# International Comparison of Specialist Care Organization: Innovations in Five Countries

## England • Germany • Italy • The Netherlands • The United States

## Interdisciplinary Ambulatory Healthcare Centers in Berlin Area (MVZs)

Lucie Michel, Zeynep Or (IRDES)

Études de cas | 1-5b

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Case studies

# Acknowledgements

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All errors and omissions remain our responsibility alone.

# Contents

# About this study

Under pressure of increasing demand for healthcare from an ageing population with multiple chronic conditions, France, as other countries, seeks to advance care coordination and integration across primary, hospital and long-term care sectors. Specialists play an essential role in treating patients with chronic conditions, but little attention is given to their organization out of hospital, and their role in enhancing care coordination and patient-centered care provision. France Stratégie (French High Council for the Future of Health Insurance, Haut Conseil pour l'avenir de l'Assurance maladie, HCAAM) asked the Institute for Research and Information in Health Economics (IRDES) to provide an international perspective on the subject.

In collaboration with researchers and experts from five countries (England, Germany, Italy, the Netherlands, and the United States), we have identified several specialist care delivery models. In order to understand the effective organization of care around specific health conditions, we carried out case studies in these countries between June 2018 and March 2019. These were not intended to provide a global description of outpatient care in each country, but rather to examine the care organization around patients with specific conditions, examining the division of roles and tasks between medical specialists and other professionals involved, the innovative features of the care model, and its funding.

This case study on the organization of specialized medicine in Germany presents three MVZs (Medizinische Versorgungszentren), interdisciplinary ambulatory healthcare centers in Berlin area. It is based on site visits in October 2018 where we interviewed the owners or the managers of these structures, along with two representatives of the National Association of Social Insurance Physicians (KBV), the general secretary of the union of MVZs, representatives of hospital federations, and two high-level German health system experts.

# GERMAN HEALTH SYSTEM
## *in a nutshell*

In Germany, health insurance, which is obligatory for all residents, is based on two systems: a public insurance scheme, provided by around one hundred competing, non-profit health insurance funds; and private substitutive insurance provided by both by for-profit and non-profit funds. Persons whose gross income exceeds €56,000 per year can opt out of the public health insurance scheme and take out private substitutive insurance. But most of them (75% of those who are able to choose their insurance scheme) stay in the public system. In 2016, almost 11% of the population was covered by private insurance policies (Commonwealth Fund, 2019; Busse and Blümel, 2014).

The regional states (Länders) own and manage the university hospitals, while the municipalities and counties own around half of the general hospital beds. They also play a role in promoting public health. However, the various levels of government play almost no role in direct funding and provision of healthcare. To a large extent, the regulation is delegated to autonomous associations: on the provider side (for example, Kassenärztliche Vereinigungen, KV, for ambulatory care physicians) and on the payer side (health insurance funds), all being members of a central body, the Federal Joint Committee.

By law, self-employed ambulatory doctors have to be members of regional associations (KV) that negotiate contracts with the health insurance funds. The regional associations of doctors are responsible for coordinating the healthcare demand in their region and act as financial intermediaries between the funds and the private doctors. The doctors invoice their regional associations according to a standard fee scale; the associations receive the money from the health insurance funds in the form of annual capitations (Busse and Blümel, 2014).

The ambulatory doctors are generally paid per medical act according to a standard fee scale established between the health insurance funds and the physician associations. The payments cover a predefined maximum number of patients per practice and reimbursement points per patient, by establishing thresholds concerning the number of treatments per patient for which a doctor can be reimbursed at full value. Financial incentives to promote the coordination of healthcare may be part of the integrated healthcare contracts, but are not systematically used (Obermann et al., 2016).

The doctors are not free to set up their own practices where they want, as the ambulatory healthcare supply is regulated by a regional 'licence' system by the KV (the right to practise medicine in a given area). As far as specialists are concerned, there is a strict separation between hospital and outpatient care. The doctors in hospital are not generally authorised to treat ambulatory patients; hence, in general there are no outpatient consultations in hospitals. The Länders determine the hospitals' capacity, while the capacity of outpatient specialist care is governed by the rules established by the Federal Joint Committee.

# 1. The MVZ - Medizinische Versorgungszentren Interdisciplinary ambulatory health care centres

## 1.1. History

- The origins of MVZ can be traced back to the former East-German "Polikliniks", which at the time were local healthcare centres that brought together doctors from different specialties and nurses, with some technical facilities (medical imaging, functional exploration, and biological analyses). Before the wall came down, almost all doctors working in East Germany were based as salaried doctors in Polikliniks, but after reunification these have gradually disappeared, due to the need to modernise the infrastructure, as well as due to the rejection of the former communist model. Nevertheless, some of the most efficient Polikliniks have survived and, in 2004, Schröder's health reform act rehabilitated them by introducing MVZ as a new legal identity for providing outpatient treatments (Imbaud et al., 2016).

- Until the 2000s, ambulatory medical practice generally consisted of a doctor (mostly male) working alone in his own practice helped by two or three medical assistants. These "Einzelpraxis" were gradually joined into group practices (grouppraxis), in which several doctors worked together independently (often two, even though e.g. in radiology they are typically larger). In 2004 with the creation of MVZs, the physicians could work on as employee, either on a salary basis, or as self-employed medical professionals in group practices. Since 2008, single-handed and group practices are also allowed to employ salaried physicians. The MVZs are criticized by some doctors, who see them as a first step in the industrialisation of ambulatory healthcare, but highly popular with others (especially, the younger generation) who appreciate the fact that they work in a team and can have more flexible working hours.

## 1.2. Context

The MVZs, established in 2004, are interdisciplinary ambulatory healthcare centres that are managed by healthcare professionals. The physicians in these centres are regulated by a licence system, managed by the regional KV (Kassenärztlich Vereinigung, Association of Statutory Health Insurance Physicians), which approves the full-time-equivalent physicians working in the structure (a licence can be shared by two physicians, each working half-time). Unlike France, ambulatory doctors cannot freely set up their practices anywhere they want in Germany. Initially, in the first MVZs it was obligatory to have at least two different specialties, but in 2018, it became possible to create a MVZ that brings together doctors practising in the same specialised field (a MVZ specialising as an eye clinic or in cardiology, for example).

The MVZs can only be established by self-employed doctors, hospitals or municipalities, but not by other bodies or by the health insurance funds. Initially, nursing homes and pharmacies were also allowed to create MVZs, but this was also changed over time. The MVZs are always directed by physicians, even if the daily management may be carried out by non-medical managers. These are private organisations —limited liability companies— or non-trading companies; very infrequently, they can be set up as associations. The doctors can work there as salaried physicians or keep their self-employed position; it is also possible for a doctor to share his or her working hours between a hospital position and a post in a MVZ. In some MVZs, which are a minority (3-4% of all MVZs), all physicians are independent and the practice is similar to that of a group practice.

There were 3,173 MVZs in Germany in 2018 against 2,073 in 2014 (KBV figures presented in an interview). On average, a MVZ has 6.2 doctors with a large number of medical assistants, secretaries and a few nurses. About 12% of ambulatory doctors worked in an MVZ in 2018. The most represented specialties in the MVZs are general practitioners, internists, and surgeons, followed by the gynaecologists, radiologists and orthopaedics (MVZ statistics by KBV). Around 41% of the MVZs are owned by doctors and 42% by hospitals. There is no specific funding to help creating MVZs.

The distribution of these healthcare centres are not equal across Germany; almost half of them are located in big towns or cities, 38% in semi-urban zones, and only 14% of them are located in rural areas (Gibis et al., 2016). According to the representatives of the KBV (National Association of Statutory Health Insurance Physicians), this is partly explained by the fact that this model is competitive and more easily developed in areas where the number of patients is high. Certain regions also have more MVZs than others, depending on the political will on the local level since MVZs are often used as platforms for financial investments into healthcare sector (Clifford, 2018). Between 2015 and 2018, the acquisition of several MVZs by major private companies has been a source of concern for certain doctors, especially in dental care sector.

We present here the two common forms of MVZ via three examples explored in Berlin city area. We visited these healthcare centers and interviewed the owners or managers (in the hospital MVZ). The topics covered in these semi-structured interviews concerned the origins of the MVZ project, the configuration and roles of the healthcare professionals involved, medical conditions treated, information systems, their links and cooperation with other care providers.

# 2. THREE EXAMPLES OF MVZ

## 2.1. First example: Herzpraxis – A MVZ set up jointly by private cardiologists and general practitioners

This MVZ is a limited liability company run by six physician partners: five cardiologists and one general practitioner, who each hold an equal financial share in the organisation. Their company also employs (on a salary basis) five other general practitioners and one cardiologist, 20 medical assistants (including medical secretaries and a manager), as well as a MFA (Medizinische Fachangestellte), a physician assistant who helps the doctors (see Box 1). The centre has two on-site electrocardiograms.

The MVZs are paid by the KV (which receives payments from different insurers), then the doctors (owners) pay their employees and share the profits. Their activities are regulated by the regional health insurance system and the physicians cannot have more than a certain number of patients per licence (the right to practise medicine in a given area). In Herzpraxis, the six cardiologists share three licences. The MVZs therefore need to apply for new licences over the years to ensure sustainability, because if a doctor with a licence leaves the MVZ, s/he also takes away a number of patients. In areas which are not over served, it is easy to get a licence, but in over-served areas, only the licences of retiring doctors are distributed again (and MVZ can apply just like other aspirants). These retiring doctors usually sell their practice at the same time, and the more attractive the area and the specialty, the higher is the price.

**Box 1. Medical assistants (MFA)**

The MFAs (Medizinische Fachangestellte), or medical assistants, are very common in Germany and are often present in large numbers in the private practices and the MVZs. They act as assistants to the doctors (similar to the physician assistants in the United States, but with a lower educational level and expertise, closer to that of the nurses). They attend a three-year course after leaving secondary school and are authorised to carry out certain tasks, such as taking blood samples, setting up electrocardiograms, taking blood pressure, setting up an intravenous drip, filling in the patient file, and follow-up over the telephone.

The doctors need to be able to estimate the number of patients very precisely because their remuneration is calculated on the basis of this number and the number of medical procedures carried out. At the end of each year, the breakdown of the activities is verified by the KV to adjust the exact amount to be paid, but if the number of medical procedures greatly exceeds the forecasted number, the healthcare professionals, and hence the MVZs, will not receive additional compensation.

In this centre (Herzpraxis), the patients are monitored for cardiovascular problems and are referred directly by the general practitioners working in the centre or by doctors working outside the MVZ. The physicians of the MVZ work also with an informally established heart failure treatment network. The "Praxisnetz" (practice networks), which are being developed in many areas, enable the MVZ and healthcare professionals in their own practice or in hospital to work together to focus on specific issues (multimorbidity, manage-

> *This network is very important to us, it's a network of professionals that allows us to improve ourselves but also to offer the best possible care to our patients. »*
>
> Cardiologist 2

ment of chronic diseases, care for elderly…), to improve their practice and care provision for the population in their local area (Obermann et al., 2016).

The cardiologists of the MVZ work in collaboration with the Charité University Hospital. Their shared goal is to reduce the number of hospitalisations by rapid diagnostic and treatment in the MVZ, without needing to go through the emergency department. This collaboration also enables the cardiologists in the MVZ, who frequently carry out vascular surgery, to have privileged access to the hospital's operating theatres. Hence, for a surgical intervention, while the private surgeon transfers the patient to a hospital, it is the MVZ that receives the main funding, although some of the funding is paid to the hospital.

The monitoring of quality of the practice is a fundamental aspect of the functioning of the MVZ, and the KV regularly monitors doctors' practices. The KV uses an electronic tool for coding medical procedures, the 'EBM' (Einheitliche Bewertungsmaßstab) system, and every three months the doctors send their data to the KV, which verifies the coherence of coded practice and patients. Furthermore, the KV randomly selects a doctor from the MVZ every year to carry out quality tests (quality of the echography, the patient file, the medical decisions, etc.).

## 2.2. Second example: The Praxisklinik – MVZ outpatient surgery

The Praxisklinik was established by an anaesthetist who decided to open his own clinic after an unfortunate experience with an associate. Making the most of his past experience, he opened a MVZ (in 2014) with one operating theatre and his (one) anaesthetist's licence. Today, as the sole owner of the MVZ, he employs five other anaesthetists, as well as a team comprising two full-time nurses, four specialised medical anaesthetic assistants, and seven operating theatre nurses. The centre now has three operating theatres for outpatient surgery with a wide range of specialisations: orthopaedics, with thirty knee operations each day, hand surgery, with around a dozen operations per day, operations such as hysterectomies and laparoscopy, and cataract operations (50 per week).

The physician owning the MVZ, anaesthetist, works practically as a private company director and has attended management and legal training courses to be able to effectively run the MVZ. The operating theatres are hired out to 30 external surgeons and the MVZ receive funding from the KV for anaesthesia services. For example, a surgeon carrying out an operation on ligaments receives €426 from the KV and pays 30% of this to the MVZ. Certain patients also come to the centre for surgeries reimbursed by private insurance companies (which generally pay more). According to the doctor who owns and manages the MVZ, the

> *I do a huge and very expensive job to improve safety and quality of care, I should be paid for it by the KV, it would be normal. »*
>
> Anesthesiologist, MVZ leader

surgeons accept this operation because they find excellent working conditions in the MVZ: up-to-date equipment and compliance with impeccable hygiene and quality standards. The latter would like the KV to recognise his efforts to improve care quality.

## 2.3. Third example: Vivantes

The public hospital consortium Vivantes comprises nine sites in the city of Berlin and has 15,000 employees. 90% of their patients are covered by public insurances and 10% have private insurance. The group Vivantes has two MVZs, in which the specialists—who are also hospital employees—work part time or full time. For the MVZ's manager, this ambulatory structure provides a "bridge" between private healthcare professionals and the hospitals. All

> *We must start with what is best for the patient. Then look how to organize and pay providers. »*
>
> Manager of the MVZ

the doctors and nurses in Vivantes are salaried. Generally, the doctors have a contract for 40 hours per week (with a maximum of 48 hours, while in the ambulatory sector doctors can work 60 hours/week). However, the salary of nurses is an issue, because the level of remuneration is higher in the hospital than in ambulatory healthcare centers.

From the point of view of hospital facilities, funded by the volume of their patients/activity (an activity-based payment model), investing in a MVZ structure has several advantages. Firstly, the MVZs enable them to recruit patients, by identifying and referring complex patients who can be potentially hospitalised. Secondly, they can also offer outpatient services (radiography, etc.) to their patients near the hospital. This is interesting from an economic perspective, as well as for improving patients' care pathways by integrating treatments. Moreover, MVZ can help hospital to reduce the length of stay, as specialists can organize the discharge with a quick visit to ambulatory center. The director of Vivantes claims that they have helped to reduce the length of hospital stays and emergency hospitalisations, with a better organisation of discharges and post-operation consultations in the MVZs (we do not have any data on this).

However, the integration of care between the two MVZs and the hospital is rather weak. Although they are part of the same organisation, the synergies (the links) with the various hospital departments are not very strong. The doctors in the two MVZs are unable to share information on their patients, or follow up the treatments at the hospital if the patient is hospitalized, except when the doctor is working both in hospital and MVZ. The lack of a common information (IT) system for sharing patient information is recognized as an issue by the MVZ manager, for improving care coordination accross settings.

The two MVZs of Vivantes are specialised in healthcare for specific populations, in the MVZ we visited on children with cancer. This specialisation helps to avoid being in direct competition with the general practitioners and specialists who refer their patients to them. Overall, investing in a MVZ allows hospital to provide a range of new services in ambulatory setting and to integrate treatments before and after hospitalisation. This is also a way of developing new services, such as radiology, and increasing hospital attractivity. Specialization in specific patient groups allows economies of scale and scope across settings.

# 3. Principal conclusions

## The challenges of the model

- Certain self-employed specialists consider that the MVZ system increases competition with the hospitals and threatens private practice. They are also concerned that the outpatient sector will be absorbed by major private groups that buy the MVZs.

- There is a risk of increasing demand for hospital care considering the activity-based funding in hospitals and the high number of hospital beds in Germany: the hospitals can use the MVZs to recruit patients. Nevertheless, the licence system that controls the number of specialists in an area restricts the overexpansion of the MVZs.

- For the hospital-owned MVZs, it is not easy to find a niche area of specialisation on a given population to avoid being in competition with the general practitioners (who transfer their patients). Also patients often suffer from multiple diseases and overspecialisation could be counter-productive.

- The information systems are not connected: even in the MVZs linked to a hospital, sharing patient information remains to be very complex. Therefore, the contribution of the MVZs to improving patients' care pathway is not always evident.

## Opportunities

- MVZs are attractive for doctors as they represent a more flexible way of working in a team:
  - In the framework of the MVZ, the economic risks and administrative tasks are shared.
  - For the physicians, the possibility of being salaried and part-time work are attractive.
  - The health professionals appreciate interdisciplinary exchange.

- Sharing common technical facilities creates scale economies and also contributes to improve the quality of the care. MVZs providing higher volumes of technical procedures and interventions help to introduce quality protocols and standards.

- For the hospitals, the MVZs can be an opportunity to reduce the strict distinction that exist in Germany between inpatient and outpatient care. They can move into the ambulatory care sector, transfer certain services to outpatient setting, and establish an efficient network (by integrating pre-and post-operation care).

- The health insurance funds also think that there could be an opportunity to reduce healthcare costs by avoiding inappropriate or redundant exam-

inations and diagnostic tests in ambulatory and inpatient setting, as often the case currently.

- For patients, the ease of access of MVZs and the availability of a range doctors in the same place is an advantage. The care organisation in the MVZ with a range of medical assistants also means that often the doctors have more time for the patients, they can invest in disease management programs, etc. The involvement of MVZ in a provider network (Praxisnetz) appears to be a significant facilitator for improving continuity of healthcare.

- At the same time, in Germany, the MVZs seem to facilitate the development of the "Praxisnetz" or practice networks that brings together healthcare professionals working in different medical centres and self-practices with focus on specific themes (in particular, chronic diseases, obesity, elderly care, etc.) in order to improve the care organisation for the population in a certain area.

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In order to investigate different ways in which specialists are working out of hospital to integrate primary and social care, we carried out case studies in five countries (England, Germany, Italy, the Netherlands, and the United States). In each study, we examined how specialist care is organised around specific health conditions. These case studies, carried out through site visits between June 2018 and March 2019, explore the organisation of care around patients by describing the coordination of roles and tasks between specialists and other health professionals involved in patient care, with a special attention to their innovative features and underlying financial models. A synthesis of results across five countries is available at: www.irdes.fr/english/2020/qes-248-integrating-specialist-care-with-primary-and-long-term-care-examples-from-five-countries.html

This case study on the organization of specialized medicine in Germany presents three MVZs (Medizinische Versorgungszentren), interdisciplinary ambulatory healthcare centers in Berlin area. It is based on site visits in October 2018 where we interviewed the owners or the managers of these structures, along with two representatives of the National Association of Social Insurance Physicians (KBV), the general secretary of the union of MVZs, representatives of hospital federations, and two high-level German health system experts.

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