 Likert scale, with categories ranging from “completely disagree” to “completely agree.” A maximum of 4 questions per stakeholder are open-ended, designed to gather unexpected information. Institutional information (name of the organisation and stakeholder group of those polled) was collected and used to guide and link the different parts of the survey to each stakeholder. All questions were made mandatory by design, except the open-ended ones. Respondent emails were also collected. Google Forms was selected as the most appropriate digital tool to create this survey.

### 2.3. Data collection and analysis

The survey was sent directly to participants by email using their official working addresses, which, in most cases, were their general contact addresses. The email was crafted to clearly introduce the research team, the relevance of the work, and why their views were important. Participants were free to not answer questions or “leave” the survey at any point, without any impediments during the process. The first round of invitation emails was sent on April 1, 2025, and reminders were issued every fortnight. Additionally, a LinkedIn strategy was implemented to broaden the reach of the initial search for participants with the publication of two LinkedIn posts that included a brief description of the team's objectives and a call for interested organisations or actors to contact us. After confirming their eligibility to participate in the survey, an invitation email with a link to the survey was sent to the provided contact details. Following the data cutoff on May 19, 2025, the data were electronically recorded and processed. Whenever responses coincided from the same actor or organisation, only one response was randomly selected for analysis if the target actor was national. If the target actor was responding at the regional, departmental, or local level, all responses were accepted. We understand that, while the literature suggests that similar problems are faced across countries, different regions in France experience distinct issues, and decentralised actors might provide valuable insights better suited to their specific context populations.

Results are presented in percentages representing the share of responses corresponding to the question of interest. In addition, consensus was studied using an adapted version of the Policy Delphi methodology (Van Ngoc, 2025), which studies consensus based on agreement scales. Based on this, consensus is high if there is  $\geq 70\%$  agreement in a single category or  $\geq 80\%$  agreement in grouped categories, moderate if there is  $\geq 60\%$  and  $<70\%$  agreement in a single category or  $\geq 70\%$  and  $<80\%$  agreement in grouped categories, and low if there is  $> 50\%$  and  $<60\%$  agreement in a single category or  $\geq 60\%$  and  $<70\%$  agreement in grouped categories. For any other figures, we assumed no consensus has been reached. **Appendix 4** shows the results of the consensus and its direction for each stakeholder category in any item of the survey. **Appendix 5** shows the results of the consensus between the different stakeholders for questions grouped around similar themes using a granular mapping of the questions, including knowledge, education, feeling and values, and various barriers, enablers and opportunities for deprescribing.

## 2.4. Ethics

According to the French Public Health Code (art. L.1121-1) and CNRS COMETS guidance, non-interventional social-science research such as this one, involving only organisational and policy stakeholders, does not qualify as “research involving humans” and is therefore exempt from ethics review. Furthermore, as no personal health or other sensitive data are collected, this study also falls outside the CNIL MR-004 declaration requirements. In any case, our study follows CNRS ethical best practices by using information provided by consenting people, ensuring confidentiality and anonymity in disclosed information, data or analysis.

## 3. Results and discussion

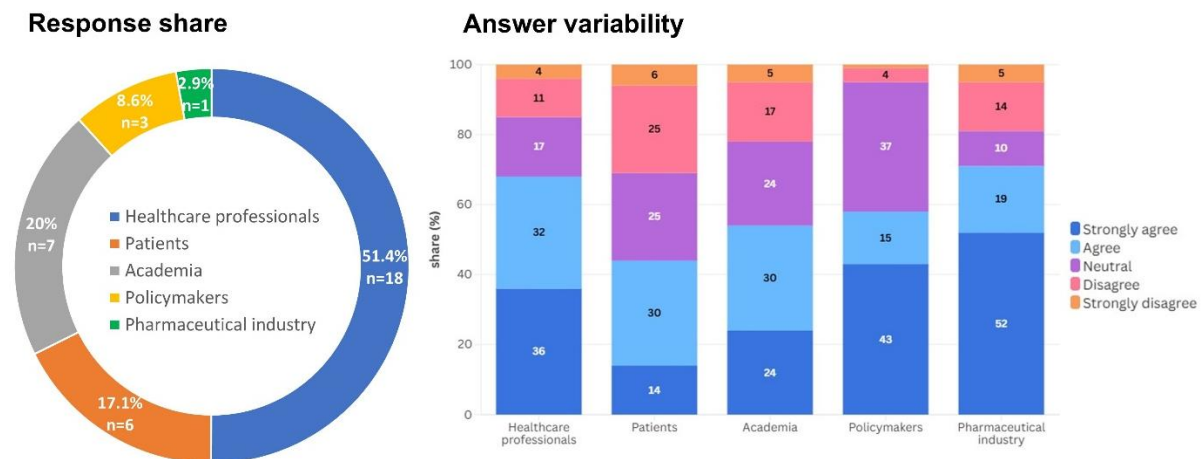
This work presents results and discussion in a mixed manner to help readers straightforwardly couple the data with its meaning. This allows for the presentation of each finding alongside its real-world implication in one place. This approach reduces repetition of numbers and interpretations, mimicking the style of policy briefs.

### 3.1. Response analysis

Of the 110 organisations identified as potential respondents, 35 responded to the survey (32% response rate). Of these, 18 (51.4%) are healthcare providers, 6 (17.1%) represent patients, 7 (20%) represent academia, 3 (8.6%) represent policymakers, and 1 (2.9%) represents the pharmaceutical industry. The respondents are involved at the national, departmental, and local levels in most cases. Most of the responses, except for those from the patients’ representatives, fell within the “Strongly agree” and “Agree” categories. Interestingly, patients were the group with the greatest proportion of responses in the “Disagree” or “Strongly disagree” categories (26%), whereas policymakers recorded the highest number of responses in the “Neutral” category (37%). The distribution of the response rate across stakeholders and the variability in their answers are shown in **Figure 1**.

While the questionnaire was open for participation, we observed that engagement from respondents identifying as policymakers and organisations representing the pharmaceutical industry was comparatively low, despite our multichannel, staggered dissemination strategy. Despite this, participants engaged actively with the survey and discussed their ideas and concerns freely in the open-ended questions (80 %).

## KEY STAKEHOLDERS ANSWERS



**Figure 1:** Response rate and answer variability according to the different categories for each key stakeholder group.

We previously mentioned that, to our knowledge, no studies in France had examined the opinions and perspectives of these stakeholders together regarding deprescribing. The findings are thus structured around five core themes found to be key for informing future policy and best practices in deprescribing in France: (1) general knowledge and training; (2) change factors: resistance, communication and collaboration; (3) resources: tools, data and time; (4) policies and support; and (5) opportunities. Wherever feasible, we support our findings from the survey with illustrative figures to enhance readability and comprehension and both the consensus analysis and the cross-stakeholder analysis of agreement, as shown in **Appendices 4 and 5**.

### 3.2. General knowledge and training

Our results show a straightforward relationship between knowledge and training in deprescribing. We received 28 answers from stakeholders on this theme. Of these, 18 (64%) indicated that they have some degree of knowledge about deprescribing, while only 10 (36%) were unfamiliar with the concept. Most of the negative responses were from those in the patient stakeholder category. Among this group, results show limited knowledge (83.3%) and an absence of any training on the subject (100%). Strikingly, policymakers also showed low levels of knowledge (66.7%) and training (66.7%). **Table 1** summarises these findings. We hypothesise that the low response rate among policymakers may be partially attributable to political disaffection to effect a real change in this area (Simonet, 2024). Several factors might contribute to this situation, including a lack of institutional support, insufficient resources, policy agendas that do not prioritise healthcare, or external pressures. Our results suggest that there

is a high probability that efforts to reduce the high rate of pharmaceutical consumption in France will remain sporadic due to the difficulty in introducing stable, system-level reforms (Groupe Onepoint, 2021; Simonet, 2023).

Knowledge and awareness of medication consumption and prescribing attitudes within a country are central to identifying whether an excessive use of medicines may constitute a public health problem. To illustrate this, data from DREES (2024) has shown that France is at the top tier for European markets in pharmaceutical consumption, and only around 20% of the total consultations are prescription-free ones (Richard *et al.*, 2023). Despite this, our results show that the pharmaceutical industry believes the market favours responsible prescribing. Furthermore, insights from this can also help identify training needs among stakeholders and provide a foundation for designing actions. For example, this might include educating professionals about best practices, empowering individuals to recognise their behaviours and reflecting on their decision-making, or engaging with industry and policymakers to develop new, informed policies.

**Table 1:** Descriptive analysis of responses on knowledge and training in deprescribing for key stakeholders.

	<b>Knowledge of deprescribing?</b>		<b>Training provided on deprescribing?</b>	
	Yes	No	Yes	No
<b>Healthcare professionals</b>	83.3% (n=15)	16.7% (n=3)	33.3% (n=6)	66.7% (n=12)
<b>Patients</b>	16.7% (n=1)	83.3% (n=5)	N/A	100% (n=6)
<b>Policymakers</b>	33.3% (n=1)	66.7% (n=2)	33.3% (n=1)	66.7% (n=2)
<b>Pharmaceutical industry</b>	100% (n=1)	N/A	N/A	N/A

Note: We have judged that questions around knowledge and training on deprescribing do not apply to academics working on the topic, as it is the subject of their studies. n = number of observations in one group.

Training has significant implications for perceptions and attitudes surrounding deprescribing. Our results show that healthcare professionals are inadequately trained in deprescribing (66.7%), undermining their confidence in identifying patients who might benefit from it. In our survey, our results show that professionals are not certain if they are confident and comfortable

about discussing deprescribing with patients or managing deprescribing plans. This aligns with the literature, which also associates competence in deprescribing with seniority and level of experience (Ng *et al.*, 2021; Robinson, Mokrzecki and Mallett, 2024), especially when dealing with patients with complicated prognoses, such as cancer. The DEPPA protocol from Nantes University aims to understand these attitudes, but results will be available from 2026 onwards (Evin *et al.*, 2024). We obtained similar results among patients, and this is supported in the literature. For this group, our survey shows a complete lack of training and information regarding deprescribing (100%), coupled with insufficient and unclear information about their medications and the associated risks and benefits. Furthermore, responses suggest a connection between training and confidence in discussing issues around health and medication use (66.7%). Patients find it complicated to talk about their willingness to discontinue or reduce a medication, or even to propose a deprescribing action plan (66.7%).

To our knowledge, there is neither comprehensive training available in France for deprescribing nor an approved approach to teaching this practice, although targeted educational interventions are being gradually developed and validated (Esparbes *et al.*, 2024). Importantly, healthcare professionals lack training modules on deprescribing during their graduate and postgraduate education, which consequently limits their functional capacity (Nizet *et al.*, 2025). Our results support this statement and show that continuous education and professional development programmes are widely regarded as valuable tools for training (96.9%).

### **3.3. Change factors: resistance, communication, and collaboration**

Resistance to change, inherently linked to knowledge and training, often hinders the adoption of novelty. Our results show that healthcare professionals feel conflict and resistance from patients when proposing a deprescribing plan (83.3%). These figures align with patients whose responses suggest they are concerned that their health would deteriorate if they were to reduce or discontinue their medications (66.7%). Some even think deprescribing might be a form of under-provision of care (66.7%). We found that patients perceive their medication as essential (100%), and some even feel uncomfortable adjusting the dosage of medications to which they are accustomed or attached (66.7%). Interestingly, most feel their health is more valued when an alternative medication is proposed instead of a deprescribing plan (83.3%), even though they understand the importance of reducing the number of medicines they usually take (66.7%). Healthcare professionals also mentioned self-medication and misinformed patient expectations as other sources of conflict and resistance. However, our results also show that most patients trust their healthcare team, especially around medication use (83.4%), and foresee an inclusivity issue derived from an era of medical paternalism (Grob, Darien and

Meyers, 2019). Our respondents noted that acknowledging patients' opinions is fundamental to mitigating these conflicts and believe that actively engaging patients in the process improves patient acceptance of therapeutic adjustments, a position well documented in the literature (Hickmann, Richter and Schlieter, 2022).

Communication and collaboration challenges were identified by the Institut Montaigne as weak points within the French healthcare system (Millet and Ros, 2023). Our results show a general agreement among the various stakeholders regarding the strengthening of interprofessional and intersectoral collaborations. The survey shows that improving communication and collaboration skills is fundamental to facilitating the implementation of deprescribing practices. Most healthcare professionals emphasised that they perceived this collaboration as fundamental for achieving better outcomes in this field (83.4%). However, they recognise that working in a collaborative environment in France remains challenging. A reason for this may lie in the longstanding traditions of independent practice, especially concerning primary care (Supper *et al.*, 2014). Solutions have been tested to address these issues, including policies to promote community health practices and primary health centres (Degand, 2022). Other actions include encouraging professionals to delocalise to areas with low population density to strengthen the capabilities of, for example, rural health centres with cross-professional, multidisciplinary teams (Polton, Chaput and Portela, 2021). In this context, our respondents highlighted the importance of the "lien ville-hôpital", a collaborative interface between community-based and hospital-based professionals which ensures that strategies are shared among professionals and guarantees treatment continuity and risk management. Other examples include the incorporation of new health professional profiles, such as advanced nurse practitioners, and the development of multifaceted professional profiles (De Rosis *et al.*, 2024).

Professionals also highlighted the need to develop fast and integrated communication and collaboration tools. They saw these tools as allowing them to work faster, facilitate efficient management of medical and pharmaceutical records, avoid the plurality of prescriptions from multiple specialists, and enable a more comprehensive risk assessment. This is especially important when evaluating and treating people with chronic conditions or mental health disorders (Quinn *et al.*, 2019; Tomaschek *et al.*, 2022). Despite the recent implementation of the shared system "Mon Espace Santé" in 2022 (Assurance Maladie, 2025), this is still a challenge in France due to the fragmentation of the healthcare system and the established idea that information sharing should not be automatic, for patients to share only what they judge as important under their responsibility (Gaucher *et al.*, 2024). Finally, professionals

mentioned that there are opportunities to improve communication with the general public, a strategy that appears to be downplayed in favour of pharmaceutical marketing campaigns.

Academics and research institutions have an important role in communication, outreach, and public engagement. Our respondents agreed on the need to improve the dissemination and communication of their findings for greater impact and clarity (85.8%). They also admitted that the lack of interdisciplinary collaboration limits the scope and impact of advances in deprescribing (57.2%). Moreover, they considered that increasing the number of collaborative research networks working on deprescribing in France would reinforce the feasibility of research in the subject (57.2%). Importantly, partnering with governmental institutions and health authorities is essential to incentivise deprescribing and to inform the development of new strategies and policies in this area. This intersectoral collaboration is considered an important priority by healthcare professionals (88.9%) and policymakers (66.6%), and is fundamental to attract and engage the pharmaceutical industry.

#### **3.4. Resources: tools, data and time**

While deprescribing is still a niche topic in research, a wide range of tools and guidance are available in the literature to facilitate informed decision-making. Reeve (2020) outlines several commonly employed and valuable tools for deprescribing. The survey included five common ones in the literature (CEASE, G-MEDSS, MedStopper, START/STOPP, and EMPOWER); however, respondents reported familiarity with only two of them (START/STOPP and EMPOWER). The open responses suggest that stakeholders in France prefer to follow guidelines developed and validated by French authorities, such as those by HAS, CNAM, and ARS. In particular, the methodologies CEPRIM and IATROPREV were provided as important frameworks for promoting concerted and safe deprescribing. Interestingly, academia monitors international guidelines, for example, those from Canada (ReCaD), Australia (ADeN), and the United States (USDEN). Well-established protocols for deprescribing in older adults, including the Laroche list, FORTA list and Beer's criteria, were also mentioned by the participants. Patients did not recognise many of these tools; instead, they emphasised the necessity of having clear, user-friendly lists tailored for non-professional audiences, stating the advantages and disadvantages of the medications and their risks and benefits.

Most of these tools were originally developed for deprescribing among older adults, with attention to prevalent comorbidities and potential adverse outcomes (Reeve, Thompson and Farrell, 2017). This focus is a shared view in France and may explain why, according to our findings, most healthcare professionals perceive deprescribing to be more important in elderly

populations than for young people (66.7%). Besides these tools, comments from our survey stressed the value of personal experience, in-house knowledge developed by multidisciplinary teams, active listening for a coherent, patient-centric approach, and accompaniment.

We further identified issues around the quantity and quality of data, protocols and guidance. Policymakers who responded to our survey were concerned about the quality and robustness of research data, suggesting that strong, data-backed evidence is essential to enable wider implementation of deprescribing (66.7%). Academics noted the challenges they face in accessing real-world, high-quality data for their research, which consequently hampers the impact of their work (57.2%). Furthermore, they highlighted the importance of introducing digital tools and modern, up-to-date data platforms to support not only research but also patient involvement and shared decision-making (57.2%). For example, Okati *et al.* (2025) recently reviewed how digital apps such as AGS Beers Criteria 2023, DTA Medications, and IAM Medical Guidelines may enable healthcare professionals to access deprescribing guidelines and recommendations faster. Other apps, such as MedGPT-Medical AI App (Early Access) and Polypharmacy: Manage Medicines, have the potential to empower patients in the decision-making process and present trustworthy educational material for patients.

These issues around information and data also affect healthcare professionals, who agreed on the necessity of clear, data-driven protocols (94.4%) that are readily available and integrated (72.2%) to ensure safe deprescribing. As an example, we previously mentioned that most protocols used in France are designed specifically for older adults with particular comorbidities and determinants. Although these are data-driven protocols, there is no clear guidance on how to use them for other patients with similar pathologies at different stages of life, such that adverse effects are minimised, with evidence supported by data. And this is important because our results show a point of friction for healthcare professionals. Some are concerned about possible negative patient outcomes (44.4%), which would influence the implementation of deprescribing in practice. Moreover, some are also concerned about both the negative professional consequences and the legal liability associated with these negative outcomes (66.7%). Yet, some professionals are inclined to deprescribing regardless of these uncertainties, focusing on what they believe is best for their patients (61.2%). Interestingly, policymakers did not identify these concerns as important factors affecting the implementation of deprescribing.

Finally, despite positive trends encouraging deprescribing, most healthcare professionals (72.2%) recognised that time constraints are a major limitation to implementing deprescribing more frequently. Limited time prevents professionals from engaging in in-depth discussions

with patients, defining a shared strategy for medication management, and ensuring the long-term monitoring of the process (Freedman *et al.*, 2021; Mejías-Trueba *et al.*, 2023; Okeowo *et al.*, 2023). This lack of time was also mentioned by patients, who admitted that sometimes professionals rush and do not present them with different available options, limiting their freedom to choose. However, policymakers did not identify the lack of time among healthcare professionals as an impediment to implementing these practices.

### **3.5. Policies and support**

Surveyed academics concur that deprescription aligns with priorities within the community in public health (85.8%) and deem research in this domain essential for informing public policy (100%). We found similar findings for policymakers and the pharmaceutical industry for the alignment between deprescribing and public health objectives in France (66.7%). However, academics also indicated that, whilst political will to advance this agenda exists (57.2%), there remains considerable scope for development.

Our results suggest that efforts to incentivise deprescribing may not align with the reality of the problem, in agreement with recent findings by Megerlin, Bouvenot and Queneau (2025). For example, healthcare professionals agreed that current reimbursement policies and the new payment methods proposed by the administration are not fit-for-purpose to motivate them to promote deprescribing (88.9%). Some even argued that linking deprescribing to financial incentives is inappropriate and suggested using metrics and incentives that encourage the proper use of medicines.

Academics agreed with the argument that deprescribing policies need redesign, guided by data and evidence, in which research plays a central role. Yet they admitted that there are financial shortages to fund these studies (71.5%) and worried about the general preference to publish clinical essays on medicines and novel therapies over studies on deprescribing (71.5%). Nevertheless, they are uncertain about increasing financial incentives and the number of targeted grants to stimulate more research. This is important because most academics highlighted that there are systemic and transdisciplinary obstacles for research to address in France, in line with recommendations from the *Académie Nationale de Médecine Française* (Lebranchu and Facon, 2024). Based on our results, we suggest that it is difficult to establish new incentives that support change in healthcare systems that usually follow inertia. Our respondents hint that these incentives may diverge from purely economic ones, although policymakers nonetheless continue to think they are important (66.6%). In addition, the respondent from the pharmaceutical industry admitted that these incentives play in their favour,

especially if the demand for certain pharmaceutical products is confirmed following the implementation of deprescribing policies.

Bureaucracy and the regulatory framework influence the dynamism and adaptability of the healthcare system and can be important deterrents to implementing new policies (Simonet, 2021). Healthcare professionals highlighted that they sometimes feel obliged to prescribe simply to justify a patient visit. Others mentioned that the automatic renewal of medicines, though it reduces paperwork and administrative burden, undermines deprescribing efforts because it eliminates important medical evaluation steps from the process. Interestingly, the pharmaceutical sector admitted that a new regulatory framework incorporating deprescribing at a national level would affect their product portfolios, but converged on the need to develop new frameworks and mechanisms to better integrate deprescribing in the healthcare system. Policymakers did not offer a clear response (their answers were neutral) as to whether the French regulatory framework is prepared to support the implementation of new deprescribing mechanisms; however, they agreed that such implementation would entail bureaucratic delays (66.7%).

Accordingly, our results show broad agreement among stakeholders that public and institutional support is fundamental to advancing deprescribing. But the details here are interesting. Academia believes there is insufficient support to facilitate further research in the field (71.5%). While other stakeholders did not explicitly contradict this statement, they identified specific support structures and actions that should be reinforced. The most frequently cited institutions providing institutional support were CPAM, ARS and OMEDIT. Professionals also believe that complementary schemes, particularly mutual insurance companies and risk-management organisations, play an important role, as they are well-positioned to incentivise quality and health prevention programmes over prescribing practices. Similarly, patients agree on the importance of having a support system to begin a deprescription plan (100%). As this statement is open for discussion on what might be a form of support, they mentioned several important actions from which they can benefit from the policy sphere, such as the creation of counselling services and public health campaigns, the availability of more multidisciplinary teams, or the availability of educational material developed by health authorities.

### **3.6. Opportunities**

Results showed that most healthcare professionals agree that deprescription is an important aspect of high-quality healthcare in France (88.3%). Indeed, this perception appears to be one of the main motivators driving them to push further and advocate for new and improved

strategies and policies to help their patients (94.4%). Politically, this is positive, as this stakeholder group wields considerable power and influence in the French political sphere (Buton, 2024). In addition, although certain institutions and research laboratories support and encourage research on deprescription (57.2%), academics stated research on the subject is not considered a national priority (57.2%). They suggested that this might be due to the prioritisation of pharmaceutical consumption at the expense of a complete, holistic view of medicine and health, thus hampering efforts to change the established paradigm. In this regard, policymakers worry that the pharmaceutical lobby might impede efforts to promote and enact deprescribing policies (66.7%). And this is linked with the need of the industry to rethink pharmaceutical marketing strategies to mitigate potential revenue losses should a tendency towards deprescribing be confirmed. The same source also highlighted that this would not stop the sector from supporting deprescribing initiatives, as it is prepared to adapt and innovate to maintain its competitiveness. For them, deprescribing is seen as an economic opportunity to focus on developing innovative therapies to maintain their market share whilst moving away from traditional drug volumes.

Nonetheless, this study shows that both policymakers and the pharmaceutical industry consider that there is sufficient evidence supporting the benefits of deprescribing (66.7%). Moreover, they appreciate the importance of integrating deprescribing widely and endorse its implementation at a national level (66.7%). This represents a window of opportunity for our stakeholders to advance efforts aimed at improving quality of life, generating a positive economic impact and promoting a sustainable future. A graphical representation to understand these three tendencies is shown in **Figure 2**.

According to our results, healthcare professionals are convinced that deprescribing positively impacts patients' quality of life (88.8%) and improves patient safety (100%). These results contrast with the fear expressed by some in this stakeholder group regarding adverse effects (44.5%). From the perspective of academia, deprescribing is an incipient field of study that should be further explored (100%) due to its importance for public health (85.7%) and its positive impact on both health care and quality of life (85.7%). Policymakers shared similar views regarding the positive impact of deprescribing on improved quality of life (66.6%) and patient security (66.6%). Interestingly, the pharmaceutical industry also agreed on this point, despite stating that overconsumption is not a current problem in France. Modern medicine and pharmaceuticals have played a vital role in maintaining population health and extending lifespans. However, we have reached a point in which our dependence on medicines outreaches efforts on health promotion and prevention (Meertens *et al.*, 2013). And this occurs despite research showing that pharmacological overconsumption imposes a risk for our health.

In light of this, deprescribing emerges as an important tool to improve people’s health and well-being, aligned with the founding values of the French healthcare system.

### Identification of opportunities

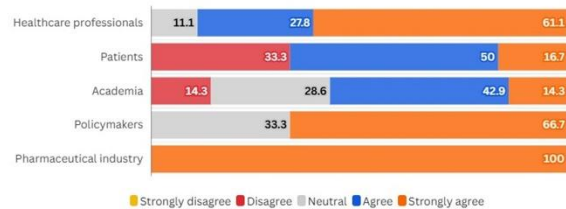
Does deprescribing improve quality of life?



Does deprescribing make a positive economic impact?



Does deprescribing contribute to a sustainable future?



**Figure 2:** Share of responses of key stakeholder groups on the opportunities of deprescribing in terms of improving quality of life, its positive economic impact, and its contribution to a clean, sustainable future.

Furthermore, healthcare providers (94.5%) and policymakers (66.7%) agree that deprescribing contributes to cost savings within the French healthcare system. This view is also shared by academics who think that research in this field demonstrates a clear cost-effectiveness for the healthcare system (57.1%). Interestingly, most professionals (72.2%) and policymakers (66.7%) justify the adoption of deprescribing for the long-term economic benefits it presents, although they understand its implementation would incur short-term costs. There is also ongoing debate among academics as to whether deprescribing will reduce out-of-pocket expenses or insurance premiums (64.7%). Furthermore, academics remain divided regarding whether their research provides evidence of a significant reduction in overall healthcare expenditure, which may, in turn, hinder its prioritisation on the current policy agenda. Finally, patients believe that stopping useless or inappropriate medications will diminish their healthcare expenditures (66.7%). However, the economic argument does not guide their willingness to reduce medication consumption (66.7% of respondents agree with this affirmation). They also highlighted that the push towards deprescribing seems to be founded solely on lowering social security economic expenditures, without further considering aspects such as health outcomes or supply factors. Economic pressures are straining both individuals and governments. Healthcare is costly, yet it remains a fundamental right that allows people to stay healthy and fully engage in society. Healthcare systems globally are experiencing substantial financial constraints, and France is no exception to this trend (Rachas *et al.*, 2022).

In this context, deprescribing is an opportunity to alleviate some of these struggles, an opinion widely shared among stakeholders in our survey.

Finally, among the respondents to our survey, healthcare professionals believe that deprescribing is an opportunity to decrease the environmental impact of health care (88.9%), while notably reducing pharmaceutical waste (88.9%). Government and policymakers are convinced that deprescribing is fundamental not only to diminish waste (66.7%), but also to optimise the utilisation of medicines in the healthcare system (66.7%). Interestingly, while the pharmaceutical sector agrees with the optimisation argument, their position around reducing pharmaceutical waste and environmental pollution is unclear, even though they think deprescribing aligns with responsible and sustainable health care. They noted the necessity to evaluate the impact of their activity on the environment, incorporating more specific metrics; however, they did not propose any such metrics to advance this discussion. Notably, some healthcare professionals acknowledge that French healthcare policies should further encourage novel and innovative approaches to address this issue (88.9%), and the majority recognise that it is important to develop robust, evidence-based policies for implementing deprescribing initiatives that can be sustained long term (94.4%). Our results show that the degree of policy innovation is a friction point between policymakers and academics. In this regard, policymakers defend that the French political milieu encourages innovation, in this case around deprescribing mechanisms (66.7%). However, academics defend that the system is somehow reluctant to embrace innovative approaches swiftly, and it is at times perceived as a discouraging influence to foster efforts towards deprescribing (71.4%).

Researchers nevertheless consider that their research demonstrates a positive impact of deprescribing on the sustainability of healthcare systems and the environment (57.2%). Furthermore, they are convinced that such research is fundamental to developing strategies to reduce pharmaceutical waste (85.7%). Regardless, they plainly agree on the importance for France to develop robust policies linking deprescribing and sustainability (100%), in a shared vision with policymakers (66.7%). Patients also think that deprescribing will reduce pharmaceutical waste and benefit the environment (66.7%). However, whether this will also contribute to a more sustainable healthcare system remains unclear, according to responses from the survey.

Environmental and biodiversity protection is considered one of the top challenges according to the 2030 Agenda, agreed in 2015 by all United Nations Member States (United Nations, 2015). Healthcare systems face increasing scrutiny over their environmental footprint, particularly regarding both pharmaceutical waste and its effects on aquatic and terrestrial

biodiversity, and problems derived from antimicrobial resistance (Desai, Njoku and Nimo-Sefah, 2022; Seppänen and Or, 2023; Sijm-Eeken, Jaspers and Peute, 2023). In this context, deprescribing represents a proactive strategy to minimise surplus medication, curtail pharmaceutical residues in the environment and promote the sustainability of healthcare delivery. Our results show that key stakeholders in France recognise the need to align prescribing policies with One Health to protect human, environmental, and biodiversity health.

### **3.7. Limitations of this work**

Despite the engagement strategy employed, we received fewer responses from policymakers and representatives of the pharmaceutical industry compared to other stakeholders. This limits our analysis and makes generalisation difficult. Similarly, our results might skew towards information obtained from healthcare professionals and patients because, first, the literature we used to inform the survey is mainly interested in the vision of these stakeholder groups, and second, because we received a comparatively higher number of responses to our survey from these groups. Moreover, an important proportion of respondents within the policymakers' stakeholder group gave "neutral" answers. While this neutrality limits our interpretation of the data, it also allows us to hypothesise about several options that could be the subject of further research. Strikingly, only one respondent from the pharmaceutical industry answered the survey. This situation is rather surprising given that the pharmaceutical industry, in its own words, is now more concerned than ever about trust, transparency, damage, and reputation (Pearcy, 2024). Although this is an interesting theme, its discussion is beyond the scope of this work. Nonetheless, we have decided to include this information to contrast it with the views of other stakeholders, particularly should any responses suggest controversy. It is also possible that we omitted key actors during the research design phase, introducing a sampling bias that might affect the comprehensiveness of this study. Finally, the limited timeframe and resources available for this project prevented us from implementing alternative engagement strategies or conducting in-depth interviews to obtain more detailed data, especially with policymakers and pharmaceutical industry participants.

## **4. Conclusions and recommendations**

Deprescribing is one important intervention for mitigating inappropriate use of medicines and addressing issues around polypharmacy in France. This study explores the attitudes and perspectives of key stakeholders towards deprescribing, with the aim of identifying opportunities for developing and implementing new policies and guidelines. This research builds upon the efforts of a consortium of actors from the *Laboratoire interdisciplinaire*

*d'évaluation des politiques publiques* (LIEPP) at SciencesPo and the *Institut de recherche et documentation en économie de la santé* (IRDES) working on the project “*DEPREFLEX: Déprescription et réflexions sur les freins et leviers*”, which explores levers, obstacles and frameworks influencing the acceptability of deprescribing in France (Monde, 2024; SciencesPo and LIEPP, 2024). In particular, we explore the relationship between deprescribing and health outcomes, economic impact and environmental considerations from the standpoint of key stakeholders with a stance on the issue.

This work stresses the importance of education and training to foster robust understanding, acceptance, and safe implementation of deprescribing. Among the stakeholders we examined, our research highlights the lack of familiarity with the concept for patients and policymakers, and the need for specialised training for healthcare professionals. We also identified patient resistance, clinical hesitancy, and system inertia as negative dynamics in the implementation of deprescribing mechanisms. These behavioural and systemic resistance are linked with issues around interprofessional and intersectoral collaboration and poor communication. Similar to other countries and healthcare systems, resource constraints, budgetary deficits, and difficulties in accessing, understanding, and using trustworthy data and information further complicate the situation.

Despite these barriers, this work illustrates the benefits of widespread implementation of deprescribing mechanisms. Our results highlight stakeholder alignment in considering deprescribing as an opportunity to improve patients' safety and quality of life, reduce the economic burden of the healthcare system, and reduce the environmental impact of the healthcare and pharmaceutical sector. Partnerships should be encouraged to increase the level of education and knowledge among different stakeholders, so that opportunities are addressed from various angles to the benefit of society as a whole. This thesis underlines the importance of developing innovative and effective policy frameworks to include deprescribing as a safe and regulated practice.

In this sense, we propose the following policy recommendations:

➤ For healthcare professionals:

- Allocate protected, remunerated time for medication reviews within standard working hours, embedded and guaranteed in employment contracts and job plans, to enable multidisciplinary teams to systematically assess and optimise medication plans without compromising other clinical duties or personal time.
- Include empathetic communication and collaboration training in professional development plans to equip professionals with the skills necessary to foster patient-

centred dialogue, understanding each patient's values, beliefs, and emotions without judgment. This training will build trust and enhance shared decision-making and patient confidence, facilitating the deprescribing process.

➤ For patient associations and actors:

- Incorporate responsible prescribing and deprescribing messages into public campaigns, utilising clear, jargon-free language and social media to explain, for example, what deprescribing is, why it matters, how it can be discussed, and the implications and benefits for the near future. These communications can align with existing global efforts, such as World Patient Safety Day on 17th September.
- Empower patients (and caregivers) through participatory forums and peer support with regular dialogue sessions, in which professionals are also present, to share experiences, explore fears and concerns around deprescribing, or to explain various strategies in a relaxed, informal atmosphere.

➤ For academia:

- Mobilise evidence-driven advocacy through strategic outreach by linking existing evidence to engage directly with key policymakers, Members of Parliament, and international bodies in briefing sessions.
- Advocate for the establishment of a dedicated research programme on deprescribing, aiming to understand the dynamics within the country by analysing political contexts, stakeholder networks, and market challenges for policy formulation and implementation; as well as to clarify the different entities and committees involved in this process to promote the topic on the political agenda.

➤ For policymakers:

- Adopt and promote a national strategy for the responsible use of medicines supported by a cohesive, cross-departmental, and interministerial approach that emphasises medication optimisation as a quality-of-care initiative rather than merely a cost-saving measure.
- Incentivise and scale up pilot programmes across various care settings throughout the country, in collaboration with regional health agencies and professional organisations, to test and adapt medication review models and guidelines from abroad to meet the specific needs and peculiarities of the country.

➤ For the pharmaceutical industry:

- Integrate responsible use metrics into corporate governance and R&D portfolios, and provide transparent accounts of real-world medicine utilisation, tracking low-value medicines, off-label use, and the volume of drugs used.
- Reform marketing practices to prioritise patient safety and cease direct-to-professional marketing, redirecting marketing budgets to fund clinical education, prevention and promotion, public health campaigns, and research in deprescribing.

This thesis emphasises the need to prioritise deprescribing within healthcare policy and practice in France. Deprescribing must become an essential component of a wider, coordinated effort, moving beyond isolated initiatives, to tackle the cultural, structural, and institutional obstacles that impede its broader implementation. To achieve this, it is crucial to engage with all stakeholders within the health ecosystem, advocating for enhanced collaboration, sustained political commitment, and innovative approaches for the benefit of all.

## Appendix 1: List of organisations (national, departmental and local)

**Table 2:** List of organisations (national, departmental and local) initially researched

Association nationale de défense des intérêts des Victimes d'accidents des médicaments	Société française de santé publique
Advocacy France - Association d'usagers en santé mentale, médico-sociale et sociale	Centre National Hospitalier d'Information sur le Médicament
Association française des malades et opérés cardio-vasculaires	Fédération des mutuelles de France
AFA Crohn RCH France - Association François Aupetit, maladies inflammatoires chroniques intestinales, maladie de Crohn et recto-colite hémorragique	OECD Health
Association française des Hémophiles	Réseau française Villes-Santé
Association française des polyarthritiques et des rhumatismes inflammatoires chroniques	Fédération National des observatoires régionaux de sante
Association francophone pour vaincre les douleurs	ARS
Actions Traitements - Association de patients, agréée pour représenter les usagers du système de santé	DGOS
AIDES – Association de lutte contre le sida	DGS
Association Nationale de Défense contre l'Arthrite Rhumatoïde	Association Française d'étude et de recherche sur l'obésité
ARGOS 2001 - Aide aux personnes atteintes de troubles bipolaires et à leur entourage	Association de recherche en soins infirmiers
Association Française du Syndrome de Fatigue Chronique	Laboratoire d'Epidémiologie et Analyses en Santé Publique : Risques, Maladies Chroniques et Handicaps
Collectif National des Associations d'Obèses	Laboratoire de pharmacologie et de toxicologie neurocardiovasculaire
Fédération française des Diabétiques	Strasbourg – EUCOR Academic Network
Fédération Française des Associations de Greffés du Cœur et des Poumons	Association pour la recherche sur le diabète
Fibromyalgie SOS	Société Francophone de Néphrologie, Dialyse et Transplantation
France Alzheimer	Club des Jeunes Néphrologues
France Dépression	Ordre National des Infirmiers
France Parkinson	Conseil national de l'ordre des pharmaciens
France Rein	Conseil national de diabétologie, d'endocrinologie et de maladies métabolique
Hypersupers TDAH France - Association française pour aider les familles, adultes et enfants concernés par le Trouble Déficit de l'Attention et Hyperactivité	Collège de médecine générale
Renaloo	Société francophone du diabète
Schizo-Oui	Société française d'endocrinologie
Autisme France	
Fédération Française Sésame Autisme	Syndicat National des Infirmières et Infirmiers Libéraux
SOS Hépatites	Fédération nationale des infirmiers
Transhépate - Fédération des malades et greffés du foie	Syndicat National des Professionnels Infirmiers
Union nationale des familles et amis de personnes malades et/ou handicapées psychiques	Collège national des cardiologues françaises
Union nationale des associations de parents de personnes handicapées mentales et de leurs amis	Fédération française de psychiatrie
Fédération française de cardiologie	Gérontopôles
Association Heart and Cœur - Cardiopathies congénitales du Cœur et des poumons	Cancéropôles
Association de malades cardiaques	Société française de gériatrie et gérontologie
Fédération Française d'endocrino-diabétologues	Association jeunes gériatres
Syndicat des médecins spécialistes en Endocrinologie, Diabétologie, Maladies Métaboliques et Nutrition	Syndicat Synpreff - Pharmaceutique
Fédération de médecins de France	Société Française de Pharmacie Clinique
Société Française de Médecine Générale	Société française de cardiologie
Confédération des centres de santé C3SI	Fédération Hospitalière de France
Syndicat des médecins libéraux	Fédération des Établissements Hospitaliers et d'Aide à la Personne
Union nationale des professionnels de santé	Fédération des Maisons de Santé en Île-de-France
Syndicat Convergence Infirmière	Fédération nationale des centres de santé
Fédération des Syndicats Pharmaceutiques de France	Fédération Nationale des Associations de Directeurs d'Établissements et Services pour Personnes Agées
Fédération française des industries de la santé	MG France
Association Générique Même Médicament	LEEM - association des entreprises du médicament
Association pour le Bon Usage du médicament	Alliance pour la recherche et l'innovation des industries de santé

Note: the 110 participant organisations are not fully represented in this table because some of them are departmental and local antennas of the main organisation, and we only show the national branch in the table.

## Appendix 2: Literature search to inform the design of the survey

**Table 3:** List of publications used to inform the design of the survey

Authors & Year	Title	DOI
(Charbonneau <i>et al.</i> , 2024)	Factors influencing the effects of policies and interventions to promote the appropriate use of medicines in high-income countries: A rapid realist review	10.1016/j.healthpol.2024.105027
(Mejías-Trueba <i>et al.</i> , 2023)	The Barriers to Deprescribing in Older Patients: A Survey of Spanish Clinicians	10.3390/healthcare11131879
(Quek <i>et al.</i> , 2023)	Deprescribing considerations for older people in general practice	10.31128/AJGP-08-22-6547
(Robinson, Mokrzecki and Mallett, 2024)	Attitudes and barriers towards deprescribing in older patients experiencing polypharmacy: a narrative review	10.1038/s41514-023-00132-2
(Ng <i>et al.</i> , 2021)	Deprescribing perceptions and practice reported by multidisciplinary hospital clinicians after, and by medical students before and after, viewing an e-learning module	10.1016/j.sapharm.2021.03.002
(Reeve, 2020)	Deprescribing tools: a review of the types of tools available to aid deprescribing in clinical practice	10.1002/jppr.1626
(Perron, 2024)	Towards a Prescription for Change: Interprofessional Management of Polypharmacy and Deprescribing	10.1007/s13670-024-00420-z
(Riordan <i>et al.</i> , 2017)	GPs' perspectives on prescribing for older people in primary care: a qualitative study	10.1111/bcp.13233
(Dhuny, Foley and Jennings, 2021)	General practitioners' knowledge of and attitudes towards prescribing psychoactive drugs in dementia care: a cross-sectional questionnaire study	10.1007/s11845-020-02356-7
(Shapoval <i>et al.</i> , 2025)	Barriers to Deprescribing Benzodiazepines in Older Adults in a Survey of European Physicians	10.1001/jamanetworkopen.2024.59883
(Gillespie, Harrison and Mullan, 2018)	Deprescribing medications for older adults in the primary care context: A mixed studies review	10.1002/hsr2.45
(Todd <i>et al.</i> , 2018)	The deprescribing rainbow: A conceptual framework highlighting the importance of patient context when stopping medication in older people	10.1186/s12877-018-0978-x
(Sinnige <i>et al.</i> , 2016)	Medication management strategy for older people with polypharmacy in general practice: A qualitative study on prescribing behaviour in primary care	10.3399/bjgp16X685681
(Alrawiai, 2023)	Deprescribing, shared decision-making, and older people: perspectives in primary care	10.1186/s40545-023-00671-9
(Okeowo <i>et al.</i> , 2023)	Barriers and facilitators of implementing proactive deprescribing within primary care: a systematic review	10.1093/ijpp/riad001
(Ibrahim <i>et al.</i> , 2021)	A systematic review of the evidence for deprescribing interventions among older people living with frailty	10.1186/s12877-021-02208-8
(Pohontsch <i>et al.</i> , 2017)	General practitioners' views on (long-term) prescription and use of problematic and potentially inappropriate medication for oldest-old patients - A qualitative interview study with GPs (CIM-TRIAD study)	10.1186/s12875-017-0595-3
(Heinrich, Hurley, <i>et al.</i> , 2022)	Barriers and enablers to deprescribing in long-term care facilities: a 'best-fit' framework synthesis of the qualitative evidence	10.1093/ageing/afab250
(Doherty <i>et al.</i> , 2020)	Barriers and facilitators to deprescribing in primary care: A systematic review	10.3399/bjgpopen20X101096
(Corban, 2021)	Les médicaments potentiellement inappropriés au cœur de la prise en charge du sujet âgé en Ehpad inappropriés au cœur de la prise en charge du sujet âgé en Ehpad	
(Daubert, 2023)	Développement durable et prescriptions: stratégies pour limiter l'impact environnemental des médicaments en médecine générale	
(Cross <i>et al.</i> , 2021)	Exploring stakeholder roles in medication management for people living with dementia	10.1016/j.sapharm.2020.06.006
(Elbeddini <i>et al.</i> , 2021)	Barriers to conducting deprescribing in the elderly population amid the COVID-19 pandemic	10.1016/j.sapharm.2020.05.025
(Martinez <i>et al.</i> , 2020)	Attitudes toward deprescribing in a middle-aged health disparities population	10.1016/j.sapharm.2020.02.014
(Graabæk <i>et al.</i> , 2021)	"I simply don't know, because I don't know which drugs I get": Perspectives on deprescribing among older adults with limited life expectancy and their relatives	10.1111/bcpt.13476
(Marquina-Márquez <i>et al.</i> , 2022)	Identifying barriers and enablers for benzodiazepine (de)prescription: a qualitative study with patients and healthcare professionals	10.23938/ASSN.1005

continuation

<b>Authors &amp; Year</b>	<b>Title</b>	<b>DOI</b>
(Kassis, Moles and Carter, 2024)	Stakeholders' perspectives and experiences of the pharmacist's role in deprescribing in ambulatory care: A qualitative meta-synthesis	10.1016/j.sapharm.2024.04.014
(Bužančić and Ortner Hadžiabdić, 2023)	Differences in Factors Influencing Deprescribing between Primary Care Providers: Cross-Sectional Study	10.3390/ijerph20064957
(Reeve, Thompson and Farrell, 2017)	Deprescribing: A narrative review of the evidence and practical recommendations for recognizing opportunities and taking action	10.1016/j.ejim.2016.12.021
(Silva Almodóvar <i>et al.</i> , 2024)	Deprescribing medications among patients with multiple prescribers: A socioecological model	10.1111/jgs.18667
(Alrasheed <i>et al.</i> , 2018)	Knowledge and willingness of physicians about deprescribing among older patients: A qualitative study	10.2147/CIA.S165588
(Huffmyer <i>et al.</i> , 2021)	Primary care clinician and community pharmacist perceptions of deprescribing	10.1111/jgs.17092
(van Poelgeest <i>et al.</i> , 2022)	Deprescribing practices, habits and attitudes of geriatricians and geriatricians-in-training across Europe: a large web-based survey	10.1007/s41999-022-00702-9
(Linsky <i>et al.</i> , 2019)	Deprescribing in the context of multiple providers: Understanding patient preferences	
(Turner <i>et al.</i> , 2020)	Patients' beliefs and attitudes towards deprescribing: Can deprescribing success be predicted?	10.1016/j.sapharm.2019.07.007
(Achterhof <i>et al.</i> , 2020)	Potentially inappropriate medication and attitudes of older adults towards deprescribing.	10.1371/journal.pone.0240463
(Weir <i>et al.</i> , 2023)	Factors Important to Older Adults Who Disagree with a Deprescribing Recommendation.	10.1001/jamanetworkopen.2023.37281
(Weir <i>et al.</i> , 2018)	Decision-Making Preferences and Deprescribing: Perspectives of Older Adults and Companions About Their Medicines.	10.1093/geronb/gbx138
(Forest <i>et al.</i> , 2021)	Patient values and preferences on polypharmacy and deprescribing: a scoping review.	10.1007/s11096-021-01328-w
(Bolt, Abdoulrezzak and Inglis, 2023)	Barriers and enablers to deprescribing of older adults and their caregivers: a systematic review and meta-synthesis.	10.1007/s41999-023-00879-7
(Palagyi <i>et al.</i> , 2016)	Barricades and brickwalls--a qualitative study exploring perceptions of medication use and deprescribing in long-term care.	10.1186/s12877-016-0181-x
(Rowe <i>et al.</i> , 2022)	Beliefs and attitudes of residents, family members and healthcare professionals regarding deprescribing in long-term care: a qualitative study.	10.1007/s11096-022-01419-2
(Kim <i>et al.</i> , 2023)	Patient-Reported Barriers and Enablers to Deprescribing Recommendations During a Clinical Trial (Shed-MEDS)	10.1093/geront/gnac100

**Appendix 3: Questionnaire: Deprescribing practices in France: A multi-stakeholder survey to guide policy and practice. (Pratiques de deprescription en France : Une enquête auprès des parties prenantes pour orienter les politiques et les pratiques.)**

**English version**

Note: unless otherwise stated, answers to the following questions are based on a Likert-scale to choose from “Completely disagree”, “Disagree”, “Neutral”, “Agree”, and “Completely agree”.

**Common questions:**

**Q1.** Which institution do you work for? (open-ended question)

**Q2.** Which stakeholder group does your organisation represent? Choose one of the following:  
*Healthcare professionals – Patients – Academia – Policymakers – Pharmaceutical industry*

**Stakeholder: Healthcare professionals**

**Q3.** Are professionals in your organisation familiar with the concept of deprescribing? (YES/NO)

**Q4.** Do professionals in your organisation know about existing tools and guidelines for deprescribing (i.e. CEASE, G-MEDSS, MedStopper, START/STOPP, EMPOWER)?

**Q5.** Other tools and guidelines that professionals in your organisation follow? (open-ended question)

**Q6.** Do professionals in your organisation receive education and training on deprescribing? (YES/NO)

**Q7.** Deprescribing improves patients’ safety.

**Q8.** Deprescribing improves patients’ quality of life.

**Q9.** Polypharmacy is currently a problem in France.

**Q10.** It is necessary to develop more strategies for deprescribing.

**Q11.** Healthcare professionals are adequately trained to identify candidates for deprescribing.

**Q12.** Healthcare professionals feel comfortable discussing deprescribing with their patients.

**Q13.** Healthcare professionals feel confident proposing a deprescribing action plan for their patients.

**Q14.** Healthcare professionals feel confident managing a deprescribing action plan for their patients.

**Q15.** Lack of time limits the ability of healthcare professionals to implement deprescribing actions.

**Q16.** Resistance from patients and caregivers affects healthcare professionals when proposing deprescribing action plans.

**Q17.** Clear, evidence-based guidelines and protocols would help healthcare professionals incorporate deprescribing more often.

**Q18.** The possibility of negative patient outcomes hinders healthcare professionals from integrating deprescribing processes in their daily activities.

**Q19.** Legal repercussions and liability prevent healthcare professionals from integrating deprescribing more often in their practice.

**Q20.** Insufficient communication and collaboration between healthcare professionals make deprescribing difficult in practice.

**Q21.** Can you list other barriers that healthcare professionals face when implementing deprescribing? (open-ended question)

**Q22.** Deprescribing is more important for elderly patients than for the younger.

**Q23.** Better access to clinical decision support tools would facilitate deprescribing in practice.

**Q24.** Continuing education programs and professional training on deprescribing facilitate deprescribing in practice.

**Q25.** Reimbursement policies and new payment methods provide sufficient financial incentives to promote deprescribing.

**Q26.** Support and guidance from health authorities are important in encouraging deprescribing

- Q27.** Can you list other facilitators for healthcare professionals in implementing deprescribing? (open-ended question)
- Q28.** Deprescribing is an important aspect of high-quality care in France.
- Q29.** Deprescribing contributes to cost savings for the healthcare system.
- Q30.** Deprescribing contributes to a significant drop in out-of-pocket expenses for patients.
- Q31.** Short-term implementation costs for deprescribing are compensated by long-term economic benefits.
- Q32.** Deprescribing helps reduce pharmaceutical waste in our healthcare system.
- Q33.** Deprescribing contributes to reducing the environmental impact of healthcare.
- Q34.** Developing powerful policies linking deprescribing and sustainability is important in France.
- Q35.** The French health policy environment encourages innovative approaches towards deprescribing.

**Stakeholder: Patients**

- Q36.** Are patients and/or caregivers in your organisation familiar with the concept of deprescribing? (YES/NO)
- Q37.** Do patients and/or caregivers in your organisation know about existing tools and guidelines for deprescribing? (YES/NO)
- Q38.** List some of the tools and guidelines your organisation is familiar with. (open-ended question)
- Q39.** Do patients and/or caregivers in your organisation receive education and guidance on deprescribing? (YES/NO)
- Q40.** List any campaign your organisation is aware about deprescribing. (open-ended question)
- Q41.** Patients and/or caregivers find it difficult to talk about their health and medications with their various healthcare providers.
- Q42.** Patients and/or caregivers understand that taking several different medications can be a health risk.
- Q43.** Patients and/or caregivers trust health professionals to make the best decisions regarding their health needs, especially when dealing with their medications.
- Q44.** It is important for patients to take fewer medications for their health.
- Q45.** Patients and/or caregivers feel comfortable reducing or stopping medications.
- Q46.** Patients and/or caregivers feel confident proposing to healthcare professionals to reduce or stop a medication.
- Q47.** Patients and/or caregivers feel comfortable reducing or stopping medications they have been taking for a long time.
- Q48.** Patients and/or caregivers have enough clear information about the benefits and risks of their medications.
- Q49.** Patients and/or caregivers understand that by reducing or stopping their medications, their health will worsen.
- Q50.** Patients and/or caregivers think reducing or stopping their medications is a form of under-caring.
- Q51.** Patients and/or caregivers think their medications are essential and need to continue with them.
- Q52.** Patients and/or caregivers feel confident proposing to healthcare professionals to reduce or stop the medication they are currently taking.
- Q53.** Can you list other barriers for patients and/or caregivers towards deprescribing? (open-ended question)
- Q54.** Having more information would positively impact patients and/or caregivers in considering reducing or stopping medication.
- Q55.** Giving patients and/or caregivers simple instructions would encourage them to consider stopping or reducing medication.
- Q56.** It is important for patients and/or caregivers to have a support system to begin reducing or stopping a medication.

- Q57.** Patients and/or caregivers trust their clinician more than other health professionals to consider reducing or stopping their medication.
- Q58.** Saving money moves patients and/or caregivers to start a plan to reduce or stop medications.
- Q59.** Can you list other facilitators for patients and/or caregivers towards deprescribing? (open-ended question)
- Q60.** When a different medication route is proposed, patients and/or caregivers think their health is being valued.
- Q61.** Patients and/or caregivers believe that reducing unnecessary medications will significantly lower their healthcare expenses.
- Q62.** Patients and/or caregivers contribute to sustaining the healthcare system by reducing or stopping their medications.
- Q63.** Patients and/or caregivers think that reducing or stopping unnecessary medications will help decrease overall pharmaceutical waste and benefit the environment.

**Stakeholder: Academia**

- Q64.** Can you list some important tools and guidelines that professionals in your organisation study in the field of deprescribing? (open-ended question)
- Q65.** Deprescribing has a positive impact on healthcare and quality of life.
- Q66.** Polypharmacy is currently a problem in France.
- Q67.** Deprescribing is an essential research area that should be further studied.
- Q68.** Research on deprescribing is relevant to improving public health outcomes.
- Q69.** Deprescribing aligns well with the priorities of academia and research institutions in public health matters.
- Q70.** Research in deprescribing is important to advance public policy matters.
- Q71.** Researchers feel confident that different audiences understand the matters around deprescribing when presenting their research.
- Q72.** Research around deprescribing is sufficiently funded.
- Q73.** Access to high-quality, real-world data hampers research in the field of deprescribing.
- Q74.** The political will to advance in the field of deprescribing is enough.
- Q75.** There is a publication bias that favours novel therapies and drug trials over deprescribing studies.
- Q76.** Lack of interdisciplinary collaboration limits the scope and impact of the field of deprescribing.
- Q77.** Can you list other barriers for academia and research organisations towards deprescribing? (open-ended question)
- Q78.** The current level of governmental and public support is sufficient to facilitate research in deprescribing.
- Q79.** Existing research networks and academic collaborations boost the feasibility of deprescribing research in France.
- Q80.** Digital health solutions and modern data systems facilitate robust research in deprescription.
- Q81.** Increasing financial incentives and the number of targeted grants boost research in deprescribing.
- Q82.** Can you list other incentives for academia and research organisations towards deprescribing? (open-ended question)
- Q83.** Deprescribing is an important research area in France.
- Q84.** My institution actively supports and encourages research on deprescribing.
- Q85.** Research in deprescribing demonstrates clear cost-effectiveness for the healthcare system.
- Q86.** Studies on deprescribing show that reducing medications significantly lowers overall healthcare expenditures.
- Q87.** Deprescribing research supports strategies that can lead to a reduction in pharmaceutical waste.

**Q88.** Deprescribing research demonstrates unambiguously its positive impact on sustainable healthcare and the environment.

**Q89.** Developing powerful policies linking deprescribing and sustainability is important in France.

**Q90.** The French health policy environment encourages innovative approaches towards deprescribing.

### **Stakeholder: Policymakers**

**Q91.** Is your organisation familiar with the concept of deprescribing? (YES/NO)

**Q92.** Do professionals in your organisation know about existing tools and guidelines for deprescribing (CEASE, G-MEDSS, MedStopper, START/STOPP, EMPOWER)? (YES/NO)

**Q93.** Other tools and guidelines that professionals in your organisation know? (open-ended question)

**Q94.** Do professionals in your organisation receive formal education/training on deprescribing? (YES/NO)

**Q95.** Deprescribing improves patients' safety.

**Q96.** Deprescribing improves patients' quality of life.

**Q97.** Pharmaceutical spending and overconsumption are a problem in France.

**Q98.** Deprescribing aligns with public health objectives in the country.

**Q99.** Deprescribing is a key strategy for optimising medication use in the healthcare system.

**Q100.** France's regulatory framework is prepared to support the implementation of deprescribing protocols to address key populations.

**Q101.** There is enough evidence to support the implementation of deprescribing initiatives.

**Q102.** It is important to incorporate deprescribing policies and regulations at the national level.

**Q103.** Implementing deprescribing policies would lead to bureaucratic backlogs.

**Q104.** There are enough regulatory mechanisms to back the implementation of deprescribing initiatives.

**Q105.** Funding and resources are sufficient to implement deprescribing initiatives.

**Q106.** Pharmaceutical lobbying slows down the promotion and implementation of deprescribing policies.

**Q107.** Concerns over legal liability and accountability discourage the development and implementation of deprescribing policies.

**Q108.** Can you list other barriers in your area of expertise towards deprescribing? (open-ended questions)

**Q109.** Strong support from the government and regulatory institutions is key to easing the development and implementation of deprescribing initiatives.

**Q110.** A solid intersectoral collaboration would make deprescribing more feasible.

**Q111.** Robust, clear, data-driven research findings supporting the importance of deprescribing would strengthen the case for its implementation.

**Q112.** Financial incentives and creative reimbursement policies are important to promote deprescribing.

**Q113.** Can you list other facilitators in your area of expertise towards deprescribing? (open-ended question)

**Q114.** Deprescribing aligns with the founding values of the healthcare system in France.

**Q115.** Deprescribing is a cost-effective strategy that can help reduce healthcare over-expending.

**Q116.** Current reimbursement policies support the economic benefits of deprescribing.

**Q117.** Long-term economic benefits of deprescribing outweigh the predictable initial costs associated with its implementation.

**Q118.** Deprescribing initiatives contribute to reducing pharmaceutical waste and environmental pollution.

**Q119.** Integrating deprescribing into health policies promotes the environmental sustainability of our healthcare system.

**Q120.** Developing powerful policies linking deprescribing and sustainability is important in France.

**Q121.** The French health policy environment encourages innovative approaches towards deprescribing.

**Stakeholder: Pharmaceutical industry**

**Q122.** Is your organisation familiar with the concept of deprescribing? (YES/NO)

**Q123.** Deprescribing improves patient safety and quality of life.

**Q124.** Pharmaceutical spending and overconsumption are a problem in France.

**Q125.** Deprescribing aligns with public health objectives in France.

**Q126.** Deprescribing is a key strategy for optimising medication use in the healthcare system.

**Q127.** There is enough evidence to support the implementation of deprescribing initiatives

**Q128.** It is important to incorporate deprescribing policies and regulations at the national level.

**Q129.** Deprescribing will reduce the overall demand for certain pharmaceutical products.

**Q130.** A novel regulatory framework on deprescribing would affect the product portfolio.

**Q131.** The potential loss of revenue due to reduced medication use is a problem for supporting deprescribing initiatives.

**Q132.** If a trend for deprescribing gains traction, marketing strategies will be dramatically affected.

**Q133.** There are enough regulatory mechanisms to back the implementation of deprescribing initiatives.

**Q134.** Can you list other barriers the sector encounters around deprescribing? (open-ended question)

**Q135.** Deprescribing is an opportunity for the sector to focus and innovate on safer and more effective therapies.

**Q136.** A solid intersectoral collaboration and the development of new partnerships would make deprescribing more appealing for the sector.

**Q137.** Can you list other facilitators the sector encounters around deprescribing? (open-ended question)

**Q138.** The market is supportive of responsible prescribing and other healthcare innovations.

**Q139.** Deprescribing aligns with sustainable and responsible healthcare.

**Q140.** Deprescribing is a cost-effective strategy that can help reduce healthcare over-expending.

**Q141.** Deprescribing is a concern in terms of market share loss.

**Q142.** Deprescribing may open new economic opportunities, which could favour innovative therapies over traditional medication volumes.

**Q143.** Deprescribing contributes to a reduction in pharmaceutical waste and overall environmental pollution.

**Q144.** The sector should use more environmental impact metrics to evaluate its activity.

**Q145.** The sector is prepared to adjust and innovate its business strategies to maintain competitiveness, foreseeing advances in implementing deprescribing initiatives.

**French version**

Remarque : sauf indication contraire, les réponses aux questions suivantes sont basées sur une échelle de Likert permettant de choisir entre « En total désaccord », « En désaccord », « Neutre », « D'accord » et « En total accord ».

**Questions communes :**

**Q1.** Quelle organisation représentez-vous ? (question ouverte)

**Q2.** Votre organisation représente quel(s) groupe(s) de parties prenantes ? Choisissez l'une des options suivantes : *Professionnels de santé – Patient – Academia – Décideurs politiques – Industrie pharmaceutique*

**Partie prenante : Professionnels de santé**

**Q3.** Les professionnels de votre organisation connaissent-ils le concept de déprescription ? (OUI/NON)

- Q4.** Les professionnels de votre organisation connaissent-ils des outils existants pour la déprescription (i.e. CEASE, G-MEDSS, MedStopper, START/STOPP, EMPOWER) ?
- Q5.** Autres outils et directives suivis par les professionnels de votre organisation. (question ouverte)
- Q6.** Les professionnels de votre organisation reçoivent-ils une formation sur la déprescription ? (OUI/NON)
- Q7.** La déprescription améliore la sécurité des patients.
- Q8.** La déprescription améliore la qualité de vie des patients.
- Q9.** La polymédication est actuellement un problème en France.
- Q10.** Il est nécessaire de développer davantage de stratégies de déprescription.
- Q11.** Les professionnels de santé sont suffisamment formés pour identifier les candidats à la déprescription.
- Q12.** Les professionnels de santé se sentent à l'aise pour discuter de la déprescription avec leurs patients.
- Q13.** Les professionnels de santé se sentent en confiance pour proposer un plan d'action de déprescription à leurs patients.
- Q14.** Les professionnels de santé se sentent capables de gérer un plan d'action de déprescription pour leurs patients.
- Q15.** Le manque de temps limite la capacité des professionnels de santé à mettre en œuvre des actions de déprescription.
- Q16.** La résistance des patients et des aidants affecte les professionnels de santé lorsqu'ils proposent des plans d'action de déprescription.
- Q17.** Des politiques et protocoles clairs, fondés sur des preuves, aideraient les professionnels de santé à intégrer plus fréquemment la déprescription.
- Q18.** La possibilité de résultats de santé négatifs pour les patients empêche les professionnels de santé d'intégrer les processus de déprescription dans leurs activités quotidiennes.
- Q19.** Les répercussions et la responsabilité juridiques empêchent les professionnels de santé d'intégrer la déprescription dans leur pratique.
- Q20.** Une communication et une collaboration insuffisantes entre les professionnels de santé rendent la déprescription difficile à mettre en pratique.
- Q21.** Pouvez-vous énumérer d'autres obstacles rencontrés par les professionnels de santé dans la mise en œuvre de la déprescription ? (question ouverte)
- Q22.** La déprescription est plus importante pour les patients âgés que pour les plus jeunes.
- Q23.** Un meilleur accès aux outils d'aide à la décision clinique faciliterait la déprescription en pratique.
- Q24.** Les programmes de formation continue et la formation professionnelle sur la déprescription facilitent la mise en œuvre de la déprescription en pratique.
- Q25.** Les politiques de remboursement et les nouvelles méthodes de paiement offrent des incitations financières suffisantes pour promouvoir la déprescription.
- Q26.** Le soutien des autorités sanitaires sont importants pour encourager la déprescription.
- Q27.** Pouvez-vous énumérer d'autres facilitateurs pour les professionnels de santé dans la mise en œuvre de la déprescription ? (question ouverte)
- Q28.** La déprescription est un aspect important d'une prise en charge de haute qualité en France.
- Q29.** La déprescription contribue à la réduction des coûts pour le système de santé.
- Q30.** La déprescription contribue à une baisse significative des dépenses directes des patients.
- Q31.** Les coûts d'implémentation à court terme de la déprescription sont compensés par des bénéfices économiques à long terme.
- Q32.** La déprescription aide à réduire le gaspillage pharmaceutique dans notre système de santé.
- Q33.** La déprescription contribue à réduire l'impact environnemental des soins de santé.
- Q34.** Il est important en France de développer des politiques fortes liant la déprescription et la durabilité.

**Q35.** L'environnement des politiques de santé en France encourage des approches innovantes en matière de déprescription.

**Partie prenante : Patients**

**Q36.** Les patients et/ou aidants dans votre organisation connaissent-ils le concept de déprescription ? (OUI/NON)

**Q37.** Les patients et/ou aidants dans votre organisation connaissent-ils les outils et recommandations existants pour la déprescription ? (OUI/NON)

**Q38.** Listez quelques-uns des outils avec lesquels votre organisation est familière. (question ouverte)

**Q39.** Les patients et/ou aidants dans votre organisation reçoivent-ils une éducation/des recommandations sur la déprescription ? (OUI/NON)

**Q40.** Listez toute campagne/politique dont votre organisation a connaissance concernant la déprescription. (question ouverte)

**Q41.** Les patients et/ou aidants trouvent difficile de parler de leur santé et de leurs médicaments avec leurs différents prestataires de soins.

**Q42.** Les patients et/ou aidants comprennent que la prise de plusieurs médicaments différents peut constituer un risque pour la santé.

**Q43.** Les patients et/ou aidants font confiance aux professionnels de santé pour prendre les meilleures décisions concernant leurs besoins de santé, notamment en ce qui concerne leurs médicaments.

**Q44.** Il est important pour les patients de prendre moins de médicaments pour leur santé.

**Q45.** Les patients et/ou aidants se sentent à l'aise pour réduire ou arrêter les médicaments.

**Q46.** Les patients et/ou aidants se sentent en confiance pour proposer aux professionnels de santé de réduire ou d'arrêter un médicament.

**Q47.** Les patients et/ou aidants se sentent à l'aise pour réduire ou arrêter les médicaments qu'ils prennent depuis longtemps.

**Q48.** Les patients et/ou aidants disposent d'informations suffisamment claires sur les bénéfices et les risques de leurs médicaments.

**Q49.** Les patients et/ou aidants pensent/présument que, en réduisant ou en arrêtant leurs médicaments, leur santé se détériorera.

**Q50.** Les patients et/ou aidants pensent que réduire ou arrêter leurs médicaments est une forme de mauvais soin.

**Q51.** Les patients et/ou aidants pensent que leurs médicaments sont essentiels et qu'il est nécessaire de continuer à les prendre.

**Q52.** Les patients et/ou aidants se sentent en confiance pour proposer aux professionnels de santé de réduire ou d'arrêter le médicament qu'ils prennent actuellement.

**Q53.** Pouvez-vous énumérer d'autres obstacles rencontrés par les patients et/ou aidants en ce qui concerne la déprescription ? (question ouverte)

**Q54.** Disposer de plus d'informations aurait un impact positif sur les patients et/ou aidants dans leur réflexion sur la réduction ou l'arrêt de leur médication.

**Q55.** Donner aux patients et/ou aidants des instructions simples les encouragerait à envisager d'arrêter ou de réduire leur médication.

**Q56.** Il est important que les patients et/ou aidants disposent d'un système de soutien pour entamer la réduction ou l'arrêt d'un médicament.

**Q57.** Les patients et/ou aidants font davantage confiance à leur clinicien plutôt qu'à d'autres professionnels de santé pour envisager de réduire ou d'arrêter leur médication.

**Q58.** L'économie d'argent incite les patients et/ou aidants à entamer un plan de réduction ou d'arrêt des médicaments.

**Q59.** Pouvez-vous énumérer d'autres facilitateurs pour les patients et/ou aidants en ce qui concerne la déprescription ? (question ouverte)

**Q60.** Lorsqu'on leur propose une autre voie médicamenteuse, les patients et/ou aidants pensent que leur santé est valorisée.

**Q61.** Les patients et/ou aidants croient que réduire les médicaments inutiles diminuera significativement leurs dépenses de santé.

**Q62.** Les patients et/ou aidants contribuent à la pérennité du système de santé en réduisant ou en arrêtant leurs médicaments.

**Q63.** Les patients et/ou aidants pensent que réduire ou arrêter les médicaments inutiles contribuera à diminuer le gaspillage pharmaceutique global et bénéficiera à l'environnement.

### **Partie prenante : Academia**

**Q64.** Pouvez-vous énumérer quelques outils et recommandations importants que les professionnels de votre organisation étudient dans le domaine de la déprescription ? (question ouverte)

**Q65.** La déprescription a un impact positif sur les soins de santé et la qualité de vie.

**Q66.** La polymédication est actuellement un problème en France.

**Q67.** La déprescription est un domaine de recherche essentiel qui devrait être davantage étudié.

**Q68.** La recherche sur la déprescription est pertinente pour améliorer les résultats de santé publique.

**Q69.** La déprescription s'aligne bien avec les priorités des milieux académiques et des institutions de recherche en matière de santé publique.

**Q70.** La recherche sur la déprescription est importante pour faire avancer les questions de politique publique.

**Q71.** Les chercheurs sont convaincus que différents publics comprennent les enjeux liés à la déprescription lorsqu'ils présentent leurs recherches.

**Q72.** La recherche sur la déprescription est suffisamment financée.

**Q73.** L'accès à des données de haute qualité et en conditions réelles entrave la recherche dans le domaine de la déprescription.

**Q74.** La volonté politique de faire avancer le domaine de la déprescription est suffisante.

**Q75.** Il existe un biais de publication qui favorise les nouvelles thérapies et les essais cliniques sur les médicaments plutôt que les études sur la déprescription.

**Q76.** Le manque de collaboration interdisciplinaire limite la portée et l'impact du domaine de la déprescription.

**Q77.** Pouvez-vous énumérer d'autres obstacles pour les organisations académiques et de recherche en matière de déprescription ? (question ouverte)

**Q78.** Le niveau actuel de soutien gouvernemental et public est suffisant pour faciliter la recherche en matière de déprescription.

**Q79.** Les réseaux de recherche existants et les collaborations académiques renforcent la faisabilité de la recherche sur la déprescription en France.

**Q80.** Les solutions de santé numérique et les systèmes de données modernes facilitent une recherche robuste dans le domaine de la déprescription.

**Q81.** L'augmentation des incitations financières et du nombre de subventions ciblées stimule la recherche sur la déprescription.

**Q82.** Pouvez-vous énumérer d'autres facilitateurs pour les organisations académiques et de recherche en matière de déprescription ? (question ouverte)

**Q83.** La déprescription est un domaine de recherche important en France.

**Q84.** Mon institution soutient activement et encourage la recherche sur la déprescription.

**Q85.** La recherche sur la déprescription démontre une rentabilité claire pour le système de santé.

**Q86.** Les études sur la déprescription montrent que la réduction des médicaments diminue significativement les dépenses globales de santé.

**Q87.** La recherche sur la déprescription soutient des stratégies pouvant conduire à une réduction du gaspillage pharmaceutique.

**Q88.** La recherche sur la déprescription démontre sans ambiguïté son impact positif pour des soins de santé durables et pour l'environnement.

**Q89.** Il est important en France de développer des politiques fortes liant la déprescription et la durabilité.

**Q90.** L'environnement des politiques de santé en France encourage des approches innovantes en matière de déprescription.

## **Partie prenante : Décideurs politiques**

**Q91.** Votre organisation est-elle familière avec le concept de déprescription ? (OUI/NON)

**Q92.** Les professionnels de votre organisation connaissent-ils les outils et recommandations existants pour la déprescription (CEASE, G-MEDSS, MedStopper, START/STOPP, EMPOWER) ? (OUI/NON)

**Q93.** Autres outils connus par les professionnels de votre organisation. (question ouverte)

**Q94.** Les professionnels de votre organisation reçoivent-ils une formation formelle sur la déprescription ? (OUI/NON)

**Q95.** La déprescription améliore la sécurité des patients.

**Q96.** La déprescription améliore la qualité de vie des patients.

**Q97.** Les dépenses pharmaceutiques et la surconsommation constituent un problème en France.

**Q98.** La déprescription s'aligne sur les objectifs de santé publique du pays.

**Q99.** La déprescription est une stratégie clé pour optimiser l'utilisation des médicaments dans le système de santé.

**Q100.** Le cadre réglementaire français est prêt à soutenir la mise en œuvre de protocoles de déprescription pour les populations clés.

**Q101.** Il existe suffisamment de preuves pour soutenir la mise en œuvre d'initiatives de déprescription.

**Q102.** Il est important d'incorporer des politiques et des recommandations sur la déprescription au niveau national.

**Q103.** La mise en œuvre de politiques de déprescription conduirait à des retards bureaucratiques.

**Q104.** Il existe suffisamment de mécanismes de régulation pour soutenir la mise en œuvre d'initiatives de déprescription.

**Q105.** Le financement et les ressources sont suffisants pour mettre en œuvre des initiatives de déprescription.

**Q106.** Le lobbying pharmaceutique ralentit la promotion et la mise en œuvre de politiques de déprescription.

**Q107.** Les inquiétudes concernant la responsabilité juridique et la reddition de comptes découragent le développement et la mise en œuvre de politiques de déprescription.

**Q108.** Pouvez-vous énumérer d'autres obstacles dans votre domaine d'expertise en matière de déprescription ? (question ouverte)

**Q109.** Un fort soutien de la part du gouvernement et des institutions régulatrices est essentiel pour faciliter le développement et la mise en œuvre d'initiatives de déprescription.

**Q110.** Une collaboration intersectorielle solide rendrait la déprescription plus réalisable.

**Q111.** Des résultats de recherche robustes, clairs et basés sur des données, soutenant l'importance de la déprescription, renforceraient l'argument en faveur de sa mise en œuvre.

**Q112.** Les incitations financières et les politiques de remboursement innovantes sont importantes pour promouvoir la déprescription.

**Q113.** Pouvez-vous énumérer d'autres facilitateurs dans votre domaine d'expertise en matière de déprescription ? (question ouverte)

**Q114.** La déprescription est en accord avec les valeurs fondatrices du système de santé en France.

**Q115.** La déprescription est une stratégie rentable qui peut aider à réduire les dépenses excessives en matière de santé.

**Q116.** Les politiques de remboursement actuelles soutiennent les avantages économiques de la déprescription.

**Q117.** Les bénéfices économiques à long terme de la déprescription l'emportent sur les coûts initiaux prévisibles associés à sa mise en œuvre.

**Q118.** Les initiatives de déprescription contribuent à réduire le gaspillage pharmaceutique et la pollution environnementale.

**Q119.** Intégrer la déprescription dans les politiques de santé favorise la durabilité environnementale de notre système de santé.

**Q120.** Il est important en France de développer des politiques fortes liant la déprescription et la durabilité.

**Q121.** L'environnement des politiques de santé en France encourage des approches innovantes en matière de déprescription.

### **Partie prenante : Industrie pharmaceutique**

**Q122.** Votre organisation est-elle familière avec le concept de déprescription ? (OUI/NON)

**Q123.** La déprescription améliore la sécurité des patients et la qualité de vie.

**Q124.** Les dépenses pharmaceutiques et la surconsommation constituent un problème en France.

**Q125.** La déprescription s'aligne sur les objectifs de santé publique en France.

**Q126.** La déprescription est une stratégie clé pour optimiser l'utilisation des médicaments dans le système de santé.

**Q127.** Il existe suffisamment de preuves pour soutenir la mise en œuvre d'initiatives de déprescription.

**Q128.** Il est important d'incorporer des politiques et des règlements sur la déprescription au niveau national.

**Q129.** La déprescription réduira la demande globale pour certains produits pharmaceutiques.

**Q130.** Un nouveau cadre réglementaire sur la déprescription affecterait le portefeuille de produits.

**Q131.** La perte potentielle de revenus due à la réduction de l'utilisation des médicaments constitue un problème pour le soutien aux initiatives de déprescription.

**Q132.** Si une tendance à la déprescription se confirme, les stratégies marketing seront considérablement affectées.

**Q133.** Il existe suffisamment de mécanismes de régulation pour soutenir la mise en œuvre d'initiatives de déprescription.

**Q134.** Pouvez-vous énumérer d'autres obstacles que le secteur rencontre en matière de déprescription ? (question ouverte)

**Q135.** La déprescription est une opportunité pour le secteur de se concentrer et d'innover sur des thérapies plus sûres et plus efficaces.

**Q136.** Une collaboration intersectorielle solide et le développement de nouveaux partenariats rendraient la déprescription plus attrayante pour le secteur.

**Q137.** Pouvez-vous énumérer d'autres facilitateurs que le secteur rencontre en matière de déprescription ? (question ouverte)

**Q138.** Le marché soutient une prescription responsable et d'autres innovations en matière de santé.

**Q139.** La déprescription s'aligne sur des soins de santé durables et responsables.

**Q140.** La déprescription est une stratégie rentable qui peut aider à réduire les dépenses excessives en matière de santé.

**Q141.** La déprescription soulève des inquiétudes en termes de perte de parts de marché.

**Q142.** La déprescription pourrait ouvrir de nouvelles opportunités économiques susceptibles de favoriser des thérapies innovantes par rapport aux volumes traditionnels de médicaments.

**Q143.** La déprescription contribue à une réduction du gaspillage pharmaceutique et de la pollution environnementale globale.

**Q144.** Le secteur devrait utiliser davantage de métriques d'impact environnemental pour évaluer son activité.

**Q145.** Le secteur est prêt à ajuster et innover ses stratégies commerciales pour maintenir sa compétitivité, en anticipant les avancées dans la mise en œuvre d'initiatives de déprescription.

## Appendix 4: Consensus analysis using the Policy Delphi Methodology

**Table 4:** Consensus analysis using the Policy Delphi Methodology

	Question number	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
	Healthcare professionals	Level of consensus	High	Moderate	NA	Moderate	High	High	High	High	No consensus	No consensus	No consensus	No consensus	Moderate	High	High	No consensus	No consensus
Question number		20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35		
Level of consensus		High	NA	Low	Moderate	High	Moderate	High	NA	High	High	Low	Moderate	High	High	High	No consensus		
Patients	Question number	36	37	38	39	40	41	42	43	44	45	46	47	48	49				
	Level of consensus	Moderate	Moderate	NA	Moderate	NA	Low	High	High	Low	No consensus	No consensus	Moderate	No consensus	Low				
	Question number	50	51	52	53	54	55	56	57	58	59	60	61	62	63				
	Level of consensus	No consensus	High	Moderate	NA	High	No consensus	High	Low	Moderate	NA	High	No consensus	No consensus	Low				
Academia	Question number	64	65	66	67	68	69	70	71	72	73	74	75	76	77				
	Level of consensus	NA	High	High	High	High	High	High	No consensus	Moderate	No consensus	No consensus	Moderate	No consensus	NA				
	Question number	78	79	80	81	82	83	84	85	86	87	88	89	90					
	Level of consensus	Moderate	No consensus	No consensus	No consensus	NA	No consensus	No consensus	No consensus	No consensus	Moderate	No consensus	High	Moderate					
Policymakers	Question number	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106		
	Level of consensus	Moderate	Moderate	NA	Moderate	Low	Low	High	Moderate	Moderate	No consensus	Moderate	Moderate	Moderate	No consensus	No consensus	Moderate		
	Question number	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121			
	Level of consensus	No consensus	NA	Moderate	Low	Moderate	Low	NA	Moderate	Moderate	No consensus	Moderate	Moderate	Moderate	Moderate	Low			
Pharmaceutical industry	Question number	122	123	124	125	126	127	128	129	130	131	132	133						
	Level of consensus	High	High	Moderate	High	High	High	High	High	High	Moderate	High	Moderate						
	Question number	134	135	136	137	138	139	140	141	142	143	144	145						
	Level of consensus	NA	No consensus	High	NA	High	High	High	Moderate	High	No consensus	High	High						

Level of consensus	
High	High
Moderate	Moderate
Low	Low
No consensus	No consensus

Note: Unless otherwise stated using “(-)” by which the direction of the consensus is **negative** or inclined for the “Disagree” & “Completely disagree” categories, the direction of the consensus shall be considered **positive** or inclined for the “Agree” & “Completely agree” categories. Responses from the pharmaceutical industry represent only one respondent, and there is no basis for consensus analysis in this category, which is included in this table for reference purposes.

### Appendix 5: Granular mapping and stakeholder’s consensus analysis

Table 5: Granular mapping and stakeholders’ consensus analysis

	Healthcare professionals	Patients	Academia	Policymakers	Pharmaceutical industry	Cross-stakeholder agreement
<b>Awareness, general knowledge and tools</b>	3, 4, 5, 9 	36, 37, 38, 40, 42 	64, 66 	91, 92, 93, 97 	122, 124 	
<b>Education, training and information</b>	6, 11, 24, 28 	39, 48, 54 	67, 83 	94 		
<b>Feelings and values (confidence, comfort, stress, trust...)</b>	12, 13, 14, 22 	41, 43, 45, 46, 47, 49, 50, 57, 60 	68, 69, 70, 89 	98, 99, 102, 114, 120 	125, 126, 128, 138 	
<b>Resistance</b>	16 	44, 51, 60 				
<b>Negative outcomes and liability</b>	18, 19 			107 		
<b>Communication, collaboration and support</b>	20, 26 	52, 55, 56 	71, 74, 76, 78, 79, 84 	109, 110 	136 	
<b>Time and bureaucracy constraints</b>	15 			103 		

continuation

	Healthcare professionals	Patients	Academia	Policymakers	Pharmaceutical industry	Cross-stakeholder agreement	
<b>Guidelines, protocols, tools and data (access, quality, quantity)</b>	17, 23 	54 	73, 80 	101, 111 	127 		
<b>Funding and market</b>	X		72, 81 	105, 112, 116 	129, 130, 131, 132, 141 		
<b>Policy and regulatory preparedness</b>	10, 25, 34, 35 	X		90 	100, 104, 121 	133, 145 	
<b>Patients' safety</b>	7 	42 	X		95 	123, 135 	
<b>Patients' quality of life</b>	8 	42 	65 	96 	123 		
<b>Economic impact</b>	29, 30, 31 	58, 61 	85, 86 	115, 117 	140, 142 		
<b>Environmental impact</b>	32, 33 	62, 63 	87, 88 	118, 119 	139, 143 		

Note: Although not every question from Appendix 1 is grouped in this table, they have been discussed in the main text because they are particular and important for each stakeholder. **Green**: high consensus, **Blue**: moderate consensus, **Red**: low consensus, **Grey**: no consensus, Blank: open-ended questions.

## REFERENCES

- Abou, J. *et al.* (2022) 'Barriers and Enablers of Healthcare Providers to Deprescribe Cardiometabolic Medication in Older Patients: A Focus Group Study.', *Drugs & aging*, 39(3), pp. 209–221. doi: 10.1007/s40266-021-00918-7.
- Achterhof, A. B. *et al.* (2020) 'Potentially inappropriate medication and attitudes of older adults towards deprescribing.', *PLoS one*, 15(10), p. e0240463. doi: 10.1371/journal.pone.0240463.
- ADEME (2023) *Médicaments non utilisés: données 2023*.
- Ailabouni, Nagham J *et al.* (2022) 'Barriers and enablers of older adults initiating a deprescribing conversation.', *Patient education and counseling*, 105(3), pp. 615–624. doi: 10.1016/j.pec.2021.06.021.
- Ailabouni, Nagham J. *et al.* (2022) 'Leveraging implementation science to increase the translation of deprescribing evidence into practice', *Research in Social and Administrative Pharmacy*, 18(3), pp. 2550–2555. doi: 10.1016/j.sapharm.2021.05.018.
- Akin, S. *et al.* (2024) 'Polypharmacy and Falls-risk-increasing Drugs in Community-dwelling Older Adults', *European Journal of Geriatrics and Gerontology*, 6(1), pp. 65–72. doi: 10.4274/ejgg.galenos.2023.2023-9-6.
- Alrasheed, M. M. *et al.* (2018) 'Knowledge and willingness of physicians about deprescribing among older patients: A qualitative study', *Clinical Interventions in Ageing*, 13, pp. 1401–1408. doi: 10.2147/CIA.S165588.
- Alrawiai, S. (2023) 'Deprescribing, shared decision-making, and older people: perspectives in primary care', *Journal of Pharmaceutical Policy and Practice*, 16(1), pp. 1–6. doi: 10.1186/s40545-023-00671-9.
- Alshammari, H. *et al.* (2024) 'Deprescribing attitudes and predictors among older adults attending geriatric clinics in Kuwait', *PLoS ONE*, 19(12), pp. 1–13. doi: 10.1371/journal.pone.0311853.
- Alshatti, D. *et al.* (2025) 'Evaluation of deprescribing services in frail patients: a systematic review.', *The International Journal of Pharmacy Practice*, 33(1), pp. 34–44. doi: 10.1093/ijpp/riae070.
- Amy M. Linsky (2024) 'Making Healthcare Safer IV.Rapid Response: Deprescribing To Reduce Medication Harms in Older Adults'.
- Anderson, K. *et al.* (2017) 'Negotiating "Unmeasurable Harm and Benefit": Perspectives of General Practitioners and Consultant Pharmacists on Deprescribing in the Primary Care Setting.', *Qualitative health research*, 27(13), pp. 1936–1947. doi: 10.1177/1049732316687732.
- Barnett, N. and Kelly, O. (2017) 'Deprescribing: Is the law on your side?', *European Journal of Hospital Pharmacy*, 24(1), pp. 21–25. doi: 10.1136/ejhpharm-2016-000949.
- Bloomfield, H. E. *et al.* (2020) 'Deprescribing for Community-Dwelling Older Adults: a Systematic Review and Meta-analysis', *Journal of General Internal Medicine*. *Journal of General Internal Medicine*, 35(11), pp. 3323–3332. doi: 10.1007/s11606-020-06089-2.
- Bolt, J., Abdoulrezzak, R. and Inglis, C. (2023) 'Barriers and enablers to deprescribing of older adults and their caregivers: a systematic review and meta-synthesis.', *European geriatric medicine*, 14(6), pp. 1211–1222. doi: 10.1007/s41999-023-00879-7.
- Bras, P. (2008) 'Organisation des soins et régulation des dépenses ambulatoires : le rôle des syndicats médicaux dos s ier', *Syndicalisme et santé*, 18.
- Britten, N. (2001) 'Prescribing and the defence of clinical autonomy', *Sociology of Health and Illness*, 23(4), pp. 478–496. doi: 10.1111/1467-9566.00261.
- Brunn, M. *et al.* (2018) 'The impact of the crisis on the health system and health in France', in *Economic Crisis, Health Systems and Health in Europe*, pp. 283–321.
- Brunn, M. (2020) 'Diviser et récompenser? La régulation des médecins de ville via les instruments d'action publique en France et en Allemagne.', *RFAS*, 1, pp. 215–236.
- Brunn, M. and Hassenteufel, P. (2021) 'France', in *Health Politics in Europe: A Handbook*, pp. 558–589. doi: 10.1093/oso/9780198860525.003.0025.
- Buton, F. (2024) 'Une élite à part. La politique comme déplacement des médecins dans le champ du pouvoir.', in *En déplacement. Le passage des frontières professionnelles en question*, pp. 207–223. doi: 10.4000/12h9n.

Bužančić, I. and Ortner Hadžiabdić, M. (2023) 'Differences in Factors Influencing Deprescribing between Primary Care Providers: Cross-Sectional Study', *International Journal of Environmental Research and Public Health*, 20(6). doi: 10.3390/ijerph20064957.

Carollo, M. *et al.* (2024) 'Medication review and deprescribing in different healthcare settings: a position statement from an Italian scientific consortium', *Ageing Clinical and Experimental Research*, 36(1). doi: 10.1007/s40520-023-02679-2.

Charbonneau, M. *et al.* (2024) 'Factors influencing the effects of policies and interventions to promote the appropriate use of medicines in high-income countries: A rapid realist review', *Health Policy*, 142, p. 105027. doi: 10.1016/j.healthpol.2024.105027.

CM, C. *et al.* (2018) 'Association of Polypharmacy With Mild Cognitive Impairment and Cognitive Ability: A Nationwide Survey in Taiwan', *Journal of Clinical Psychiatry*, 79(6). doi: 10.4088/JCP.17m12043.

Conklin, J., Farrell, B. and Suleman, S. (2019) 'Implementing deprescribing guidelines into frontline practice: Barriers and facilitators', *Research in Social and Administrative Pharmacy*, 15(6), pp. 796–800. doi: 10.1016/j.sapharm.2018.08.012.

Corban, M. (2021) 'Les médicaments potentiellement inappropriés au coeur de la prise en charge du sujet âgé en Ehpad inappropriés au cœur de la prise en charge du sujet âgé en Ehpad', *Sciences pharmaceutiques*.

Cross, A. J. *et al.* (2021) 'Exploring stakeholder roles in medication management for people living with dementia', *Research in Social and Administrative Pharmacy*, 17(4), pp. 707–714. doi: 10.1016/j.sapharm.2020.06.006.

CYCLAMED (2023) *CYCLAMED. Rapport d'activité 2023*.

Daubert, A. (2023) 'Développement durable et prescriptions: stratégies pour limiter l'impact environnemental des médicaments en médecine générale', *Médecine humaine et pathologie*.

Daunt, R., Curtin, D. and O'Mahony, D. (2023) 'Polypharmacy stewardship: a novel approach to tackle a major public health crisis', *The Lancet Healthy Longevity*, 4(5), pp. e228–e235. doi: 10.1016/S2666-7568(23)00036-3.

Degand, O. (2022) *La collaboration entre les Médecins Généralistes et les Sages-Femmes libérales au sein des maisons de santé pluriprofessionnelles. Etude qualitative menée auprès des médecins généralistes et des sages-femmes au sein de maison de santé pluriprofessionnell.*

Desai, M., Njoku, A. and Nimo-Sefah, L. (2022) 'Comparing Environmental Policies to Reduce Pharmaceutical Pollution and Address Disparities', *International Journal of Environmental Research and Public Health*, 19(14). doi: 10.3390/ijerph19148292.

Dhuny, S., Foley, T. and Jennings, A. (2021) 'General practitioners' knowledge of and attitudes towards prescribing psychoactive drugs in dementia care: a cross-sectional questionnaire study', *Irish Journal of Medical Science*, 190(2), pp. 667–675. doi: 10.1007/s11845-020-02356-7.

Doherty, A. J. *et al.* (2020) 'Barriers and facilitators to deprescribing in primary care: A systematic review', *BJGP Open*, 4(3), pp. 1–14. doi: 10.3399/bjgpopen20X101096.

DREES (2024) *Les dépenses de santé en 2023. Resultats de comptes de la santé. Édition 2024., Panorames de la DREES*.

Drusch, S., Zureik, M. and Herr, M. (2023) 'Potentially inappropriate medications and polypharmacy in the older population: A nationwide cross-sectional study in France in 2019', *Therapies*, 78(5), pp. 575–584. doi: 10.1016/j.therap.2023.02.001.

Duncan, P., Duerden, M. and Payne, R. A. (2017) 'Deprescribing: A primary care perspective', *European Journal of Hospital Pharmacy*, 24(1), pp. 37–42. doi: 10.1136/ejhpharm-2016-000967.

Ministère de la Transition Écologique (2018) 'Le règlement REACH. Updated version to 2025'. Available at: [https://www.ecologie.gouv.fr/politiques-publiques/reglement-reach#:~:text=REACH est un règlement européen,de l'industrie chimique européenne](https://www.ecologie.gouv.fr/politiques-publiques/reglement-reach#:~:text=REACH est un règlement européen,de l'industrie chimique européenne. Accessed on 13/06/2025). Accessed on 13/06/2025

Elbeddini, A. *et al.* (2021) 'Barriers to conducting deprescribing in the elderly population amid the COVID-19 pandemic', *Research in Social and Administrative Pharmacy*, 17(1), pp. 1942–1945. doi: 10.1016/j.sapharm.2020.05.025.

- Ellis, M. L. *et al.* (2015) 'Assessing approaches and barriers to reduce antipsychotic drug use in Florida nursing homes', *Ageing & Mental Health*, 19(6), pp. 507–516. doi: 10.1080/13607863.2014.952710.
- Elshazly, M. *et al.* (2025) 'Enablers and barriers to community pharmacists' readiness to implement deprescribing of inappropriate medications for older adults in Qatar.', *PloS one*, 20(1), p. e0316363. doi: 10.1371/journal.pone.0316363.
- Etangsale, A. and Ratiney, R. (2019) 'Medication and falls in the elderly: An epidemiological study in a French hospital', *Pharmacien Hospitalier et Clinicien*, 54(1), pp. 38–48. doi: 10.1016/j.phclin.2018.11.002.
- Eurostat (2021) *Healthcare expenditure statistics – overview*. Available at: [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Healthcare\\_expenditure\\_statistics\\_-\\_overview](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Healthcare_expenditure_statistics_-_overview). Accessed on 13/06/2025
- Evin, A. *et al.* (2024) 'DEprescribing: Perceptions of PATients living with advanced cancer. A multicentre, prospective mixed observational study protocol', *PLoS ONE*, 19(8), pp. 1–13. doi: 10.1371/journal.pone.0305737.
- Farrell, B. *et al.* (2023) 'A Proposed Curricular Framework for an Interprofessional Approach to Deprescribing', *Medical Science Educator*, 33(2), pp. 551–567. doi: 10.1007/s40670-022-01704-9.
- Fasth, L. M. *et al.* (2025) 'How Should Clinicians Discuss Deprescribing with Caregivers of Older Adults Living with Dementia? A Qualitative Study.', *Drugs & Ageing*, 42(2), pp. 155–164. doi: 10.1007/s40266-024-01179-w.
- Forest, E. *et al.* (2021) 'Patient values and preferences on polypharmacy and deprescribing: a scoping review.', *International journal of clinical pharmacy*, 43(6), pp. 1461–1499. doi: 10.1007/s11096-021-01328-w.
- Gouvernement de France (2023) *France Nation Verte: Planification écologique du système de santé*.
- Freedman, S. *et al.* (2021) 'Docs with their eyes on the clock? The effect of time pressures on primary care productivity', *Journal of Health Economics*, 77, p. 102442. doi: 10.1016/j.jhealeco.2021.102442.
- Fried, T. R. *et al.* (2025) 'Communication as a key component of deprescribing: Conceptual framework and review of the literature', *Journal of the American Geriatrics Society*, 73(3), pp. 717–727. doi: 10.1111/jgs.19305.
- Gaucher, L. *et al.* (2024) 'The challenge of adopting a collaborative information system for independent healthcare workers in France: a comprehensive study', *Scientific Reports*, 14(1), pp. 1–10. doi: 10.1038/s41598-024-62164-2.
- Geddis-Regan, A. *et al.* (2021) 'Enhancing shared and surrogate decision making for people living with dementia: A systematic review of the effectiveness of interventions', *Health Expectations*, 24(1), pp. 19–32. doi: 10.1111/hex.13167.
- Gerlach, N. *et al.* (2020) 'Professional roles of general practitioners, community pharmacists and specialist providers in collaborative medication deprescribing - a qualitative study.', *BMC Family Practice*, 21(1), p. 183. doi: 10.1186/s12875-020-01255-1.
- Gillespie, R. J., Harrison, L. and Mullan, J. (2018) 'Deprescribing medications for older adults in the primary care context: A mixed studies review', *Health Science Reports*, 1(7). doi: 10.1002/hsr2.45.
- Giunchi, V. *et al.* (2025) 'Environmental sustainability—an essential component of rational use of medicines', *International Journal of Pharmacy Practice*, 33(1), pp. 102–112. doi: 10.1093/ijpp/riae073.
- Godoi, C. De *et al.* (2025) 'Polypharmacy and Mild Cognitive Impairment in Older Adults : A 3-year Study of DO-HEALTH', *Journal of the American Medical Directors Association*, p. 105586. doi: 10.1016/j.jamda.2025.105586.
- Goupil, B. *et al.* (2019) 'Association between gifts from pharmaceutical companies to French general practitioners and their drug prescribing patterns in 2016: Retrospective study using the French Transparency in Healthcare and National Health Data System databases', *The BMJ*, 367, pp. 1–9. doi: 10.1136/bmj.l6015.
- Graabæk, T. *et al.* (2021) "I simply don't know, because I don't know which drugs I get": Perspectives on deprescribing among older adults with limited life expectancy and their relatives', *Basic and Clinical Pharmacology and Toxicology*, 128(1), pp. 115–127. doi: 10.1111/bcpt.13476.
- Green, A. R. *et al.* (2020) 'How Clinicians Discuss Medications During Primary Care Encounters Among Older Adults with Cognitive Impairment.', *Journal of General Internal Medicine*, 35(1), pp. 237–246. doi: 10.1007/s11606-019-05424-6.
- Green, A. R. *et al.* (2021) 'Assessment of Patient-Preferred Language to Achieve Goal-Aligned Deprescribing in Older Adults', *JAMA Network Open*, 4(4), p. e212633. doi: 10.1001/jamanetworkopen.2021.2633.

- Grob, R., Darien, G. and Meyers, D. (2019) 'Why Physicians Should Trust in Patients', *JAMA*, 321(14), p. 1347. doi: 10.1001/jama.2019.1500.
- HAS (2024) 'Elaboration d'un bilan médicamenteux harmonisé et partagé'.
- Heinrich, C. H., McHugh, S., *et al.* (2022) 'Barriers and enablers to deprescribing in long-term care: A qualitative investigation into the opinions of healthcare professionals in Ireland', *PLoS ONE*, 17, pp. 1–19. doi: 10.1371/journal.pone.0274552.
- Heinrich, C. H., Hurley, E., *et al.* (2022) 'Barriers and enablers to deprescribing in long-term care facilities: a "best-fit" framework synthesis of the qualitative evidence', *Age and Ageing*, 51(1), pp. 1–19. doi: 10.1093/ageing/afab250.
- Heinrich, C. H. *et al.* (2023) 'Multidisciplinary DEprescribing review for Frail oldER adults in long-term care (DEFERAL): Implementation strategy design using behaviour science tools and stakeholder engagement', *Research in Social and Administrative Pharmacy*, 19(8), pp. 1202–1213. doi: 10.1016/j.sapharm.2023.05.002.
- Hickmann, E., Richter, P. and Schlieter, H. (2022) 'All together now – patient engagement, patient empowerment, and associated terms in personal healthcare', *BMC Health Services Research*, 22(1), pp. 1–11. doi: 10.1186/s12913-022-08501-5.
- Hilmer, S. N. and Gnjjidic, D. (2018) 'Deprescribing: The emerging evidence for and the practice of the "geriatrician's salute"', *Age and Ageing*, 47(5), pp. 638–640. doi: 10.1093/ageing/afy014.
- Hoffmann, T. C. and Del Mar, C. (2017) 'Clinicians' Expectations of the Benefits and Harms of Treatments, Screening, and Tests', *JAMA Internal Medicine*, 177(3), p. 407. doi: 10.1001/jamainternmed.2016.8254.
- Holliday, S. *et al.* (2017) 'Protecting Pain Patients. The Evaluation of a Chronic Pain Educational Intervention.', *Pain medicine*, 18(12), pp. 2306–2315. doi: 10.1093/pm/pnx018.
- Van Der Hoof, C. S. *et al.* (2005) 'Inappropriate drug prescribing in older adults: The updated 2002 Beers criteria - A population-based cohort study', *British Journal of Clinical Pharmacology*, 60(2), pp. 137–144. doi: 10.1111/j.1365-2125.2005.02391.x.
- Huffmyer, M. J. *et al.* (2021) 'Primary care clinician and community pharmacist perceptions of deprescribing', *Journal of the American Geriatrics Society*, 69(6), pp. 1686–1689. doi: 10.1111/jgs.17092.
- Hung, A., Kim, Y. H. and Pavon, J. M. (2024) 'Deprescribing in older adults with polypharmacy.', *BMJ Clinical Research*, 385, p. e074892. doi: 10.1136/bmj-2023-074892.
- Ibrahim, K. *et al.* (2021) 'A systematic review of the evidence for deprescribing interventions among older people living with frailty', *BMC Geriatrics*, 21(1), pp. 1–16. doi: 10.1186/s12877-021-02208-8.
- INSEE (2025) *Tableau de bord de l'économie française – Population*. Available at: [https://www.insee.fr/fr/outil-interactif/5367857/tableau/20\\_DEM/21\\_POP](https://www.insee.fr/fr/outil-interactif/5367857/tableau/20_DEM/21_POP). Accessed on 13/06/2025.
- Japelj, N. *et al.* (2024) 'Deprescribing: An umbrella review', *Acta Pharmaceutica*, 74(2), pp. 249–267. doi: 10.2478/acph-2024-0011.
- Karwaki, T. E. (2020) 'Deprescribing: Legal & Policy Reforms for Safe & Effective Medication Use', *J. Health & Biomedical Law*, 863, pp. 209–246.
- Kassis, A., Moles, R. and Carter, S. (2024) 'Stakeholders' perspectives and experiences of the pharmacist's role in deprescribing in ambulatory care: A qualitative meta-synthesis', *Research in Social and Administrative Pharmacy*, 20(8), pp. 697–712. doi: 10.1016/j.sapharm.2024.04.014.
- Khazzaka, M. (2019) 'Pharmaceutical marketing strategies' influence on physicians' prescribing pattern in Lebanon: Ethics, gifts, and samples', *BMC Health Services Research*, 19(1), pp. 1–11. doi: 10.1186/s12913-019-3887-6.
- Kim, J. L. *et al.* (2023) 'Patient-Reported Barriers and Enablers to Deprescribing Recommendations During a Clinical Trial (Shed-MEDS)', *The Gerontologist*, 63(3), pp. 523–533. doi: 10.1093/geront/gnac100.
- Krist, A. H. *et al.* (2017) 'Engaging Patients in Decision-Making and Behavior Change to Promote Prevention', *Studies in Health Technology and Informatics*, 240, pp. 284–302. doi: 10.3233/978-1-61499-790-0-284.
- Kwame, A. and Petrucka, P. M. (2021) 'A literature-based study of patient-centered care and communication in nurse-patient interactions: barriers, facilitators, and the way forward', *BMC Nursing*, 20(1), pp. 1–10. doi: 10.1186/s12912-021-00684-2.



- Megerlin, F., Bouvenot, G. and Queneau, P. (2025) 'Drug deprescribing policy and incentives in France', *Annales Pharmaceutiques Françaises*. Académie Nationale de Pharmacie. doi: 10.1016/j.pharma.2025.04.003.
- Mejías-Trueba, M. *et al.* (2023) 'The Barriers to Deprescription in Older Patients: A Survey of Spanish Clinicians', *Healthcare (Switzerland)*, 11(13), pp. 5–12. doi: 10.3390/healthcare11131879.
- Millet, L. and Ros, E. (2023) *What Are the Challenges Ahead for the French Healthcare System?, Expressions by Montaigne - Institut Montaigne*. Available at: <https://www.institutmontaigne.org/en/expressions/what-are-challenges-ahead-french-healthcare-system>. Accessed on 13/06/2025.
- Molina, M. *et al.* (2022) 'Medical students' exposure to and attitudes towards product promotion and incentives from the pharmaceutical industry in 2019: A national cross-sectional study in France', *BMJ Open*, 12(7), pp. 1–16. doi: 10.1136/bmjopen-2020-045671.
- Monde, L. (2024) 'Face aux enjeux de la surprescription médicamenteuse, une approche collaborative et systémique est nécessaire', *Le Monde*. Available at: [https://www.lemonde.fr/sciences/article/2024/06/18/face-aux-enjeux-de-la-surprescription-medicamenteuse-une-approche-collaborative-et-systemique-est-necessaire\\_6241073\\_1650684.html](https://www.lemonde.fr/sciences/article/2024/06/18/face-aux-enjeux-de-la-surprescription-medicamenteuse-une-approche-collaborative-et-systemique-est-necessaire_6241073_1650684.html). Accessed on 13/06/2025.
- Moth, A. E. *et al.* (2021) 'What Makes Deprescription of Psychotropic Drugs in Nursing Home Residents with Dementia so Challenging? A Qualitative Systematic Review of Barriers and Facilitators.', *Drugs & Ageing*, 38(8), pp. 671–685. doi: 10.1007/s40266-021-00875-1.
- United Nations (2015) *Transforming our world: the 2030 Agenda for Sustainable Development*. Available at: <https://sdgs.un.org/2030agenda>. Accessed on 13/06/2025.
- Navid, P. *et al.* (2021) 'Attitudes toward deprescribing among adults with heart failure with preserved ejection fraction.', *Journal of the American Geriatrics Society*, 69(7), pp. 1948–1955. doi: 10.1111/jgs.17204.
- Ng, B. *et al.* (2021) 'Deprescribing perceptions and practice reported by multidisciplinary hospital clinicians after, and by medical students before and after, viewing an e-learning module', *Research in Social and Administrative Pharmacy*, 17(11), pp. 1997–2005. doi: 10.1016/j.sapharm.2021.03.002.
- Van Ngoc, P. (2025) '*Understanding and improving benzodiazepines and Z-drugs management in primary care*'.
- Nicholson, A. and Stone, B. (2013) 'Evidence to the Royal Commission on the National Health Service. 1. From the Clinical Pharmacology Section of the British Pharmacological Society.', *British Journal of Clinical Pharmacology*, 5(6), pp. 475–480. doi: 10.1111/j.1365-2125.1978.tb01659.x.
- Niemi, L. *et al.* (2025) 'Do you think medicines can be prescribed in a more eco-directed, greener way? A qualitative study based on public and prescriber focus groups on the impact of pharmaceuticals in Scotland's water environment', *BMJ Open*, 15(1), pp. 1–15. doi: 10.1136/bmjopen-2024-088066.
- OECD (2019) *Pharmaceutical Residues in Freshwater: Hazards and Policy Responses*. OECD. doi: 10.1787/c936f42d-en.
- OECD (2023) *France: Country Health Profile 2023*. OECD (State of Health in the EU). doi: 10.1787/07c48f9f-en.
- Okafor, C. E. *et al.* (2024) 'Cost-Consequence Analysis of Deprescribing to Optimize Health Outcomes for Frail Older People: A Within-Trial Analysis', *Journal of the American Medical Directors Association*, 25(3), pp. 539–544.e2. doi: 10.1016/j.jamda.2023.12.016.
- Okati, L. *et al.* (2025) 'Mobile applications on app stores for deprescribing: A scoping review.', *British Journal of Clinical Pharmacology*, 91(1), pp. 55–65. doi: 10.1111/bcp.16191.
- Okeowo, D. A. *et al.* (2023) 'Barriers and facilitators of implementing proactive deprescribing within primary care: a systematic review', *International Journal of Pharmacy Practice*, 31(2), pp. 126–152. doi: 10.1093/ijpp/riad001.
- Oktora, M. P., Edwina, A. E. and Denig, P. (2022) 'Differences in Older Patients' Attitudes Toward Deprescribing at Contextual and Individual Level.', *Frontiers in public health*, 10, p. 795043. doi: 10.3389/fpubh.2022.795043.
- Groupe Onepoint (2021) 'La santé des Français et l'hôpital au cœur de la campagne présidentielle.' Available at: <https://www.groupeonepoint.com/fr/actualites/la-sante-des-francais-et-lhopital-au-coeur-de-la-campagne-presidentielle/>. Accessed on 13/06/2025.
- Or, Z. *et al.* (2023) 'Health Systems in Transition – France: Health System Review 2023', *Health Systems in Transition*.

- Or, Z. and Gandré, C. (2021) 'Sustainability and Resilience in the French Health System'. Available at: [https://www3.weforum.org/docs/WEF\\_PHSSR\\_Greece\\_2023.pdf](https://www3.weforum.org/docs/WEF_PHSSR_Greece_2023.pdf). Accessed on 13/06/2025
- Palagyi, A. *et al.* (2016) 'Barricades and brickwalls--a qualitative study exploring perceptions of medication use and deprescribing in long-term care.', *BMC Geriatrics*, 16, p. 15. doi: 10.1186/s12877-016-0181-x.
- Paque, K. *et al.* (2019) 'Barriers and enablers to deprescribing in people with a life-limiting disease: A systematic review', *Palliative Medicine*, 33(1), pp. 37–48. doi: 10.1177/0269216318801124.
- Park, H. Y. *et al.* (2017) 'The association between polypharmacy and dementia: A nested case-control study based on a 12-year longitudinal cohort database in South Korea', *PLoS ONE*, 12(1), pp. 1–17. doi: 10.1371/journal.pone.0169463.
- te Paske, R. *et al.* (2023) 'The impact of trust in healthcare and medication, and beliefs about medication on medication adherence in a Dutch medication-using population', *Journal of Psychosomatic Research*, 174, p. 111472. doi: 10.1016/j.jpsychores.2023.111472.
- Pearcy, J. (2024) *Familiarity and trust: Why it matters to industry reputation and what we can we do about it.*, *ABPI Blog*. Available at: <https://www.abpi.org.uk/media/blogs/2024/march/familiarity-and-trust-why-it-matters-to-industry-reputation-and-what-we-can-we-do-about-it/>. Accessed on 13/06/2025.
- Peat, G. *et al.* (2022) 'Barriers and facilitators of successful deprescribing as described by older patients living with frailty, their informal carers and clinicians: a qualitative interview study.', *BMJ Open*, 12(3), p. e054279. doi: 10.1136/bmjopen-2021-054279.
- Perera, I. M. (2022) 'Interest group governance and policy agendas', *Governance*, 35(3), pp. 869–886. doi: 10.1111/gove.12615.
- Perron, A. E. (2024) 'Towards a Prescription for Change: Interprofessional Management of Polypharmacy and Deprescribing', *Current Geriatrics Reports*, 13(3), pp. 152–161. doi: 10.1007/s13670-024-00420-z.
- Pickering, A. N. *et al.* (2022) 'Primary care physicians' approaches to low-value prescribing in older adults: a qualitative study.', *BMC Geriatrics*, 22(1), p. 152. doi: 10.1186/s12877-022-02829-7.
- van Poelgeest, E. P. *et al.* (2022) 'Deprescribing practices, habits and attitudes of geriatricians and geriatricians-in-training across Europe: a large web-based survey', *European Geriatric Medicine*, 13(6), pp. 1455–1466. doi: 10.1007/s41999-022-00702-9.
- Pohontsch, N. J. *et al.* (2017) 'General practitioners' views on (long-term) prescription and use of problematic and potentially inappropriate medication for oldest-old patients - A qualitative interview study with GPs (CIM-TRIAD study)', *BMC Family Practice*, 18(1), pp. 1–12. doi: 10.1186/s12875-017-0595-3.
- Polton, D., Chaput, H. and Portela, M. (2021) 'LES DOSSIERS DE LA DREES: Remédier aux pénuries de médecins dans certaines zones géographiques. Les leçons de la littérature internationale'
- The Shift Project (2023) *Décarboner la santé pour soigner durablement*, *The Shift Project*, Paris. Available at: <https://theshiftproject.org/publications/decarboner-sante-soigner-durablement/>. Accessed on 13/06/2025.
- Quek, H. W. *et al.* (2023) 'Deprescribing considerations for older people in general practice', *Australian Journal of General Practice*, 52(4), pp. 173–180. doi: 10.31128/AJGP-08-22-6547.
- Queneau, P. (2004) 'La thérapeutique est aussi la science et l'art de dé-prescrire.', *Presse Med*, 33(9), pp. 583–5.
- Quinn, M. *et al.* (2019) 'Electronic health records, communication, and data sharing: Challenges and opportunities for improving the diagnostic process', *Diagnosis*, 6(3), pp. 241–248. doi: 10.1515/dx-2018-0036.
- Rachas, A. *et al.* (2022) 'The Economic Burden of Disease in France From the National Health Insurance Perspective', *Medical Care*, 60(9), pp. 655–664. doi: 10.1097/MLR.0000000000001745.
- Ramsdale, E. *et al.* (2024) 'Decreasing polypharmacy in older adults with cancer: A pilot cluster-randomized trial protocol.', *Journal of Geriatric Oncology*, 15(2), p. 101687. doi: 10.1016/j.jgo.2023.101687.
- Reeve, E. *et al.* (2015) 'A systematic review of the emerging definition of "deprescribing" with network analysis: Implications for future research and clinical practice.', *British Journal of Clinical Pharmacology*, 80(6), pp. 1254–1268. doi: 10.1111/bcp.12732.

- Reeve, E. (2020) 'Deprescribing tools: a review of the types of tools available to aid deprescribing in clinical practice', *Journal of Pharmacy Practice and Research*, 50(1), pp. 98–107. doi: 10.1002/jppr.1626.
- Reeve, E., Thompson, W. and Farrell, B. (2017) 'Deprescribing: A narrative review of the evidence and practical recommendations for recognizing opportunities and taking action', *European Journal of Internal Medicine*, 38, pp. 3–11. doi: 10.1016/j.ejim.2016.12.021.
- Richard, A. *et al.* (2023) 'Prescription-free consultation in France and Europe: Rates' evolution, physicians' and patients' perceptions from 2005 to 2019, a systematic review', *Therapies*, 78(6), pp. 733–741. doi: 10.1016/j.therap.2023.02.011.
- Riordan, D. O. *et al.* (2017) 'GPs' perspectives on prescribing for older people in primary care: a qualitative study', *British Journal of Clinical Pharmacology*, 83(7), pp. 1521–1531. doi: 10.1111/bcp.13233.
- Robiner, W. N., Tumlin, T. R. and Tompkins, T. L. (2013) 'Psychologists and Medications in the Era of Interprofessional Care: Collaboration Is Less Problematic and Costly Than Prescribing', *Clinical Psychology: Science and Practice*, 20(4), pp. 489–507. doi: 10.1111/cpsp.12054.
- Robinson-Barella, A. *et al.* (2024) "Starting to think that way from the start": approaching deprescribing decision-making for people accessing palliative care - a qualitative exploration of healthcare professionals' views', *BMC Palliative Care*, 23(1). doi: 10.1186/s12904-024-01523-2.
- Robinson, M., Mokrzecki, S. and Mallett, A. J. (2024) 'Attitudes and barriers towards deprescribing in older patients experiencing polypharmacy: a narrative review', *npj Aging*, 10(1), pp. 1–6. doi: 10.1038/s41514-023-00132-2.
- Rodwin, M. A. (2020) 'Pharmaceutical Price and Spending Controls in France: Lessons for the United States', *International Journal of Health Services*, 50(2), pp. 156–165. doi: 10.1177/0020731419897580.
- De Rosis, C. *et al.* (2024) 'The deployment of advanced practice nurses in the French health system: From clinics to professional networks', *International Nursing Review*, 71(2), pp. 362–374. doi: 10.1111/inr.12926.
- Rowe, S. *et al.* (2022) 'Beliefs and attitudes of residents, family members and healthcare professionals regarding deprescribing in long-term care: a qualitative study.', *International journal of clinical pharmacy*, 44(6), pp. 1370–1379. doi: 10.1007/s11096-022-01419-2.
- Saka, S. A. and Osineye, T. R. (2024) 'Considerations, barriers and enablers of deprescribing among healthcare professionals in Ogun State, Southwest, Nigeria: a cross-sectional survey.', *BMC Health Services Research*, 24(1), p. 661. doi: 10.1186/s12913-024-11101-0.
- HAS (2023) 'Environmental health roadmap. Reinforcing the HAS' commitment to environmental issues in the context of its missions',
- Ministère des Solidarités et de la Santé (2019) 'Ma Santé 2022: Un Engagement Collectif'. Available at: [http://scioteca.caf.com/bitstream/handle/123456789/1091/RED2017-Eng-8ene.pdf?sequence=12&isAllowed=y%0Ahttp://dx.doi.org/10.1016/j.regsciurbeco.2008.06.005%0Ahttps://www.researchgate.net/publication/305320484\\_SISTEM\\_PEMBETUNGAN\\_TERPUSAT\\_STRATEGI\\_MELESTARI](http://scioteca.caf.com/bitstream/handle/123456789/1091/RED2017-Eng-8ene.pdf?sequence=12&isAllowed=y%0Ahttp://dx.doi.org/10.1016/j.regsciurbeco.2008.06.005%0Ahttps://www.researchgate.net/publication/305320484_SISTEM_PEMBETUNGAN_TERPUSAT_STRATEGI_MELESTARI). Accessed on 13/06/2025.
- Ministère des Solidarités et de la Santé (n.d.) 'Projet Stratégie nationale de santé 2023 - 2033. Projet soumis à consultation'.
- SciencesPo and LIEPP (2024) 'Déprescrire dans une perspective santé-environnement: quelles pistes pour les politiques publiques en France?' Available at: <https://www.sciencespo.fr/liepp/fr/evenements/deprescrire-dans-une-perspective-sante-environnement-quelles-pistes-pour-les-politiques-publiques-en-france/>. Accessed on 13/06/2025.
- Scott, I. A. *et al.* (2015) 'Reducing inappropriate polypharmacy: The process of deprescribing', *JAMA Internal Medicine*, 175(5), pp. 827–834. doi: 10.1001/jamainternmed.2015.0324.
- Seppänen, A.-V. and Or, Z. (2023) *The environmental sustainability of health care systems: a literature review on the environmental footprint of health care systems and interventions aiming to reduce it: towards a framework for action for France*.
- Shapoval, V. *et al.* (2025) 'Barriers to Deprescribing Benzodiazepines in Older Adults in a Survey of European Physicians', *JAMA Network Open*, 8(3), p. e2459883. doi: 10.1001/jamanetworkopen.2024.59883.

- Sijm-Eeken, M., Jaspers, M. and Peute, L. (2023) 'Identifying Environmental Impact Factors for Sustainable Healthcare: A Scoping Review', *International Journal of Environmental Research and Public Health*, 20(18), doi: 10.3390/ijerph20186747.
- Silva Almodóvar, A. *et al.* (2024) 'Deprescribing medications among patients with multiple prescribers: A socioecological model', *Journal of the American Geriatrics Society*, 72(3), pp. 660–669. doi: 10.1111/jgs.18667.
- Simó Miñana, J. (2012) 'Use of prescription drugs in Spain and Europe', *Atención Primaria*, 44(6), pp. 335–347. doi: 10.1016/j.aprim.2011.06.009.
- Simonet, D. (2021) 'French idiosyncratic health-care reforms, performance management and its political repercussions', *Risk Management and Healthcare Policy*, 14, pp. 2971–2981. doi: 10.2147/RMHP.S306381.
- Simonet, D. (2023) 'Health Care Reforms, Power Concentration, and Receding Citizen Participation', *Risk Management and Healthcare Policy*, 16, pp. 1359–1364. doi: 10.2147/RMHP.S421397.
- Simonet, D. (2024) 'New Public Management, Austerity, and the Alienation of the Medical Profession in France', *Journal of Healthcare Leadership*, 16, pp. 329–339. doi: 10.2147/JHL.S463904.
- Sinnige, J. *et al.* (2016) 'Medication management strategy for older people with polypharmacy in general practice: A qualitative study on prescribing behaviour in primary care', *British Journal of General Practice*, 66(649), pp. e540–e551. doi: 10.3399/bjgp16X685681.
- Supper, I. *et al.* (2014) 'Interprofessional collaboration in primary health care: a review of facilitators and barriers perceived by involved actors', *Journal of Public Health*, 37(4), pp. 716–27. doi: 10.1093/pubmed/fdu102.
- Sutton, R. T. *et al.* (2020) 'An overview of clinical decision support systems: benefits, risks, and strategies for success', *npj Digital Medicine*, 3(1), pp. 1–10. doi: 10.1038/s41746-020-0221-y.
- Tabuteau, D. (2016) 'Soixante-dix ans de Sécurité Sociale: Sécurité sociale et politique de santé.', *Les Tribunes de la santé*, 50(1), pp. 25–35. doi: 10.3917/seve.050.0025.
- Teichman, P. and Wan, S. (2021) 'How to integrate clinical pharmacists into primary care', *Family Practice Management*, 28(3), pp. 12–17.
- Al Thabbah, D. H. *et al.* (2022) 'The effect of pharmaceutical companies' marketing mix strategies on physicians prescribing practices in Jordan: a cross-sectional study', *BMC Health Services Research*, 22(1), pp. 1–12. doi: 10.1186/s12913-022-08664-1.
- Tjia, J. *et al.* (2023) 'Perspectives on deprescribing in palliative care', *Expert Review of Clinical Pharmacology*, 16(5), pp. 411–421. doi: 10.1080/17512433.2023.2197592.
- Todd, A. *et al.* (2018) 'The deprescribing rainbow: A conceptual framework highlighting the importance of patient context when stopping medication in older people', *BMC Geriatrics*, 18(1), pp. 1–8. doi: 10.1186/s12877-018-0978-x.
- Tomaschek, R. *et al.* (2022) 'Improvement Strategies for the Challenging Collaboration of General Practitioners and Specialists for Patients with Complex Chronic Conditions: A Scoping Review', *International Journal of Integrated Care*, 22(3), pp. 1–13. doi: 10.5334/ijic.5970.
- Tsiga, E. *et al.* (2013) 'The influence of time pressure on adherence to guidelines in primary care: An experimental study', *BMJ Open*, 3(4), pp. 1–6. doi: 10.1136/bmjopen-2013-002700.
- Turner, J. P. *et al.* (2018) 'Deprescribing conversations: a closer look at prescriber–patient communication', *Therapeutic Advances in Drug Safety*, 9(12), pp. 687–698. doi: 10.1177/2042098618804490.
- Turner, J. P. *et al.* (2020) 'Patients beliefs and attitudes towards deprescribing: Can deprescribing success be predicted?', *Research in Social and Administrative Pharmacy*, 16(4), pp. 599–604. doi: 10.1016/j.sapharm.2019.07.007.
- Vaseur, R. M. E. *et al.* (2024) 'Technology-supported shared decision-making in chronic conditions: A systematic review of randomized controlled trials', *Patient Education and Counseling*, 124, p. 108267. doi: 10.1016/j.pec.2024.108267.
- Vidonsky Lüthold, R. *et al.* (2025) 'Older Adults' Attitudes Toward Deprescribing in 14 Countries.', *JAMA Network Open*, 8(2), p. e2457498. doi: 10.1001/jamanetworkopen.2024.57498.

- van der Waal, M. S. *et al.* (2024) 'Factors influencing deprescribing in primary care for those towards the end of life: A qualitative interview study with patients and healthcare practitioners', *Palliative Medicine*. doi: 10.1177/02692163241261202.
- Weir, K. *et al.* (2018) 'Decision-Making Preferences and Deprescribing: Perspectives of Older Adults and Companions About Their Medicines.', *The Journals of Gerontology. Series B, Psychological sciences and social sciences*, 73(7), pp. e98–e107. doi: 10.1093/geronb/gbx138.
- Weir, K. R. *et al.* (2023) 'Factors Important to Older Adults Who Disagree With a Deprescribing Recommendation.', *JAMA Network Open*, 6(10), p. e2337281. doi: 10.1001/jamanetworkopen.2023.37281.
- Wermeling, M. *et al.* (2014) 'Why do GPs continue inappropriate hospital prescriptions of proton pump inhibitors? A qualitative study', *European Journal of General Practice*, 20(3), pp. 174–180. doi: 10.3109/13814788.2013.844787.
- Williams, S. *et al.* (2021) 'Deprescribing medications that may increase the risk of hepatic encephalopathy: A qualitative study of patients with cirrhosis and their doctors.', *United European Gastroenterology Journal*, 9(2), pp. 193–202. doi: 10.1177/2050640620975224.
- Woodford, H. J. (2024) 'Polypharmacy in Older Patients', *British Journal of Hospital Medicine*. doi: 10.12968/hmed.2024.0388.
- Woodward, M. C. (2003) 'Deprescribing: Achieving Better Health Outcomes for Older People through Reducing Medications', *Journal of Pharmacy Practice and Research*, 33(4), pp. 323–328. doi: <https://doi.org/10.1002/jppr2003334323>.
- Zhou, X. *et al.* (2025) 'Challenges and barriers to physician decision-making for prescribing and deprescribing among patients with multimorbidity in eastern China's primary care settings: a qualitative study.', *BMJ Open*, 15(2), p. e095063. doi: 10.1136/bmjopen-2024-095063.