Management Summary

The introduction of a prospective reimbursement system for psychiatric and psychosomatic inpatient facilities („pauschalierendes Entgeltsystem in der Psychiatrie und Psychosomatik“ – PEPP) constitutes a change from the current hospital-specific per diem payment to a system more greatly aligned to the resource intensity of inpatient psychiatric care. Under the PEPP reimbursement system hospital cases are classified into hospital-independent, day-related and cost-homogeneous groups (the so-called PEPPs).

Legislators have commissioned the National Association of Statutory Health Insurance Funds, the Association of Private Health Insurance and the German Hospital Federation to conduct research on the impact of the new reimbursement system. The research particularly investigates changes in the provision and the quality of inpatient psychiatric services as well as the impact on other areas of service provision.

The evaluation of PEPP is divided into three reporting periods: the years 2011 and 2012, years 2013 to 2015 and years 2016 to 2018. It should be noted, however, that these periods refer to the original schedule for the introduction of the new reimbursement system prior to the PsychVVG amendment which became effective only after the research assignment was designed. The present report comprises data and evaluation results for the years 2011 and 2012. In accordance with the research assignment, the primary objective was to report baseline characteristics of the various predefined indicators. Consequently this report provides a basis for future evaluations of potential effects of the introduction of the PEPP reimbursement system.

In accordance with the research assignment, primary and secondary data sources were used. Semi-structured interviews were conducted to collect the opinions of various stakeholders affected by the introduction of PEPP. More specifically, patients receiving care, service providers, payers, and scientific institutions were surveyed on clinical outcomes, processes, quality, and transparency of both, the old and the new reimbursement system. Secondary data was based on information according to § 21 KHEntgG (Hospital Remuneration Act), from the Federal Bureau of Statistics, from the KJ1 statistics of the Federal Ministry of Health (BMG) as well as from federal state authorities that are responsible for regional health care planning.

An important element of the research assignment is a database for explorative information retrieval which is accessible to the public through the website of the Institute for the Reimbursement of Hospitals (InEK) (www.g-drg.de). The available online tool is designed to allow readers to readily select, subset and display indicators for their own analyses. In addition, various options for presentation of results are available.

The evaluations in this report are based on 98 indicators. Information from secondary data sources are analyzed quantitatively, i. e. measures of location and dispersion are calculated and discussed subsequently. Indicators from the stakeholder survey were analyzed

qualitatively. Due to the present report covering the pre-PEPP period of 2011 and 2012, we are focusing on descriptive analyses of intertemporal changes. The results section of the final report is divided into chapters relating to different aspects of the provision of inpatient psychiatric services. Each chapter starts with a systematic review of the literature followed by a presentation of empirical evaluations and a brief discussion. Results are summarized as follows:

- Changes in access to care: Results are ambiguous. An increasing number of hospitals with regional care obligations indicates an improvement in access to care between 2011 and 2012. However, this increase may also result from inaccurate coding of the variable for regional care obligation. At the same time, a greater average distance between patients' residence and hospitals as well as an increasing number of patients who have not been admitted to the nearest in-patient facility is observed. This, however, might indicate a reduction in access to care. Data from the federal ministries of health suggest a relatively wide spread (between federal states) relating to the change in the number of beds in hospitals with regional care obligations. This spread may result from diverse trends in rural and urban areas.
- Changes in the structure of care provision: The analyses show that the structure of inpatient care remains relatively stable prior to the introduction of the new reimbursement system. There is a positive trend for specialist rehabilitation units (those with a specialist department for psychiatry and psychotherapy or psychosomatics). This development is not surprising as data from 2008-2010 reveal a long-term trend in the increase of capacities for rehabilitation clinics and wards. However, there is currently not enough evidence to identify trends concerning a shift between sectors or between facilities with various levels of care.
- Changes in the number of admissions: The current results are heterogeneous and do not show any clear tendencies. The number of admissions in psychiatric hospitals increases in 2012 by 2.2 percent over the previous year. One possible explanation can be derived from changes in settlement rules concerning case consolidations. However, as average length of stay only marginally decreased in the observational period, it is not plausible to be the only reason for the development of the number of admissions as splitting of cases would presumably reduce periods of hospitalization significantly. It is unclear whether or not these changes are a result of the upcoming introduction of the new reimbursement system. Data on the number of involuntary commitments are hardly related to the introduction of the new reimbursement system as variations in these numbers are rather caused by adaptations of legislative changes by jurisdiction rather than by changes in the reimbursement system.
- Changes in treatment patterns: The analyses indicate an increase in the number of treatment days in psychiatric care but a reduction in the average length of stay. An increase in the number of admissions might explain the increase in the number of treatment days. The decrease in the average length of stay could also be explained by

admissions of less severe cases as well as financial incentives. An analysis of groups of diagnoses, which was not possible at this stage, could facilitate the understanding of this development.

- Changes in coding behavior: The results suggest trends in the quality of coding already before the introduction of the new reimbursement system. The proportion of admissions with frequently coded comorbidities to all recorded admissions increases by about 3.5 percentage points from 2011 to 2012. Learning effects in the application of introduced coding rules might possibly have had an influence on this development. The proportion of admissions with non-specific coding to admissions with specific coding as well as the number of admissions with parallel diagnoses that are mutually exclusive also decrease (-0.6 percentage points and -6.0 percent, respectively). These results might indicate an improvement in coding quality. However, it is unclear whether this change also impacts the observed increase in the number of admissions. The decline in the number of OPS codes that typically belong to somatic care is strikingly high at 52.6 percent. IT-related changes, e.g. modifications of information systems used by psychiatric and psychosomatic hospitals, may have induced this strong trend.
- Changes in quality: The decline in the proportion of patients discharged "fit-for-work" among all discharges show a slight tendency towards a deterioration in the quality of care. This interpretation, however, has to be treated with caution, especially because, based on the available data, it is not possible to adjust patients for the severity of disease. Furthermore it is highly uncertain whether changes in quality are associated with the upcoming introduction of PEPP. Analyses from the next period of the PEPP-evaluation may lead to more detailed insights.
- Transparency and acceptance: The transparency of the old, hospital-specific per diem payments (TGPS), is seen as very low by the survey participants. According to them, there is hardly any transparency on the actual resource intensity of hospital services. The participants also regard the PEPP reimbursement system as not very transparent, however, for differing reasons. Service providers consider the flat-rate distribution of the services charged over a small number of PEPPs as critical while the payers are not entirely satisfied with the „definition of services" under PEPP. Acceptance in the TGPS system is categorized as high by the survey participants based on their historically grown, long-term experience with the system. However, payers and participants from the scientific community particularly emphasize that the system is outdated and no longer accurately reflects treatment reality. The acceptance of the PEPP reimbursement system is graded critically by patient representatives since they feel it sets disincentives for "treatment optimization" according to financial aspects. Service providers also view PEPP critically in terms of its acceptance. They find it particularly challenging to standardize psychiatric inpatient services in the same manner as the DRG system does in somatic inpatient treatment. Payers

seem to have a more positive image of the PEPP system. In particular, they value an increase in transparency and in the level of detail of the documentation. However, payers also demand improvements. The group of scientific institutions criticizes PEPP for its complexity and its increased documentation requirements.

- Other changes: For this chapter, trends associated with the indicators under examination are difficult to assess as all of them underwent changes in the definition and method of calculation during the period of observation. Furthermore, a profound interpretation is infeasible, as the basic population has changed between 2011 and 2012. Adjusted costs for psychiatric hospitals increased by 10% within the observation period. This upward trend may partly be explained by an increase in treatment days (4%). In addition, staff costs increased largely which can be attributed among other reasons to changes in payment rules for stand-by duties in 2012. Future evaluations, for example, of the cost of inpatient care, might also have to account for competing changes such as in the employment market or in the structure of service provision (e. g., outsourcing, integrated care). Thus, any comparison with previous years is only possible to a limited extent. As a consequence, future analyses will concentrate on identifying changes in the trends over time.