

ADVISORY COUNCIL
on the Assessment of Developments
in the Health Care System

Short Summary of the Report 2018:

**Needs-Based Regulation
of the Health Care Provision**

– Introduction and Summary –

Report 2018

This summary contains the English translation of Chapters 1 and 17 from the full report (in German). The text and page numbers in this summary correspond to the full report to enable a good traceability. The English translation includes some additional sentences and footnotes that provide background information on the German health care system to international readers.

1 Could the needs-based regulation of health care present an opportunity for the future?

1.1 Optimal health care provision by means of avoiding over-, under- and misuse

1. Many people refer to health as ‘the highest good’, and indeed, Germany spends considerable financial resources on health care. In 2017, the health care expenditures amounted to 374 billion euros or 11.5 % of gross domestic product (GDP) (Destatis 2018a, 2018b), of which nearly 231 billion euros were spent by the statutory health insurance (SHI) (BMG 2018).

2. Even though Germany allocates a significant amount of finances to the health care sector, a wrong allocation of funds (e.g., creating an ‘oversupply’ of not clinically indicated interventions, such as spinal surgery or left heart catheterisations) may lead to a waste of resources and generate an ‘undersupply’ in other sectors, such as nursing or palliative care¹. Therefore, a solidary funded health care system should aim at the efficient allocation of resources to achieve the optimum health care provision².

3. Accordingly, the objective of the Advisory Council on the Assessment of Developments in the Health Care System (the Council) is to attain the optimum health care provision. According to § 142 SGB V, the Council should outline the ways to improve the health care system by defining priorities to address under- as well as oversupply, taking into account economic conditions.

4. In their report concerning the hospital sector, the German Ethics Council (*Deutscher Ethikrat*) identified ‘patient well-being’ as the ethical guiding principle for providing health care. The provision of health care should take into account patient autonomy and ensure equal access to high-quality treatments (Deutscher Ethikrat 2016, page 37 ff.). Taking medical and economic aspects into consideration, the Council investigates the ways for achieving the well-being of patients in a financially sustainable manner. The Council pursued this objective in its previous reports and will continue to investigate it in the future.

¹ Additionally, there are instances of the inappropriate use or ‘misuse’ of health care services (SVR 2001).

² It goes without saying that resources, which are inappropriately allocated in the health care sector, will be missing in other economic sectors.

5. While the Council's approach may seem to be technocratic, it is not in conflict with patient-centered health care. In contrast, the two approaches have a complementary relationship. To ensure the optimum health care provision from the medical standpoint in a SHI-financed health care system, the existing resources (personnel, structural and technical facilities, financial resources) should be used effectively and efficiently. At the same time, the inefficient use of resources should be actively avoided.

6. In the presence of the challenges presented by technological progress, demographic change, the expansion of some supply structures, and the large number of people and interests involved, the health system should be continuously analyzed and refined by the involved politicians and institutions.

1.2 Needs-based regulation – an opportunity for improving health care provision and for ensuring patient well-being

7. The present report investigates the current and future developments in the health care system and takes the needs-based approach to regulation with the aim of achieving the optimum health care provision.

8. The Council regards the concept of - more or less active - regulation of the demand side and the supply side of health care as the areas with high improvement potential. Regulation can be generally understood as leading to a specific goal. In the case of health care, this goal could be generally described as achieving patient well-being.

9. From a macroeconomic point of view, there are three coordination mechanisms on the supply side that can assume a goal-oriented regulatory function. These mechanisms are currently used in the German health care system and include 1) market and price mechanisms (e.g., drug discount agreements), 2) corporate coordination (e.g., self-administration through health care institutions), and 3) public planning and budgetary decision-making (e.g., the planning and financing of the hospital sector). The above mechanisms assume an allocative function and thus exert a regulatory effect by optimizing health care structures. The following five ways of achieving the goal of individual well-being could be distinguished:

- prevention through behavioral and life-style changes on the individual and institutional levels (*Verhaltens- und Verhältnisprävention*) to promote health and prevent disease³;
- medical therapy or diagnosis-based treatment to restore physical or mental health⁴;

³ The terminology suggested by the German Ethics Council of patient well-being is helpful to clarify that it is not always patient health (especially when applied to the chronically ill) that is the primary objective of the health care system, but rather the physical and mental well-being of a person (the World Health Organization defines the goal of social well-being). The terminology used by the Ethics Council is limited in the case of preventive interventions, which aim at maintaining the physical and mental well-being of people through the appropriate adjustments in the living conditions, preventing them from becoming ill in the first place.

⁴ As long as the full restoration of health is not possible, the objective becomes to minimize pain and to increase the quality of life.

- rehabilitation to re-acquire physical or mental functions;
- nursing care to professionally support patients in their recovery;
- palliative care to professionally support persons in their last phase of life.

10. The analyses by the Council indicate that there are still instances of over-, under- and misuse in the German health care system and thus there are 'regulatory deficits'. Such deficits should not necessarily be compensated by more regulation, but rather by a better targeted regulation. Due to the underlying complexity of the structures of the health system, the Council considers a needs-based regulation to be necessary at one point or another. First, the expansion of supply structures should be regulated more effectively and efficiently in the future. This applies in particular to the planning and financing of hospitals as well as to the existing barriers between the outpatient and inpatient sectors. Second, there is a need for the regulation of patient pathways and health care utilization. Therefore, the Council puts a specific focus on the regulation of patient pathways in the complex care system.

11. The Council recognizes that the term 'regulation' when applied to people and their interaction could be misleading. People have a strong aversion to being regulated by external forces. The term 'regulation' seems to be hardly compatible with the concept of patient well-being, whereby the primary concern should be to respect the autonomy of the patient and to enable the restoration of the autonomy lost due to illness. However, the German health care system is so complicated⁵ that the provision of targeted information to empower patients on the way to reaching their goals and preserving their autonomy is indispensable⁶.

12. Two complementary measures are available to safeguard patient autonomy. The first measure is to increase public awareness about various options that exist in the health care system. In other words, this measure addresses the health literacy. The Council has repeatedly recommended improving the health literacy of the population. A well-informed patient, who confidently navigates through the health care system, should remain the objective of the health policy.

13. The second complementary measure is to confide in a pilot in certain situations. The image of a knowledgeable and reliable pilot, whom the captain brings on board of their own ship to safely reach the destination in rough waters, has often been used to portray a patient navigating through the health care system. It has also been argued that a qualified general practitioner should take over this function in the complex and multi-layered health care system.

⁵ In regard to the hospital sector, the German Ethics Committee also comes to the conclusion that the hospital sector is highly complex and its understanding requires an expert knowledge of system. Given the complexity of the health system as a whole, the Council considers the two measures outlined below to be appropriate and in line with the idea of patient autonomy.

⁶ The responsibility for the provision of information to patients to support their autonomy should be shared by the corresponding health care institutions.

1.3 Health literacy and knowledgeable pilots for a needs-based navigation through the complex health care system

14. The Council supports the recommendation of the German Council of Economic Experts (the Economic Council) to enable a better patient navigation through the complex health care system (SVR Wirtschaft 2017, page 30). One example of an area with an urgent need for a better patient navigation is the provision of timely and effective emergency care⁷. This approach could be described as ‘weak paternalism’, because it does not impose specific clinical pathways on patients, thereby respecting their autonomy. However, it uses targeted incentives to promote a meaningful health care provision. Such weak paternalism in the health system is justified to the extent that it has been developed by democratically elected persons and it remains transparent, contestable, and adjustable. Weak paternalism does not force patients but rather uses incentives to protect patient well-being from the over- and misuse of health care. As such, weak paternalism is based on the individual considerations, but also on the considerations of the solidarity of all payers and potential future patients. Its ultimate goal is to ensure the equal access to and the sustainability of the health care system.

15. The fact that the health system has to meet the needs of an individual patient for high quality health care while respecting patient autonomy, as well as the needs of all insured for an access to high quality health care, leads to the normative concept of need-based approach⁸. According to this approach, each and every insured person should receive, in quantitative and qualitative terms, the health care that satisfies their needs or which they require according to some objective criteria. Although this objective need is subject to change over time and also remains a difficult-to-measure construct, the needs-based care provision based on this approach can at least be characterized by positive and negative criteria. A distinction should be made between the following two definitions of the objective need. On the one hand, the objective need from a clinical standpoint is defined by high quality evidence-based studies or by a majority option of leading scientists. On the other hand, the objective need is represented by the actual catalog of services financed through the solidarity community. This catalog is defined by an authorized body, in Germany, represented by the Federal Joint Committee (*Gemeinsame Bundesausschuss*, G-BA).

16. The needs-based approach should take into account case severity, disability index, and living conditions (e.g., homelessness), and should not depend on patients’ income, gender, marital status, place of residence, occupation, or social status. In addition, the needs-based approach should incorporate the criteria of effectiveness and efficiency to provide health services with an evidence for a positive balance between costs and benefits.

17. The objective need, as explained above, should be distinguished from the subjective need, latent need, and patient autonomy.

⁷ In this aspect, the report in 2017/2018 by the Economic Council suggests that an effective regulation of patient pathways should limit the use of emergency care by the patients without an urgent need in order not to bind the resources needed for the provision of health care in truly urgent and severe cases.

⁸ The Council relates to the similar discussion in the report from 2014 (SVR 2014, Textziffer 1 ff.) and other contemporary discussions of the needs-based approach, in particular by Herr et al. (2018) und Robra/Spura (2018).

18. The subjective need corresponds to the individual preferences of a patient. Despite having the same age, gender, morbidity, and other exogenous factors, two individuals may display a different subjective need because they have, for example, divergent security concerns. This different subjective need then manifests itself in a different demand for health care, for example, regarding the use of preventive services and the frequency of doctor visits. If these deviations remain within a certain tolerance range, it may be justifiable to provide the subjectively needier patient with those services that could help them achieve their well-being. However, in the presence of scarce resources, access and distributive justice would be the decisive criteria, sometimes necessitating a conversation with the patient about the reasons for not meeting their subjective need (Augurzky et al., 2012, Berger et al., 2013).

19. A latent need is present if a treatment is deemed useful according to objective medical criteria, but A) the patient is not informed about their options or misjudges their condition, B) the treatment is not financed by the SHI, or C) the utilization of the needed treatment is not warranted for other reasons, for example, due to the lack of supply capacity. In Case A, a consultation between the patient and a medical professional is required. If the patient rejects the medically indicated treatment during the consultation, the patient's will is to be respected. In Case B, if the patient insists on the satisfaction of their latent need, it may be necessary to look for exemptions that allow financing through SHI. In Case C, the regulator should ensure the presence of sufficient supply capacities in a reasonable proximity to the patient.

20. The needs-based approach deals with the question of the appropriate scope of the service catalog financed by SHI and the efficient and effective provision of the included services. The scope of the services provided by the German SHI is quite extensive from an international perspective. However, from the point of view of efficiency and effectiveness, the use of not clinically indicated health care services (i.e. the over- and misuse of services) presents the central medical and economic problem. This problem applies not only directly to the treatments within the inpatient and outpatient sectors and across the sectors but also indirectly to the respective supply capacities, which can generate problematic supply-induced demand both medically and economically.

21. The present report takes the needs-based approach primarily in the context of regulation and discusses its application on both the demand and the supply sides. Part I examines the structural characteristics of the outpatient and inpatient sectors in Germany and in other countries. In this context, the planning of supply capacities as well as the utilization and financing of health care are investigated. Part II examines future perspectives for a needs-based cross-sectoral care, including approaches to organize and plan cross-sectoral care, to manage patient pathways, and to structure the emergency care. Part III investigates how the needs-based approach can be applied in practice to coordinating health care, taking health care provision for patients with back pain and for patients with mental disorders as examples.

22. The Council hopes to contribute to patient well-being over the next few years and decades and looks forward to a lively discussion of the presented analyses and recommendations with representatives of politics, self-governance and research institutions and the public.

1.4 Literatur

- Augurzky, B.; Felder, S.; Gölker, R.; Mennicken, R.; Meyer, S.; Wasem, J. et al. (2012): Mengenentwicklung und Mengensteuerung stationärer Leistungen. Endbericht: Forschungsprojekt im Auftrag des GKV-Spitzenverbandes, Essen.
- Berger, B.; Gerlach, A.; Groth, S.; Sladek, U.; Ebner, K.; Mühlhauser, I. und Steckelberg, A. (2013): Competence training in evidence-based medicine for patients, patient counsellors, consumer representatives and health care professionals in Austria. A feasibility study. Z Evid Fortbild Qual Gesundhwes 107(1): 44-52.
- BMG (Bundesministerium für Gesundheit) (2018): Vorläufige Rechnungsergebnisse der GKV. KV 45.
- Destatis (Statistisches Bundesamt) (2018a): Gesundheitsausgaben nach Ausgabenträgern, www.destatis.de/DE/ZahlenFakten/GesellschaftStaat/Gesundheit/Gesundheitsausgaben/Tabellen/Ausgabentraeger.html (abgerufen am 25.05.2018).
- Destatis (Statistisches Bundesamt) (2018b): Inlandsproduktberechnung: Wichtige gesamtwirtschaftliche Größen, www.destatis.de/DE/ZahlenFakten/GesamtwirtschaftUmwelt/VGR/Inlandsprodukt/Tabellen/Gesamtwirtschaft.html (abgerufen am 25.05.2018).
- Deutscher Ethikrat (2016): Patientenwohl als ethischer Maßstab für das Krankenhaus. Stellungnahme.
- Herr, D.; Hohmann, A.; Varabyova, Y. und Schreyögg, J. (2018): Bedarf und Bedarfsgerechtigkeit in der stationären Versorgung. In: Klauber, J., Geraedts, M., Friedrich, J. und Wasem, J. (Hrsg.): Krankenhaus-Report 2018. Schwerpunkt: Bedarf und Bedarfsgerechtigkeit. Schattauer, Stuttgart: 23-38.
- Robra, B.-P. und Spura, A. (2018): Versorgungsbedarf im Gesundheitswesen - ein Konstrukt. In: Klauber, J., Geraedts, M., Friedrich, J. und Wasem, J. (Hrsg.): Krankenhaus-Report 2018. Schwerpunkt: Bedarf und Bedarfsgerechtigkeit. Schattauer, Stuttgart: 3-22.
- SVR (Sachverständigenrat für die Konzertierte Aktion im Gesundheitswesen) (2001): Bedarfsgerechtigkeit und Wirtschaftlichkeit. Band III Über-, Unter- und Fehlversorgung. Gutachten 2000/2001, Baden-Baden, Nomos.
- SVR (Sachverständigenrat zur Begutachtung der Entwicklung im Gesundheitswesen) (2014): Bedarfsgerechte Versorgung. Perspektiven für ländliche Regionen und ausgewählte Leistungsbereiche. Gutachten 2014, Bern, Hogrefe, vorm. Verlag Hans Huber.
- SVR Wirtschaft (Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung) (2017): Für eine zukunftsorientierte Wirtschaftspolitik. Jahresgutachten 2017/18.

17 Recommendations for the Needs-Based Cross-Sectoral Health Care Delivery

17.1 Executive Summary: Regulation for the sake of patient well-being

1. Extensive (but limited) resources are allocated to the German health care sector every year. This report investigated how these resources can be employed provide high-quality health care and to improve patient well-being. This objective requires a good organization and sustainable financing of the health care system. The Council examined various means to achieve this objective by considering the underlying medical and economic implications. The Council addressed similar issues in its previous reports and will continue to do so in future investigations.

2. The Council's approach to examining the medical and economic effects at the aggregated level is not in conflict with the patient-centered approach but rather in a complementary relationship. In a health care system funded through the statutory health insurance (SHI), the available resources (personnel, structures and technical facilities as well as financial means) should be used effectively and efficiently to ensure that an individual is considered at the center of medical, nursing and other health-related activities. The regulator should also anticipate and correct any undesirable developments in the health care system.

3. Thus, the report investigates the past, present and, above all, future developments in the health care system and analyzes the opportunities for a needs-based regulation. Regulation is generally regarded in the context of its underlying objective. In the health care sector, the objective of regulation is defined as 'patient well-being' and corresponds to the pertinent opinion of the German Ethics Council on this subject.

4. The results of the analyses presented in this report reveal the incidents of the over-, under- and misuse of services in the German health care system, indicating 'regulation deficits'. Such deficits need not necessarily translate into more regulation, but instead can be compensated by a more *targeted* regulation. Owing to the complexity of the health care system, the Council regards a more decisive needs-based regulation as necessary in certain situations. Thus, the expansion and further development of supply structures should be regulated more effectively and more efficiently in the future. This applies in particular to the planning and financing of hospital capacities as well as to the reduction of the considerable discrepancies between the outpatient and inpatient health care sectors. On the demand side, it is sometimes necessary to 'steer' patients and regulate the utilization of health care services. The regulation of patient pathways in a complex health care system is, therefore, another focus of this report.

5. As a central criterion for the appropriateness of its regulatory suggestions, the Council relied on the needs-based approach. The needs-based health care is a normative concept, whereby every

insured person should receive – in quantitative and qualitative terms – the health care services that are appropriate for their demand, in accordance to possibly objective criteria. Although the objective demand for health care is subject to change over time and ultimately remains a non-measurable construct, the demand derived through the needs-based approach can be approximated using positive and negative criteria.

6. In the present report, the needs-based approach has been applied both to the assessment of the current situation and to the formulation of proposals for further development. The main results and recommendations on the needs-based regulation in seven key areas - on the demand side and on the supply side of the health care system - can be summarized as follows.

17.1.1 Outpatient capacity planning and remuneration

7. The current planning of demand in the outpatient sector represents a simple extension of the historical supply capacities with a regional adjustment. The estimation of demand for various groups of physicians is based on physician density statistics from 1995 for general practitioners, from 1990 for specialists and from 1999 for psychotherapists. Subsequently, the statistics are adjusted for demographic trends.

8. The Council recommends improving the procedure for outpatient capacity planning by including the past and future changes in the determinants of the supply and the demand for outpatient services since the historical calculation of the respective physician densities. On the supply side, these determinants include physician age and their retirement as well as the absolute and relative increase of salaried physicians. In this context, the planning of the future supply should be based on the number of full-time equivalent physicians (thereby considering their actual working hours) instead of relying on a simple head-count.

9. On the demand side, there has been a noticeable internal migration from rural to urban regions in recent years, which exacerbated the regional differences in the number and the morbidity of insured persons. Consequently, the attractiveness of physician practices in urban areas has increased, while in structurally weak areas it has become difficult to find physicians for vacant positions. The scarcity of physician practice licences in attractive urban areas has resulted in an increase of their resale value. Therefore, the respective owners were able to sell the practice at a value much higher than the actual value of the property. To curtail this widespread practice, the procedure for granting physician practice licences should be reformed. With regard to the acquisition prices, there could be a transitional arrangement. The acquisition prices should be recorded and analyzed regionally to increase transparency. In addition, the duration of the licence for operating an outpatient practice should be limited, for instance to 30 years for medical care centers (MVZs) and professional associations (Berufsausübungsgemeinschaften, BAGs). For individual outpatient physicians the licence should expire when they retire.

10. To ensure a high level of universal outpatient care, the Council recommends simplifying the regulation for the authorization of outpatient physicians in the areas where there is an impending shortage due to the upcoming retirement of several outpatient physicians. It should be possible to authorize new outpatient physicians five years before the expected retirement. Although the remuneration does not play the key role for the settlement of outpatient physicians in structurally weak areas, significant financial bonuses for physicians could potentially contribute to an improvement of the situation.

11. A fixed morbidity-based remuneration per patient for general practitioners could provide incentives for the provision of high-quality care. Some services may still be remunerated on a fee-for-service basis. However, such a remuneration system requires assigning patients to specific general practitioners, who the patients could freely select.

17.1.2 Planning and financing of hospital capacities

12. The planning and financing of hospital capacities in Germany contains several areas with improvement potential. The current planning of hospital capacities often does not adequately correspond to the medical need of population. In terms of the tax-based financing of hospital investment costs, the current financing provided by the regions is not sufficient to meet the investment needs of hospitals. The shortage of financing is in part due to the existence of excess capacities in the hospital market. The DRG-based financing of hospital operating costs is also problematic. The DRG-system has contributed to improving transparency; however, in some situations it gives wrong incentives to hospitals. The shortcomings in the financing of hospital investment and operating costs are particularly problematic for university hospitals and other tertiary care providers. The Council recommends the following solutions to improve hospital planning and financing.

13. At the moment, the planning of hospital capacities in Germany is methodologically mostly based on extrapolating the number of beds using a limited set of parameters, such as the number of residents in a region, the frequency of hospitalizations, the degree of bed utilization and the length of stay. However, this methodological approach should be replaced by an activity-based capacity planning. Moreover, the planning of hospital capacities should take into account different provider levels, different hospital structures, and other key parameters, such as personnel and equipment. The forecast of demand for hospital services should consider data on population demographics, mortality, and morbidity, as well as predictions about medical and technological advances and the changes in patient preferences.

14. In terms of the tax-based financing of hospital investment costs, a transition from the so-called dual system, whereby the state finances hospital investment costs whereas the SHI finances hospital operating costs, to a monistic financing system is recommended. In the monistic financing system, the SHI would be responsible for covering both investment and operating hospital costs. However, because a political consensus on the transition to the monistic financing system has not yet been found and is uncertain in the future, other measures are needed both to address the current insufficient funding of hospital investment costs and to diminish the redundant hospital capacities. To facilitate the modernization of hospital structures, the Structural Fund for Hospitals was established by law¹ in 2016 as a temporary measure to provide additional financing over the period of 2016 till 2018. The newly elected government intended to extend the Fund's operation for the four consecutive years. The burden of additional financing is shared equally between the SHI and the regions. The Fund is well-suited to foster the regional investment in hospital structures and to accelerate the clearing up of redundant hospital capacities. The Council recommends that the Structural Fund is transformed from a temporary to a permanent measure to perpetually increase the amount of investments in hospital structures. Moreover, in the regions with substantial redundancy of hospital capacities, the focus should be placed more strongly on the closure of entire hospitals and not just individual departments. In terms of the source of financing, the share of the Fund currently borne by the SHI should be financed

¹ The Law reforming the structures of hospital care (Krankenhausstrukturgesetz - KHSG) of 1st of January 2016

through the federal government. In return, the federal government should be enabled to participate in the planning of hospital capacities, especially in the geographic areas that encompass several planning regions. For that purpose, a permanent commission with members from the federal government and regional representatives should be established.

15. The Council further suggests several reforms in the financing of hospital operating costs. In Germany, a substantial share of hospital operating costs is financed through the DRG-system. Currently, each hospital receives the same reimbursement per case that is determined by the weight of the applicable DRG. The Council recommends that the DRG-system is evolved to consider the variation of hospital costs per case at the different levels of care provision (e.g., acute care, specialized care, or highly specialized care), for instance, by using multipliers on the relative weights. However, the currently heterogeneous definition of the levels of care provision is not suitable for this purpose. Instead, a new nationwide and empirically derived definition of care provision levels should be introduced at the departmental level. The Council further recommends the strengthening of flat-rate reimbursement as opposed to activity-based reimbursement. For instance, hospitals in rural areas would be compensated for holding spare capacities. Furthermore, to prevent hospitals from undertaking interventions that are not clinically indicated but may be carried out to maximize profits, the Council proposes to develop the existing procedure of getting a second medical opinion into a compulsory measure. Moreover, such interventions should be properly justified and documented by hospitals. The Council further suggests to extend the use of outpatient care at hospitals by defining a catalog of outpatient procedures that would be reimbursed at the same rate in the outpatient and inpatient sector. To ensure cost-covering reimbursement for hospitals, these cross-sectoral rates should be initially set above the current rates used in the outpatient sector. Later, these rates should be continually evaluated and reduced to correspond to the actually incurred costs. Another area of reform in the financing of hospital operating costs concerns the calculation of the base rate used in the DRG-system, which is currently performed at the regional level. To ensure fair competition between hospitals, a federal base rate should be determined (instead of using different regional base rates). This federal base rate should be adjusted by a regionalization factor to agree with the hospital-specific price level of a respective region. Finally, the report contains recommendations for the promotion of high-quality postgraduate medical education and training by allocating resources from the DRG-system to a specifically established fund. In the so-called “backpack-model” proposed by the Council, hospitals or physician practices involved in postgraduate medical education and training would receive reimbursement from this fund based on the number of physicians and the respective duration of their training.

17.1.3 Cross-sectoral health care

16. A needs-based cross-sectoral health care is primarily impeded by the strong isolation of the outpatient and the inpatient sectors. Hospitals and outpatient care providers are not collaborating for the benefits of patients but are separated from each other because of an invisible but momentous wall between them. The integrated care, which for the time being is based on selected contracts between health insurance companies and health care providers, has been striving for a better integration of the outpatient and inpatient sectors for about 20 years. However, the currently achieved progress is still unsatisfactory in relation to the starting point.

17. The success of integrated care models is hindered by restrictive regulations, which provide the potential contractors little scope for action. This applies - amongst other issues - for the permissible legal forms of medical service centers (*medizinische Versorgungszentren*, MVZs), a limited selection of disease management programs (DMPs) and the requirement for providing the evidence of economic efficiency for integrated care under § 140a SGB V. The Council suggests that the authorization of pharmacists as equivalent contractors in the context of integrated care models and the granting of service provider status to physician networks under § 87b SGB V could create promising options for the development of regional cross-sectoral health care.

18. The outpatient specialist medical care (*Ambulante spezialfachärztliche Versorgung*, ASV), which was established by law in 2012, promises a conceptually relevant contribution to the solution of the problems at the intersection of the inpatient and outpatient sectors and, at the same time, supports an increased substitution of inpatient by outpatient services. The so far rather disappointing development of the ASV goes back to a considerable extent to the extremely high participation requirements, which require a formal assessment despite the obligatory provision of quality assurance.

19. The Council further recommends that the planning of cross-sectoral care should be undertaken by regional committees, supported by administrative offices that should be set up for that purpose. The voting rights in these committees should be structured similar to the Federal Joint Committee (*Gemeinsamer Bundesausschuss*, G-BA) and should be closely tied to the responsibility for securing and financing health care provision. To determine the health care need of population, a prospective planning component, which takes demographic changes and medical-technical progress into account, should be used in addition to the data on regional morbidity. Accordingly, the demand planning should not be based solely on fixed capacity criteria, such as the number of practice-based physicians and hospital beds, but should rather incorporate activity-based elements (e.g. the number and the scope of services that need to be provided). A related question concerns the provision of services in the outpatient or inpatient setting, which should be considered taking into account medical, economic and regional aspects. In addition, the proposed regional health care planning should include further parameters, such as patient waiting and travel times, as well as the results of cross-sectoral quality assessments.

20. The Council suggests that the granting of temporary service provision contracts to hospitals may expand their use of outpatient services. At the same time, outpatient care providers should also be eligible to apply for these service contracts. Above all, needs-based health care planning requires a cross-sectoral remuneration system according to the principle "the same price for the same service" regardless of the setting of service provision. This remuneration system should be based, as considered by law for the ASV, on a diagnosis-based calculation.

17.1.4 The regulation of patient pathways

21. The coordination of health care services becomes ever more important due to the increase in complexity of diseases and treatment options. The current care provision in Germany cannot satisfactorily meet this challenge. One of the shortcomings of the current care provision includes the lack of coordinated health care utilization, causing problems with physician appointments and capacities. As a solution, the Council proposes incentives for a general practitioner-centered model (*Hausarztzentrierte Versorgung*, HzV), whereby a general practitioner is always visited first before seeking specialized care. The HzV represents the first model of health care provision coordinated by

the general practitioner in Germany. The aim of the HzV is to insure the provision of high-quality and guideline-based care by the general practitioner. To provide financial incentives for the enrollment in the HzV, the Council recommends offering a reduced insurance tariff linked to the enrollment in the HzV and subsequently evaluating these tariffs.

22. If all other attempts to strengthen the HzV and enhance the regulation of patient pathways should fail, the Council recommends considering an introduction of a contact fee (*Kontaktgebühr*) for specialist visits without referral. Looking at international experiences, contact fees may – in selected areas – have a positive effect on the financing and coordinating of care provision. An important prerequisite for a successful implementation of contact fees is the provision of information to the insured about the effectiveness and costs of different treatment options. The lack of empirical evidence on the contact fees in Germany should be addressed by promoting further research in this area.

23. The transition to a need-based regulation of patient care cannot succeed without supporting patient involvement by providing evidence-based information to patients. Hence, a national health portal (*nationales Gesundheitsportal*) could serve as a central point of contact for patients. In addition, models and studies of informed participatory decision-making should be supported. Patient information centers offering instructions on obtaining and understanding evidence-based research should be made more widely known to the general public. At the same time, the promotion of health literacy should take place early on, preferably, already in school.

24. The transition from the inpatient to outpatient, nursing, or rehabilitation settings has always been an area with high improvement potential. Discharge management is an interprofessional task to address the needs of patients in the transition from the inpatient to other settings. With regard to the provision of pharmaceuticals during the discharge, the Council favors an extension of the hospital rights to dispense pharmaceuticals.

25. Digitization could contribute to improved regulatory processes, for instance, as a complementary telemonitoring of patients in rural areas. The implementation of a cross-sectoral electronic patient data system is the basic requirement for the use digital applications. Networking and interoperability within the framework of the telematics infrastructure remain to be implemented in a timely manner. The aspect of usability, in particular for older people or for groups with specific health needs (e.g., migrants), should be considered more consistently in the assessment of digital applications. The cost-benefit evaluations of the telematics infrastructure should consider – besides the financial implications for the SHI – other parameters, such as the reduction of travel costs for the participating physicians.

17.1.5 The future model for the emergency care provision

26. Three sectors are involved in emergency care in Germany: the on-call medical service by outpatient physicians, the ambulance service and the emergency departments of the hospitals. Particularly the emergency departments and the ambulance service are facing increasing demand, resulting in long waiting times and an excessive workload for personnel. The analyses of the Council suggest the current organization of emergency care is not capable to meet population health care needs. Patients with minor symptoms who could be treated in outpatient settings are increasingly making use of the ambulance service and the emergency departments, thus blocking specialized treatment capacities. The existing remuneration system incentivizes ambulance transports to hospitals, causing

preventable inpatient admissions. Many patients and health professionals are dissatisfied with the current situation.

27. Regarding widespread misuse of emergency care, insufficient regulation of patient pathways, and often inadequate information for patients seeking treatment, the Council has put together a set of measures needed to establish a coherent cross-sectoral emergency care.

28. In the future, every person should be able to reach a competent professional in integrated control centers (*Integrierte Leitstellen*, ILS) around the clock, if possible via one nationwide telephone number. In the ILS, all emergency calls (112) as well as all calls for the emergency services of outpatient physicians (116117) should be coordinated. Experienced medical professionals, supported by broadly trained physicians, should carry out a qualified initial assessment (i.e. triage). Using guideline-based emergency algorithms, the staff in the ILS would determine the best clinical pathways and adapt them to the local situation in each individual case before the patient even leaves his home. The clinical pathways could range from the use of an ambulance to the home visit of an on-call doctor to the activation of an emergency nursing or palliative care team. A substantial number of patient issues or concerns should be resolved on the phone.

29. Walk-in patients with an acute need for treatment would receive short-term appointments in offices of outpatient physicians or an immediate appointment from the ILS in an integrated emergency center (*Integrierte Notfallzentren*, INZ), which should also be reachable around the clock in a high-quality hospital in close proximity. Outpatient and inpatient physicians would collaborate in the INZ and would receive a common remuneration for their services. In the INZ, patients would arrive at a central counter, coordinated by an independent physician, for example, a physician working at the Regional Association of SHI-Physicians (*Kassenärztlichen Vereinigung*), who would carry out another initial assessment (i.e. triage) according to the case severity and urgency. Depending on the individual situation, patients are then treated either by outpatient physicians (in the outpatient setting) or by inpatient physicians (if necessary including an inpatient admission in the hospital).

30. Consistent documentation and digital infrastructure enable optimal cross-sectoral collaboration. The provision of multilingual information for patients through different channels, including social media and information portals, would help explain the tiered emergency system to the general population. Digital applications can further simplify the use of emergency services and the regulation of patient pathways.

17.1.6 Health care provision for patients with back pain

31. In Germany, about 20 % of insured persons visit a physician at least once per annum due to back pain. Back pain is the most common cause of disability and early retirement. Acute and chronic back pain leads to extensive utilization of medical services. In the outpatient sector, general practitioners and orthopedists are the most common specialists who treat back pain. The outpatient care provision is characterized by a high rate of utilization of diagnostic imaging – particularly for patients with acute, unspecific back pain. There are hints that the prescription of opiates in the outpatient sector for patients with chronic back pain is rising. The injections of painkillers and cortisone both in the outpatient and inpatient sectors are more frequent than the use of multimodal pain therapy. This wide use of painkillers and cortisone contradicts the recommendations contained in the National Health Care Guideline (*Nationalen VersorgungsLeitlinie*, NVL) for low back pain. The analyses of the frequency of back surgeries show an increasing tendency and an inexplicable regional

variation. Although the indications for the surgical treatment of back pain are often difficult to verify, there are increasing concerns about the lack of necessity for many surgical interventions.

32. Back pain also belongs to the frequent causes for visiting an emergency room in the hospital, even during the opening hours of outpatient physicians, and causes avoidable hospital admissions.

33. The Council suggests a variety of measures that would empower patients to engage in decision-making about different treatment options. One of the measures involves introducing a compulsory provision of patient information on the (limited) benefits of diagnostic imaging as well as on the importance of physical exercise and physiotherapy. In Germany, the prescribing physician decides on the type and length of the physiotherapeutic treatment. The Council advises to consider extending the rights of physiotherapists, for instance, by allowing either blank prescriptions² by physicians or even direct access to physiotherapy without medical prescription. Preliminary evaluations of these measures suggest their feasibility; however, the implications for efficacy, safety and profitability remain to be examined. In any case, only physiotherapists with relevant university degree and clinical qualifications should be granted the right to allow direct access to physiotherapy.

34. Currently, the establishment of a disease management program (DMP) for chronic back pain is being negotiated. The important aspect in putting up a DMP for chronic back pain is the definition of a target patient group. The inclusion of patients in the treatment program for the chronically ill at the onset of their symptoms may have negative effects on their attitude and behavior, leading to the so-called ‘somatic fixation’. Therefore, for patients with acute and subacute back pain, forms of care other than DMP may be better suited, for example, contracts for a special care in accordance with § 140a SGB V. The main goal should thereby be to identify disease patterns with a high risk for chronification at an early stage and provide an appropriate therapy. In contrast, for patients with chronic low back pain, the DMP can ensure a guideline-compliant treatment. The Council suggests that the provision of multimodal pain therapy in the DMP should be allowed in the outpatient setting or at least in the day-care setting.

35. Furthermore, back surgeries should be reported on the German Spine Registry in order to ensure the quality of treatment and to enable the long-term analysis of patients who benefit the most from this therapy. Back surgeries should be based on evidence-based patient information and included in the guideline of the G-BA concerning the provision of a second medical opinion on surgeries.

17.1.7 Health care provision for patients with mental disorders

36. The current organization of psychiatric-psychosomatic-psychotherapeutic care (i.e. mental health care) shows potential for improvement, in particular with regard to the provider structures, the complexity of clinical pathways and the accountability for coordination, especially in outpatient care.

37. Over the past 20 years, the length of stay and the number of hospital beds in mental health care have decreased, while the number of admissions has increased significantly. In the coming years, the number of patients with psychiatric diagnoses is likely to continue increasing. At the same time, the treatment of mental disorders in outpatient settings has not reached its full potential. The number of physicians and psychologists in this field has increased substantially, in particular the number of

² Blank prescriptions only provide an indication for physiotherapy thus giving physiotherapists the right to determine the frequency and duration of the needed treatment.

psychological and medical psychotherapists. An improvement in the coordination of patients with mental disorders can be expected in particular via the newly introduced service of psychotherapeutic consultation hours.

38. However, the Council conducted a survey among psychiatric and psychosomatic clinics and outpatient facilities, in which the respondents assessed that the waiting times for a psychotherapy still were too long. In particular, outpatient psychiatrists and psychotherapists were believed to have too long waiting times, which could lead to otherwise avoidable admissions in the inpatient sector. Therefore, the number of outpatient facilities and day-care hospitals for patients with mental disorders should be increased, whereby a future cross-sectoral planning of health care should consider not only the number of outpatient psychotherapeutic facilities, but also their actual utilization. The objective could be to end the expansion of hospital beds, which happened during the last years, by increasing the number of outpatient treatment options. To simplify the search for a psychotherapy, a central coordination of free therapy places should be optimized, for instance by the appointment service points (*Terminservicestellen*) of the Regional Association of SHI-Physicians or by online platforms.

39. New forms of mental health care provision, including selective remuneration agreements and projects of the Innovation Fund (*Innovationsfonds*)³, added dynamics to the coordination of mental health care. For example, some new projects focus on mental health care provision for refugees and for the elderly population in need of nursing care. To improve the actual provision of mental health care on a large scale, the new models with positive evaluation results must be included into the collective agreement of the SHI. This includes, for example, the use of e-health services as a supplement to outpatient care, as long as these services have scientifically proven their benefit for patients. Likewise, a standardized electronic medical record, especially in the field of mental disorders, could offer a great potential for improvement of coordination, provided that specific data protection requirements are respected.

40. To further improve the coordination of care, the general practitioner should act as a first contact person for patients, taking care of a pathway that adheres to the clinical guidelines. In severe cases, other professionals, such as an outpatient psychiatrist, a psychotherapist or an outpatient clinic, could coordinate the provision of mental health care. Passing the main coordination responsibility on to another service provider would be discussed with the patient and the new coordinator and would be documented accordingly. In the future, a higher remuneration should be provided for managing the coordination of mental health care.

17.1.8 Call to discussion

41. The next section outlines all recommendations included in the full report, some of which are not explicitly mentioned in the executive summary provided above.

42. With this report, the Council would like to contribute to improving the health care system. To explain the analyses and recommendations presented in this report, the Council organizes a symposium in Berlin and – for the first time in its history – four regional conferences involving the

³ The Innovation Fund was established in 2015 to promote innovative projects with an annual contribution of 300 million euros per year from 2016 to 2019, financed by the SHI.

respective regions. Further information about these events and about this and previous reports can be found on the Council's website: www.svr-gesundheit.de.

17.2 The summary of recommendations

The following section compiles recommendations mentioned in the individual chapters of the full report. Further details on the proposed recommendations and the technical background can be found (in German) in the respective chapters or sections specified in brackets.

1. With regard to the outpatient capacity planning and remuneration, the Council offers the following recommendations:

- a. to reform the procedure for granting licences for outpatient medical practices. The apparently widespread practice of reselling the medical practice, which is associated to a licence, in attractive areas at a price far exceeding its material value should be halted. A transitional arrangement for the acquisition prices should be found. In addition, the prices should be recorded and analyzed in an aggregated form to increase transparency (see Section 3.5.2);
- b. to limit the licence of outpatient physicians (e.g. to up to 30 years for MVZs and BAGs, up to retirement for individual physicians) and to link the licence to operate a medical practice with the obligation to provide a specific range of (especially basic) services (see Section 3.5.2);
- c. to simplify the settlement of new outpatient physicians in areas that are likely to be undersupplied due to the impending retirement of several outpatient physicians. Here, new licences should be allowed as early as five years before the prospective retirement (see Section 3.5.2);
- d. to introduce financial incentives (up to 50 % surcharge on basic services) in structurally weak regions to ensure the provision of high-quality care;
- e. to set incentives for the provision of high-quality treatments through an annual morbidity-based flat-rate allowance per patient in primary care (see Section 5.3.3). Specific services can still be remunerated on a fee-for-service basis. Such a remuneration system requires the assignment of a patient to a specific physician, whom the patient can freely select.

2. With regard to the planning and financing of hospitals, the Council offers the following recommendations:

- a. to replace the current bed-based planning approach by a performance-based planning approach, taking into account different levels of care provision, different hospital structures, and other key parameters, such as personnel and medical equipment (see Section 6.4.2);
- b. to establish shorter planning intervals and to monitor the achievement of planning objectives, which consider both quality criteria and medical-technological and nursing development (see Section 6.4.2);

- c. to consider a wide range of factors in the demand forecast for the hospital sector: data on demographic trends, mortality and morbidity, as well as medical and technological developments and the patient preferences (see Section 6.4.2);
- d. to define a catalog of outpatient procedures that would be reimbursed at the same rate in the outpatient and inpatient sectors. The reimbursement rates should initially be set above the current outpatient rates and should be evaluated and adjusted over time. This reform proposal could be seen a transitional step to a cross-sectoral reimbursement system (see Section 6.3 and Recommendation 3 h);
- e. to address the treatment of patients with ambulatory care-sensitive conditions (ACSC) more effectively in order to avoid hospitalizations and to strive for a cross-sectoral coordination of care for chronically ill, multimorbid patients (see Section 6.3);
- f. to transition towards a monistic system of hospital financing. The distribution of investment funds to hospitals should take place through selective contracting between SHI and hospitals (see Section 8.2.3);
- g. to finance the share of the Structural Fund for Hospitals currently borne through the SHI from the tax revenues of the federal government. In return, the federal government should be given an opportunity to co-ordinate hospital care planning in the areas concerning several regions. For that purpose, a permanent commission uniting the representatives from the federal and regional governments should be established. A federal hospital care plan should be prepared by the federal government in cooperation with the regions. A certain share of the Structural Fund should be reserved for the investments concerning the transregional matters (see Section 8.2.4);
- h. to further develop the DRG-system by reviewing the assumption of uniform cost structures across all levels of care provision and by differentiating the level of hospital reimbursement according to a new nationwide and empirically derived definition of care provision levels (at the departmental level), for instance, by using multipliers on the relative weights (see Section 8.3.2);
- i. taking other European countries as an example, to increase the share of the flat-rate reimbursement components compared to the activity-based DRG-reimbursement (see Section 8.3.3);
- j. to develop the existing practice of providing a second medical opinion before certain invasive interventions to a compulsory measure, and/or to require the documentation and justification of these interventions, for example, through a compulsory submission to a registry (see Section 8.3.5);
- k. to calculate the relative weights in the DRG-system using a constant hospital sample (see Section 8.3.5);
- l. to introduce a federal base rate adjusted by an automated regional component in the calculation of the DRG-reimbursement (see Section 8.3.6);
- m. to find a solution for the reimbursement of extremely high-cost cases for university hospitals and other tertiary providers, for example, through the introduction of a risk pool for the reimbursement of such cases. Additionally, university hospitals and other tertiary

providers should receive additional reimbursement for the operation of innovation centers and highly specialized centers as well as for reserving hospital beds for disasters and epidemics (see Section 8.5);

- n. to set incentives for high-quality postgraduate medical education and training. For this purpose, an educational fund should be established – through an appropriate adjustment of the DRG-system – from which the funds could be allocated to physicians and transferred to the relevant hospitals or physician practices according to the duration of postgraduate medical education and training (see Section 8.3.4);
- o. to strive for a balanced composition between the basic and third-party funding of medical research. Third-party funding from federal funds should be supplemented by an increase in the share of research funding by the regions. The financing of third-party funded projects should be based on full costs. This requires transparency about the actual full costs of research projects (see Section 8.4.2).

3. With regard to the planning of cross-sectoral care, the Council offers the following recommendations:

- a. to further develop the capacity planning for the outpatient and inpatient sectors towards an effective regulatory measure and to achieve a more interwoven health care provision that is delivered according to the population needs (see Section 13.3);
- b. to transfer the cross-sectoral planning responsibilities to regional bodies, supported by administrative offices (see Section 13.2.2). The voting rights in these bodies, which would be organized similar to the G-BA, should be closely linked to the responsibility for securing and financing health care. At the same time, the involvement of relevant interest groups – analogous to patient representation in the G-BA – should be made possible;
- c. to incorporate regional morbidity from good data sources in the planning process (see Section 13.2.4) and to introduce a prospective planning component addressing demographic changes and the medical-technical progress (see Section 13.2.5) (see Recommendation 2 c);
- d. to improve data availability and comparability in the outpatient and inpatient sectors, in particular with regard to diagnostic data, and to ensure access to and scientific use of inpatient data pursuant to § 301 SGB V in connection with outpatient data pursuant to § 295 SGB V (see Section 13.3.1.1);
- e. to calculate the demand for health services using an activity-based approach and not based on fixed capacities like the number of physicians and hospital beds (see Section 13.2.6). This allows for a medical and economic assessment of whether these services should be provided in outpatient or inpatient settings. Existing network and cooperation structures should be considered already in the planning process and the interaction of the various regional health care providers should be coordinated efficiently;
- f. to assign temporary contracts to hospitals and, if necessary, extend the provision of outpatient services in hospitals, for example, in the context of hospital-based MVZs. Similarly, service contracts can be assigned to outpatient care providers (see Section 13.2.6 and Recommendation 1b);

- g. to continuously evaluate the regional planning of health care provision on the basis of various parameters, such as waiting times and travel times, specific political goals, as well as cross-sectoral quality indicators, which are yet to be developed (see Section 13.2.8);
 - h. to address possible disincentives related to cross-sectoral capacity planning by introducing a cross-sectoral reimbursement structure according to the principle "the same price for the same service" (see Section 13.2.3). As a first step, a catalog of hybrid services that are to be billed at the same price in the outpatient and inpatient sectors should be defined. This requires greater cooperation between the Institute of the Evaluation Committee (*Institut des Bewertungsausschusses*, InBA), which is responsible for the ambulatory remuneration system, and the InEK, with the overall objective of defining a cross-sectoral remuneration system. In this case, cross-sectoral case flat rates could be defined for certain indications (see Recommendation 2d). In the future, the care of patients with outpatient and inpatient episodes could be remunerated by diagnosis-based fixed fees (*diagnosebezogene Leistungskomplexpauschalen*) and the reimbursement could be allocated to the corresponding service providers;
 - i. to support the development of the ASV and to re-assess the current extremely high participation requirements, without neglecting the necessary quality assurance (see Section 11.6);
 - j. to standardize the complicated set of legal forms for MVZs and to extend the permissible legal forms of MVZs (see Section 11.6);
 - k. to leave the choice of DMP-eligible disease groups to regional partners and to abolish their performance and administration fees in morbidity-based risk adjustment scheme (*Morbiditätsorientierter Risikostrukturausgleich*, Morbi-RSA) (see Section 11.6);
 - l. to abolish the requirements for economic evaluations in the case of integrated care provision pursuant to § 140a SGB V to intensify competition between these contracts (see Section 11.6);
 - m. to authorize pharmacists as equal partners in the provision of integrated care according to § 140a SGB V (see Section 11.6);
 - n. to provide further options for regional care provision and to offer the service provider status according to § 87b (4) SGB V for particularly eligible physician networks (*besonders förderungswürdig anerkannte Praxisnetze*) (Stages I and II) (see Section 11.6);
 - o. to promote innovative cross-sectoral care concepts and to continue funding them through the Innovation Fund (see Section 11.6).
- 4. With regard to the needs-based regulation of patient pathways, the Council offers the following recommendations:**
- a. to extend general practitioner-centered models (HzV), whereby patient pathways are coordinated by the general practitioner, in order to contribute to the efficient and effective specialist care provision (see Section 12.7.1). An optional reduced tariff should be offered by all health insurances to provide a financial incentive to participate in the HzV

models. The development and implementation of the HzV models must be evaluated in the methodologically high-quality studies;

- b. to evaluate the overall financial burden of introducing any new fee in proportion to the cost savings through the expected regulatory effect on patients. Depending on the outcome, a contact fee for each specialist visit without referral could be introduced (as discussed in the Council's report from 2014) (see Section 12.7.2). Visits to primary care physicians, ophthalmologists, gynecologists, psychiatrists, and pediatricians should be exempt from the contact fee. The total fee amount should be decided politically taking into account social implications. The impact of the introduction of a contact fee should be subsequently evaluated and the amount should be adjusted accordingly;
- c. to promote the health literacy of the population (ideally starting at schools), to facilitate the handling of health information, and to develop an understanding of evidence-based medicine (see Section 12.7.3). In this context, citizens' access to scientific results should be improved, and complex decision-making situations should be supported by decision coaches. Further research should evaluate the informed participatory decision-making;
- d. to extend the rights of hospitals to provide pharmaceuticals for the duration of up to one week after the discharge (irrespective of the day of the week) as part of a comprehensive discharge management. Discharge management could be accompanied by the review of the medication plan by a pharmacist and a subsequent discussion with the patient (see Section 12.7.4);
- e. to take the patient's perspective for evaluations of digital applications into account (e.g., to improve patient autonomy or patient comfort in therapy) (see Section 12.7.5). In addition, evaluation processes in the context of SGB V must be adapted to the special features of digital applications, without reducing the extent of evaluation (in particular with regard to security, but also with regard to effectiveness). Corresponding methodological approaches for the evaluation of complex telemedicine interventions, must therefore be continuously developed and evaluated.

5. With regard to a needs-based emergency care provision, the Council offers the following recommendations:

- a. to better integrate the three pillars of emergency care (rescue or ambulant service, on-call medical service by outpatient physicians, and emergency departments of hospitals). Thus, experienced professionals, supported by broadly trained physicians, should ensure a 24/7 coordination of both the emergency calls (112) and the calls for the medical on-call service (116117) in the Integrated Control Centers (Integrierte Leitstellen, ILS) (see Section 14.4.1). In the ILS, a qualified initial assessment (triage) should be carried out using up-to-date guideline-based emergency algorithms and the best possible clinical pathway should be chosen. The clinical pathway for individual patients can range from using the ambulance service to visiting an on-call physician to activating an emergency nursing or palliative care team, as well as referring patients to regular outpatient care on the next day. Many patient issues or concerns should be resolved through telephone counseling and treatment by outpatient physicians;
- b. to locate the on-call physician service in interdisciplinary and cross-sectorally integrated emergency centers (Integrierte Notfallzentren, INZs) in hospitals, which should be

accessible around the clock (see Section 14.4.2). Walk-in patients with an acute need for treatment can receive an immediate appointment in an INZ from the ILS following a qualified initial telephone assessment (triage). In the INZ, experienced outpatient and inpatient physicians work together under one roof. Patients arrive at a central counter, where a on spot assessment (triage) would be carried out according to the severity and urgency of the case, coordinated by independent physicians. Depending on the individual situation, the patients are then treated by outpatient physicians or by clinicians (possibly including an inpatient admission) or forwarded onto other suitable clinical pathways;

- c. to establish the INZs according to a tiered system in selected clinics, which comply to requirements inspired by the G-BA's concept of inpatient emergency structures. The planning should be under the responsibility of the regional bodies according to § 90a SGB V or the regional ministries. The focus on particularly suitable clinics with INZ allows the provision of highly spezialized care, such as the child and adolescent on-call service, the mental care intervention service, a 24-hour availability of left-heart catheter interventions, computed tomography (CT) or magnetic resonance imaging (MRI);
- d. to provide an extra-budgetary compensation for cross-sectoral emergency care as a combination of a basic lump sum payment and per-case reimbursement (see Section 14.4.2). The basic lump sum payment should finance the costs of providing emergency care and should be adjusted according to the level of health care provision of the respective INZ. In addition, this lump sum payment should be supplemented by per-case reimbursement, irrespective of the case severity. The INZ should be run as a hospital-based but independent economic unit and finance the operation of the hospital emergency department and the on-call medical service from its internal budget;
- e. to facilitate the supply of pharmaceuticals in emergencies and to allow physicians working in the on-call medical service to dispense pharmaceuticals within a defined emergency product range, including medicines covered by the Narcotics Act (*Betäubungsmittelgesetz*) (see Section 14.4.2);
- f. to promote the provision of outpatient care in order to reduce the use of emergency care, by encouraging the flexibility of the office hours of outpatient practices in the evening and on weekends (see Section 14.4.3);
- g. to standardize the access requirements for the on-call medical service and to promote a nationally standardized course Medical Emergency Service (*Ärztlicher Notdienst*) for the on-call medical service, similar to the current emergency medical training (see Section 14.4.4);
- h. to include the assignment to an emergency department or the acquisition of emergency medical knowledge and skills as a compulsory part of post-graduate education in general medicine as well as in trauma surgery, neurology and internal medicine (see Section 14.4.4);
- i. to remove disincentives in the rescue service and to establish the rescue service as a separate medical sector in SGB V (the corresponding code), as well as to finance its capital costs from tax funds and the operating costs by the SHI (see Section 14.4.5);

- j. to improve coordination of the rescue service and to aim for greater horizontal integration of currently more than 300 different rescue service districts (see Section 14.4.5);
- k. to extend and standardize the competencies for a wide range of medical interventions carried out by emergency paramedics across different regions (see Section 14.4.5);
- l. to inform the general public about the new emergency care system using multilingual patient information (e.g. through social media and information portals) and to promote the correct use of emergency care structures through digital applications (see Section 14.4.2);
- m. to facilitate the development of these new emergency care structures through consistent cross-sectoral documentation and digital support, thereby easing the evaluation of these structures by ensuring better data comparability and availability (see Section 14.4.6).

6. With regard to the needs-based regulation of care provision to patients with back pain, the Council offers the following recommendations:

- a. to improve the provision of patient information on the causes and treatment options for back pain (see Section 15.4.1). Physicians should be obliged to inform patients on the importance of physical exercise, on the need to avoid bed rest, and on the lack of effectiveness of diagnostic imaging in the case of unspecific back pain. The provision of this information to patients should be documented. Due to the high prevalence of back pain, an awareness-raising media campaign should be considered to strengthen the patient's informed decision-making;
- b. to ensure a guideline-compliant provision of care to patients with back pain (see Section 15.4.2). For example, an early use of diagnostic imaging without the presence of red flags (that is, warning signs such as paralysis) should be avoided. Contracts for a special care (*besondere Versorgung*) according to § 140a SGB V could help to reimburse physicians for the extra time spent giving advice to patients (see Recommendation 3 m). An outpatient provision of multimodal pain therapy should be allowed. The provision of care to patients with back pain according to these contracts should be systematically evaluated;
- c. to strengthen the role of physiotherapy in the treatment of back pain (see Section 15.4.3). For this purpose, blank prescriptions and direct access to a physiotherapist should be tested and systematically evaluated in model projects. Physiotherapists should be part of interdisciplinary teams treating back pain patients, for instance, in spinal centers. Furthermore, the fees for physiotherapy training should be abolished and instead, a remuneration should be introduced (analogous to nursing education);
- d. to add back surgeries to the guideline about the provision of a second medical opinion of the G-BA (see Section 15.4.4). The referring physician must inform the patient about their right to seek an independent second medical opinion and provide information about suitable physicians. The selection of physicians to provide a second medical opinion must occur based on transparent and objective criteria. At the same time, a systematic evaluation of the provision of a second medical opinion has to be carried out in order to examine to what extent this measure actually contributes to the reduction of not clinically indicated interventions (see Recommendation 2 j);

- e. to turn the reporting (e.g., to the German Spinal Registry) of the incidences of back surgery and their individual justification into a compulsory measure (see section 15.4.5). The reported data should be sufficiently detailed to enable the evaluation of the indication for an operation. The compulsory reporting to the registry could be reimbursed (see Recommendation 2 j);
- f. to prevent hospitalizations due to nonspecific back pain in the absence of red flags (see Section 15.4.6). Taking into account the recommended restructuring of the emergency care, a patient with nonspecific back pain and in the absence of red flags should be referred to the outpatient care after the initial assessment at the common counter in the INZ (see Recommendation 5 b).

7. With regard to the health care provision for patients with mental disorders, the Council offers the following recommendations:

- a. to expand outpatient capacities, especially day-care clinics and psychiatric practices (see Section 16.7.2). Dependent on the development of ward-equivalent treatment options (*stationsäquivalente Behandlung*), new intensive-ambulatory and multimodal services originating from outpatient settings should be introduced. These service-delivery models could be characterized as lying between outpatient and inpatient mental health care provision;
- b. to increase day-care capacity, furthermore, to check a possible flexibilization of day-care clinics and an expansion of night-care clinics (see Section 16.7.6);
- c. to end the increase of the number of hospital beds for mental health care and instead extend the provision of mental health care in outpatient settings (see Section 16.7.2);
- d. to separate the outpatient planning of the number of so-called “nerve specialists” (*Nervenärzte*) into psychiatrists and neurologists, since the joint planning, which takes place for historical reasons, no longer appears to be appropriate (see Section 16.7.2);
- e. to verify the actual utilization of the outpatient practices for psychotherapy and for psychiatry/neurology and, depending on the outcome, to adjust the planning capacities accordingly and possibly establish partial practice licences (see Section 16.7.2);
- f. to assign the responsibility for coordinating mental health care to a clearly defined professional, possibly with one specific service provider per patient (see Section 16.7.1). The coordination effort could be remunerated by an appropriate coordination fee;
- g. to integrate mental health care services more into local health centers (*lokale Gesundheitszentren*, LGZs) or local mental health centers, which are also equipped with social workers and mental health nurses (see Section 16.7.6);
- h. to incorporate successful mental health care projects, which have been funded through the Innovation Fund, into the collective agreement of the SHI, paying attention to a clearly arranged “landscape” of mental health care services (see Section 16.4.6);
- i. to provide a better overview and coordination of available psychotherapy places, as far as this is not already covered by the appointment service points of the Regional Association of SHI-Physicians in the future (see section 16.7.5);

- j. to consider a careful expansion of residential homes with locked wards for persons, who suffer from chronic and severe mental disorders and who present a significant danger to themselves or others due to their specific illness, and to equip these facilities well enough to ensure the dignity of the patients and to avoid custody-similar conditions (see Section 16.7.7);
- k. to develop standardized quality assurance solutions for digital mental health applications (see Section 16.7.8). Transparency for patients should be ensured, e.g. by a standardized certification;
- l. to exploit the potential for telemedicine in rural areas by a nationwide relaxation of the long-distance treatment ban, while paying close attention to quality assurance (see Section 16.7.8);
- m. to consider the interactions between workplace conditions and mental disorders in preventive services according to the biopsychosocial model of disease development (see Section 16.7.9). When policy decisions in other sectors are done, for example in education, family and social policies, their impact on health should always be taken into account.