

Bundled Payment in Portugal

Country Background Note: Portugal

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OECD Template for Case Studies of Innovative Payment Systems

Bundled Payment in Portugal

<p>Short description of the new payment scheme</p>	<p>From volume to a patient centred payment system - bundled payment per patient treated</p> <p>Since 2003, Portuguese public hospitals mainly receive activity-based financing (inpatient and outpatient care). Since 2007, patient centred payment models have been introduced according to a patient's chronic condition. For each condition, clinical guidelines have been issued allowing costing and pricing (national tariff per year/ condition). Hospitals are reimbursed for the comprehensive treatment provided to patients with: HIV infection, multiple sclerosis, pulmonary hypertension, different lysosomal storage diseases, familial amyloid polyneuropathy and selected oncological diseases (i.e. breast cancer, cervix cancer, colon-rectal cancer). In 2014, 9.7% of the overall hospital funding from the central government was dedicated to this new model.</p>
<p>Context and problem the reform aims to address</p>	<p>Until 2006, hospitals' outpatient services were reimbursed by medical consultations and day-centre episodes without considering patient diagnosis (demand side) or resource consumption (supply side). The bundled tariff applied for "medical consultation" and "a day-care episode" included drug costs and ancillary diagnostic and therapeutic exams. Since the 1990s, inpatient care is reimbursed by a DRG system promoting hospitalisations.</p> <p>In recent years, outpatient treatment of several chronic conditions evolved mainly due to the development of innovative high cost drugs. Hospitals treating patients (diagnosed with high cost ambulatory chronic conditions) who wanted to provide ambulatory care incurred a financial loss and eventually there was a risk to establish cream-skimming strategies and to provide suboptimal quality of care. The payment model in place encouraged over-hospitalization, and over-provision (and over-invoicing) of medical consultations and daycentre episodes. Moreover, there were possible difficulties in accessing state of the art healthcare (e.g., innovative treatments). Beside this, few hospitals developed specialized outpatient clinics dedicated to the specific chronic condition, forcing patients to visit different hospital departments or hospitals to access proper care. Additionally, statistical data were scarce and data on quality of care were anecdotal.</p> <p>The implementation of disease management models assures that healthcare is delivered in an integrated manner; with the aim of ensuring that access to such care is timely, held in the most appropriate level of care, with high levels of quality and effectiveness.</p>

	<p>To eliminate the described problems, boost patient oriented care and disease management programmes, since 2007, the Portuguese National Health System introduced a patient centred payment system - bundled payment per patient treated.</p>
<p>Understanding payment reform</p>	<p>In 2006, the National AIDS Commission (NAC) started a program to increase early HIV infection detection and consequently needed to assure timely access to state of the art treatment and monitor adherence to treatment and control quality of outpatient care. It is relevant to realize that between 2004 and 2006, the financial burden on hospitals with antiretroviral therapy increased by 45.9%, from € 87.5 million to € 127.7 million. The expenditure planned for 2007 reached € 142.4 million. In parallel, to address prescription quality and treatment compliance, the NAC published clinical guidelines for HIV/AIDS treatment.</p> <p>Within this context, the NAC proposed to the Central Administration of the Health System (ACSS) the introduction of an experimental payment model applied to eligible hospitals (i.e. hospitals with more than 400 patients under antiretroviral therapy). The payment model consisted of a monthly tariff for all outpatient treatment provided to patients living with HIV/AIDS (i.e. without any experience with antiretroviral therapy), including antiretroviral drugs and ancillary diagnostic and therapeutic exams. The tariff per patient treated was determined by a bottom-up pricing strategy according to clinical guidelines: recommended patient follow up, including the number of medical appointments, diagnostic exams, and therapeutic regimen. The pricing was developed by the NAC and validated by ACSS, patient associations and medical doctor representatives.</p> <p>If patients are hospitalized (inpatient care) the new payment model is interrupted and the hospital is reimbursed according to the usual payment model (Case mix Index adjusted using DRG). Furthermore, there were three criteria for maintaining patients in the new payment model: 1) comply with the required reports; 2) undetectable viral load after 24 weeks of treatment; 3) at least two medical appointments, two viral loads and two contacts with the pharmacist per year. Hospitals that don't comply with these criteria are not allowed to invoice under the new payment model.</p> <p>Providers were also monitored and the final payment was determined by the clinical results achieved: (1) % patients that comply with treatment and (2) % patients with controlled infection (CD4+ and HIV RNA levels). Hospitals that did not comply with the pre-defined targets had a cut in the tariff.</p> <p>If the costs are below the capitation payment, the hospital can keep the savings. If the costs are above the capitation payment, the hospital has to incur the financial loss.</p> <p>In 2007, the experimental payment model was introduced. At that time, the new payment model aimed to: a) increase transparency and</p>

exactitude of the clinical pathway; b) increase the rationalization of care, assuring quality, equity and accessibility; c) strengthen the negotiating capacity of hospitals when purchasing antiretroviral drugs, along with the planning and budgeting of care. Even though the payment model was exclusively applied to hospitals, there was an expectation that some hospitals would increase their partnership with other providers that followed HIV patients (e.g. drug users' treatment centres).

A specific Electronic Health Record was developed to support patient treatment and the new payment model. There was additional funding to develop the IT solution and to deploy it throughout the hospitals.

Since 2009, the payment model was extended to all hospitals regardless of the number of patients treated. In 2012, the payment model was extended to all patients living with HIV infection/ AIDS, covering all patients treated with antiretroviral drugs. The tariff was adjusted to the average costs incurred by the hospitals.

After analysing the impact of the payment model applied to HIV/AIDS infection, ACSS consulted different stakeholders, namely other government institutions, hospitals, medical experts and patients, in order to expand the payment model to other chronic conditions. The main criteria to select the conditions to initiate the new payment model were: a) high ambulatory treatment cost; b) definition of clinical guidelines and clinical pathways; c) data that allow for costing and pricing. Within this scope, the Central Administration for the Health System selected the following conditions: multiple sclerosis, pulmonary hypertension, breast cancer, cervix cancer, colorectal cancer; lysosomal storage diseases and Familial amyloid polyneuropathy. All payment schemes aimed to create reference treatment centres to encourage cooperation between providers. Treatment centres were also encouraged to establish partnerships with non-reference centre hospitals – affiliate centres – in order to promote distance to treatment accessibility to patients. The reference centres have clinical authority over the affiliate centres and assume drug treatment costs. Annually and whenever clinical guidelines are updated, pricing and costing is updated by ACSS.

Pulmonary arterial hypertension (PAH)

PAH is a syndrome characterized by increased pressure in the pulmonary arteries, with increased pressure on the heart. PAH may result in premature death, since it affects paediatric patients and adult patients. Symptoms associated with PAH, such as breathlessness, fatigue, chest pain, dizziness and peripheral edema, can severely affect quality of life. The treatment available for patients with PAH involves access to innovative and expensive therapies.

In 2013, 547 patients were identified, of which 90 are in the process of diagnosis / pre-treatment. There were already published clinical guidelines for this condition. Costing (top-down approach to outpatient treatment historical costs and pharmaceutical acquisition costs)

and pricing considered stages of disease progression in adults due to the low number of patients and cost variability: (a) follow-up 1 year; (b) follow-up after 1 year WHO/NYHA functional class <III; c) follow-up after 1 year WHO/NYHA functional class IV. Historical costs were compared with state of the art treatment and adjusted if necessary. State of the art treatment cost was defined by a bottom-up costing strategy and considered all cost components. Only three providers were considered to be eligible.

Multiple sclerosis (MS)

MS is an inflammatory, chronic and degenerative disease that affects the central nervous system. The treatment available for patients with MS involves access to innovative therapies associated with high costs.

It is estimated that there are between 4,000 and 5,600 patients with MS in Portugal. There were already published clinical guidelines for this condition.

Costing (top-down approach to outpatient treatment historical costs and pharmaceutical costs) considered stages of disease progression according to the Expanded Disability Status Scale (EDSS): (a) EDSS <3.5, until an outbreak per year; (b) EDSS <3.5, up to two outbreaks per year; c) 4 <EDSS <6.5; d) 7 <EDSS <8. Historical costs were compared with state of the art treatment and adjusted if necessary. State of the art treatment cost was defined by a bottom-up costing strategy and considered all cost components.

Pricing considered a single price per patient due to the high number of patients.

To be eligible, providers needed to be following up more than 150 patients.

Oncology (Breast cancer, Colon-rectal cancer, Cervix cancer)

Cancer is the leading cause of death before the age of 70 (i.e., the leading cause of premature death), and ranks second in the set of causes of mortality in all age groups, after stroke. Many of these deaths are avoidable through primary prevention measures (such as reduced exposure to smoking) and secondary prevention (early diagnosis).

In Portugal, the population-based screenings have progressed more slowly than desirable. According to the National Oncology Program, it was necessary to recognize and identify centres with high differentiation to coordinate satellite treatment centres (less differentiated) to ensure proximity and quality of care to patients diagnosed with most common cancers. Clinical guidelines have been published for population-based screenings and treatment for Breast cancer, Colon-rectal cancer and Cervix cancer.

Costing considered data of 6,106 patients during 24 months follow-up since diagnosis. Data was collected from 6 different hospitals and considered all costs incurred by patients (outpatient and inpatient costs, including breast reconstruction and reconstruction of intestinal transit, and drug costs). We found a high variability of costs between hospitals, assuming different treatment strategies and outcomes.

State of the art treatment cost was defined by a bottom-up costing strategy and considered all cost components.

Pricing considered treatment for the first 24 months. For the three diseases, the price defined for the first year is higher than the second

	<p>year. Only seven hospitals were considered eligible (able to provide all adequate care independently). Outcomes are being monitored, namely survival rates, for 6 months, 12 months, 18 months and 24 months.</p> <p><u>Lysosomal storage diseases</u> The complexity of the diagnosis of genetic diseases of the group of lysosomal storage diseases requires the use of highly specialized laboratory techniques. Furthermore, treatment should succeed not only as a correct diagnosis, but as a thorough clinical study. In Portugal, there were no reference centre networks. In 2013, three reference centres were defined and a new national therapeutics committee was constituted. Pricing and costing (top-down approach to outpatient treatment costs and pharmaceutical costs) was developed for the following diseases: Fabry, Pompe, Gaucher, Niemann-Pick and Mucopolysaccharidosis type I. Historical costs were compared with state of the art treatment and adjusted if necessary. State of the art treatment cost was defined by a bottom-up costing strategy and considered all cost components.</p> <p><u>Familial amyloid polyneuropathy (FAP)</u> FAP is an autosomal dominant neurodegenerative disease. It is a hereditary disease endemic in Portugal, with more than 1,000 people affected, coming from about 500 families, where 70% of the people develop the illness. In northern Sweden, for example, 1.5% of the population has the mutated gene. There are many other populations in the world who exhibit the illness having developed it independently. In the absence of a liver transplant, FAP is invariably fatal, usually within a decade. In 2011, the drug Tafamidis was approved by the European Medicines Agency for the treatment of FAP. The introduction of the drug in Portugal implied the establishment of two reference centres and the new payment model. Costing (top-down approach to outpatient treatment historical costs and pharmaceutical costs) and pricing considered annual treatment.</p>
Implementation of payment reform	<p>The Central Administration led the payment reform, engaging different stakeholders according to the disease/health condition analysed. The main partner for the development of the payment reform was the Directorate General of Health, the entity responsible for issuing clinical guidelines. Clinical experts, providers and, in some cases patients associations, were also involved in the payment reform. Academia was always invited to participate in monitoring and evaluation. For some conditions, there were some initial opposition from providers but it was overcome through the explanation of the purpose and objectives of the reform. The main opposition originated from the providers that were not chosen to be pilot centres or reference centres. Even though they continue to be allowed to treat patients, they were not eligible to the new payment models. The first condition chosen to apply the new payment model was piloted for over 5 years before the payment reform was extended to</p>

	other conditions.
Assessing payment reform	<p>The payment reform developed for HIV/AIDS was evaluated by independent academic studies. The other conditions are being evaluated by the Ministry of Health and independent groups.</p> <p>The independent assessment for the HIV/AIDS payment model concluded the following:</p> <ul style="list-style-type: none"> • The program promotes access to quality care (assessed by the biological outcomes of patients); • Providers are complying with the treatment guidelines; • The average annual cost for the treatment of HIV/AIDS patients is below the tariff; • The information system used in the collection, processing and monitoring of information of patients is not the most appropriate, and increase unnecessary administrative burden. <p>At present, all hospitals have at their disposal a common IT system for HIV/AIDS that allows adequate collection, processing and monitoring of information of patients. The IT system was deployed free of charge to all NHS hospitals treating people living with HIV/AIDS.</p>