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A Critical Evaluation of Payment Models of Mental Healthcare Providers in Portugal

Final Report

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1. Foreword

The Portuguese mental health system was scrutinized in detail in the National Mental Health Plan 2007 – 2016, published in 2008 (Coordenação Nacional para a Saúde Mental, 2008). The Plan documents the serious limitations of the system, which can be summarized in seven points:

- Insufficient access to care;
- Excess of in-patient admissions (which consumes 83% of resources) versus insufficient community interventions;
- Excess of emergency visits and readmissions at hospitals, related to the limited access to ambulatory care;
- Insufficient development of prevention/promotion;
- Inequality in the distribution of resources: coastal versus inland, psychiatric versus general hospitals;
- Insufficient human resources, not only in regard to physicians (low ratios of psychiatrists) but also to other health professionals (psychiatric nurses, psychologists, social assistants, occupational therapists);
- Reduced global financing.

These issues are particularly worrisome in a context of a large and increasing burden of mental health diseases in the Portuguese population. In Portugal, the mental disorders represent 11.7% of the total lost Disease-Adjusted Life Years (DALYs), i.e., they are the second highest cause of lost DALYs after cerebrovascular diseases (Direção Geral da Saúde, 2014). Although the death rate by suicide was well below the OECD average in 2013 (8.7 per 100,000, versus 11.7 per 100,000) (OECD, 2014b), other values were much less favorable. According to the only epidemiological study on the Portuguese mental health, carried out in 2008, the prevalence of depression was 7.9% (one third being of high severity), the prevalence of anxiety disorders was 16.5%, the prevalence of impulse control disorders 3.5%, and that of disorders related to substance abuse 1.6% (Caldas de Almeida & Xavier, 2013). Compared to a set of nine European countries, Portugal experienced the highest prevalence of any of these four psychiatric disorders (22.9%). The survey also highlighted that the mental health diseases were strongly socially patterned, and that only 15% of the sample had received treatment in the previous 12 months (Caldas de Almeida & Xavier, 2013).

The WHO launched a series of recommendations that are well-adapted to the difficulties faced by the Portuguese mental health system (Coordenação Nacional para a Saúde Mental, 2008). The main recommendations were the following:

- The organization of mental health in geo-demographic areas, which guarantee the physical access to treatment;
- The integration of units and programs, including in-patient care, in order to guarantee a response to the various needs;
- A common coordination for mental health;
- The involvement of patients and their families, and the different community entities;
- A strong articulation with primary care;
- The collaboration with the social sector and NGOs for the rehabilitation and long-term care of high-severity patients.

There is thus a serious gap between the international evidence of good practices in the provision of mental healthcare and the reality of the Portuguese mental health system. Its improvement requires obviously a comprehensive strategy, which includes more adequate financing, cultural changes, organizational reforms, innovative guidelines, and modifications in the payment schemes of providers. Our perspective, in this report, consisted in focusing on this last issue; that is, we examined how current payment mechanisms help explain the limitations of the mental health system, and the extent to which changes in these payment strategies might contribute to reach the best practices recommended by the WHO.

This report included a theoretical and comprehensive review of healthcare providers' payment schemes and their related incentives, a detailed description of the payment of mental healthcare providers in Portugal, and the expected incentives created by these payment schemes. By doing so, we present an overview of the situation of the mental health system in Portugal from a health economics perspective, which will prepare further work, namely the search for alternative payment systems that provide more adequate incentives towards prevention, de-institutionalization, and coordination between actors.

Note that this report focuses essentially the payment of providers, not the financing of the mental health system. The financing is essentially the one that holds for the Portuguese health system in general, and is beyond our scope of analysis. Roughly speaking, two third of the health system funding come from taxation, and the remaining from out-of-pocket and private insurance payments. This system, despite its shortcomings, is considered as consensual, and has been evolving only very slightly over the last 40 years. Another concern related to financing is that mental health in Portugal only represented 5.2% of total health expenditures in 2013 (Joint Action on Mental Health and Well-Being, 2015), compared to much higher values in other countries, such as 11% in the Netherlands and Germany, 12.9% in France, 10% in Sweden, and 13% in the UK. This clearly points to the priority each country sets to mental health. Again, this major concern will not be discussed in this report, because the prioritization of mental health in budgets and decision-making is a non-technical political issue.

Section 2 provides a theoretical background on the different payment mechanisms and their expected incentives. Then, in Section 3, we describe the criteria for the evaluation of payment mechanisms or, in other terms, the objectives that the payment systems should ideally incentivize. Section 4 briefly maps the different providers of mental healthcare in Portugal. Sections 5, 6 and 7 describe the payment models in Portugal and their expected incentives for these various providers of mental healthcare. Section 8 concludes the report.

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2. Payment Models for Healthcare Providers

There are several schemes a third-party payer may use to finance healthcare providers, each creating a different set of incentives for some types of behavior. The factors that they depend on may be related to only very general traits of the providers' activity or, in contrary, to rather specific details of the medical services provided. Based on "Reforming Payment for Healthcare in Europe to Achieve Better Value" (Charlesworth, Davies, & Dixon, 2012), we order the most important payment schemes according to the specificity of the activity measures they depend on, from the most to the least general, and discuss the incentives they create for providers. Global budget, which is simply a fixed sum and does not depend in any way on the provider's activity, is the first we mention, and Fee-for-service, which requires that all medical services provided are detailed, is the last. We still analyze Pay-for-performance, which does not integrate well into this logic, but is usually used to complement the other schemes and never applied in isolation.

Table 1: Provider Payment schemes (Source: Charlesworth et al. (2012))

Bundled						Unbundled
Block budget/ salary	Capitation	Per period	Per patient pathway	Per case/ diagnosis/ procedure	Per day	Fee-for-service
Periodic global lump sum – independent of number of patients	Periodic lump sum per enrolled patient for a range of services	Periodic lump sum per patient diagnosed with a particular condition	Lump sum for all services required for a defined pathway of care	Payment per case based on grouping of patients with similar diagnoses/ procedures or resource needs	Payment per day of stay in a hospital or other facility	Payment for each item of service and patient contact

Source: adapted from Department of Health (2011: Figure 8, p. 20) by Hurst and Charlesworth (forthcoming)

Theoretical background

Each type of payment system generates incentives, which influence the health professionals' and healthcare institutions' practices. In the public health literature, the impact of these incentives is generally summarized in a simplified manner, for the use of policy-makers (see e.g., The REFINEMENT Project (2015)). Implicitly, these contributions assume that healthcare providers are profit-maximizers, without having any other objective. This leads authors to conclude, for example, that physicians paid by salary would have a low motivation and

provide low-quality care, or that capitation would promote patients' selection and discrimination.

However, how incentives influence practices is not straightforward from a theoretical viewpoint, because it depends on providers' objectives. The economic literature has extensively examined what these objectives could be (referred in technical terms as the arguments of the utility function). As regards individual practitioners, it is usually assumed that they maximize their income subject to a minimum benefit for the patient that guarantees demand (McGuire, 2000). This simple model has different sophisticated variants, which incorporate the fact that quality is visible or not for the patients and for third-party payers, or that quality and costs depend on an effort variable. Also, other models consider that practitioners have an ethical concern, desire to treat interesting cases, or seek to attain a target income (McGuire, 2000). From these alternative models, and coming back to our previous examples, it is not obvious that practitioners will discriminate patients under capitation or reduce quality when paid a fixed salary, because of their ethical, reputation, and demand concerns.

As regards hospitals, the classical model assumes an objective of maximizing patients' benefit under a solvency constraint (not-profit hospitals), and a profit-maximizing objective subject to a minimum quality to guarantee demand (for-profit hospitals) (Rosko & Broyles, 1988). Other possible objectives mentioned by Rosko and Broyles (1988) are the maximization of volume, of the scope of services, or of quality / quantity of services.

Our perspective in this study was to assume a "worst case scenario", which we considered as the most conservative approach. We hypothesized that physicians and hospitals were pure profit-maximizers, and examined the consequences of such objective under different payment schemes. This hypothesis permitted a simple view that allowed to formulate expectations about possible outcomes. In all cases, however, we highlighted that the expected outcomes are only theoretical, in a worst case scenario, and may be attenuated in real practice by the other components of providers' objectives.

Global budget (GB)

This payment scheme is fixed. It implies the payment of a lump-sum value to the provider, which uses it to finance its activity during the period the scheme refers to, normally one year.

As a fixed payment scheme does not vary with the actions taken by the provider, it is unable to guide the provider's behavior towards the achievement of very specific goals. However, it can define low or high payments, and with this exert some influence in the effort put by the provider in his activity, but this depends on each professional's intrinsic motivation and sense of duty. Also, such payment schemes are easy to design and implement and, not depending on any reported behavior, do not incentivize false or manipulated reports and dispense the need of verifying and controlling the provider's activity. They incentivize cost containment in

the provision of medical services, as all these services' costs are supported by the provider (The REFINEMENT Project, 2015). This may or not lead to an increase in efficiency, depending on the provider's ability and motivation to produce quality services at the lowest possible cost. Global budgets have a flexibility characteristic which may turn to be an advantage or disadvantage, depending on the ability of the provider to efficiently distribute the resources available to the different services it provides (The REFINEMENT Project, 2015). Although they are fixed, they have to be determined in a reasonable way, and this usually means looking at the human and physical resources available to the provider, or to the financing needs it had in the past. The fact that the provider is able to understand the dynamic nature of the financing problem means that this type of payment schemes may incentivize an increase in activity or costs, because the provider, wishing to obtain a higher budget in the future, may increase his spending in the present.

It is still important to refer fixed salaries paid to physicians, which are a form of global budgets applied to individual health professionals. This financing instrument imposes no risk on the physician, in opposition to others which depend on his activity, but lacks the power to create incentives for a better performance (Rice, 2006; Robinson, 2001).

Capitation (CAP)

This payment scheme depends on the number of people enrolled on a list associated with the provider. This list contains all the people in a certain geographical area, either they suffer from some medical condition or not.

Capitation may induce high quality in medical services in case the providers compete for patients, which means they want to keep the ones already enrolled in their lists and attract new ones (Rice, 2006). Also, in this case, efficiency is expected, as the provider has an incentive to keep its self-supported costs as low as possible, not hurting the quality of the services it provides. In case the patient's list is fixed and providers do not compete for patients, efficiency may be replaced by cost containment, if the provider lacks the internal motivation or ability to keep high quality standards at reduced costs. The fact that providers are paid according to the number of patients enrolled in their list, and not to the number of patients they actually treat, may lead providers to avoid the more costly patients, either by not accepting them in their list, or, in the case of primary care physicians, to over-refer them to secondary care, which may create inefficiencies, if treatment is possible and desirable at the primary level (Robinson, 2001).

Per period payment (PPP)

This payment scheme depends on the number of people with a specific health condition enrolled (Barros, 2013) on a list associated with the provider. Its only difference to capitation

relies on the fact that the list it creates contains only people suffering from a specific medical condition, and not all people living in a geographical area. In this sense, the incentives it creates are basically the same as capitation, already described.

Episode-based payment (EBP)

This payment scheme depends on the number of episodes of care the provider treats. It pays the provider or providers that intervene in the treatment of a patient a fixed sum for all the medical services the patient requires, even if related to more than one medical condition.

This scheme, not being linked to costs, creates the incentive for efficiency, as the difference between what the provider is paid for treating a patient and how much it costs to do so is entirely appropriated by him (Barros, 2013). However, cost-containment is not necessarily achieved, because of the possibility of excessive activity, even if each medical service is provided efficiently. Besides, the desire of the provider to produce a high quantity at a low cost may hurt the quality of the services provided (The REFINEMENT Project, 2015). This scheme may also favor collaboration between different providers and, although incentivizing early discharges, in a logic of cost-containment, also privileges good healthcare, because readmissions increase episodes' length and, thus, the provider's cost (Sood, Huckfeldt, Escarce, Grabowski, & Newhouse, 2011). It can also create disputes over the distribution of the payment between providers, generate an excessive number of episodes and favor a biased classification of episodes and the selection of patients with more profitable episodes (The REFINEMENT Project, 2015).

Case-based payment (CBP)

This payment scheme depends on the number of patients treated with each specific type of condition. A classification system of medical conditions (the DRG systems are the most notorious ones) identifies the set of possible diagnoses or cases and each one is paid with a fixed amount.

It has downsides similar to the ones of EBP. Namely, excess activity, quantity privileged over quality, manipulation of the classification of cases and filtration of patients in favor of the ones which medical conditions are more profitable for the provider. Besides, in opposition to EBS, it does not incentivize the collaboration of different providers in situations where such collaboration would be useful in the perspective of the total recovery of a patient, as it finances each provider separately. However, it is easy to apply, at least in the perspective of the payer, and it promotes efficiency in the provision of services, because of the fixed payment they are object of.

Per diem payment (PDP)

This payment scheme depends on the duration of the provider's in-patient stays. The provider receives a fixed amount for each day a patient remains in its facilities.

It is very objective and easy to apply, but the fact that in-patient stays are paid on a daily basis may have some undesired effects on the stay duration. In fact, patients may be kept in treatment for longer periods than needed and slower, but not necessarily more effective, treatments may be applied.

Fee-for-service (FFS)

This payment scheme depends on the number of each specific service provided. The value to be paid for each medical service is predefined and paid after being realized.

It rewards physicians who follow their patients' condition and provide them all the care they need, as well as the ones who have more costly patients, because the services needed to treat them are generally the ones with the highest financing (Robinson, 2001). Accessibility, then, should not be an issue under this scheme. However, it may also have some perverse effects. Unnecessary but well paid services may be provided in detriment of more useful ones (McGuire, 2000; Robinson, 2001). The classification of the services provided may be manipulated in favor of well-paid ones. And, in primary care, there may be under-referral, because physicians may want to treat patients which would be more efficiently of effectively treated in secondary care (Robinson, 2001).

Pay-for-performance (P4P)

This payment scheme depends on the number of attained objectives. It rewards providers which obtain specific results, or penalize the ones who fail to do so. This scheme does not focus on the processes used, but on the verifiable consequences they imply. The goals it refers to may be absolute, or relative, in comparison with other providers.

It is a very effective way to align the provider's incentives with the population's needs, as the achievement of certain levels in specific indicators not only implies an improvement in the population's health condition, but also directly benefits the provider. However, it is important not to make the provider income too much dependent of these indicators, as the result of his activity is influenced by patients' behavior and other factors it cannot control. This highlights one downside of this scheme: it may be unfair, rewarding bad providers and punishing good ones, if factors uncontrolled by the provider prevent the alignment of the effort exerted and the quality of procedures with the results obtained (Ettner & Schoenbaum, 2006). Also, there is the possibility that providers excessively focus on the goals defined by these payment

schemes and neglect the others. This may lead to a practice that is better in achieving the defined goals than in protecting and improving the population's health (The REFINEMENT Project, 2015). It may also have negative consequences already mentioned, namely the manipulation of information by the provider in order to be eligible for rewards (The REFINEMENT Project, 2015), and the filtration of patients treated, retaining the ones which the provider expects to help him to have a good performance in the defined criteria, and avoiding the others.

3. Evaluation Criteria of Payment Models in Mental Health

In order to evaluate the incentives created by the different payment mechanisms of mental healthcare providers (primary care, hospitals, and long-term care), we adopted six criteria, which we detail here-below. This list of criteria was inspired by World Health Organization (2006), The REFINEMENT Project (2015) and Wilson et al. (2015).

Comprehensiveness of primary care services, involving mental health

It is desirable, from an access and efficiency viewpoint, that primary care services are involved in mental healthcare, so that other specialized providers can concentrate their activities in more severe diseases. To do so, the GPs must have the capacity to evaluate the symptoms and patient's living context/condition, establish the diagnosis, and consider the different therapies, from the least time consuming (pharmacological therapy) to the most time consuming (combination of pharmacological therapy and psychotherapy/psychological therapy). In addition to the greater efficiency and benefits for the patient, a more comprehensive array of services reinforces primary care, which is beneficial for health systems (Wilson et al., 2015). This criterion obviously only applies to primary care, given that for hospitals and long-term care we will refer to services specialized in mental health.

Continuity of care

This item refers to a long-term relationship between the patient and his/her physician, beyond specific episodes of illness and disease. The continuity of care is favored by quality of care, communication and respect for the patient (Wilson et al., 2015). It has been demonstrated that continuity of care in mental health is associated to higher quality of life, lower severity of symptoms, and better community functioning (Adair et al., 2014).

Coordination of care

This criterion refers to the establishment of different forms of cooperation between primary care and specialized services in mental healthcare (acute care, long-term care, social care), including referral patterns, regular contacts, sharing of decisions and responsibilities, and integration of services. The coordination of care is of particular importance in mental health considering the wide range of needs (medical, social, and psychological) and involved actors (Caldas de Almeida & Killaspy, 2011). From an efficiency viewpoint, the coordination of care

reduces unnecessary costs, duplication of services, and the risk of medical errors (Wilson et al., 2015). Also, there is evidence that coordination (with a strong role for primary care) permits to deliver a more integrated care, which is a cost-effective way to treat patients with severe mental disease (OECD, 2014a).

Prevention of disease

As it is the case for many diseases, there is growing evidence that several interventions can prevent mental health disorders, or attenuate their severity, and that these interventions are cost-effective (for a review, see Knapp, McDaid, and Parsonage (2011)). Including prevention as a criterion signifies that providers should be incentivized to perform these kind of interventions, such as early intervention for psychosis, school-based and parenting programs to prevent conduct disorder, or safety measures for suicide prevention.

Accessibility of care

The accessibility refers to the possibility given to all citizens to resort to healthcare when needed, irrespective of personal characteristics, such as health condition or socioeconomic status. The access may be restrained for example by financial barriers (copayments), by distances, or by waiting times. Better access favors the fulfilling of needs and also a more continuous care (Caldas de Almeida & Killaspy, 2011).

Non-discrimination in care

Non-discrimination refers to the treatment of all patients with the same quality, respecting horizontal equity (equal treatment for equal needs) and vertical equity (higher treatment for higher needs). This is a common goal of health systems, which is of particular relevance in mental health given the problems of access and the social patterning of mental diseases.

Efficiency of care

The most efficient practices are selected and provided, i.e., those that provide the best outcomes with the lowest expenditures.

4. A Simple Mapping of Mental Healthcare Providers in Portugal

Figure 1 presents a simple mapping of mental healthcare providers in Portugal, distinguishing primary and specialized care. This mapping was inspired on Joint Action on Mental Health and Well-Being (2015).

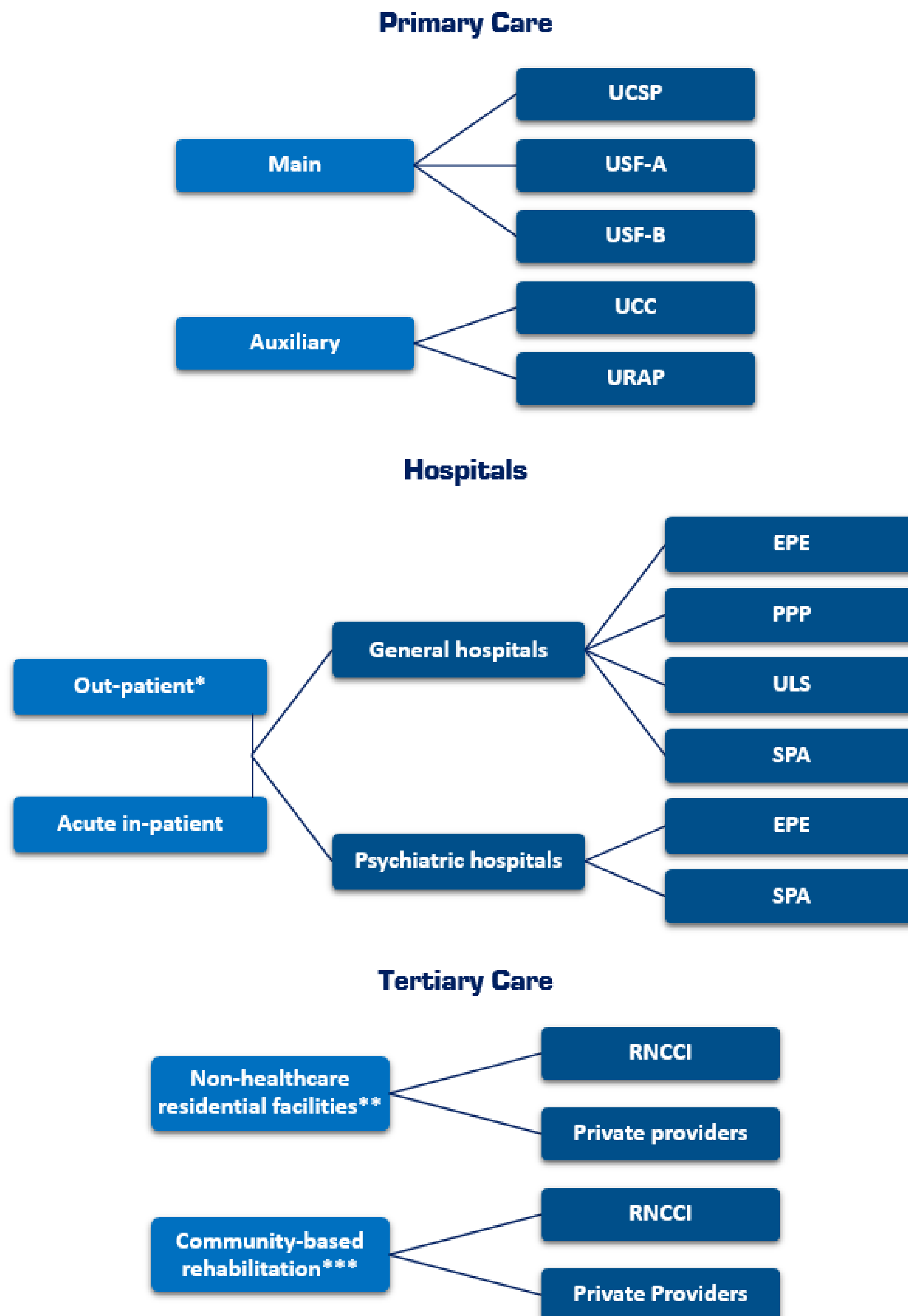
Primary care units are responsible for all primary care consultations, provided by GPs and nurses, for a given population defined on a geographical basis. There are three types of main primary care units: the Personalized Healthcare Practice (Unidade de Cuidados de Saúde Personalizados, UCSP), the A-type Family Health Practice (Unidade de Saúde Familiar do tipo A, USF-A), and the B-type Family Health Practice (Unidade de Saúde Familiar do tipo B, USF-B). Additionally, there are “auxiliary primary care practices”, which involve other health professionals, of two types: the Community Care Practice (Unidade de Cuidados na Comunidade, UCC) and the Shared Care Resources Practice (Unidade de Recursos Assistenciais Partilhados, URAP), which are responsible for larger populations and areas.

According to Figure 1, in what regards hospital care, the out-patient visits and in-patient acute care are provided by psychiatric departments of general hospitals and psychiatric hospitals. Note that there are currently only two remaining psychiatric hospitals in Portugal (“Centro Hospitalar Psiquiátrico de Lisboa” in Lisbon and “Hospital Magalhães Lemos” in Porto). There are four types of statuses for hospitals in Portugal, with different payment models: the Autonomus Public Hospital (Hospital “Entidade Pública Empresarial”, EPE), the Public-Private Hospital (Hospital “Parceria Público-Privada”, PPP), the Local Health Unit (Unidades Locais de Saúde, ULS), and the Public Administrative Sector Hospital (Hospital “Sector Público Administrativo”, SPA). Few psychiatric departments have community-based teams, which provide out-patient consultations and other types of care out of the hospital. This is however a particularity of specific hospitals, which decided to adopt this type of practice, which does not entitle to a specific financing model.

Finally, the tertiary care includes (1) the non-hospital residential health and non-health facilities, for people with relatively stable mental health disorders who do not require intensive care, namely residential units, socio-occupational units, and at-home support teams; (2) community-based rehabilitation services, which encompasses non-intensive care, units for high-depending patients, and long-term care facilities. These latter services are provided by hospitals, but also by other providers (non-profit private organizations, NGOs). The National Network of Sustainable and Integrated Care (Rede Nacional de Cuidados Continuados Integrados, RNCCI) has been developed over the recent years, aiming at providing a common public structure and articulation for both types services.

In the following sections, we detail how these different levels of practice are financed.

Figure 1: Services and providers of mental healthcare in Portugal



*Out-patient mental health departments, community mental health centers and day treatment facilities / **Residential units, socio-occupational units and at-home teams / ***Community rehabilitation units, high-dependence rehabilitation units and longer-term complex care units

UCSP: Personalized Healthcare Practice / USF: Family Health Practice / UCC: Community Care Practice / URAP: Shared Care Resources Practice / EPE: Autonomous Public / PPP: Public-Private / ULS: Local Health Units / SPA: Public Administrative Sector / RNCCI: National Network of Sustainable and Integrated Care

5. Primary Care

As already mentioned, primary care in Portugal is provided by different types of units, which differ in their organization and payment model. We describe here-below how each type of practice is financed, distinguishing main and auxiliary primary care practices.

Main primary care practices

The UCSPs correspond to the traditional model of primary care centers, which existed before the 2006 reform of primary care. The professionals at UCSPs are paid by a fixed salary, which is defined by law and depends on the number of hours worked and on years of experience.

At USF-As, professionals also receive a fixed salary, but are on top of that evaluated on the basis of a series of quality indicators. A quantitative target is defined for each indicator, and a final score is attributed to the USF-A on the basis of the degree of achievement of the target. This final score is associated to a group-based financial incentive. The incentive is attributed to the USF-A as a whole, and can only be used for collective actions, such as participation in training or conferences, or investment in equipment.

Finally, the GPs at USF-Bs are paid a fixed salary and are also evaluated on the basis of quality indicators, with final scores entitling to group-based financial incentives, similarly to USF-As. Note that the fixed salary is augmented in 500€ and 900€ if the physician is appointed as coordinator or trainer, respectively. However, individual incentives are also attributed to physicians, nurses, and administrators, on the basis of their performance. Also, physicians at USF-Bs are paid additional amounts on the basis of the length of their patient list (a geographic capitation-form of payment). The individual incentives and the capitation are complements to the salary and can be freely used by professionals. Lastly, there is also a fee-for-service payment at USF-Bs for at-home visits, paid a value of 30€/visit up to a limit of 20 consultations per month.

Note that all UCSPs can apply to the USF-B and USF-A status on a voluntary basis, and USF-As can apply to the USF-B status. These statuses are attributed provided the UCSP and USF-A exhibit a satisfactory level of performance with regard to some indicators, and adopts specific organizational forms. In other terms, it is likely that USF-As and UCSPs will improve their performance even if they are not financed by P4P because of the incentive to obtain the USF-B status. Table 2 summarizes the payment schemes for the different types of main primary care centers.

Table 2: Payment schemes for the different types of main primary care centers

Unit	Fixed salary	Group-based P4P	Individual-based P4P	Capitation	Fee-for-service
UCSP	✓	✓			
USF-A	✓	✓	✓		
USF-B	✓	✓	✓	✓	✓

We reviewed the list of indicators used to evaluate the USFs' performance for the year 2015 (ACSS, 2014b), in order to determine those related to mental health:

- One national indicator compulsory to all USFs: proportion of patients aged 65 or older without prescribed anxiolytics, tranquilizers, or hypnotics;
- Three indicators that can be adopted voluntarily at the regional or local level: (1) proportion of patients aged 18 or older with diagnosed depression who were prescribed an anti-depression therapy; (2) proportion of patients aged 14 or older with a registry of alcohol consumption in the last three years; (3) proportion of patients aged 14 or older with a problem of "excess alcohol consumption" who received at least one related consultation in the last three years.

Regarding items unrelated to mental health, there are 12 major indicators that apply nationally to all primary care centers. These indicators are related to (1) healthcare use (number of consultations and at-home consultations); (2) follow-up of pregnant women and newborns; (3) follow-up of chronic diseases (hypertension and diabetes); (4) registration of smoking habits; (5) patients' satisfaction; and (6) expenditures related to drugs and exams.

Expected incentives

As mentioned in the Foreword, the literature largely discusses the advantages and disadvantages of the different payment schemes that are used in Portugal to finance primary care. From the mental health perspective, the results are summarized in Table 3.

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Table 3: Expected incentives from primary care payment mechanisms

Criterion	UCSP	USF-A	USF-B
Comprehensiveness	--	--	-
Continuity	-	-	+
Coordination	-	-	-
Prevention	-	-	-
Accessibility	-	-	-
Non-discrimination	0	-	-
Efficiency	0	+	+

++: Highly expected to occur / +: Moderately expected to occur / 0: Neutral / -: Moderately expected not to occur / --: Highly expected not to occur / ?: Ambiguous

There are no financial incentives for GPs to be involved in mental healthcare. The financial incentives counter-act indeed this possible involvement for at least three reasons:

- The USFs are largely incentivized, by capitation and P4P, to treat a large number of patients and increase the number of consultations (in particular, at USF-Bs, whose at-home visits are paid by FFS). These incentives are generally unfavorable to the diagnosis and treatment of mental health problems, which require longer consultations. Although this situation does not apply to UCSPs, the high number of patients to treat and the insufficient number of GPs in some regions (Marcelino et al., 2012) are not favorable to long consultations (Granja, Ponte, & Cavadas, 2014).

- The indicators related to mental health are totally residual in the pay-for-performance scheme, and principally related to avoid the excess prescription of anxiolytics. The diagnosis and treatment of depression is an indicator that can be included voluntary at the regional or local level. The presence of these indicators led us however to consider that the disincentive to participate in mental healthcare was somewhat lower at USF-As and USF-Bs.

- At UCSPs, the GPs are not incentivized to act as real gatekeepers, although the gatekeeping exists formally, because they are not penalized for excess referral nor rewarded for treating the patient on-site. Additionally, the low motivation related to fixed salaries is likely to represent an incentive to excess referral. This led us to consider that GPs at UCSPs are the least motivated to treat patients with mental health disorders.

It is important to notice that there is an official list of services that primary care practices must offer. This list does not include any mental healthcare for adults, but includes the regular assessment of mental health conditions of children aged between one week and 18 years old.

There are clear guidelines about how emotional skills and attitudes must be evaluated, and the frequency of this evaluation. Though, there is no financial incentive to perform such evaluation, which is thus highly dependent on the GP's preferences, competences, and time. In particular, we may expect that these evaluations are difficult considering the insufficient number of GPs and the subsequent high number of patients without a family physician (Marcelino et al., 2012).

The continuity of care is clearly favored at USF-Bs given the capitation component of the payment scheme that applies to them. It creates the figure of the "family physician", who is responsible for the patients in his lists, following their episodes of care. By contrast, there is no capitation component at UCSPs and USF-As, which leads us to infer that there is no reason to expect continuity of care in these settings.

There are no financial incentives for GPs to collaborate or coordinate care with other providers, for at least two reasons:

- The financing of GPs is totally independent of that for specialized care. More generally, the financing is fragmented across providers, with separate budgets creating different and independent incentives.

- The treatment of mental health does not figure as a priority in the indicators of pay-for-performance, so that GPs do not have any particular incentive to spend time in discussions with specialists to improve the follow-up of patients with mental disorders. However, the list of indicators does include some, even if few, related to mental health, hence at least some attention should be paid to it.

There is no substantial difference between the different types of primary care health centers in what concerns the incentives they have to assure prevention of health problems. In fact, all three types of units are responsible for the costs of their activity, which, assuming the cost of implementing an effective prevention policy is outweighed by the savings in posterior treatments, should encourage all of them to devote some resources to prevention. However, the fact that the human resources of primary care in Portugal are scarce implies that there is not much time left after all other activities, seen as priorities, are conducted. Also, the quality indicators of mental healthcare that guide the rewards attributed to the USFs are not related in any way to prevention, and this turns the focus from this units away from it and in the direction of more profitable activities. In general, we conclude that the current payment scheme of primary care in Portugal does not favor the prevention of health problems.

The payment schemes of the three types of primary care units do not generate different incentives for the accessibility of care. The negative consequences in terms of reputation and legal actions of denying treatment to an eligible patient by a primary care unit make it unreasonable to suppose that it is a significant reality. A primary care consultation requires a low out-of-pocket payment of 5€, and there are exemptions to many different groups of people, which cover a large part of the population. For example, in 2011, approximately 43%

of the Portuguese population was exempt from paying this user charge. Hence, the access is not expected to be limited by financial barriers. Though, there are many people who are not assigned a family physician, whose number is insufficient to cover the whole population (Marcelino et al., 2012). Those persons without a family physician face greater difficulties in obtaining a consultation at primary care centers, experiencing long waiting times. This represents a serious limitation of access, which more than offsets, in our view, the benefits of the low co-payments.

The fact that the fixed salary is the main source of payment avoids the temptation to select specific groups of patients, or to discriminate the treatments. At UCSPs, the GPs are solely paid by salary, so that there is no specific incentive towards equity or against it. At USFs, however, the payment by capitation is only adjusted for age, so that some patients are possibly less profitable than others (e.g., those with chronic diseases). This may prompt GPs to treat some patients better than others, or to adopt some form of discrimination (although he cannot select the patients in his list). Also, the P4P component creates an incentive to select the patients for whom better outcomes or an easier follow-up is expected. Additionally, there is no specific reward for treating vulnerable patients, or for decreasing the inequalities in treatment or in health. This is why we considered that the payment of USFs may be unfavorable to non-discrimination.

Finally, the UCSPs have no specific incentive towards more or less efficiency, because the payment is independent of the expenditures or the type of practice. By contrast, the capitation payment, coupled with the nationally-incentivized indicators on expenditures for drugs and tests, encourage USFs to adopt more efficient types of practice.

Auxiliary primary care practices

UCCs are multi-disciplinary groups including nurses, social assistants, nutritionists, and psychologists. These health professionals provide on-site and at-home complementary consultations to primary care patients referred by GPs. They are usually located in a separate setting but close to primary care centers. The nurses also perform community interventions, such as health promotion interventions at schools or nursing homes. The number of UCCs depends on the size of the population of the region. The health professionals receive a fixed salary. In 2015, a list of indicators was defined related to productivity, quality of the processes, and efficiency. For each indicator, targets are jointly fixed with the Regional Health Authorities, but are not subject to pay-for-performance payments.

UCCs thus complement primary care along two lines that GPs have low incentives to perform: the involvement in mental health and the prevention programs. First, UCCs include psychologists, who deliver consultations, in particular to the most vulnerable populations. These settings are thus designed to compensate the expectedly low involvement of GPs in primary care. However, in practice, the number of psychologists is low for the number of

persons to be treated, resulting in low accessibility, in particular to treat the least severe, common disorders. Also, there is no indicator related to mental health (the indicators are essentially devoted to care for dependent elderly).

Second, UCCs include the prevention of disease as one of their principal activities. In particular, nurses are devoted to promote health at schools and nursing homes. It is unclear however the extent to which the prevention is oriented towards mental health. The low number of professionals working at UCCs may preclude the prevention strategies to be fully effective. Despite these limitations, we considered that UCCs are expected to invest in preventions as a major activity.

URAPs include several health professionals, namely nurses, psychologists, social assistants, nutritionists, physiotherapists, and oral health technicians. These professionals are not affected to a specific setting, but work as consultant for other practices. It is expected again that GPs refer to psychologists from URAPs in case of need, compensating their own difficulty of involvement in mental health. Again, the number of psychologists at URAPs is considered as very low in regard to needs. Anecdotal evidence indicates waiting times of more than one year to get a first consultation with a psychologist. Hence, this solution only partially compensates the lack of access previously referred.

6. Hospitals

We describe here-below the main features of the hospital financing that may apply for paying the treatment of mental health patients. As already mentioned, there are four types of hospitals in Portugal, with different financing models: the Autonomous Public Hospital (Hospital “Entidade Pública Empresarial”, EPE), the Public-Private Hospital (Hospital “Parceria Público-Privada”, PPP), the Local Health Unit (Unidades Locais de Saúde, ULS), and the Public Administrative Sector Hospital (Hospital “Sector Público Administrativo”, SPA).

Hospitals EPE

The hospitals EPE represent the vast majority of hospitals (more than 40). Their financing is based on an activity-based payment scheme with volume caps. We may summarize this financing into five components: (1) a per period payment with volume caps for specific diseases; (2) a case-based payment with volume caps for in-patient stays; (3) a per diem payment for chronic patients in-patient stays; (4) an episode based payment, with volume caps; (5) a pay-for-performance component. We detail here-below these five domains, using as main reference the hospital contracting manual (ACSS, 2014a).

1. Per period payment with volume caps for specific diseases

In parallel to this general financing scheme, an innovative financing scheme has been recently implemented, of the type of bundled payment type, for HIV/AIDS, multiple sclerosis, pulmonary hypertension, COPD, familial amyloid polyneuropathy, lysosomal storage disease, and three types of cancer (breast, cervix, and colorectal). For these diseases, the hospital receives a prospective fixed payment for treating the patient during one year, regardless of the type of care that is performed at the hospital, and by which service (excluding in-patient stays, which are paid separately, except for cancer care). For example, the hospital has been receiving 763€ per year per patient with HIV/AIDS. The number of patients to be treated is negotiated prospectively, and the rules exposed here-above apply in case the number of patients exceeds or falls below the negotiated volume. Note that this bundled payment scheme is not applied to psychiatric patients.

2. Case-based payment with volume caps for in-patient stays

The in-patient stays’ price depends on the historical casemix index (DRG-based) of the hospital, which weights a base price depending on the hospital characteristics (for more details on how this casemix index is calculated, see ACSS (2015)). As a matter of example, the in-patient admissions at the Centro Hospitalar de Lisboa Norte, a University hospital with one of the highest casemix of the country in 2015, are valued at 2,056€ for medical stays, and at 2,120€ for surgical stays. By contrast, the Hospital Distrital de Santarem, a smaller hospital

from a smaller city, with a lower casemix index, receives 1,710€ per in-patient stay, either surgical or medical.

3. Per diem payment for chronic patient in-patient stays with volume caps

A *per diem* is attributed for the payment of in-patient stays of patients with specific chronic diseases, namely related to pneumology, chronic psychiatry, psycho-social rehabilitation, ventilation, physical and rehabilitation medicine, and Hansen disease. The stays of chronic psychiatric patients is valued at 37.33€ per day. Notice that these type of in-patient stays are not paid according to the fee-for-service logic that the others are.

The hospitals considered here are however specialized in treating acute phases of diseases, while for these chronic patients a long-term non-acute care is required. The long-term care in Portugal is mostly provided by non-NHS social institutions, that is, religious orders and associations. In case the hospital opts for referring a chronic psychiatric patient to these facilities, it has to assume the payment of these facilities, for which it is reimbursed with a per diem of 38.89€/day. Table 4 summarizes the payment scheme for psychiatric patients at EPE hospitals.

4. Episode-based payment with volume caps

For each hospital, a given volume of out-patient consultations, day cases, and emergency visits is contracted annually, on a prospective basis. Also, a price for each one of these items is fixed prospectively, which usually varies with the hospital type (there are seven hospital categories, which depend on size and number of specialties). For example, the price for out-patient consultations varies between 37.20€ and 106.85€ in 2015, according to the hospital type. An emergency visit at a polyvalent emergency department is of 107.59€. For day case admissions, the base price is 20.14€, and 30.49€ for psychiatric day cases. At psychiatric hospitals and psychiatric department of general hospitals, first consultations are valued at 102.30€, and subsequent ones at 99.32€. The price paid per consultation includes the financing of all resources related to the consultation, namely the exams, lab tests, and the drugs that are exclusively delivered by hospitals. This is why we opted to include the payment of consultations under the “episode-based payment” classification instead of fee-for-service.

The global volume for each of these items is negotiated annually between the hospital and the ACSS (“Administração Central do Sistema de Saúde”, i.e., Central Administration of the Health System, the public institution that defines the hospital financing). This negotiation is based on historical values, on public health objectives and evaluation of needs, and on the hospital capacity. A global budget (B) is thus defined on the basis of the price for each item (p) multiplied by the negotiated quantity (q^*), i.e., $B = p \times q^*$. The budget is divided by 12 and allocated monthly to the hospital.

In case the hospital does not reach the contracted value, that is, its volume is $q < q^*$, it only receives $p \times q$. In case it exceeds the negotiated volume, i.e., $q > q^*$, there will be a financial

reward by the end of the year that depends on the savings obtained from the hospitals that have performed below the negotiated value. In other terms, there is a fixed budget for hospital financing, and the reward for excess production must be equal to the penalization for insufficient production.

In order to encourage psychiatric consultations by hospital professionals in the community, an episode-based payment without volume caps was also instituted in 2013. The first psychiatric consultations in the community and using telemedicine are valued at 112.53€, and the subsequent ones at 109.25€. However, according to informal unpublished information, these activities have not been accounted so far to determine the hospital budgets, so that this aspect of the financing has not been implemented in practice.

5. Pay-for-performance

A list of 16 indicators are defined at the national level, related to access, quality of care, and sustainability/efficiency. Additionally, other indicators are defined at the regional level, by the Regional Health Administrations. A share of 5% of the hospital budget (as defined here-above) is dependent on the achievement of targets for the indicators. However, there is no indicator related specifically to mental healthcare.

Table 4: Payment values for the treatment of psychiatric patients at EPE hospitals

Payment Type	Value (€)
Per period payment: Not applicable	
Case-based payment	
In-patient stays	Variable (ICM)
Per diem payment	
Psycho-social rehabilitation stays	73.33
Chronic psychiatric stays	73.33
Chronic psychiatric stays – social institutions	38.89
Episode-based payment	
First consultations	99.32
Subsequent consultations	99.32
First consultation – community/telemedicine	112.53
Subsequent consultations – community/telemedicine	109.25
Day case	30.49
Emergency visits	107.59

Unidades Locais de Saúde

ULSs were conceived to integrate under a single administration the hospital and primary care centers of a given geographic area. There are 8 ULSs: Baixo Alentejo, Castelo Branco, Guarda, Litoral Alentejano, Matosinhos, Minho, Nordeste and Norte Alentejano. The ULSs are paid by capitation, with a price attributed per resident of the ULS catchment area. A share of the capitation-based value (10%) is dependent however on the achievement of specific objectives:

- 3% for the quality in primary care, according to the indicators for USFs;
- 3% for the activity in secondary care, according to the activity items that define the budget of EPE hospitals;
- 4% for sustainability/efficiency objectives, according to the indicators defined for the hospitals EPE.

Hospitals SPA

The payment scheme of hospitals SPA consists in a global budget, which is not based neither on prices nor on negotiated activity caps. This global budget is fixed prospectively, and is based on the hospital characteristics and historical budgets, but there is no official formula to define this budget. This payment method was the one under application to all Portuguese NSH hospitals before the creation of hospitals SA (which later were called EPE), in 2002. Note finally that there are only four hospitals SPA (Centro Hospitalar do Oeste, Centro Hospitalar Psiquiátrico de Lisboa, Centro de Medicina de Reabilitação da Região Centro, Hospital Arcebispo João Crisóstomo – Cantanhede).

Expected incentives

The incentives are summarized in Table 5. They are the same as the ones studied in primary care, except for the involvement in the treatment of mental diseases, which does not need to be evaluated for specialized psychiatric care.

Table 5: Expected incentives from hospitals payment scheme

Criterion	EPE					ULS	SPA
	PPP	CBP	PDP	EBP	P4P	CAP	GB
Continuity	NA	--	+	--	0	+	0
Coordination	NA	-	-	-	0	+	0
Prevention	NA	0	0	-	0	+	+
Accessibility	NA	?	?	?	0	-	-
Non-discrimination	NA	-	-	-	-	-	-
Efficiency	NA	+	-	+	+	+	+

++: Highly expected to occur / +: Moderately expected to occur / 0: Neutral / -: Moderately expected not to occur / --: Highly expected not to occur / ?: Ambiguous

PPP: Per Period Payment / CBP: Case Based Payment / PDP: Per Diem Payment / EBP: Episode-based payment / P4P: Pay-for-performance / CAP: Capitation / GB: Global Budget

Case-based payment with volume caps

The difference between this payment scheme and a traditional fee-for-service relies on the fact that the services' prices defined by this one depend on the casemix index of the hospital which, in turn, depends on the complexity of the cases it treated on the past. This means that an incentive to control for the type of cases treated is added here. Continuity and coordination are not favored because each in-patient stay is paid independently of what happens to patients before and after the specific treatment the scheme refers to, be it in the same or in other provider. The case-based payment applies to in-patient stays, where prevention is not supposed to take place, so this scheme is neutral in what refers to this criterion.

The impact of the case-based payment on access to healthcare depends crucially on the distribution of the profit generated by patients. In case many patients are more expensive to treat than what the provider receives for treating them, it is expected that some barriers will exist for these patients to be effectively treated. Otherwise, the provider benefits from a large set of patients and we should not expect access to be an issue.

In what refers to non-discrimination, there are two factors to consider. On a first glance, there should be little incentive to undertreat more complex patients, for whom the payment is higher. However, we need to bear in mind how the casemix indexes are constructed. In particular, we must remember that the value is fixed for groups of patients who may highly differ in their characteristics, so that the payment may exceed the costs for some patients, and not for others. That is, two patients may have conditions which fall under the same DRG code, but only the treatment of one of them is profitable. This creates an incentive for the hospital to select or to treat better some sub-categories of patients, threatening the equity in healthcare delivery. This seems like a rather important factor in the Portuguese healthcare system, thus our conclusion that discrimination of patients is an issue under this payment scheme.

This payment scheme creates an incentive to increase the number of in-patient stays, for example through splitting stays into various episodes, or by increasing readmissions, which may create inefficiencies. However, this reality is attenuated by the existence of volume caps. On the other hand, the fact that the costs of the in-patient stays are supported by the provider should lead it to try to minimize their costs. The fact that we have one attenuated argument against and one in favor of efficiency leads us to conclude that it should be verified.

Per diem payment with volume caps

The treatment of chronic patients is based on a per diem that clearly favors long in-patient admissions, too long if we consider that this value is relatively high for long stays requiring few care. This means that continuity of care should be assured, because patients are observed for long periods of time by professionals of the same hospital. However, this also means that

treatment is excessively concentrated on a single hospital, and no collaboration between different providers is expected. Prevention is simply not an issue in in-patient stays.

The same argument that applied for the incentive to promote access generated by the case-based payment is valid here: it depends on the profitability of patients. As for non-discrimination, if we assume that the per diem value is profitable for specific patient categories which the hospital is able to detect, there is an incentive to treat some patients better than others, in relation to their needs. The costs of in-patient stays are supported by the hospital, which means there is an incentive to provide each service associated to them at a low cost. However, the excessive length of each in-patient stay implies an inefficient use of the available resources, because the means used to treat patients who no longer need treatment might be better used in others that actually need them. The absence of volume caps for in-patient stays allows the latter effect to dominate the former, meaning that this payment scheme should not promote efficiency.

Episode-based payment with volume caps

The episode-based model payment pays each specific service in isolation, which does not favor a continuous relationship between the hospital and the patient.

It only applies to the treatment of patients in the hospital, so that there is little incentive to coordinate care with other providers. However, the payment of psychiatric consultations in the community at a higher price than a consultation in the hospital's facilities counteracts this, favoring an efficient strategy with benefits for the patients, as it corresponds to the de-institutionalization objective referred by the WHO. This is why, in Table 5, coordination was considered as slightly favored. Nonetheless, to our best knowledge, this form of payment has not been implemented in practice.

Prevention activities are not directly rewarded by this scheme, which means it creates no positive incentive for prevention to take place. On the other hand, this scheme benefits providers with a large volume of profitable patients, up to a certain limit, hence they should have no interest in avoiding health problems. Also, there is an incentive to conduct short consultations, in order to have many of them, which disfavors time-consuming prevention activities.

The logic that applies to accessibility is the same that was applied in the case-based payment, hence the ambiguous sign in Table 5.

As regards non-discrimination, episode-based payment may lead hospitals to apply to patients with higher needs the same treatment as the one applied to the others, as the payment for consultations is fixed and its cost is supported by the hospital.

The impact on efficiency is closely tied both to the cost and activity levels. On the one side, there is an incentive to provide each service with the lowest possible cost, because it is paid

by a fixed fee independent of the cost, which means hospitals benefit from all savings they make. On the other, this payment scheme creates a clear incentive to increase activity (consultations, stays, day cases), up to the volume that has been contracted. Above this threshold, the financial incentive is reduced because the monetary reward is hypothetical. However, increasing activity might be profitable in the long run, because if it exceeds the threshold, the hospital may gain a better position to negotiate a higher cap – and thus a higher budget – in the following years. In a nutshell, we can consider that there is an incentive to increase activity, but only to a certain point. The increase in activity may reduce efficiency, if excess care, conducive to waste, is provided. However, the fact that this excess is limited by volume caps leads us to consider that the cost reduction effect dominates, and efficiency should be a reality.

Pay-for-performance

Continuity of care, collaboration with other entities, prevention of health problems and accessibility to healthcare are not mentioned in the list of indicators, so we consider that pay-for-performance is neutral as regards these indicators.

Non-discrimination might be threatened by the risk of hospitals providing a lower quality treatment those patients who are not expected to favor the achievement of targets (e.g., discharging them too early or not readmitting them). By contrast, pay-for-performance is favorable to efficiency because there are indicators specifically related to this objective, namely the percentage of readmissions and long stays, the consumption of generic drugs, or the percentage of day surgeries.

Capitation

Capitation at ULS has been explicitly defined to favor the continuity and coordination of care. The hospital and primary care units are under a common administration and are responsible for treating all the population of their catchment area. This gives an incentive to ULSs to choose where it is more beneficial to treat the patient, either at the hospital or at the primary care unit. The possibility of choice will be effective only if hospitals and primary care units effectively collaborate. Prevention is also favored, as the hospital covers the cost of treatment of the people assigned to it, being in its best interest to avoid health problems in this group of people.

In principle, a capitation scheme guarantees access, because all citizens of a given area are entitled to be included in one list. On top of that, as already mentioned, copayments are very low, which avoids financial barriers to access to healthcare. However, the lack of family physicians in Portugal may make access, in practice, difficult to guarantee.

The unique payment for all potential patients renders some of them more profitable than others, possibly incentivizing the hospital to under-treat some categories of patients. This indicates that discrimination of patients may be an issue under this scheme. However, this model also favors efficiency because a fixed payment is received per patient regardless of the services he receives, for a given period, so that the ULS is incentivized to provide the best treatment at the lowest cost.

Global budget

There is no incentive favorable or unfavorable to continuity or coordination of care. Indeed, the hospital does not receive a payment for each patient it treats, or each service it provides, which means it has no incentive to keep patients for longer than needed and to avoid necessary coordination with other institutions. However, there is also no explicit incentive for coordination.

Global budgets contrast with the previous payment schemes in that they do not incentivize the increase in activity (although the activity level may be accounted for in the negotiation of future budgets, but this information is not officially available, and we don’t know how the negotiation formally takes place, and which criteria are part of this negotiation). There is thus a clear incentive to contain costs and to avoid excess provision of services, increasing prevention and seeking efficiency. The relevance of the cost-containment objective might threaten the accessibility and non-discrimination objectives, because it may prompt hospitals to avoid, to excessively refer, or to undertreat the most costly patients, who put at risk their financial sustainability.

7. Tertiary Care

As already mentioned, the tertiary care mainly includes rehabilitation, long-term care, and residential facilities. Such care is provided in Portugal by acute NHS hospitals and non-profit private facilities. The payment schemes for these institutions has already been discussed here-above.

As regards rehabilitation and long-term care for high-dependency or complex long-term patients, the acute hospitals are paid a per diem for the treatment of chronic psychiatric patients, at a value of 37€ per day. In case the patient is transferred to a non-profit private facility, the NHS hospital pays this institution a per diem of 38€. The private non-profit facilities also provide care to privately-insured and uninsured patients. Although there is no official report on how these stays are financed, anecdotal evidence suggests that the payment also consists of a per diem, which value is generally higher than the 38€ received for NHS patients.

As regards residential facilities, official tariffs also consist in per diem values. The values vary between 12.83€ and 50.89€ according to the degree of support, being the lowest value attributed to fully autonomous residencies, and the highest value when there is a maximum need of support (Ministérios das Finanças e da Administração Pública, Ministério do Trabalho e da Solidariedade Social, & Ministério da Saúde, 2011). For socio-occupational units, there is also a per diem, of 27.36€.

The incentives created by the per diem payment scheme have already been discussed, namely the incentive to increase the length of stay and the number of patients, while efficiency is not incentivized unless the daily value is low. Accessibility may be an issue of not, depending if most potential patients are profitable or not. Also, there is an incentive to discriminate treatments across patients, hurting the ones which ideal treatment would be more expensive. The de-institutionalization and collaboration between institutions is favored in the specific cases that acute hospitals are responsible for the payment of their patients staying at private non-profit facilities. We considered that this experience was however too specific to attribute a positive evaluation for this item. Prevention does not make sense in this context and continuity of care is favored by the long term nature of this type of healthcare.

Table 6: Expected incentives from tertiary care payment scheme

Criterion	Per Diem
Continuity	+
Coordination / De-institutionalization	-
Prevention	0
Accessibility	?
Non-discrimination	-
Efficiency	-

++: Highly expected to occur / +: Moderately expected to occur / 0: Neutral / -: Moderately expected not to occur / --: Highly expected not to occur / ?: Ambiguous

8. Conclusion

The payment of mental healthcare providers in Portugal is highly diverse, offering interesting and relevant incentives to achieve public health objectives. The payment of USFs, in primary care, is very promising in the light of its mix of capitation and pay-for-performance. The mix of capitation and pay-for-performance used at ULSs is also interesting because it promotes public health objectives while incentivizing efficiency. The price-volume payment of Hospitals EPE also offers interesting insights, although it is less ambitious.

However, it appears clearly that different payment schemes coexist within each level of care, and that the scheme applied to each level of care has been designed independently of what has been implemented at the other levels. Three major problems can be expected from this payment model:

- Different payment mechanisms induce different practices for the same level of care, so that similar patients are very likely to be treated differently according to their provider. For example, in primary care, it is very likely that patients will not be treated in the same way at a UCSP or at a USF; at hospitals, the practices are very likely to differ between EPEs and SPAs. Note that there is no freedom of choice, and that patients are obliged to opt for the practices of their residence area. This potentially creates inequalities while complicating the collaboration between providers.

- The system has not been designed for the incentives to be compatible between levels of care, which may result in a lack of coordination. For example, the ULSs have no financing interest in treating more patients, but primary care units have an incentive to refer more patients to them. The Hospitals EPE have an incentive to admit more patients whose admission could have been avoided with more collaboration with primary care, which are themselves incentivized to refer.

- The primary care sector has almost no incentive, nor material conditions, to treat patients with mental health problems and to work on the prevention of mental disorders. This is a major issue, which imposes an unnecessary burden on secondary care and is not beneficial for the patients. The auxiliary primary care services offer the possibility of mental health treatments for common diseases, but the number of providers is clearly insufficient to cover the needs.

The current payment model also raises specific issues, at all levels of care:

- The primary care sector is not incentivized to favor continuity of care, low referral and prevention, except maybe at USF-Bs, which are paid by capitation. Also, there is no incentive to treat the most vulnerable patients, while the insufficient number of family physicians limits the access to primary care, in particular among the worse-off who cannot access private care.

- The hospitals are paid essentially on the basis of their production of different services, which does not favor integrated views of patients' condition, prevention, continuity of care, and coordination of care within the hospital and with other providers. In particular, there is no incentive to provide community care, i.e., outside the hospital. The ULSs have been designed to reduce these weaknesses, through the capitation payment, the larger use of P4P, and the joint management of primary and hospital units; this interesting experience needs however to be evaluated.

- The rehabilitation, long-term care and residential facilities are basically funded on a per diem basis, which does not favor efficiency, and may incentivize patients' selection. Interestingly, the per diem scheme has been financed in specific cases by acute hospitals, hence favoring collaboration between institutions and de-institutionalization. However, this experience is still too recent and particular.

The revision of payment schemes is beyond the scope of the current report. However, from our evaluation, it seems that we should favor innovative payment models which incentivize a greater coordination and integration of care, instead of schemes that simply pay institutions on the basis of their production. The current payment model of USF-Bs in primary care is promising, and calls for an extension to all primary care institutions, at least for equity reasons; the involvement of primary care in the treatment of common mental health disorders should be however explicitly incentivized and facilitated, using P4P or other incentives, and through the reinforcement of primary care human resources.

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