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The Heterogeneity of Hospitalisation Admission for Depression is Linked to Prior Healthcare

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According to the World Health Organisation (WHO), depression is now the leading cause of disability in the world. Despite the existence of treatments, a large part of the world's population — including in the developed countries — does not have access to them. General practitioners (GPs) play a key role in the treatment of this disorder. However, GPs in France refer patients suffering from depression less often to other healthcare professionals.

According to the European Health Interview Survey-The Health, Health Care and Insurance Survey (EHIS-ESPS), the estimated prevalence of depression in France is 7%, representing almost 4 million people aged 15 or over. In 2012–2013, 200,000 initial hospitalisations for a depressive episode were recorded in health institutions (data from the National Inter-Scheme Information System on Health Insurance (SNIIRAM) cross-referenced with hospital data). These hospital episodes are classified into 9 categories. They bring out the heterogeneity of the healthcare, the frequency of hospitalisations in medical rather than psychiatric units, and the fact that they are often 'unplanned'. Hence, 1 out of every 10 people initially hospitalised — particularly in the case of recipients of Universal Complementary Health Insurance (Couverture Maladie Universelle Complémentaire, or CMU-C), young people, and the very old — did not receive ambulatory care before the hospital episode. A psychiatrist was consulted by 3 out of every 10 patients hospitalised and more than half of the patients were prescribed antidepressants prior to hospitalisation.

The analysis subsequently focused on 5 categories of hospital episode in order to study patient care through the use of ambulatory care provided by GPs and psychiatrists during the six-month period prior to hospitalisation.

According to the World Health Organisation (WHO), around 322 million individuals suffer from depression worldwide and it is therefore the leading cause of disability. Furthermore, suicide, which is closely associated with depression, is a leading cause of death, with 800,000 suicides recorded annually worldwide (WHO, 2014) and around 10,000 in France (the National Observatory of Suicide or Observatoire National du Suicide, 2016). According to the 2014 European Health Interview Survey-The Health and Social Protection Survey (EHIS-ESPS 2014), the prevalence in France of episodes of clinical depression (CD) among people aged over 15 is 7%, which corresponds to the European Union average, with a higher prevalence among women (9%) (Pisarik, Rochereau, 2017). However, France is one of Europe's very high suicide rate countries, with 16.2 suicides per 100,000 people, compared with the European Union average of 10.2.

The WHO, like other international institutions (the American Psychiatric Association or APA, 2010; Reesal, Lam, 2001; and the United Kingdom's National

Institute for Health and Care Excellence or NICE, 2009), has issued recommendations with regard to the treatment of patients with depressive disorders. Among the recommendations, the stepped and collaborative care model (Sinnema et al., 2013; Watzke et al., 2014) is highlighted. It aims to treat patients in an appropriate manner with the lowest intensity of care, and to raise the level in accordance with the clinical evolution. This model requires collaborative practices between the various healthcare professionals (nurses, GPs, psychiatrists, and psychologists) and collaboration between levels of care (primary care and specialised, outpatient, and hospital care). It recommends the possible provision of treatment solely with antidepressants or combined with psychotherapeutic treatment. The final level in this model is full-time hospitalisation. In France, pending an updated set of regulations, the National Health Authority (Haute Autorité de Santé, or HAS) [the National Agency for Health Accreditation and Evaluation, or Agence Nationale d'Accréditation et d'Évaluation en Santé (ANAES), 2002] recommends that hospitalisation is used when there is a high risk of suicide, in the case of severe forms of depression with associated psychotic or somatic symptoms, or in specific situations (insufficient family or social support, the inability to maintain necessary contracts, and inadequate response to treatment).

The treatment of depression in France is distinguished, on the one hand, by a significant — though decreasing — proportion of patients suffering from depression who do not seek treatment, and, on the other hand, by the key role played by GPs in ambulatory psychiatric care (Dumesnil et al., 2012). According to the National Institute for Prevention and Health Education (Institut National de Prévention et d'Éducation pour la Santé, INPES) [Beck and Guignard, 2012], 61% of people who experienced an episode of clinical depression sought treatment and 2.8% were likely to be hospitalised for episodes of severe depression. According to the European Study of the Epidemiology of Mental Disorders (ESEMeD), GPs in France refer patients suffering from depression less often to a consultant (22%), compared to Germany (25%), Belgium (30%), Spain (40%), Italy (50%), and the Netherlands (55%), despite the fact that there is a higher density of psychiatrists in France.

At the same time, the proportion of patients receiving medical treatment prescribed by a GP is among the highest in Europe (63%) (Kovess et al., 2004). The treatment is also characterised by a low proportion of treatments deemed appropriate, as they do not comply with the minimum six-month period that is recommended for antidepressant treatment or psychotherapy (Briffault et al., 2010).

Furthermore, other factors may explain the inadequate patient care, such as the stigma associated with mental illness, the difficulty of ensuring compliance with treatment, the insufficient training of healthcare professionals, and the difficulty in obtaining rapid specialist medical advice, the absence of health insurance reimbursements for consultations with a psychologist or a psychotherapist who is not a qualified doctor, the waiting time for an appointment with a psychiatrist, and the resistance of patients and professionals to use specialised psychiatric treatment.

Context

By focusing on prior healthcare to hospitalisation for an episode of clinical depression, this study complements the work carried out by the French National Health Insurance (Caisse Nationale de l'Assurance Maladie des Travailleurs Salariés, CNAMTS) in relation to the treatment of depression. These studies focused, in particular, on post-hospitalisation follow-up, and rehospitalisation for depression, as well as the monitoring of a cohort of new consumers of antidepressants. It was overseen by a piloting committee consisting of representatives from the French National Health Insurance and a group of specialist psychiatrists.

This study aims to supplement existing knowledge of the treatment of depression in France. The prior hospitalisations for an episode of clinical depression were first described and categorised. The analysis then went on to examine patient contacts with GPs, specialised outpatient facilities (self-employed psychiatrists, Medical Psychological Centres (MPCs), etc.), and the provision of medical treatment. Lastly, the link between these hospitalisations and the type of prior ambulatory healthcare was studied (see 'Sources' inset) in order to better classify the hospital episodes and analyse them by placing them in the context of patients' healthcare. The causal link between the nature of the ambulatory care and the potential occurrence of hospitalisation for patients suffering from a depressive episode was not studied, because the way the design of the cohort was constituted did not make this possible.

Sources

Patients 'initially hospitalised' for an episode of clinical depression in 2012–2013 and their prior outpatient treatment

The retrospective and prospective cohort of patients hospitalised on a full-time basis for psychiatric reasons (including attempted suicide) in 2012 and 2013 from the National Health Insurance Scheme (Caisse Nationale de l'Assurance Maladie des Travailleurs Salariés, CNAMTS) was constituted from the data of the Medical Information Systems Program in the fields of Medicine, Surgery, and Gynaecology/Obstetrics (Programme de Médicalisation des Systèmes d'Information en Médecine, Chirurgie, Obstétrique, PMSI-MCO): hospitalised patients whose principal diagnosis was a psychiatric one (Cim10 chapter F) and/or attempted suicide (principal diagnosis S00 to T98, associated diagnosis X60 to X84); the Medical Information Database for Psychiatry (Recueil d'Information Médicalisée en Psychiatrie, or Rim-P): all of the patients.

These patients include those hospitalised for a principal diagnosis of depression (Cim10 F32-F33), or attempted suicide, accompanied by a diagnosis of depression in 2012–2013, and who had not been hospitalised during the two years leading up to the diagnosis. When the inclusion stay was contiguous with a stay for frequent or indeterminate mental disorders, both stays were considered as being part of the same episode.

The record of hospital and ambulatory care consumption over the twenty-four months leading up to hospitalisation was extracted. The analysis of the consumption of ambulatory care was limited to the six months preceding the initial hospitalisation, as the information gathered beyond this period had a limited value.

200,000 initial hospitalisations for an episode of clinical depression in 2012–2013

In 2012 and 2013, according to data from the Programme for the Medicalisation of Information Systems (Programme de Médicalisation des Systèmes d'Information or PMSI) for Medicine, Surgery, and Obstetrics (MSO), and the Medical Information Database for Psychiatry (Recueil d'Information Médicalisée en Psychiatrie, or Rim-P), 200,000 initial hospitalisations for an episode of clinical depression — which were not preceded by other hospitalisations for depression in the two last years — were recorded in public and private healthcare facilities in France.

Although it is difficult to identify the first 'lifetime' hospitalisations in France, it is possible to determine the first hospitalisations for an episode of clinical depression within a two-year period. The two-year period corresponds with the recurrence of a depressive episode. Studies on the evolution of depressive disorders in the lifetime of individuals show that episodes of clinical depression were isolated incidents in 50% of cases, that in 35% of cases depression recurred within two to three years, and that there was a chronic evolution in the remaining 15% of cases (Monroe, Harkness, 2011). The first hospitalisations represented 87% of the hospitalisations for an episode of clinical depression as the primary reason or associated with a suicide attempt (suicide attempts with an accompanying diagnosis of a depressive disorder represented 16% of the initial hospitalisations). The remaining 13% had already been hospitalised for depression in the two preceding years.

9 categories of hospitalisation

The initial hospitalisations for an episode of clinical depression encompassed very disparate situations, which were grouped into categories by means of a Multiple Correspondence Analysis (MCA) [see 'Method' inset], followed by an Ascending Hierarchical Classification (AHC). They were based on information about the patient characteristics (age, the existence of psychiatric comorbidities, somatic comorbidities, or a suicide attempt, and the severity of the depressive episode, etc.) and hospitalisation characteristics (type of hospital department, length of stay, type of healthcare institution — 'public or private, monodisciplinary or multidisciplinary' —, the legal procedure, and the mode of admission) [Table 1].

The Ascending Hierarchical Classification made it possible to identify nine distinct categories of hospitalisation:

- **Category 1 (14% of people hospitalised): hospitalisations that are generally 'planned' in public psychiatric facilities for a mild or moderate depressive episode.** The first category was distinguished by voluntary hospitalisations in public psychiatric facilities where change lengths of time. This category was characterised by mild or moderate depressive episodes, without an attempted suicide or associated comorbidities. Patients were largely admitted from home. Men were slightly over-represented. All the age groups were represented, even though certain groups were overrepresented, such as the middle-age range (ages 35–64) and the young aged 17–25.
- **Category 2 (5% of people hospitalised): long and 'planned' hospitalisations in a non-profit private psychiatric facility (Établissement de Santé Privé d'Intérêt Collectif, ESPIC).** In the second category, voluntary hospital admissions into psychiatric facilities were largely made from patients' homes. It was characterised by the significant number of transfers from other hospital units or medical and social facilities. Nearly 44% of the hospitalisations were due to a moderate depressive episode, 46% a severe episode, and almost all of them did not concern a suicide attempt associated with a hospital stay, which was a more 'planned' hospitalisation. Insured patients of the chronic conditions scheme (Dispositif des Affections de Longue Durée, ALD) suffering from depression were strongly represented (24%), which may indicate a more chronic or recurrent disorder. Women were over-represented, as well as patients aged 50 to 79. Hospital stays were more common in mainly rural areas where the healthcare and medical and social services were relatively significant in proportion to insured population and where the psychiatric facility was often the sole operator involved in the provision of healthcare for mental disorders.
- **Category 3 (6% of people hospitalised): compulsory hospitalisations in public psychiatric facilities for complex episodes of depression.** These compulsory hospitalisations, which occurred in emergency units in crisis situations, were associated with relatively short stays in public psychiatric hospitals. They were characteristic of complex clinical situations: severe depressive episodes with psychotic symptoms, the presence of psychiatric comorbidities, or associated suicide attempts. Men were over-represented, as well as patients of working age.

Method

Results of the Multiple Correspondence Analysis

Multiple Correspondence Analysis (MCA) conducted on nine active variables, presented in Table 1, resulted in the retention of the first 11 factorial axes that were higher than the average inertia in the perspective of establishing the categories; hence, 58% of the information was retained. The analysis subsequently focused on the first four axes.

The first axis contrasts short-stay hospitalisations for clinical depression (accompanied by attempted suicide) in the medical unit of a multidisciplinary public facility (with or without transfer to a psychiatric unit during the hospitalisation) — with admission via the emergency services ('unplanned hospitalisations') —, with longer hospitalisations in a public or private facility, specialising in the treatment of mental disorders, very often with admissions from the patient's home (planned hospitalisations). The second axis contrasts involuntary hospitalisations in a specialised long-stay public facility with hospitalisations with the presence of somatic comorbidity in a hospital department. The third axis is characterised by the age of the patients, with, on the one hand, the hospitalisation of older patients (65 years and older), and, on the other, the hospitalisation of patients in the medium age group (35–49 years), more often consisting of short stays in private facilities. The level of severity of the episode of depression characterises the fourth axis, which compared hospitalisations for mild and moderate depression for non-adult patients with hospitalisations for severe depression with a psychotic syndrome.

T1

Descriptive variables of the typology

			Modality in the study population (%)	Categories 1	2	3	4	5	6	7	8	9
Numbers and share of each category			200,073 (100%)	28,578 (14,3%)	10,566 (5,3%)	11,701 (5,9%)	17,213 (8,6%)	42,202 (21,1%)	14,883 (7,4%)	10,574 (5,3%)	47,987 (24,0%)	16,369 (8,2%)
Active variables												
Type of health facility	Specialised public		11.5	52.3	0.5	40.8	4.4	1.0	10.0	1.6	0.3	1.4
	Specialised non-profit private (Espic)		6.3	0.8	86.0	2.8	2.7	0.0	2.7	3.4	1.6	5.3
	Specialised private		24.4	7.5	4.5	2.4	17.1	91.4	13.6	1.3	2.4	6.6
	Multidisciplinary public		57.9	39.4	9.0	54.0	75.8	7.6	73.7	93.7	95.7	86.7
Hospital unit	Psychiatry		48.1	95.8	81.1	44.4	31.7	96.3	37.2	8.4	1.5	11.4
	Medicine, surgery, obstetrics (MCO)		35.1	1.1	12.6	0.1	52.0	0.8	42.2	84.1	63.2	84.3
	Combined		16.8	3.2	6.3	55.5	16.3	2.9	20.6	7.6	35.3	4.3
Length of stay	< 2 days		27.0	8.8	8.6	29.2	20.8	1.0	44.9	15.8	67.5	15.1
	2-7 days		23.4	32.2	14.6	33.6	29.2	5.5	24.8	62.1	23.0	21.1
	8-14 days		13.7	19.3	27.6	15.1	22.8	5.5	10.1	13.2	4.9	34.3
	15-29 days		12.1	25.0	10.8	9.9	10.6	13.2	10.9	4.9	2.1	25.3
	≥ 30 days		23.9	14.7	38.4	12.3	16.6	74.8	9.2	4.0	2.5	4.2
Means of admission	Home		47.9	60.2	65.5	25.4	47.9	89.1	35.4	28.1	14.7	46.1
	Emergency		44.5	23.2	12.1	58.5	45.8	4.8	60.3	70.7	84.8	44.4
	Other health service, medical and social		5.8	13.2	19.5	12.9	4.9	3.2	2.7	1.0	0.3	8.9
Legal procedure for involuntary hospitalisations			5.2	1.5	3.6	78.1	0.4	0.2	1.4	0.0	0.0	0.1
Level of severity of the episode of clinical depression (CD)	Mild		5.4	17.0	2.2	4.4	4.3	1.6	4.5	12.0	2.6	3.7
	Moderate		23.0	39.0	43.9	20.4	16.7	20.2	23.7	25.4	13.8	21.8
	Severe		63.2	39.1	46.4	50.5	61.3	69.1	65.3	59.6	80.1	63.6
	Severe with psychotic symptoms		7.8	3.5	7.0	23.6	16.9	8.2	6.0	2.9	3.4	11.0
Attempted suicide			18.9	0.3	2.3	26.4	10.8	0.3	28.6	19.2	51.7	7.4
Psychiatric comorbidity			37.1	24.9	34.7	42.7	23.4	50.7	39.5	29.2	42.0	23.3
Somatic comorbidity			34.0	4.0	19.8	19.7	63.3	25.4	24.6	42.9	38.2	87.2
Age group	< 17 days		4.5	1.6	1.6	0.2	0.0	0.5	0.0	76.9	0.1	0.0
	17-25 days		8.6	13.9	10.5	9.2	0.2	4.0	0.0	1.0	18.8	0.8
	26-34 days		9.7	2.4	5.8	9.6	0.0	4.7	100.0	0.1	0.0	0.0
	35-49 days		28.7	42.5	23.3	34.2	3.9	34.5	0.0	4.8	46.6	4.0
	50-64 days		25.9	28.7	34.6	33.1	1.3	41.6	0.0	16.8	31.2	10.2
	65-79 days		13.8	6.7	16.2	11.2	94.1	11.7	0.0	0.3	2.2	2.4
	≥ 80 days		8.9	4.3	8.0	2.5	0.5	3.1	0.0	0.1	1.1	82.6
Illustrative variables												
Gender	Men		37.2	43.1	30.1	48.9	23.2	35.3	45.8	25.3	40.5	32.4
	Women		62.8	56.9	69.9	51.1	76.8	64.7	54.2	74.7	59.5	67.6
Universal Complementary Health Insurance (CMU)	basic	Healthcare recipient	7.5	8.2	6.4	6.4	1.4	6.0	12.5	14.8	9.6	1.5
	complementary	Healthcare recipient	15.8	16.7	13.4	17.4	3.6	12.7	28.6	25.5	20.5	3.6
Chronic condition (ALD)	dépression	Healthcare recipient	18.3	18.9	23.9	16.9	15.1	30.6	11.2	5.1	15.8	8.6
	psychiatry other	Healthcare recipient	21.7	19.4	24.2	26.0	20.4	30.5	18.7	10.4	20.3	14.1
	somatic	Healthcare recipient	35.0	31.1	37.1	33.8	51.9	36.3	20.1	14.6	31.1	58.6
Healthcare provisions in different kinds of area (typology established by Irdes, Coldefy, and Le Neindre, 2014):												
Areas with insufficient psychiatric services and staff, which are often in general hospitals			12.2	10.8	5.8	9.7	13.9	10.5	13.1	12.8	15.0	13.1
Areas in which general interest missions are carried out by specialised public psychiatric facilities, which interact with their environment, but with intra-hospital based resources			15.5	20.4	12.6	17.7	14.4	7.9	16.8	18.9	18.2	16.8
Mostly urban areas with significant private healthcare provision and an operational approach suited to urban practices			40.4	31.9	37.4	36.9	42.8	52.8	39.5	39.1	36.8	42.1
Areas with extensive equipment and staff, where public psychiatric institutions specialising in a 'global' approach are predominant			18.1	23.6	15.1	21.3	16.5	17.7	20.8	15.7	17.1	15.5
Mainly rural areas that combine significant healthcare with medical and social services			11.7	10.9	28.3	12.3	12.4	9.1	9.8	10.4	11.2	12.4

Sources: SNIIRAM, PMSI-MCO, Rim-P 2012-2013.

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• **Category 4 (9% of people hospitalised): hospitalisations of elderly women with significant somatic comorbidities in medical wards**. Category 4 was characterised by the fact that the patients concerned were particularly elderly: 95% were aged over 65, compared with 23% of the sample. The patients were more likely to be women, with significant somatic comorbidities, a significant psychotic symptoms. Eighty per cent of the hospitalisations took place a public health facility, with admission via an emergency department in half of the cases.

• **Category 5 (21% of people hospitalised): 'planned' hospitalisations for severe depressive episodes in private health facilities.** The second largest in terms of the number of patients, Category 5 (21% of people hospitalised for an episode of clinical depression) was characterised by long-stay hospitalisations for severe depressive episodes without associated suicide attempts in private for-profit health facilities. Patients were largely admitted from their homes. Nearly 70% of patients were diagnosed as suffering from a severe depressive episode. Nearly a third of the patients were beneficiaries of the chronic conditions scheme (le Dispositif des Affections de Longue Durée, ALD) due to the fact that they suffered from depression, which may indicate a more chronic or recurrent disorder. More than three quarters of the patients were aged between 35 and 65. These hospitalisations were more common in urban areas with private non-hospital health provision and large private hospitals.

• **Category 6 (7% of people hospitalised): short unplanned hospitalisations of young adults for severe depressive episodes with suicide attempts in public health facilities**. This category relates to relatively young men (26–34). Most of these hospitalisations are unplanned, of short duration, with admission via an emergency unit, and take place in multidisciplinary public health facilities. Beneficiaries of Universal Complementary Health Insurance (Couverture Maladie Universelle Complémentaire, or CMU-C) were over-represented.

• **Category 7 (5% of people hospitalised): unplanned hospitalisations of patients who were largely minors in medical wards of public facilities.** Seventy-seven per cent of the patients in Category 7 were under 17, and were very often girls. A suicide attempt was associated with the stay in one out of five cases; the length of stay was often 2 to 7 days. These young patients very often had a somatic comorbidity.

• **Category 8 (24% of people hospitalised): unplanned hospitalisations for severe depressive episodes accompanied by suicide attempts in medical wards**. Category 8 represented the most frequent type of hospitalisation for an episode of clinical depression in France, in terms of the number of patients. The length of hospital stay was less than 2 days in 67% of cases. These voluntary hospitalisations took place in multidisciplinary public health facilities. Nearly 80% of the patients in this category were diagnosed as suffering from a severe depressive episode (compared with 63%) and in 52% of cases a suicide attempt was associated with the hospital stay (compared with 19%). Men were slightly over-represented, as well as beneficiaries of Complementary Health Insurance (Couverture Maladie Universelle Complémentaire, or CMU-C) (31%). These hospitalisations were more common in areas with limited resources in terms of staff and psychiatric facilities, and where psychiatric wards were largely located in general hospitals.

• **Category 9 (8% of people hospitalised): Hospitalisations of very elderly patients in medical wards in public health facilities.** More than 80% of the patients were over 80, with significant somatic comorbidities, and were very often transferred from medical services, follow-up and rehabilitation care (FRC) services, long-term healthcare services, or medical and social healthcare services.

This classification made it possible to highlight the significance of the hospital stays for depression that took place in a medical ward, and not in a psychiatric ward, and were often 'unplanned'. The treatment of depression in a medical ward was a priori justified in cases where there was a suicide attempt, requiring somatic care, and in the case of certain specific age groups, such as the patients who were minors in Category 7 and the elderly patients in Categories 4 and 9. Indeed, the capacity to treat minors is very limited in child psychiatry and paediatric hospitalisation is recommended because there is less stigma associated with it. In the case of the latter, there were significant somatic comorbidities. However, the fact that the largest category contained patients who were hospitalised for a severe depressive episode in an emergency situation in a medical facility — a third of them were subsequently transferred to a psychiatric unit — raises questions.

When the stays largely took place in a psychiatric unit (Categories 1, 2, 3, and 5), they were more 'planned', with the exception of Category 3. The latter was distinguished by legal involuntary hospitalisations for patients suffering from acute depression with significant psychiatric comorbidities. The differences between the three other categories are related to the legal status of the hospitals (a public facility, a non-profit private psychiatric facility, or a private facility), combined with the lengths of stay and the different demographic and clinical characteristics.

By comparing 'planned' hospitalisations in psychiatric facilities with hospitalisations in medical units following admission via an emergency unit, the classification raises questions about the pathway of healthcare prior to the hospital episodes. The second part of the study described the healthcare in the six months prior to the hospitalisation for depression in a comprehensive manner, and the third part correlated the prior healthcare with the type of hospitalisation.

Prior healthcare largely provided by GPs and psychiatrists

In order to study the pathway of care, the analysis focused on the use of ambulatory care provided by GPs and psychiatrists during the six-month period prior to hospitalisation. Nevertheless, other forms of care were observed, even though they could not be linked with any certainty to healthcare associated with the depressive episode. Hence, nearly 15% of the patients had been hospitalised for another

psychiatric disorder. In the case of these patients, the depressive episode was associated with another severe psychiatric condition, or the diagnosis was unclear. Furthermore, 4% of the patients had also been hospitalised in the preceding six months due to a suicide attempt (without being diagnosed as suffering from depression). Lastly, over the same period, 40% of the patients were treated in an emergency unit without hospitalisation.

During the six months prior to hospitalisation, 89% of the patients 'initially hospitalised' for an episode of clinical depression consulted a freelance healthcare professional (a GP or psychiatrist) or a healthcare professional in a Medical Psychological Centre (Centre Médico-Psychologique, CMP), and 11% of them did not consult any healthcare professionals (see Figure). Non-reimbursable private psychologist consultations could not be identified in the French Health System data, or in the use of healthcare observed in the study. In the case of most of the patients 'initially hospitalised' due to an episode of clinical depression, a GP, in collaboration — or not in collaboration — with a psychiatrist (86%), was the main provider of care for patients in the course of their treatment during the six months prior to hospitalisation.

No prior ambulatory healthcare for 11% of the patients hospitalised for depression

For 11% of the patients 'initially hospitalised' without outpatient treatment in the six preceding months, hospitalisation was the means by which they entered the healthcare system in order to receive treatment for an episode of clinical depression. The absence of outpatient treatment was more common among men (16% compared with 9% of women), beneficiaries of Complementary Health Insurance (Couverture Maladie Universelle Complé-mentaire, or CMU-C) [13% compared with 9%], and the youngest patients (more than 20% of patients aged under 25 and 15% of those aged 26–34 did not receive treatment, compared with less than 10% in the older age group).

The GP: a key player in outpatient healthcare for a majority of patients

For 58% of 'initial hospitalisations', the GP was the only doctor consulted, whatever the reason for the consultation. An exclusive follow-up by a GP was more frequent in the older age groups and among the recipients of Complementary Health Insurance (CMU-C). The exclusive consultation of a GP was complemented, for 30% of initial hospitalisations, by a prescription for antidepressants (25% were associated with an anxiolytic and hypnotic), and for 14% a prescription for anxiolytic and hypnotic drugs exclusively. For the 14% of patients who had solely consulted a GP without a prescription associated with psychotropes, the reason for the consultation potentially went beyond a mental health disorder.

3 out of 10 hospitalised patients had consulted a psychiatrist

Almost a third of the persons hospitalised for an episode of clinical depression (CD) had consulted a psychiatrist in the six months prior to the hospitalisation, a private psychiatrist (25%), or a healthcare professional in a Medical and Psychological Centre (CMP, 6%), most often in association with GPs (28%) and rarely alone with a psychiatrist (3%). Women were more likely to consult a private psychiatrist (32% compared with 28% of men) as were non-beneficiaries of Complementary Health Insurance (CMU-C) [32% compared with 24%]. The patients who consulted a doctor in a medical and psychological centre (CMP), generally young men, were more likely to be beneficiaries of Complementary Health Insurance (CMU-C).

Despite the possible underestimation of consultations in a Medical and Psychological Centre (CMP), as a result of the limits of the monitoring of the treatment of the patients, who are seen exclusively as outpatients in one establishment and hospitalised in another, Medical and Psychological Centres (CMP) seem to play a relatively minor role in the treatment of depression prior to a hospital stay. GPs specified several obstacles in orienting patients to a Medical and Psychological Centre: delays in organising an appointment, an absence of feedback, a lack of collaboration, and the patients' reluctance to visit a centre (Dumesnil, 2012).

Antidepressants were often prescribed on their own or in association with other drugs prior to hospitalisation

Over the six months leading up to hospitalisation, more than seven out of ten hospitalised patients had been prescribed psychotropic drugs. 54% had been given at least one prescription for antidepressants (45% in association with a hyp-

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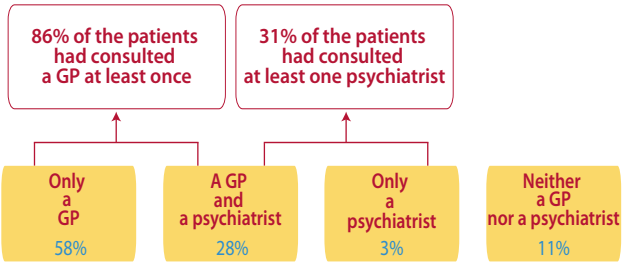
Types of prior healthcare prior to an initial hospitalisation for depression



Medicaments prescribed (% of patients)			
Antidepressants	30%	22%	2%
of which solely antidepressants	5%	3%	1%
of which antidepressants + hypnotic or anxiolytic drugs	25%	19%	1%
Solely hypnotic or anxiolytic drugs	14%	4%	1%

Sources: SNIIRAM, PMSI-MCO, Rim-P 2012-2013.

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Distribution of the categories according to the different healthcare professionals and provision prior to initial hospitalisation for clinical depression

	Category 5	Category 1	Category 2	Category 8	Category 6
	Planned hospitalisations...			Unplanned hospitalisations...	
	In a private facility for episodes of severe clinical depression	Voluntary treatment in a public psychiatric facility for episodes of mild or moderate clinical depression	Voluntary and long psychiatric treatment in a non-profit private healthcare facility	In a public facility for severe episodes of clinical depression and attempted suicide	Short stay in a public facility for young adults for episodes of severe clinical depression with attempted suicide
Freelance GP	14%	14%	5%	27%	7%
Freelance psychiatrist with/without freelance GP	45%	11%	6%	16%	6%
CMP* Psychiatrist with/without freelance GP	13%	29%	8%	19%	9%
Without a doctor	10%	15%	5%	31%	11%
Total	21%	14%	5%	24%	7%

* CMP : Medical and Psychological Centre.

Reading: 24% of all those hospitalised for the first time belonged to Category 8. 31% of those admitted to hospital for the first time who had not consulted a GP or a psychiatrist in the six months leading up to the hospitalisation belonged to Category 8. Category 8 over-represented patients who were not monitored post-hospitalisation. The online percentages do not total 100%, because the Table does not include Categories 3, 4, 7 and 9.

Sources: SNIIRAM, PMSI-MCO, Rim-P 2012-2013. Download the data

notic or anxiolytic treatment and 9% exclusively), a treatment recommended for the outpatient treatment of depression, with psychotherapies. Besides the number of persons receiving treatment, it is important to take into account the duration of the treatment, as poor observance was one of the leading causes of the ineffectiveness of the antidepressant treatment. 12% of those who had undergone an antidepressant treatment only had one prescription during the six months leading up to the hospitalisation. This relatively low proportion may indicate a relatively good observance, partly related to the severity of the disorders, in comparison with the 40% of patients commencing an antidepressant treatment who had only had one prescription over the year on a national level (the National Fund of Health Insurance for Employees, CNAMTS, 2016). In addition, almost one out of five hospitalised patients had been prescribed a hypnotic or anxiolytic treatment. These therapeutic categories were not recommended for the curative treatment of an episode of clinical depression, as certain antidepressants with anxiolytic properties were more suitable. These potentially inadequate prescriptions for the patients, who were subsequently hospitalised for depression, may correspond to patients who were not or misdiagnosed by the health professional, or correctly diagnosed but were given a treatment that did not match the recommendations. They may also have arisen from an obstacle created by the patients, who preferred to take this kind of treatment, which was more easily accepted than taking antidepressants.

Prescriptions for hypnotic or anxiolytic drugs alone were less frequent when a psychiatrist was involved in the treatment programme than when the patient only consulted a GP (see Figure).

The last part of our study aimed to analize the link between the prior pathway healthcare and the various categories of hospitalisation. A few types of hospitalisation analysed in the first part of the study corresponded to specific populations for which it was difficult to assess the healthcare provided to treat depression. Hence, they were excluded from this final analysis. This concerned non-adult patients in Category 7, older, and very old patients with significant somatic comorbidity in Categories 4 and 9, as well as complex patients, often treated for a more severe pathology that required compulsary hospitalisation in Category 3. As part of this analysis of the link between upstream healthcare and the type of hospitalisation, we focused on the categories of hospitalisation relating to adult patients, without psychiatric comorbidity with severe mental disorders, by distinguishing Categories 1, 2, and 5 (known as 'planned' hospitalisation), which represented 40% of the hospitalisations, and Categories 6 and 8 (known as 'unplanned' hospitalisation), accounting for 31% of the hospitalisations.

Unplanned hospitalisations were more frequent in the absence of upstream treatment …

Patients who had not been prescribed a treatment by a GP or psychiatrist in the six months prior to the hospitalisation were over-represented in Categories 8 and 6 ('unplanned' hospitalisation), due to the frequency of their admission via the emergency services (Table 2). This form of hospitalisation was more often the case with beneficiaries of Complementary Health Insurance (CMU-C) and in areas where psychiatric treatment was less available. The socio-spatial inequalities associated with these categories may explain the lack of use of outpatient care and, eventually, an unplanned hospitalisation, in accordance with studies realised by Sicot et al. (2015).

… and in the event of exclusive treatment by a GP

Patients who exclusively consulted a GP were over-represented in the categories of unplanned hospitalisations. Conversely, the proportion of patients in 'unplanned' hospitalisations was lower when they had consulted a psychiatrist.

An antidepressant course of treatment alone or combined with a hypnotic or anxiolytic treatment in the six months

prior to the hospitalisation did not modify this observation, but rather strengthened the contrasts. In the categories of 'unplanned' hospitalisations, the proportion of patients treated by hypnotic or anxiolytic drugs alone, was over-represented and partly related to the type of prescriber. The intervention of a psychiatrist in the treatment programme of persons hospitalised for an episode of clinical depression seemed to limit inadequate prescriptions and emergency hospitalisations.

Sector-based hospitalisation referrals

Patients who had consulted a private psychiatrist at least once were more likely to be hospitalised in the private sector (Category 5) [see Table 2]. Within the same activity sector, referral was facilitated, particularly as a significant number of psychiatrists practising in a clinic had a private activity in a medical practice that enabled them to ensure continuity between outpatient and hospital care, or refer the patient to colleagues. This result suggests the existence of healthcare dictated by sectors of expertise, already noted by Sicot and al. (2015). In contrast, patients who had consulted a doctor in a Medical and Psychiatric Centre (CMP), either exclusively or in association with the consultation of a GP, were more likely to go to public-sector establishments that offered psychiatric services (Categories 1 and 2). Again, this sector-based referral corresponded to the principle of continuity of treatment associated with the role of district psychiatry. The variability of the health professionals involved in the provision of care enabled the patients to access more diversified and specialised treatments and therapies but made the continuity of care more difficult and required the coordinated involvement of the various health actors.

* * *

The results of this study attest to a marked heterogeneity in the groups of hospitalisation for depression in France, with a significant proportion of 'unplanned' hospitalisations in medical units. This would indicate that there is a link between the healthcare prior to hospitalisation and the planned or unplanned nature of this hospitalisation. Hence, two factors were identified in relation to the prior treatment prior to unplanned hospitalisations. They occured more often when the patient was not treated by an outpatient doctor (a GP or psychiatrist), but also when the treatment did not involve psychiatrists. This was reinforced when the drug therapy included — alone or in association with other drugs — the prescription of hypnotic or anxiolytic drugs. These treatments and types of hospitalisation were associated with certain individual characteristics of the patients: young persons and the part of Complementary Health Insurance (CMU) were less likely to benefit from specialised prior healthcare and 'unplanned' hospitalisations. Another segment of hospitalisations seemed to correspond with the stepped care model with ambulatory care, prior to the hospitalisation, for almost nine out of ten patients, combined with antidepressant drug therapy for half of them.

To improve the analyse of the pathway of care for depression, this study would need to be extended to all the patients treated for an episode of clinical depression, whether hospitalised or not. However, the lack of records of diagnoses in the data set of the French National Health Insurance (Assurance Maladie) relating to consultations with private medical professionals makes it difficult to carry out such a study. The monitoring of new consumers of antidepressants conducted by the French National Health Insurance should provide complementary elements. The availability of data in terms of prior healthcare before hospitalisation, until the end of 2018, should also provide information that will improve the analysis of pathways of care and aftercare of persons hospitalised for an episode of clinical depression. ♦

For further information

- American Psychiatric Association (2010). *Practice Guideline for the Treatment of Patients with Major Depressive Disorder.*
- Anaes (2002). *Prise en charge d'un épisode dépressif isolé de l'adulte en ambulatoire.*
- Beck F., Guignard R. (2012). « La dépression en France (2005-2010) : prévalence, recours au soin et sentiment d'information de la population », Inpes, *La santé de l'homme*, n° 421, pp. 43-45.
- Briffault X., Morvan Y., Rouillon F., Dardennes R., Lamboy B. (2010). « Recours aux soins et adéquation des traitements de l'épisode dépressif majeur en France », *L'Encéphale*, 36S, D48—D58.
- Cnamts (2016). Rapport Charges et produits pour l'année 2015.
- Coldefy M., Le Neindre C. (2014). « Les disparités territoriales d'offre et d'organisation des soins en psychiatrie en France », rapport de l'Irdes n° 558.
- Dumesnil H., Cortaredona S., Cavillon M., Mikol F., Aubry C., Sebbah R., Verdoux H., Verger P. (2012). « La prise en charge de la dépression en médecine générale de ville », Direction de la Recherche, des Etudes de l'Evaluation et des Statistiques, *Etudes et résultats*, n°810.
- Fagot J.P., Cuerq A., Samson S., Fagot-Campagna A. (2017). "Cohort of One Million Patients Initiating Antidepressant Treatment in France: 12-Month Flow-Up". *International Journal of Clinical Practice*, 70: 744-751.
- Kovess *et al.* (2004). *The State of Mental Health in the European Union*, European Commission.
- Monroe S.M., Harkness K.L. (2011). "Recurrence in Major Depression: A Conceptual Analysis", *Psychol Rev*, Oct;118(4):655-74.
- NICE (2009). *Depression in Adults: Recognition and Management Clinical Guideline.*
- Pisarik J., Rochereau T. (2017). « Etat de santé des Français et facteurs de risque », Irdes, *Questions d'économie de la santé*, n°223, mars.
- Organisation mondiale de la santé (2014). *Prévention du suicide : l'état d'urgence mondial.*
- Observatoire national du suicide (2016). Suicide, connaître pour prévenir : dimensions nationales, locales, et associatives.
- Reesal R.T. , Lam R.W. (2001). "CANMAT Depression Work Group Canadian Journal of Psychiatry", *Revue canadienne de psychiatrie*, 46 Suppl 1:21S-28S.
- Sicot *et al.* (2015). *Rapport Parcours de soins et systèmes locaux de prise en charge : une comparaison entre territoires et établissements (2012-2014)*, LISST-Cers, Toulouse.
- Sinnema H., Franx G., Spijker J. *et al.* (2013). "Delivering Stepped Care for Depression in General Practice: Results of a Survey Amongst General Practitioners in the Netherlands", *European Journal General Practitioner*, pp. 19(4):221-9.
- Watzke B., Heddaeus D., Steinmann M. *et al.* (2014). "Effectiveness and Cost-Effectiveness of a Guideline-Based Stepped Care Model for Patients with Depression: Study Protocol of a Cluster-Randomized Controlled Trial in Routine Care", *BMC Psychiatry*, 14:230.

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