
Management Summary

Introduced on a voluntary basis from 2013, the prospective payment system known as PEPP (“pauschalierendes Entgeltsystem in der Psychiatrie und Psychosomatik”) for psychiatric and psychosomatic inpatient facilities in Germany represents a shift from hospital- or department-specific per diem payments (TGPS) to a system that is aligned more closely with the intensity of resource use in inpatient psychiatric care. Similar to the diagnosis-related groups (DRGs) used to pay for somatic care, the PEPP system aims at classifying patients into hospital-, day-based and cost-homogeneous groups (so-called PEPPs).

Through Section 17d para. 8 of the Hospital Financing Act (KHEntgG), the legislature commissioned the Federal Association of Statutory Health Insurance (SHI) Funds, the Association of Private Health Insurance Companies and the German Hospital Federation (part of the system of joint self-government in Germany’s SHI scheme) to evaluate the impact of the new payment system. The chief aim was to examine structural developments in the provision of inpatient psychiatric services and changes in the quality of care, as well as effects on other areas of service provision, including the nature and extent of any shifts in activity.

The evaluation of the PEPP payment system was initially to be divided into three reporting periods: 2011 to 2012, 2013 to 2015 and 2016 to 2018. It should be borne in mind, however, that these referred to the original schedule for introducing the new payment system, as the research project was put out to tender before the relevant legislation reforming the care and payment of psychiatric and psychosomatic care (PsychVVG) came into effect.

The present report, which presents data and results from the first cycle of research, is based on data for the years 2011 to 2015. It is an extension of the final report on baseline measurements, and as such it aims to use descriptive and inferential statistical methods to measure and discuss changes in certain indicators associated with the introduction of the PEPP payment system.

The assessments in this report are based on indicators from various areas of service provision. In accordance with the research agreement, both primary and secondary data were used. Primary data were collected from inpatient facilities, SHI funds, private insurance companies and the SHI Medical Review Board using questionnaires. Our analysis of secondary data draws upon data from hospitals in accordance with Section 21 of the Hospital Financing Act; official census data obtained from the Federal Statistical Office (for example, “Grunddaten der Krankenhäuser” and “Kostennachweis der Krankenhäuser”); billing data from the SHI funds in accordance with Sections 295 and 301 of Book V of the Code of Social Law; the KJ1 statistics of the Federal Ministry of Health (BMG); and data from state authorities responsible for regional health care planning. Quantitative methods were used to analyse both primary and secondary data.

An important component of the evaluation is a [database](#), which can be accessed by the public through the website of the Institute for the Hospital Remuneration System (InEK). Secondary data used in the present report are available there. A flexible filter function allows readers to focus their own analyses on specific indicators and subsets of these (for example, one or more of Germany's 16 states). A variety of options are available for displaying the results.

The results are summarised as follows:

Changes in access to care (Chapter 4): The results of our analysis of secondary data for the periods before and after the voluntary introduction of the PEPP payment system present a mixed picture regarding changes in access to psychiatric care. The number of psychiatric hospitals increased during the observation period. This, alongside a slight decrease in the proportion of overnight inpatient cases being treated outside the region responsible for their care, suggests that access to care close to home may have improved. The distance of the most direct route between patients' homes and the hospitals in which they receive their care can also give us information in this regard. The results of our analysis show that this distance increased by 9.6 percent overall during the observation period. However, since this could also be due to the disproportionate growth in the number of psychosomatic cases, this does not necessarily indicate a negative development with respect to access to care. As a consequence, no firm conclusions can be drawn about the relationship between the introduction of the PEPP system and changes in access to psychiatric and psychosomatic care.

Changes in the structure of care provision (Chapter 5): Our analyses indicate that structural aspects of inpatient psychiatric care provision have remained stable – for example, there has been hardly any change in the number and proportion of hospitals with a psychiatric primary care clinic. Additionally, our empirical analysis of ancillary and ambulatory services shows an increase in treatment activity in the area of psychiatric care. The observed increase in the number of admissions and consultation days in hospital-based psychiatric primary care clinics suggests, at any rate, that the quantity of care being provided in these facilities has risen. This is especially noteworthy given that the number of hospitals with such clinics remained nearly constant during the same period. However, changes in the number of psychiatric admissions (see Chapter 6) or in the average length of stay (see Chapter 7) cannot explain such a development. It can therefore be assumed that, rather than a shift in activity from the inpatient to the ambulatory sector, we are seeing an expansion in the range of services being provided. Based on the results of our empirical analyses, there is no evidence that the introduction of the PEPP payment system has had an impact on structural aspects of psychiatric and psychosomatic care provision.

Changes in the number of admissions (Chapter 6): The results of our empirical analysis suggest that the changes observed in the number of admissions to psychiatric hospitals and the number of treated patients are unlikely to be related to the introduction of the PEPP payment system. Indeed, while there was a statistically significant increase in these two indicators between 2011/12 and 2013/15, this was seen both in hospitals that had voluntarily adopted the PEPP payment system and in those that had remained with hospital-specific per diem payments (TGPS). It would therefore seem that the rise in the number of admissions and patients is more likely attributable to an increased demand for inpatient services or changes in treatment methods, unrelated to the introduction of the PEPP payment system.

Changes in treatment patterns (Chapter 7): While our analysis showed an increase in the number of standard or intensive care admissions in the period from 2013 to 2015, no difference was observed between hospitals using the PEPP payment system and those receiving hospital-specific per diem payments (TGPS). As a result, no relationship could be identified between the introduction of the PEPP system and changes in treatment patterns. An increase in the average length of stay over the observation period was seen but was not statistically significant in our predictive models. Because there was already a statistically significant difference in length of stay between the PEPP hospitals and the TGPS comparison group in our baseline data, a selection effect favouring PEPP payments is likely. In summary, the introduction of the PEPP payment system does not appear to have changed treatment patterns, whether in terms of the spectrum of treatment or the treatment processes examined in our analysis.

Changes in coding behaviour (Chapter 8): The changes observed in coding behaviour are probably related to the introduction of the PEPP payment system. For example, the ratio of cases with unspecific coding to cases with specific coding decreased during the observation period, as did the number of cases with parallel coding of mutually exclusive diagnoses. Moreover, the proportion of cases with common somatic co-morbidities increased by 11 percentage points between 2011 and 2015. Because this increase in the number of diagnosed co-morbidities is probably not due to a rise in their actual prevalence, it seems likely that a change in coding behaviour – that is, more detailed coding – is the cause. A large majority of studies identified in our structured search of the literature provides evidence that the introduction of a prospective day-based system of payment has led to such changes. Even though the PEPP payment system has been voluntary and currently has no implications for hospitals' budgets, it is reasonable to assume that hospitals will have continually improved their coding before the mandatory introduction of the PEPP system.

Changes in quality (Chapter 9): For the most part, changes in processes and structural quality differed only minimally between hospitals that had chosen to adopt the PEPP payment system between 2013 and 2015 and those that had not. Examples include whether hospitals satisfied and fully financed the services and staffing levels set out in the Psych-PV, as well as various clinical processes (e. g. patient admission, clinical pathways, case conferences, team meetings). In contrast, there were clear differences between PEPP and TGPS hospitals when it came to discharges: Discharge management in accordance with Section 39 of Book V of the Code of Social Law was much more common in the PEPP hospitals than in their TGPS counterparts. This finding was consistent irrespective of the type of discharge management involved, whether this was assistance in transferring a patient to another provider or the provision of work-related occupational therapy. Regarding the quality of outcomes as judged by the hospitals themselves, our findings are ambiguous. Whereas hospitals using the PEPP payment system gave a more positive rating overall of treatment success, there was no difference between the hospitals in terms of the proportion of patients reported as being discharged fit for work. A relatively constant downward trend could be observed over the entire observation period in both groups of hospitals, but this is not evidence of a causal relationship.

Other changes (Chapter 10): Overall this chapter shows substantial changes in the structures of SHI funds and private health insurance companies. The introduction of the PEPP payment system has led to changes in billing procedures, which have an impact on areas such as IT, staffing and training. It has also led to increased cost for hospitals, as seen in developments such as a rise in the number of spot audits and related corrections and litigation. No conclusions can yet be made with regard to spending on health services by SHI funds.