

Strengthening care coordination: a comparative analysis of reform implementation in Austria and Germany, with options for Austria

Report prepared for the Main Association of Austrian Social Security Institutions

by

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List of abbreviations

BVA	Federal Insurance Office, Bundesversicherungsamt
DMP	Disease management programme
FHC	Federal Health Commission, Bundesgesundheitskommission
G-BA	Federal Joint Committee, Gemeinsamer Bundesausschuss
KV	Regional Association of Statutory Health Insurance Physicians, Kassenärztliche Vereinigung
MoH	Ministry of Health
RSA	Risk structure adjustment
SHI	Social health insurance

1. Introduction

1.1 Overcoming the policy ‘implementation gap’ to improve care coordination

The rising prevalence of chronic conditions – diabetes, dementia, cardiovascular disease, asthma and many others, including the problem of multi-morbidity – creates substantial challenges for health systems worldwide. In Austria, apparent deficits in the quality of care for people with chronic conditions are increasingly recognized as undermining the performance of the health system. For example, OECD figures suggest a high level of avoidable hospital admissions for people with chronic conditions; uncontrolled hospital admissions for diabetes in Austria are the highest in the OECD at about 188 per 100,000 population (OECD average: 50 per 100,000 population),¹ while admissions for acute exacerbations of respiratory conditions are also higher in Austria than in other countries (OECD, 2011). In the case of diabetes, a recent study suggests that blood glucose and lipid levels, hypertension and related cardiovascular risk factors are poorly controlled in about 50 per cent of diabetics, and more than 20 per cent suffer from at least one severe complication such as blindness, major and minor amputations, end-stage renal failure, myocardial infarction or stroke (Rakovac et al., 2009).

In many countries, the organisation and financing of health care are oriented towards treating acute short-term illness. As a result, health systems are often characterised by fragmented delivery structures. The acute model of care is widely recognized as ill-suited to meeting the health needs of people with chronic conditions, who require seamless care over extended periods of time and across multiple sectors and settings of care. Achieving better coordination and integration of care has therefore become a focus for health care reform in many countries. Better care coordination may not necessarily save costs in the short term, but it is likely to enhance the overall efficiency of the health system through improved outcomes and this can prevent wasteful spending in the long term (Suhrcke et al., 2008). Integrated care has thus become an explicit objective of health system reform in many countries (McKee & Nolte, 2009).

¹ The indicator refers to the number of hospital discharges of people aged 15 years and over with diabetes Type I or II without mention of a short-term or long-term complication per 100 000 population. Rates have been adjusted for differences in the age and sex structure of each country’s population. Variations in coding practices and disease classification systems between countries may to some extent affect the comparability of data.

Although there is substantial consensus on the need for better coordination of care, little is known about how best to implement policies to achieve this aim. The notion of a ‘gap’ between policy vision and actual implementation has been a long-standing topic in public administration and management (Hjern & Porter, 1981) and the problem is not unique to health care: indeed, in education, labour market and other public policy domains, policy-makers are increasingly grappling not only with the problem of “*where to go*” but also of “*how to get there*” (OECD, 2010). Implementing health policy tends to be particularly challenging. Hurdles include organisational complexity; multiple agency relationships between payer and provider, provider and patient, and patient and payer; and often diverging interests between policy-makers and regulators on the one hand, and payers, providers and patients on the other.

Health care reforms in Austria in 2005 introduced two key policy instruments to improve care coordination for people with chronic conditions: a Reformpool of virtual funding intended to address the divide between inpatient and outpatient care via projects jointly financed by social health insurance (SHI) and State governments, and disease management programmes (DMPs) to improve care coordination specifically for people with chronic conditions. The adoption of these and other measures was seen as a significant step toward reducing fragmentation in health care delivery. However, the results of these reforms have fallen short of policy makers’ expectations. In 2012, only 32,000 patients and fewer than 1000 physicians participated in the DMP Therapie Aktiv introduced in six of Austria’s nine Federal States. With regard to the Reformpool, on average only 15.8 percent of (theoretically) available funds have been used, with regional variations ranging from 1.5 percent (Tyrol) to 33 percent (Styria). In the eyes of Austrian stakeholders, the initial momentum of reform implementation has slowed.

How best to bridge the gap between policy vision and practice is a critical question for policy makers in Austria and elsewhere, particularly as the prevalence of chronic conditions continues to grow (Gress et al., 2009). In this report we provide cross-national comparative analysis with the aim of giving policy makers in Austria a better understanding of their own situation and insights from the experience of other countries facing similar challenges.

1.2 Study objectives

The overarching motivation for this study is to better understand major factors which may impede or support key elements in reform processes intended to achieve better care coordination. Specific objectives are to:

- identify barriers to the implementation of care coordination policies in Austria;
- compare the experience of policy implementation in Austria and Germany and identify insights for Austria;
- discuss options for action in Austria.

1.3 Structure of this report

Section 2 outlines a conceptual framework for analysis by distinguishing key dimensions and meanings of integration, defining indicators of policy success, and outlining an explanatory theory to help those responsible for policy development and implementation better understand the reasons for policy outcomes.

Section 3 explains the comparative case study design, and the methods used for data collection and analysis.

Section 4 summarises the main challenges to care coordination in Austria and Germany. The Section illustrates key policy drivers, describes attempts to overcome fragmentation of care, and examines policy outcomes based on the conceptual framework.

Section 5 explores implementation barriers and levers based on the cross-country comparative analysis of Austria and Germany.

Section 6 draws conclusions based on the analyses.

Section 7 offers recommendations to strengthen the implementation of care coordination policies in Austria.

2. Framework for analysis

2.1 Categorising policies to improve care coordination

Over the past decade, concepts such as ‘integrated care’ and ‘care coordination’ have become buzzwords in health policy debates, but are frequently used inconsistently (Kodner & Spreeuwenberg, 2002). Analysts have attempted to develop a common terminology to enable systematic assessment of the structures and processes involved in achieving integrated care in practice, their prerequisites and their effects on health care delivery and user outcomes. The most frequently used taxonomies differentiate between type, degree and breadth of integration (table 1).

As regards types of integration, the clinical integration of services across providers and over time should clearly form the basis of any care coordination initiative. However, the other types highlighted in table 1 point out the need to consider how this clinical integration will be organised. In other words, it will be important to reflect on whether the necessary financial, informational, administrative, organisational and normative levers are in place to support the process of clinical integration.

Leutz’ notion of a continuum from full separation over linkage, coordination to full integration illustrates different degrees of integration. Full integration of clinical and financial arrangements is sometimes seen as the ‘ideal vision’ of integrated care, because this model is most likely to maximise the shared (clinical and financial) interest of providers to provide care efficiently, where efficiency is defined as the relation between outcomes achieved over resources invested. However, in order to function optimally, the other types of integration also need to be addressed. In some respects, the continuum of integration may be understood as a sequence. In most health systems with fragmented financing and delivery structures, it may be politically and technically impossible to move from full separation to full integration. In between these two extremes, however, countries will have a range of reform options to improve linkage and coordination between care providers. As fully integrated care in the sense of Leutz’ framework can be seen as a long-term vision in many countries, in this report we mainly refer to efforts to enhance ‘care coordination’ as the more short- to medium-term objective. However, we also acknowledge that these concepts will be overlapping in practice.

The breadth of integration is another key dimension in analysing care coordination and integration. Policy-makers can choose models focused on a single indication such as diabetes. Although single-indication models such as disease management programmes may be composed of multiple complex components including self-management support, clinical management and monitoring interventions, they tend to remain relatively narrow in scope as regards for instance patients with complex multi-morbidities or a whole-population focus where intervention does not occur only once patients have developed symptoms (secondary prevention, as in disease management programmes) but ideally much earlier in disease aetiology by targeting otherwise healthy people with risk factors for a disease (primary prevention). These aspects may be addressed in more patient-centred and population-oriented models of integration, respectively.

The answer to the question “which model is best” should be driven by the needs of the population addressed. For patients with a single condition, a classic disease management programme may be sufficient. For more complex patients with multiple medical and social care needs, in contrast, additional tailored case management may be required. Population-oriented models of care, in turn, may incorporate indication- and patient-centred models. The vision in these models relates to optimising care delivery in light of the needs of a local community and taking into account the existing distribution and quality of supply structures.

2.2 Assessing policy outcomes

At a health system level, multiple dimensions may be distinguished in assessing success and failure of policy implementation. Precise definitions of ‘success’ and ‘failure’ will depend on the extent to which the policy’s initial objectives have been met. Generic parameters used in this study include:

- Awareness and uptake of the policy among the implementers of policy, in terms of payers engaged in funding projects, participation of eligible providers and patients;
- Availability of evaluations suggesting improved care quality and outcomes.

Clearly, high participation (DMP enrolment) rates are not the ultimate aim of a policy. The ultimate goal is to improve patient health outcomes (morbidity, mortality, quality of life). However, DMPs and other policies were introduced based on the assumption that better care structures would improve care processes (eg adherence to treatment guidelines and agreements to exchange information, use of information systems to ensure continuity of patient data over time and across providers) and ultimately health outcomes. According to this logic, high participation rates of payers, providers and patients can be seen as a necessary pre-condition to achieve large-scale population health impact. The above indicators of success are thus to be understood in the sense that the policy is sufficiently known and accepted, has been taken up, evaluated and embedded into medical practice.

Table 1: Integration: types, degrees and breadth

Types of integration

- *clinical*: the extent to which services are coordinated
 - over time;
 - across disciplines and/ or sectors of a health system;
 - across the entire continuum of care (prevention, primary and specialist care, rehabilitation and social care).
- *financial*: the extent to which financial flows are aligned with the delivery pathway across providers
- *informational*: the extent to which clinical and managerial information systems support communication between clinical teams, outcome measurement and performance management
- *administrative*: non-clinical support structures (such as strategic planning and shared human resource management and seconded staff) eg to support coordination between small practices
- *organizational*: governance and organisational arrangements (such as the creation of networks, mergers, contracting or strategic alliances) are used to aid integration within and between health care institutions
- *normative*: the extent to which a shared vision is identified, communicated and operationalized across individuals and organisations

Degrees of integration

- *full integration*: the integrated organisation is responsible for the full continuum of care, including financing. Multidisciplinary teams manage care in all key settings, using a common record as part of daily joint practice. Funds are pooled to purchase new or existing services and align financial incentives.
- *coordination*: organisations retain their own service responsibility and funding criteria, but smooth transitions between settings. For example, providers define and routinely provide information in both directions, screen patients at key points (eg hospital discharge) to identify special needs, and use some financial incentives.
- *linkage*: organisations understand delivery and payment arrangements for each service and respond to special needs of patients through appropriate referral and follow-up. Organisations provide and request information (eg discharge information) when needed.
- *full separation*: different providers are organisationally and financially isolated.

Breadth of integration

- *indication-oriented models* which integrate care for a *single indication* (eg disease management for diabetes)
- *patient-centred models* which focus on the potentially multiple needs of the user/ patient (eg case management for patients with multi-morbidity or for end-of-life care, discharge management)
- *regional/ population-oriented models* which focus on the entire population of insurees and continuum of care, including strategies for prevention and health promotion, case-finding and diagnosis tailored to the needs of a local community. These models may comprise indication- and/or patient-oriented integrated care.

Sources: adapted from (Amelung et al., 2009; Delnoij et al., 2002; Fulop et al., 2005; Leutz, 1999; Nolte & McKee, 2008; Peek et al., 2009; Rosen et al., 2011; Shortell et al., 1994).

2.3 Conceptualizing policy implementation

The implementation of public policy has stimulated a wide array of theoretical frameworks (for overviews see eg Hill (2009); Sabatier (1999; 1980)). In health policy, the multiplicity of actors and in particular the tripartite structure of different groups of payers, providers and patients, who are supposed to implement a policy, increases complexity. The role of these stakeholder groups differs between health systems, raising additional questions over the role of context in shaping health policy. In recognition of this complexity, the policy triangle developed by Walt and Gilson (1994) provides a useful starting point for analysis. The framework is grounded in a political economy perspective and emphasises the importance of and interaction between context, actors and process in shaping health policy design (content) and outcomes. Thereby, the framework may help to explain why intended policy outcomes manifest or fail to emerge (Figure 1).

The health system context may be conceptualized in terms of four core functions of health systems such as governance, financing, resource generation and service delivery (WHO, 2000). In particular, this includes the ways in which financing (collection, pooling, allocation of resources and provider payment), health care delivery and human resources are organised across sectors, and what, if any, issues concern the interfaces between sectors. Governance can be understood as translating expectations towards health services into strategic planning decisions. These may be concerned with questions of user choice and empowerment, quality monitoring and measurement, clinical guidelines and standardisation in medical care, as indications of a wider trend away from delivering patient care based on professional discretion towards a more transparently managed care process where multiple disciplines co-operate based on evidence-based guidance (Scott et al., 2000).

The process of health reform may be broken down into four functional elements (OECD, 2010). The first element is an evaluation of health system performance, in the sense of formal or informal identification of problems in the health system (policy drivers). The second element refers to the stage where ideas emerge on how to address the recognized problems. Following an 'ideal' model of policy-making, alternative courses of action will be identified and their respective costs and benefits will be evaluated (policy design). The third element refers to the selection of a particular

course of action (policy adoption) eg through legislation. The fourth stage considers the implementation of the policy, in particular the incentives that might be needed to motivate stakeholders to take up the policy. Such incentives may broadly be classified as market or economic means (exchange relationships between providers and/or payers such as financial and non-financial incentives), hierarchical instruments (rules and regulations such as practice guidelines and standards for information exchange), or network mechanisms (the formation and sustenance of trust relationships between actors) (Thompson et al., 1991).

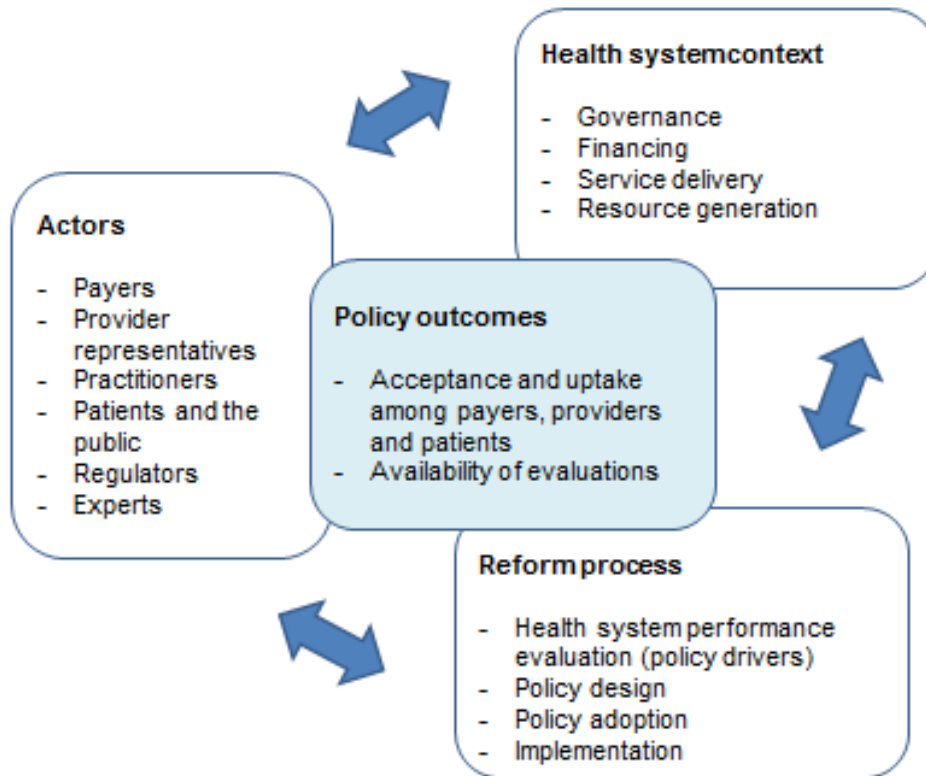
Given the key role of stakeholders in shaping policy outcomes, the following analysis will particularly focus on the characteristics of different actors involved in policy implementation, in relation to context factors described above. An approach to do this is to conceptualize actors' behaviours through the lens of contextual interaction theory (Bressers & Klok, 1988; O'Toole, 2004). The perspective is, essentially, a social process theory that places emphasis on interdependent action between actors involved in policy implementation over time in a particular context. The theory's logic incorporates three sets of actor characteristics: their motivation, information, and power. In this report we understand these characteristics as follows:

- **Motivation** refers to *incentives and values* affecting the goals and behaviour of stakeholders;
- **Information** refers to *technical knowledge* at hand but also its *interpretation* with regard to available options for action and their desirability;
- **Power** is here understood in terms of actors' *resources and capacity* to impede or facilitate policy implementation. Thus, in line with Berger (2005), 'power' refers not only to an actor's power *over* key veto points (see also Immergut (1992)) but also to the power *to* act because the necessary (staff, management, logistic etc.) capacity is available. "Power *with*" refers to stakeholders' skills to negotiate with others and reach agreements on how to move forward.

The analysis will focus on broad groups of payers, patients, providers and their representatives as the key actors, because these represent the major interest groups affecting health care policy implementation in Austria and Germany. Clearly, there may also be variation not only between but also within these groups. Depending on how key influencing factors combine, one could expect different kinds of

implementation processes and outcomes. The analysis can thus help implementation managers to identify strategic strengths and weaknesses that arise from actors' characteristics and their interaction in a particular context.

Figure 1: Conceptual framework



Source: adapted by authors from OECD (2010); Walt and Gilson (1994).

3. Research methods

3.1 Comparative case study design

A comparative case study design (Yin, 1994, 2003) is used to explore drivers of policy outcomes. The rationale for a comparative lens is to help examine factors that may have been decisive for past policy ‘failures’ and ‘successes’, as opposed to those that were simply present. One approach to do this is to look for different outcomes elsewhere despite similar starting points, and to identify whether key factors were configured differently (Marmor, 2012; Marmor et al., 2005).

In this report, we compare the Austrian case to Germany, a country that seems to have experienced relative ‘success’ in implementing policies similar to those introduced in Austria. Another key reason for selecting Germany as a primary comparator is that there are structural similarities between the German and Austrian health systems, which are likely to pose comparable challenges and starting points in launching policies to improve the coordination of chronic care delivery (see Section 4.1).

The units of analysis in this research are the selected policies described in Section 4.2, but we also compare at the level of the country. While we are interested in the general idea of how to successfully promote care integration, these specific policy initiatives have been chosen because they were introduced with high expectations on the side of policy-makers which have not always been met in practice, and thus these policies are particularly illustrative of barriers in the care coordination policy ‘implementation gap’. The selected policies also illustrate two key different levels of implementation at a strategic project development level affecting mainly payers and providers, and at a project level affecting mainly individual practitioners and patients.

Cross-national inquiry will not solve the problems for policy-makers, and should avoid “naïve transplantation” of policies from other systems without any adaptation (Klein, 2009). But comparative analysis can help national policy-makers to better understand their own situation and to get insights and ideas from countries who are grappling with similar challenges. Thereby, cross-national analysis is intended to stimulate learning and dialogue between different stakeholders through a better understanding of a country’s policy issues and options for action.

3.2 Data collection

The study draws on two main methods for data collection. First, the academic and grey literature in English and German on integrated care developments in Austria and Germany was reviewed using scientific and popular data bases such as PubMed/Medline, Web of Science, EconLit, Google Scholar and Google. Second, primary data was collected through interviews with stakeholders involved in the design and implementation of care coordination reforms in Austria and Germany. The interviews mainly serve to elicit key stakeholders' experiences of the reform processes, and perceived causal inferences about barriers and enabling factors. They also serve to probe themes emerging from the literature and fill gaps not addressed by existing research.

For the selection of interviewees, purposeful sampling based on maximum variation sampling (Patton, 1990) was used. The purpose was to represent the diversity of relevant stakeholder groups acting at different levels of the health care system (table 2), in order to gain an understanding of the range of stakeholder perspectives on the topic. The sample size was therefore informed by the stakeholder groups we intended to interview and not to achieve data saturation. Individual interviewees were identified through web search and word of mouth based on their relevant roles and functions. The recruitment of interview partners was conducted by IHS (for Austria) and LSE (for Germany).

To ensure consistency in data collection across the interviewees and across countries a semi-structured interview guide was developed. The guide was pre-tested among members of the research team and iteratively refined during data collection to improve comprehensibility and focus of the interview questions. The interviews were semi-structured in the sense that a comparable interview guide was used for all interviews in Austria and Germany, but that specific questions asked were adapted to the interviewee in question. For instance, additional questions could be asked to follow-up novel themes and ideas (Robson, 2011).

In total, 15 interviews with Austrian stakeholders and 27 interviews with German stakeholders were conducted (table 2). All participants were informed about the objectives of the project, and were encouraged to ask questions at any point before,

during or after the interview. Participants were assured that any contributions would be anonymous. The interviews were conducted in German and transcribed verbatim. The interviews were analysed in German in order to maintain linguistic nuances, and emerging themes were then translated into English.

The London School of Economics and Political Science Research Ethics Committee passed the research proposal under Chair's Action, as no major ethical issues were identified.

Table 2: Characteristics of interviewees

Interviewees' roles and characteristics	Germany	Austria	Total
Ministry and regulatory bodies	3	1	4
Payers	4	4	8
Providers	3	2	5
<i>Associations in charge of planning and contracting</i>	<i>1</i>	<i>1</i>	<i>2</i>
<i>Professional societies</i>	<i>2</i>	<i>1</i>	<i>3</i>
Representatives from local physician-hospital networks (Germany only)	8	-	8
Patient representatives	2	2	4
Supervisory authorities and boards	3	2	5
Health system experts and policy advisors	4	4	8
Total	27	15	42

3.3 Data analysis

The transcripts were analysed using a hybrid approach to thematic analysis (Boyatzis, 1998; Fereday & Cochrane, 2006). Within a deductive frame of theory-informed categories and constructs relating to contextual interaction theory (“motivation”, “information”, “power”), themes were developed inductively from the data based on careful and iterative reading of the interview transcripts. A close connection between data and conceptualization was achieved through a systematic, iterative process that involved assigning labels and indexing from interview transcripts (‘coding’) and comparing emergent themes with other pieces of data.

In identifying themes, the coding strategy was oriented along Ryan and Bernard’s (2003) recommendations, which, among others involve examining similarities and differences between stakeholder groups and between countries, such as exploring how interviewees discuss a topic and perceive causal relationships, but also reflecting on what interviewees might omit in their answers.

The analysis was grounded in two levels. First, a ‘within-country’ analysis was conducted for Austria (by IHS) and for Germany (by LSE). For each interview transcript, text passages were involved with each other to identify emerging themes. Subsequently, themes arising from different stakeholders were compared and contrasted. Based on the two country case studies, a ‘cross-country analysis’ was conducted jointly by LSE and IHS. Key implementation barriers and levers were systematically compared for both countries, guided by the conceptual framework.

The qualitative computer-based analysis software *Atlas.ti* was used to facilitate data management, support the coding process and increase transparency of the results. The research teams at LSE and IHS had regular discussions on emerging themes within the interviews and to adjust questions in future interviews. A sample of coded transcripts was exchanged to foster comparability of coding strategies. Findings from the interviews were cross-checked and triangulated with media reports, academic and grey literature (where available) to improve robustness of the findings and examine competing explanations.

4. Policies to improve care coordination

4.1 Policy drivers

Efforts to improve the coordination and integration of care result from and are embedded in a particular health system context. During the interviews, stakeholders in Austria and Germany were therefore also asked about their assessment of key context factors that, first, help explain why there is a perceived need for better coordination of care and, second, also impede progress from a contextual perspective. Challenges to care coordination were identified in the following areas: financing, organisation and governance.

Financing

In both Austria and Germany, sectorally fragmented financing (ambulatory, hospital, long-term care) reduces payers' interest in cross-sectoral integration, as benefits are perceived to accrue elsewhere. In Austria, hospitals are paid via the provincial health funds financed by all levels of government and SHI, while office-based physicians are paid by SHI through a mix of flat fees per visit and fee-for-service. As neither the state health funds nor sickness funds are fully responsible for the interfaces between inpatient and outpatient care, financial issues arise. In Germany, SHI pays for operating expenses both for hospitals and office-based physicians, but budgets for both sectors are largely separate. Payment for office-based physicians is capped through a global sum at regional KV² level. Payment for individual physicians is based on the number of patients of the previous year's quarter multiplied by a specialty-specific case value (since 2009) plus optional payment for certain extra-budgetary services. The lack of a shared financial responsibility for outpatient and hospital services means that investments eg in ambulatory care may not pay off to sickness funds. Reduced hospital admissions for one condition are also suspected to trigger substitutive activity in other areas by hospitals to compensate for expenditure foregone, thus not reducing overall expenditure on hospital care.

² The Regional Association of Statutory Health Insurance Physicians (*Kassenärztliche Vereinigungen*).

Organisation

Service delivery is organised based on the patient's direct access to both generalist and specialist physicians in the outpatient sector in both Austria and Germany. Interviewees repeatedly point out that relationships between providers tend to function rather 'randomly', as mutual roles and responsibilities are not well defined. For instance, what specific duties a "Hausarzt" ought to fulfil, such as when to refer to other levels of care or how to communicate with other providers in a timely manner, remains dependent on the goodwill of local individuals and not on binding commitment, resulting in large-scale orientation problems. Solo practices are the predominant mode of service delivery in the outpatient sector. In Germany, about 38.8 per cent of generalists work in small group practices ("Gemeinschaftspraxen") in 2011 (KBV, 2011c); sharing office space but not necessarily patients or patients' records. In Austria, it is estimated that less than 1 per cent of generalists work in small group practices ("Gruppenpraxen").

Governance

The health systems in Austria and Germany are marked by the central role of self-governance actors, where the Ministry of Health sets the overall regulatory framework, but payers and providers are, through their representation in statutory bodies, in charge of the detailed implementation of public law. A part of governance is setting standards and then monitoring and ensuring adherence to standards based on performance information and evaluation. The recognition that these dimensions of governance were not sufficiently developed was a key driver for the introduction of care coordination policies in Germany and Austria.

The shift towards better care coordination entails efforts to move beyond the professional judgement of individual doctors towards shared responsibility for the care process. Transparency based on scientific standards and evidence-based guidelines therefore form the backbone of a DMP and other care coordination policies. However, the extent of guideline adherence among physicians is not evaluated in Austria and Germany. While in both countries, measures have been taken over the past years to promote quality monitoring in the inpatient sector, in the outpatient sector quality monitoring and assessment for office-based physicians remains less developed.

Especially in the outpatient sector there is little culture of monitoring, understanding and improvement on treatment errors. Some providers may be afraid of a ranking and public disclosure of their performance.

To ensure that evidence-based medicine is actually “lived” in practice, some form of (electronic) data exchange will be a prerequisite. Currently in Austria and Germany, information deficits arise at the interfaces of care. While individual providers (hospitals, groups of physicians or single practices) have internal information systems, problems eg regarding patients’ medical history and prescriptions arise especially in cross-sectoral communication. In Austria, the planned electronic health record ELGA and ePrescription could help address some of the technical barriers, but these systems have not been introduced yet and their acceptance in practice remains unclear. Socio-technical concerns over data privacy, such as how to safeguard sensitive medical data, are also frequently mentioned by Austrian interviewees, including fears of “patients made of glass”.

In Germany, electronic health records that would enable monitoring patient pathways across sectors and over time exist only sporadically, mostly in the initiative of individual hospitals or physician networks. However, compatibility among different outpatient software systems and inconsistent documentation practices among providers remain significant problems. The partial introduction of an electronic health insurance card (eCard) in late 2011, for about ten per cent of the insured, contains only administrative data so far, but patients may on a voluntary basis also add some medical data eg on allergies and drug incompatibilities (Gematik, 2011). Unlike electronic medical records, privacy would be more straightforward as patients retain the ownership of their data. However, in field trials the eCard has proved impractical eg due to the need for the patient to type in a 12-digit ID number. Nevertheless, the Health Care Structure Act of 2012 provides that sickness funds who fail to provide 70 per cent of their insured with the eCard until 31 December 2012 may not increase their administrative expenses in 2013 compared to 2012 (SGB V, § 4.6).

4.2 Policy design

Austria and Germany have introduced a series of reforms to improve the coordination and integration of care over the past years. Two key measures were the introduction of disease management programmes (DMPs) in both countries to improve care coordination at a doctor-patient level, and measures to encourage local experimentation and innovation with cross-sectoral models of care via integrated care contracting in Germany and a Reformpool in Austria. What underlines the importance of freedom of choice in both countries is that participation is voluntary for payers, providers and patients.³ Comparing these four policy initiatives illustrates key differences in approaches to policy design and implementation.

Encouraging local innovation in cross-sectoral initiatives via the Reformpool (AT) and integrated care contracts (DE)

Starting points were similar in both countries: the perceived substantial fragmentation in financing and delivery between ambulatory (office-based physician) and hospital sectors. The Reformpool in Austria was specifically introduced to fund innovative projects that shift service provision between the in- and outpatient sector in ways that benefit both state governments and sickness funds, by ensuring that care is delivered in the optimal setting (Czypionka & Röhring, 2009). In Germany, integrated care contracting (§ 140 SGB V) was introduced in 2000. Policy objectives were to overcome sectoral divides by encouraging local experimentation via direct contracts between sickness funds and providers.

In both countries, no additional funds were put into the health system to finance integrated care. Novel forms of care have to be funded via re-distribution of resources, but who gains and who loses in this re-distributive process differs between the countries. In Germany, integrated care contracting had hardly been taken up in the initial years since 2000. Therefore, between 2004 and 2008 the “start-up funding” framework was introduced to enable sickness funds to withhold 1 per cent of total hospital and SHI physician remuneration to finance cross-sectoral or interdisciplinary

³ Both in Austria and in Germany, patients are by default in “standard care”. Participation in a DMP or other novel care programme thus requires an active choice and confirmation of enrolment in such a programme. This seeks to ensure informed consent, stimulate patient’s active involvement in the care process, and to know the number and characteristics of programme participants.

projects (SVR, 2010). Thus, payers had access to earmarked and (from their perspective) additional funds, at the expense of the totality of SHI providers. Since 2009, sickness funds are legally required to downwards adjust the global sum paid to regional KVs in collective contracts by the service volume delivered in selective integrated care contracts (SGB V, § 140d). In Austria, although the formal arrangements seem similar – up to 1 per cent (for the years 2005 and 2006) and up to 2 per cent (for the years 2007 and 2008) of total health care expenditure could be reserved for Reformpool projects – the crucial difference to Germany was that these funds were not additional, but only virtually available from the payer’s perspective. Actually available funds were only the remainder after existing mandatory commitments (eg physician bills, contributions to state hospital funds, prescriptions) had been paid. The Reformpool was thus developed within the existing financing system, without changing financial incentives in the system (Czypionka & Röhrling, 2009).

Pathways to implementation differed in their degree of radicalism. In Germany, integrated care contracting was a radically new measure as it enabled individual providers or provider networks to contract directly with sickness funds, bypassing the collective contracting system that had come to be seen as rigid and discouraging innovation. Integrated care contracting was intended to widen the leeway for local solutions, and consequently did not impose a central framework. In Austria, in contrast, Reformpool projects are required to adhere to collective agreements. If services or financial designs differ from collective agreements, the Chamber of Physicians, who is in charge of both professional regulation and interest representation in contracting, must give consent.

Disease Management Programmes

DMPs in Austria and Germany were introduced to improve adherence to clinical guidelines and patient self-management in ambulatory care. In Austria, the foundation for DMPs has been laid by the 2005 health care reform, to improve the quality of chronic care. In Germany, DMPs were introduced in 2002 in response to over-, under- and misuse in the German health system addressed by the Advisory Council to the Ministry of Health (SVR, 2001). DMPs were also introduced to reduce incentives for

risk selection in a competitive market. DMP enrolment was defined as an additional category in the then existing risk structure adjustment (RSA) mechanism in order to better compensate sickness funds for the higher financial risks of chronically ill patients (Göpffarth, 2007).

Pathways to implementation were highly centralised in Germany and mainly decentralised in Austria. In Germany, national representatives of payers and providers jointly define uniform standards for content and evaluation, as mandated by the Ministry of Health, in the Federal Joint Committee (G-BA). On this basis, DMPs are developed by individual sickness funds at regional level, accredited by the Federal Insurance Office, and translated into contracts either with the Regional Associations of SHI Physicians (KVs), who are in charge of collective contracting and have mandatory membership of SHI physicians in that region, or directly with individual providers, if no collective DMP contract exists. In Austria, approaches to DMP development differ across Federal States. The most widespread DMP, *Therapie Aktiv*, which is for diabetes mellitus type 2, was developed in 2004 by the Styrian sickness fund and the Institute for Biomedicine and Health Science of Joanneum Research on behalf of Austrian SHI (Österreichische Sozialversicherung, 2006). The programme was implemented in 2007. Based on a template by the Competence Centre for Integrated Care, which is funded by SHI institutions to centralise knowledge to advance integrated care, other sickness funds have also adopted the programme.

4.3 Policy outcomes

Encouraging local innovation: Reformpool (AT) and integrated care contracts (DE)

In both countries, the results at a health system level have been mixed. In Germany, during the start-up funding period (2004-2008), integrated care contracts increased to over 6000 in 2008 (Grothaus, 2009). Most of these contracts were indication-oriented packages of care spanning two or three sectors (eg hospital, ambulatory care, rehabilitation), in particular for hip and knee replacements. While having potential for patient benefit if applied to the right patients, these contracts were also criticized as simple volume discounts rather than optimisations of delivery structures. However, in a few “islands of excellence” across Germany, integrated care contracting was also used by regional physician networks to develop regional population-oriented cross-sectoral networks of care. Funds from the 1 per cent budget were invested in structural advancement of IT and management capacity, leading to more professional physician-led organisations who usually assume cross-sectoral financial responsibility to some extent, and who seek to shape local care delivery through shared treatment pathways and a number of care and case management programmes. Since the expiry of start-up funding in late 2009, the total number of currently running contracts is estimated to still be around 6,000 contracts (SVR, 2012). However, the development of more ambitious population-oriented, cross-sectoral networks is stagnating and remains limited to a few successful pioneers that have attracted much attention (Weatherly et al., 2007) but have led to little emulation in other regions.

The Reformpool in Austria showed a hesitant start in the first two years. With 34 simultaneously running projects, activity peaked in the third quarter of 2008, and has slowed down since then. Most projects focus on disease management for diabetes, coronary heart diseases or nephrological diseases, stroke units, discharge and case management. On average, 15.8 per cent of possible funds have been used for Reformpool-investments. However, use of funds among the nine states ranges from 33 per cent (Styria) to only 1.5 per cent (Tyrol) (Czypionka & Röhrling, 2009). As an Austrian stakeholder concludes:

“The potential has not been released... and now it seems as if they [Reformpool activities in Federal states] are falling asleep.”

In Austria, no comprehensive information exists regarding participation of patients, and thus the potential for population health impact of Reformpool projects. This is also related to the fact that not all projects require patient enrolment, but may instead address process redesign (eg improved discharge management).

In both Austria and Germany, little is known about the health and economic effects of integrated care initiatives. In Germany, the lack of transparency about outcomes has been even more controversial as public funds from the entire SHI system were re-directed to a limited number of contracts. Comprehensive evaluations of the health and economic effects of integrated care models remain rare. One of the most scientifically comprehensive and publicly transparent approaches appears to be the evaluation of the population-oriented cross-sectoral network *Gesundes Kinzigtal*. In this partnership between a local physicians' network in the South-West of Germany, the management company OptiMedis AG and the two sickness funds AOK Baden-Württemberg and LKK, the provider organisation accepts long-term economic responsibility for health costs across sectors in return for the prospect of shared savings with sickness funds. The long-term contract is intended to incentivise and reward investments into better managed care eg through a number of disease and case-management programmes, wider health promotion interventions, patient pathways and pharmacotherapy guidelines (Hildebrandt et al., 2009). Measurement is population-oriented and covers outcomes of different medical modules, such as shared decision-making and specific care programmes, as well as overall economic success. Improvements are reported both for the quality of medical processes and surrogate outcomes, patient satisfaction, and economic gains (Hildebrandt et al., 2011). The evaluation strategy is conducted in partnership with a number of academic institutions.⁴

⁴ More information on current evaluation studies and published results is available at: <http://www.ekiv.org/en/ausschreibungen-evaluationsprojekte.php> (last accessed 3 August 2012).

Disease Management Programmes

DMPs in Germany are often praised as a “success story” (Lisac et al., 2008; Stock et al., 2010). Over six million patients participate in one or more of six DMPs (for diabetes type 1 and 2, coronary heart disease, breast cancer, asthma and COPD) which are offered across Germany. In the case of the DMP diabetes type 2, introduced in 2002/03 as one of the first DMPs, about three million patients participate, which are estimated to be about half of all eligible patients with diabetes in Germany. In 2010, physician participation rates ranged from just under 60 per cent in Hamburg to almost or over 90 per cent in 7 of 17 KV regions (Bayern, Brandenburg, Bremen, Rheinland-Pfalz, Saarland, Sachsen, Sachsen-Anhalt) (LSE estimate based on (KBV, 2009 2010, 2010 2011a, b)). In Austria, general practitioners and specialists for internal medicine (both contracted and without a contract) are eligible to participate. As of September 2012, about 15.3 per cent of eligible physicians participate in the DMP Therapie Aktiv, ranging from 8.8 per cent of eligible physicians in Vienna to 25 per cent in Upper Austria (IHS HealthEcon estimate based on (Ärzteverlagshaus, 2012; Therapie Aktiv, 2012)).

In Austria, interviewees mention that already starting DMPs is a big step forward to introduce ideas of evidence-based medicine and reduction of unwarranted practice variations. A DMP for Diabetes Mellitus type 2, *Therapie Aktiv*, is the most widespread programme in Austria. It was designed by the Styrian sickness fund in cooperation with the Austrian Diabetes Association, and is in part a Reformpool-project or already adopted into daily routine in six of nine states. However, based on estimations of about 420.000 diabetics (Wawrosky, 2010) in Austria, only about 32,000 (about 7.7 per cent) are currently participating in *Therapie Aktiv* (Czypionka et al., 2011). So far, only one DMP, *Therapie Aktiv* for type 2 diabetes, has been implemented in several (six of nine) Federal States in Austria. For the development of other DMPs, plans exist but actual implementation is slow.

While in Germany, evaluation of clinical and economic effects is mandatory, the robustness of available evaluations remains disputed especially regarding patient-relevant endpoints (eg mortality, long-term quality of life). In both Austria and Germany, transparency for patients on the benefits of DMPs remains in part unclear.

In Germany, structural quality has been advanced with better training of medical assistants to organise the delivery of DMPs. At a regional level, joint institutions between provider and payer representatives provide monitoring and feedback to physician practices. Nevertheless, some concerns exist over insufficient quality assurance of medical documentation of DMP participants (eg discrepancies between documented and billed services where eg a physician registers a patient's visit to the ophthalmologist but this visit is not billed by the ophthalmologist, potentially because it was never provided).

While the six DMPs have now been successfully embedded into routine care in Germany, the Federal Joint Committee, the national body representing SHI payers and providers, has decided against the introduction of new DMPs. Priority is now given to the better alignment of existing DMPs to multi-morbidity, in order to go beyond the disease-specific focus to a more patient-centred model of care.

Table 3: Health system context and policy drivers for care coordination in Austria and Germany

	Austria	Germany
Financing	<ul style="list-style-type: none"> Hospitals: provincial health funds, funded by all levels of government, plus fixed proportion of contributions without decision-making role by SHI institutions Office-based SHI physicians: SHI, via collective contracts with regional Chambers of Physicians 	<ul style="list-style-type: none"> Hospitals: SHI (operating costs), State governments (infrastructure) Office-based SHI physicians: SHI, via collective contracts with Regional Associations of SHI physicians (KVs) or selective contracts (since 2000)
Organisation of care delivery	<ul style="list-style-type: none"> No defined roles and duties for communication and cooperation between providers Virtually all office-based generalists estimated to work in solo practice 	<ul style="list-style-type: none"> No defined roles and duties for communication and cooperation between providers About 61.2 per cent of office-based generalists work in solo practice
Governance		
a) Evidence-based guidelines	<ul style="list-style-type: none"> Guidelines developed/adapted by medical societies and <i>Arznei und Vernunft</i> (a guideline initiative of the Main Association of Austrian Social Security Institutions with the pharmaceutical industry); adherence not evaluated First Federal Quality Guideline regarding diabetes mellitus type 2 recommended by MoH based on the DMP <i>Therapie Aktiv</i> 	<ul style="list-style-type: none"> Various dispersed guidelines by different medical societies prior to DMP, adherence not evaluated Introduction of DMPs prompted physician representatives to start the development of more ambitious evidence-based, joint interdisciplinary National Care Guidelines
b) Information systems	<ul style="list-style-type: none"> Information and communication deficits between hospitals and outpatient physicians Electronic health record <i>ELGA</i> in development to incorporate all relevant patient data across sectors Local, mostly intra-sectoral information systems 	<ul style="list-style-type: none"> Information and communication deficits between hospitals and outpatient physicians No nationwide electronic health record; frequently lack of compatibility between different IT systems in the outpatient sector Efforts to improve performance evaluation in outpatient sector in early stages, but requirement for physicians to have a Quality Management (QM) system in their practices
c) Quality monitoring and assessment	<ul style="list-style-type: none"> Efforts to improve performance evaluation in outpatient sector in early stages Some attempts (eg MedTogether, PIK projects) to link services to improve care to financial rewards predating DMPs DMP <i>Therapie Aktiv</i> was first large attempt to link services to improve care (here: documentation, adherence to guidelines) to financial rewards 	<ul style="list-style-type: none"> Some attempts (eg structural contracts mainly on diabetes concluded by regional KVs) predating DMPs DMPs first attempt to link services to improve care (here: documentation, adherence to guidelines) to financial rewards at a nationwide scale

Table 4: Characteristics of selected policies to improve care coordination in Austria and Germany

	AT: Reformpool (since 2005)	DE: Integrated care (since 2000, § 140)	AT: DMPs (since 2005)	DE: DMPs (since 2002, § 137f-g)
Target group	Payers, Providers	Payers, Providers	Patients, Providers	Patients, Providers
Breadth of integration	Preferred: cross-sectoral, involving hospitals and office-based physicians In practice also indication-oriented models and non-medical projects	Preferred: cross-sectoral, population-oriented regional networks In practice also interdisciplinary and indication-oriented models	Indication-oriented Mostly at ambulatory level	Indication-oriented Mostly at ambulatory level
Type of integration	Clinical, informational, financial	Clinical, informational, financial	Clinical, informational	Clinical, informational
Degree of integration	Linkage or coordination	Linkage, coordination or integration	Coordination or linkage	Coordination or linkage
Incentive design	Virtual, non-earmarked funds (from payers' perspective): 1 percent (2005/06) and 2 percent (2007/08) of total hospital and SHI physician remuneration theoretically available, but practically dependent on level of payers' budget once mandatory commitments have been paid	Real, earmarked funds (from payers' perspective): 1 percent (2004-08) of total hospital and SHI physician remuneration could be withheld by sickness funds to finance integrated care contracts Since 2009: no earmarked funding, downwards adjustment of collective contracts legally required	Payers: no funds Providers: flat fee for documentation, therapy Patients: no financial incentives	Payers: risk structure adjustment (RSA) category (until 2009), administrative flat fee (since 2009) Providers: flat fee for documentation, therapy Patients: financial incentives (eg bonus, lower co-payments)
Pathway for implementation	Decentralised: state health funds make decisions Central funding criteria by Federal Health Commission, but not enforced	Decentralised: no nationwide standards Selective contracts between payers and providers, outside of collective contracting system	Decentralised development: Styrian sickness funds developed <i>Therapie Aktiv</i> , spread to six of nine Federal states In general: different approaches across Federal States	Centralised, 'top down' development: nationwide uniform standards for content and evaluation defined by Federal Joint Committee (G-BA) Decentralised programmes: usually within collective contracting system, although direct contracts with providers are possible

Source: Austrian and German case studies.

Table 5: Implementation of DMPs in Austria and Germany

	Austria: <i>Therapie Aktiv</i>	Germany
Up-take by payers	<ul style="list-style-type: none"> Implemented in six of nine Federal States Slow progress for other DMPs, up-take differs by provinces 	<ul style="list-style-type: none"> Implemented by virtually all sickness funds
Up-take by providers	<ul style="list-style-type: none"> Acceptance is still a weakness Participation is 15.3 per cent on average in regions where <i>Therapie Aktiv</i> is implemented, ranging from 8.8 per cent of eligible physicians in Vienna to 25 per cent in Upper Austria (as of September 2012) 	<ul style="list-style-type: none"> Acceptance has grown considerably Participation ranges from just under 60 per cent to over 90 per cent across KV regions (as of 2010)
Up-take by patients	<ul style="list-style-type: none"> Relatively low: about 32,000 people with diabetes in the DMP <i>Therapie Aktiv</i> (approx. 7.7 per cent of estimated diabetics in Austria) 	<ul style="list-style-type: none"> Relatively high: over 3 million people with diabetes in the DMP Diabetes type II (over 50 per cent of estimated diabetics in Germany)
Development of structures	<ul style="list-style-type: none"> In some states (eg Styria) provision of help to re-structure practice organisation Intent to integrate required documentation better in physician software 	<ul style="list-style-type: none"> Better training of medical assistants to organise delivery of DMPs Mandatory electronic documentation for DMPs since 2008 A monitoring culture has been fostered and has prompted medical representatives to develop more in-depth National Care Guidelines Joint institutions at regional level between sickness funds and providers disseminate feedback to individual physicians
Availability of evaluations	<ul style="list-style-type: none"> Evaluation efforts currently on their way So far robust evaluation hardly exists or is not publicly available Concerns over insufficient quality assurance of medical documentation of DMP participants 	<ul style="list-style-type: none"> Mandatory evaluation of clinical outcomes and costs Robustness of available evaluations remains disputed Concerns over insufficient quality assurance of medical documentation of DMP participants

Source: Austrian and German case studies.

Table 6: Implementation of mechanisms to foster cross-sectoral innovation in Austria and Germany

	Austria: Reformpool	Germany: integrated care contracts (§ 140)
Up-take by payers	<ul style="list-style-type: none"> • Low compared to Germany – activity peaked in 2008 with 34 simultaneously running projects for a population of 8.8 million SHI insurees • De facto hardly any new projects since 2009 	<ul style="list-style-type: none"> • High compared to Austria – over 6000 contracts in 2008 for a population of about 70 million SHI insurees • Dynamics have levelled off since 2009, about 6000 contracts (no precise information available) • Little further development in population-oriented cross-sectoral networks
Up-take by providers	<ul style="list-style-type: none"> • Relatively high up-take in 2007 and 2008 • Stagnation since 2009 	<ul style="list-style-type: none"> • Relatively high up-take between 2004 and 2008 • Stagnation since 2009
Up-take by patients	<ul style="list-style-type: none"> • No comprehensive information available • Some projects do not rely on patient enrolment (eg discharge management) 	<ul style="list-style-type: none"> • No comprehensive information available • Estimates suggest an increase from about 1.6 million in 2008 to 1.9 million in 2011
Development of structures	<ul style="list-style-type: none"> • No legal obligation to introduce successful projects into routine care • Limited dissemination of successful initiatives to other regions 	<ul style="list-style-type: none"> • Formation of innovative cross-sectoral population-oriented networks • But in the majority of contracts, little genuine transformation of cross-sectoral delivery structures • No legal obligation to introduce successful projects into routine care • Limited dissemination of successful initiatives to other regions
Availability of evaluations	<ul style="list-style-type: none"> • Mandatory evaluation of clinical outcomes and costs, eg via the controlling instrument Reformpool <i>manager</i> • Evaluation exists for some projects, but is very difficult and obtained results are ambiguous 	<ul style="list-style-type: none"> • No mandatory evaluation • With few exceptions, limited transparency about clinical outcomes and costs

Source: Austrian and German case studies; (SVR, 2012), (Hofmarcher, 2012), (Busse et al., 2013).

5. Implementation barriers and levers

This chapter analyses major implementation barriers and levers to explain policy outcomes in Austria and Germany. The first section will focus on cross-sectoral initiatives via the Reformpool (Austria) and integrated care contracts (Germany). The second section will focus on the implementation of DMPs in both countries, with a focus on diabetes mellitus type 2. The structure of the analysis follows the conceptual framework by concentrating on four major groups of actors in the implementation process: payers, provider representatives, practitioners and patients. For each stakeholder group, factors are identified and analysed with regard to their influence as barriers or levers on policy outcomes. Broadly, these factors are categorised according to the set of core actor characteristics identified in the conceptual framework: motivation, information and power/capacity. Tables 6 and 7 present a synthesis of implementation barriers and levers as regards cross-sectoral initiatives via the Reformpool and integrated care contracts, and DMPs, respectively.

5.1 Cross-sectoral initiatives: the Reformpool (AT) and integrated care contracts (DE)

Payers

(1a) Motivation: financial incentives

Between 2004 and 2008, payers in Germany had a positive incentive to use “start-up funding” for integrated care contracts. Funds were extra (from the payer’s perspective) and simply had to be invested. Apart from staff time necessary to develop and monitor contracts, the financial impact on sickness funds was therefore cost-neutral from the outset, with a potential for positive health, economic and marketing effects. The expiry of start-up funding in late 2008 has removed this incentive. Since 2009, the situation is dominated by the fear of competitive disadvantage when investing in projects that have high initial costs with uncertain and delayed (financial) gains. Fears of having to raise an ‘extra’ insurance premium above the uniform premium encourages efforts to save

money in the short-term instead of attempting to transform care delivery in the longer-term.

No external incentive mechanisms, such as competition or reputation effects, exist for Austrian sickness funds to motivate them to offer novel forms of care. Some interviewed experts from Austria see the lack of competition between payers as a stabilising factor that supports inertia in the system. In Germany, however, despite the formal existence of competition, this incentive does hardly exist either, as sickness funds hardly compete on price or quality. Insurance premiums are uniform, and a comprehensive benefits basket is regulated centrally, although sickness funds are required to offer their insurees special optional tariffs (eg with bonuses or reduced co-payments) for participation in novel forms of care (eg DMPs, integrated care contracts, general practitioner-centred contracts). Nevertheless, a rudimentary form of price competition exists: if sickness funds overspend their allocations from the Central Health Fund in one year, they must levy an additional premium on top of the uniform premium for the next year. A widely cited reason for SHI fund's reluctance to invest in care management programmes is the fear that investments might force them to collect an additional premium. Substantial member losses of a large SHI fund, DAK, after the introduction of an additional premium is cited as a major reason not to risk any longer-term investments in the first place.

In Austria, the incentive design was problematic from the outset. Funds are virtual and become available only after existing commitments (eg physician bills, mandatory contributions to state hospital funds, prescriptions) have been met. Furthermore, Reformpool projects are required to provide shared financial benefit for SHI and State governments. Experience from the past years suggests, however, that what constitutes a shared benefit was difficult to agree on in practice. Even if total costs for the system were likely to be reduced, the lack of genuinely shared financial responsibility between SHI and State governments meant that payers have to invest in the short term, but cost-savings, if there are any, will be (i) delayed and (ii) likely to materialise in another sector, such as in the case of reduced hospital admissions as a result of better ambulatory care. In a context where Austrian sickness funds are required to balance income and expenditure and many are already in debt, any extra investment that is not strictly necessary becomes unlikely. What is more, in calculating costs, the two partners

often have different viewpoints. For example, the federal states as hospital owners might argue that fixed costs will not be reduced by a shift to the outpatient sector, thus factoring in only variable costs as a basis for financial shifting. More generally, as funds will necessarily be transferred when a project is moved to regular reimbursement, the partner losing the services from its sector will downplay the own financial contribution, as it can no longer direct these funds.

In Germany, a response to this problem of having to mobilise additional funds out of existing budgets to pay for integrated care contracts is the legal requirement for payers to downwards adjust collective contracts for the service volume provided in (selective) integrated care contracts. Downwards adjustment of collective provider remuneration can, however, not only be technically but also politically burdensome. Sickness funds may have to bargain with KVs over the magnitude of the correction and, as consensus is rarely found, face an arbitration procedure to find a solution that delays the process of implementation. This effort is often seen as outweighing any potential benefits from integrated care contracts. In contrast to this type of contract which is intended to substitute for care delivered under the collective contract (“substitutive contract”), downwards adjustment is not necessary for a contract expanding on existing services (“add-on contract”). Given the principle of ensuring stability in insurance contribution rates, the latter however increasingly lead to objections by regulatory authorities, ie the Federal Insurance Office, and are thus becoming rarer.

(1b) Motivation: national criteria and requirements

Apart from the role of financial incentives, experiences from Austria and Germany also highlight the multi-faceted impact of national criteria on facilitating or hindering regional projects. In Germany, the use of ‘start-up funding’ was unrestricted; even what should count as ‘integrated care’ had not been specified. The German experience suggests that such a flexible policy design can trigger a substantial increase in the number of projects. However, the absence of national funding criteria and quality standards also in part explains the disappointed expectations of policy-makers, eg over the rather narrow scope of many projects that did little to transform delivery processes and structures.

In Austria, in contrast, a formal national framework, defined by the Federal Health Commission, specifies the general aims and types of Reformpool projects, eleven overarching selection criteria for Reformpool projects, and requirements for documentation, evaluation and information exchange.⁵ However, the funding procedure is perceived as bureaucratic obstacle that requires justification for any deviation. The formal application procedure appears to be perceived as overly burdensome. As a result, interviews with Austrian stakeholders suggest that in some cases, sickness funds or state governments prefer to commission projects outside the Reformpool mechanism on a more informal basis, because then there is no requirement to decide unanimously with another stakeholder and to meet criteria as regards transparency or evaluation.

Another key insight relates to the mandatory or voluntary character of national frameworks. In Austria, adherence to the funding criteria is de facto voluntary. Health Platforms have much discretion in interpreting the national criteria. Adherence is neither ex-ante linked to the mobilisation of funds via the Reformpool, nor ex-post enforced with sanctions and, thus, depends on the goodwill of SHI and provincial governments. What is more, the legal character of the framework remains disputed. Only very basic requirements can be found in the 15a-agreement which becomes actual law. Most of the funding criteria exist in the form of a resolution by the Federal Health Commission and are phrased in the form of mandatory regulations (“has to”). However, the resolution is neither a law nor an ordinance by a ministry. Also, Health Platforms might see it as an interference with their work, despite the fact that federal government, SHI and states are the major player in the Commission itself. In Germany, although not even voluntary standards exist as regards service quality and evaluation, there are however strict financial regulations for novel forms of care. Payer representatives interviewed see these regulations as increasingly limiting their contractual flexibility. In particular, payers may face legal difficulties if they want to invest into longer-term selective contracts. Since 2012, the Federal Health Insurance Office (BVA) has been responsible for ensuring that selective contracts fully recover their investment costs

⁵ These include e.g. the requirement for a shared benefit between sickness fund and state government, quality assurance measures, an evaluation plan of cost, volume and quality ex-ante and ex-post, a plan to ensure sustainability of investments, and the requirement to share savings (or additional costs that have arisen) following project completion. The national framework also requires Health Platforms, who distribute Reformpool funds at a regional level, to define requirements for documentation and evaluation of project effects, and points to the need for institutionalising information exchange via minimum standards for documentation and ongoing reporting, central documentation of all projects and exchange of experiences .

within a limited timeframe (usually one year, or three years). This re-financing clause is intended to safeguard stability in insurance contributions. However, the purely financial character of existing regulations and their timeframe are seen as too narrow by some stakeholders to recognise the effort required for fundamental structural changes.

(2) Information: lack of evaluations

Stakeholders in both countries see the lack of information about health and economic effects as a major source of uncertainty among payers. In principle, sickness funds in both countries have rich information from provider claims that could be used to monitor and evaluate projects. In the past, however, this data has frequently either not been used, or not been publicly made available. According to a recent survey in Germany, only 4.9 per cent of sickness funds always evaluate their contracts, 17.1 per cent never evaluate, 22 per cent evaluate usually and 56.1 per cent conduct a partial evaluation. Among sickness funds who do conduct evaluations of integrated care contracts, almost 90 per cent never or only partially publicise their findings (SVR 2012). The logic behind this culture of non-disclosure is that in an insurance market where sickness funds are supposed to compete for market share, they have little incentive to share their business ‘failures’ and ‘successes’ with competitors.

The absence of a feedback-loop remains a key gap in both Austria and Germany. Evaluation and publication of project effects is not mandatory (Germany) or not enforced (Austria). The absence of robust and transparent outcome measurement weakens arguments for a nationwide roll-out of projects. However, even initiatives which suggest positive clinical and economic effects (eg *Integrierte Versorgung Schlaganfall* in Upper Austria) have not spread to other states. As a result, our interviews confirm a widespread perception that too little is known about costs and outcomes of integrated care contracts. This has implications for the knowledge gain from these projects for the SHI system as a whole. If hardly any robust evaluations are published, other sickness funds are unlikely to start similar initiatives, as the uncertainty over unintended cost impacts may seem too high.

(3a) Power: actor relations

In Austria, cultural informal animosities between some states and social security institutions, as well as among states and within SHI, also impede progress. To some extent, strong tensions between SHI, physicians and physician representatives seem to inhibit the implementation of projects. The interviews confirmed that in some cases, ideas were rejected also because they were developed by some other institution, perceived as a rival. There seemed to be a perception that something developed elsewhere cannot be right. As a result, informal aspects in power and decision-making that are often neglected in analysis seemed in part to determine whether a project was introduced or not.

(3b) Power: technical and staff capacity

Stakeholders in Austria, and to some extent Germany, also refer to gaps in technical and staff capacity as regards public health and economics. Many sickness funds tend to see themselves predominantly as public administration, rather than strategic entrepreneurs that invest in population-oriented medicine in order to shape local care delivery and improve outcomes for their insurees. In Austria, questions of scale may reinforce this situation; given that many states have fewer than 600,000 inhabitants and analytic capacity in the smaller sickness funds is more restricted.

Gaps in capacity to interpret the uncertainty in available information thus also appear limit some payers' willingness to engage with novel forms of care. Stakeholders from both Austria and Germany point out that especially smaller sickness funds set little trust in ambitious far-reaching projects whose impact they feel unable to estimate. This implies that not only is insufficient information a problem, but also real or perceived asymmetry of information, if payers receive a project proposal from a provider group or management company who may have built up more expertise in this area.

Provider representatives

(1) Motivation: financial incentives

In both Austria and Germany, the provider representatives traditionally in charge of collective contracting have limited motivation to support cross-sectoral initiatives via the Reformpool or integrated care contracts, respectively. In Austria, this appears to be because the Chamber of Physicians may generally see little benefit in projects that attempt to re-structure care to the optimal setting (thereby potentially reducing costs to the health system, but also provider incomes). Projects that expand on existing services tend to be viewed more favourably.

In Germany, regional KVs have been given no systemic incentive to support selective contracts. First, they are confronted with the parallel existence of selective and collective contracting. From their perspective, this dual system has raised serious doubts about who is now responsible for ensuring appropriate access to care – a statutory duty that in the German ambulatory sector has been delegated from Government also to providers in the form of regional KVs, and not solely to sickness funds, as in Austria. Second, KVs also face reductions in their revenues, as they are paid from a fixed proportion of the turnover of each SHI physician in that region. Selective contracts threaten the income (and ultimately existence) of KVs, as they require a reduction of the global sum paid to regional KVs based on collective contracts by the service volume delivered in a selective contract. Consequently, there is little systemic incentive to support selective contracts even as an external service provider for functions such as controlling that individual physicians may find difficult to handle.

(2) Information: existence and impact of policies

Provider representatives in both countries tend to have generally good knowledge about the existence and scope of the Reformpool mechanism and integrated care contracting, respectively. Their knowledge about the effects of available projects, however, remains limited, as for the other stakeholder groups in the respective health system. In Germany, a particularly controversial informational problem for regional KVs is the difficulty to estimate the scope of service volumes in collective contracts that is being

substituted by selective contracts. Gaps in information introduce additional complexity into evaluating true service shifts between collective and selective contracting systems.

(3) Power: existence of veto points

Provider representatives in both Germany and Austria retain a veto point whose strength, however, differs between the countries. In Austria, the Chamber of Physicians retains a powerful role to facilitate or hinder progress in projects that seek to improve coordination and integration of care. If a project seeks to deviate from collective agreement in terms of service coverage or levels or types remuneration, consent of the Chamber of Physicians is required. In the past, this veto point appears to have sometimes impeded progress in Austria. When eg “ambulatory care centres” were to be included into the 15a-agreement of 2008-2013, the nearly finalised version of two of its articles was completely abolished due to protests by physicians and replaced by a clause stating the intent to set up a working group to find suitable models by the end of 2008.

In Germany, although KVs are formally excluded from integrated care contracting, they can nevertheless slow down negotiations. As described above, selective contracts that substitute for service volume in collective contracts require a corresponding downwards adjustment of the global sum paid to regional KVs for outpatient physicians. Refusal on the side of KVs leads to tedious arbitration procedures for payers and can be seen as significant effort to implement an integrated care contract. Although some stakeholders note the exclusion of regional KVs from selective contracting has enabled individual providers to bypass entrenched institutional structures and conclude direct contracts more easily, others note that regional KVs thus retain some form of real political influence over progress in selective contracting.

Practitioners

(1) Motivation: financial incentives

In Germany, integrated care contracts had been possible since 2000 – without much success – but were kick-started when “start-up funding” between 2004 and 2008 enabled sickness funds to withhold 1 per cent of total hospital and SHI physician remuneration to finance (preferably) cross-sectoral or interdisciplinary projects. This effectively meant that payment for inpatient and outpatient care was reduced and providers felt the need to engage in projects in order to re-gain the funds deducted in advance. This was not resisted by individual providers, only by regional KVs who had however been excluded from integrated care contracting. In Germany, this meant that, although the global remuneration to providers was reduced, individual incomes of practitioners would not necessarily decrease, provided that practitioners would succeed in securing compensatory selective contracts. As by definition selective contracts would not cover all providers, this implied a potential gain for some at the expense of others who were less successful in negotiating contracts.

In Austria and Germany since 2009, financial risk lies with the project initiators. While the ‘start-up funding’ framework in Germany had earmarked funds to foster innovation in the system at the expense of the totality of SHI providers, currently the project initiators will usually have to pay upfront to develop care projects, and invest in necessary IT or management infrastructure. However, there is high uncertainty over returns on investment. Neither in Austria nor in Germany can project initiators be certain to have their initiative commissioned by payers. This will reduce the willingness to set up a project in the first place.

For current providers of health care and their representatives, there is little incentive to engage in projects that seek to reduce costs. In fact, projects in Austria tend to rather expand services than reduce them, thus filling gaps instead of rearranging service delivery. In Germany, experiences suggest that group and bargaining processes at local level are time- and resource-intensive and only few enthusiasts seem willing to invest this effort. Financing problems but also operational and technical issues, such as incompatible IT interfaces, further limit further practitioners’ motivation to engage in the development of integrated care structures.

(2) Information: existence of cross-sectoral projects

The degree of information of local practitioners as regards novel forms of care appears to be difficult to estimate. In Austria, the degree of information among office-based physicians in Austria cannot be said with certainty. It can be expected that physicians know about individual Reformpool projects in their region, but general knowledge about the development of projects is estimated to be limited. In Germany, experiences from successful regional integrated care networks suggest that a long-term strategy of both information and motivational levers is critical to achieve and sustain participation of outpatient physicians in novel forms of care. Therefore, as interviewees point out, practitioners may generally be aware of the Reformpool or integrated care contracts, but their actual degree of information (and participation) is likely to depend also on efforts of local project managers.

(3) Capacity: negotiation of profitable contracts

In terms of capacity for providers to negotiate profitable contracts with payers, a key success factor for regional population-oriented cross-sectoral networks in Germany is the existence of professional network management. Such network can centralise much of the legal and economic skill required to negotiate contracts, but also competences in internal controlling and organisation to ensure that integration is actually “lived” in practice. In Austria, outpatient providers have in principle one main SHI fund per region (about 80 per cent of people are insured with their provincial sickness funds, the remainder is insured with occupation-based sickness funds) (Hofmarcher, 2012), while in Germany, even the largest association of all 146 SHI funds (Allgemeine Ortskrankenkassen, AOK) has only a regional market share of about 35 per cent (among the about 85 per cent of Germans with SHI, thus below 30 per cent of all Germans) (VdEK, 2011). This makes it even less profitable for providers to enter into agreements only with a single SHI fund, as they then would face the medically, ethically and economically absurd situation of having to treat patients from different sickness funds differently. Austrian outpatient physicians are not confronted with this problem. However, so far they do not appear to have taken up this structural advantage over to their German colleagues.

Patients

(1) Motivation

Active patient participation in efforts to improve care coordination across sectors may not always be necessary. Process improvements, such as discharge management involving more rapid information exchange between hospital staff, office-based physicians and ambulatory nursing teams, for instance, might not require direct patient consent. To ensure seamless follow-up care, they are simply provided. A similar logic applies to structural advancements such as putting in place multi-disciplinary teams or case managers. Clinical and managerial motivation and leadership will be much more decisive for these models.

(2) Information

Generally, our interviews with stakeholders in Austria and Germany suggest that often the benefits of innovative care models and thus reasons to join may not be entirely clear. This potential problem for motivation is intrinsically linked to ways in which information is provided to patients and the general public. Both in Germany and Austria, patients appear to face two fundamental information gaps. First, they do not have an overview over available care models. Second, there is little transparency about the patient-relevant outcomes (eg mortality, long-term quality of life) from existing projects. This lack of information appears to pose barriers to the future participation of patients in care management models in both countries.

(3) Capacity

The capacity of patients to shape the development and implementation of innovative cross-sectoral care models seems limited in both countries. Patients are not usually involved in the design of integrated care models. Typically, they are dependent on care models being offered to them by providers and their SHI fund. This raises questions over unused potential of patients. Stronger involvement of patients in the implementation of care models could help to drive large-scale change, by putting a

stronger emphasis on the actual health needs and preferences of those who are ultimately affected most.

Summary of critical points

In summary, some critical points can be identified from experience in promoting local innovation in cross-sectoral projects through the Reformpool mechanism (Austria) and integrated care contracting (Germany):

- The importance of having funds to pay for integrated care initiatives that are earmarked and additional from the payer's perspective;
- The importance of ensuring evaluation of the availability and health and economic effects of integrated care initiatives to foster transparency and acceptance among payers, providers and patients;
- The importance of reviewing technical capacity of payers and providers to develop and implement integrated care initiatives.

Table 7: Actor characteristics affecting the implementation of cross-sectoral projects

	Motivation		Information		Power/ Capacity	
	AT	DE	AT	DE	AT	DE
Payers	<p>Low: virtual nature of funds, limited shared financial interest between payers</p> <p>Perceived bureaucratic hurdles</p>	<p>High (2004-08): additional, dedicated funds</p> <p>Low (since 2009): no extra funds, political and technical effort of lowering provider budgets</p> <p>Perceived regulatory barriers</p>	<p>Low: with few exceptions, little transparency about health and economic effects</p>	<p>Low: with few exceptions, little transparency about health and economic effects</p>	<p>Medium/low: regional single payers, but sectoral fragmented budgets and entrepreneurial thinking just starting</p>	<p>Medium/low: some funds with large market share, but competition reduces potential impact and entrepreneurial thinking just starting</p>
Provider representatives	<p>Medium/high: expansion of services</p> <p>Low: re-structuring of care to optimal setting</p>	<p>Low: KVs excluded from selective contracts, which in turn reduce their revenues and complicate their duty to guarantee equal access to care</p>	<p>High: general knowledge about Reformpool mechanism</p>	<p>High: general knowledge about selective contracts</p> <p>Low: knowledge of regional service provision but complexity of evaluating true service shifts between collective and selective contracting</p>	<p>Low: formal involvement (eg only one seat in the FHC compared to 7 for the federal government, 9 for the federal states or 6 for SHI)</p> <p>High: real political influence (see p40)</p>	<p>Low: formal involvement</p> <p>Medium: real political influence, as refusal to lower the global sum for outpatient care leads to tedious arbitration procedures for payers</p>
Individual providers	<p>Variable: depends on whether project is perceived as additional bureaucratic burden</p>	<p>High (2004-08): prospect of additional income, opportunity to shape local care delivery</p> <p>Low (since 2009): little economic incentive to invest or cooperate with others in a generally competitive climate</p>	<p>Variable: depends on effort of local project managers</p>	<p>Variable: depends on effort of local project managers</p>	<p>Low: as traditional ‘lone fighter’</p> <p>Medium/high: with professional management</p>	<p>Low: as traditional ‘lone fighter’</p> <p>High: with professional management, organisational structures, IT</p>
Patients	<p>Uncertain: with few exceptions, benefits may not be clear</p> <p>Not relevant: process improvement, eg managed discharge</p>	<p>Uncertain: with few exceptions, benefits may not be clear</p> <p>Not relevant: process improvement, eg managed discharge</p>	<p>Low: with few exceptions, little transparency on patient-relevant endpoints and available models</p>	<p>Low: with few exceptions, little transparency on patient-relevant endpoints and available models</p>	<p>Low: generally little involvement in designing care models</p>	<p>Low: generally little involvement in designing care models</p>

Source: Austrian and German case studies.

5.2 Disease Management Programmes

Payers

(1) Motivation: financial incentives

The incentive design for payers to participate strongly differs between Austria and Germany. In Austria, funds for the development and evaluation of DMPs have to come out of the existing financial resources, without any external incentive. Investments of sickness funds in better ambulatory care are also unlikely to pay off, eg in the form of reduced hospital admissions, because sickness funds always pay a fixed proportion of SHI contributions to state hospital funds, regardless of total hospital expenditure. Without the prospect of returns on investment, payers' motivation to engage with DMPs appears limited. In Germany, in contrast, funds for DMPs are formally provided on top of existing allocations. There have been two stages of incentive design in Germany. In the first stage, until 2009, DMP enrolment was a separate category in the risk structure adjustment (RSA) mechanism between sickness funds. Sickness funds would receive higher allocations for every DMP participant which more accurately reflected their actual expenditure compared to non-enrolled chronically ill people. This arrangement was not only an effective incentive for sickness funds to increase DMP enrolment rates, but due to its re-distributive character it also did not impose any additional costs on the health system.

With the introduction of a morbidity-oriented RSA in 2009, which covers 80 conditions in total, including the six DMP indications, DMP enrolment as an RSA category became obsolete. Sickness funds now receive a programme flat fee for each enrolled DMP patient per year to cover sickness funds' administrative costs (2009: €55.00; 2012: €30.24) and there is extra remuneration for doctors. Thus, for any diabetes patient who is enrolled in the DMP diabetes, sickness funds receive a standard allocation based on the patient's age, sex and diagnosis, and an extra fee to cover DMP programme costs. The level of the programme flat fee depends on average programme costs and is set annually by the National Association of sickness funds. Although the size of the incentive is thus much lower than before 2009 and in principle "only" cost-neutral, by 2009 all sickness funds had already introduced DMPs and the initial

investment of developing and implementing DMPs had been recovered. The programme flat fee thus simply enables sickness funds to continue running DMPs.

(2) Information

Improved health outcomes and cost-savings among DMP participants might be expected eg in the form of reduced emergency hospital admissions due to acute complications. Information on such effects of DMPs is limited, however. In both countries, robust evaluation of health and economic effects is either hardly available (Austria) or mainly focused on measuring process improvements rather than patient-relevant endpoints such as mortality, morbidity and quality of life, or payer-relevant endpoints such as cost (Germany).

(3) Capacity/ Power

The DMP *Therapie Aktiv* is a notable exception in Austria, as it is so far the only DMP that is in a very comparable format offered in several (six of nine) Federal States either as a Reformpool project or already in routine care. A key factor for the (at least partial) regional dissemination of *Therapie Aktiv* and translation into routine care appears to have been the provision of a template to adapt the programme that was provided by the SV-funded Competence Centre Integrierte Versorgung. In this case individual sickness funds thus did at least not face the initial costs of developing the programme.

Provider representatives

(1) Motivation

In Germany, national provider representatives were generally supportive of the medical rationale underlying DMPs. Only the linkage to the risk structure mechanism (RSA) was strongly criticised as framing DMPs as a predominantly fiscal rather than medical instrument and inducing sickness funds to try to influence physicians and patients to

maximise DMP enrolment rates for monetary reasons. In Austria, the Chamber of Physicians has always been highly sceptical about the idea of medical guidelines from the beginning and strongly opposed the idea of introducing them at the national level, as it is stated in the health reform law of 2005 (Czypionka et al., 2006b). Regarding DMPs in particular, “cookbook medicine” was cited as a widespread perception by medical representatives in the interviews. As an example, in Lower Austria the DMP was cancelled by the local chamber of physicians in 2009. Representatives stated as one reason that “physicians know how to treat diabetics anyway and are used to engaging in continuous training efforts in a fashion that is alien to most other professions” (translation of a citation in Czypionka et al 2009: 4)

A form of ‘loss aversion’ appears to have been a concrete incentive for regional KVs in Germany to participate in DMPs. As sickness funds were enabled to also contract directly with individual providers but the income of regional KVs directly depends on physicians’ turnover, direct DMP contracts bypassing KVs would also reduce (albeit to a limited extent) the income of KVs. Moreover, some KVs were forerunners in concluding DMP contracts with sickness funds. Given that overall funds in the ambulatory system are fixed, the higher financial allocations to DMP participants were perceived as leading to re-distributions of financial flows, at the disadvantage of regions and doctors who did not offer DMPs. This dual threat of direct contracting combined with potential perceived financial flows into other regions proved an effective lever for KVs to participate in DMPs contracts. Similar to payers, provider representatives had thus strong motives to pass on financial incentives and communicate benefits of DMPs to physicians.

(2) Information: two-way approach to information

While formal information given to medical representatives in Austria seems limited, provider representatives in Germany are generally well-informed about the development and up-dating process of DMPs. To ensure the medical credibility of DMPs, as supporting scientific institute (IQWiG) to the Federal Joint Committee (G-BA) is responsible for a robust evidence-based review and development process. Proposed revisions are widely disseminated for consultation to affected payer, provider

and patient groups, in order to ensure that all affected voices have a chance to comment and are heard. The G-BA, which is in charge of defining revisions to DMPs, is then required to take these comments into account. From a medical standpoint, stakeholders in Germany suggest that this combination of two-way approach to information – an evidence basis disseminated to provider representatives, and return feedback from the medical community – is what gives German-style DMPs their high standing among provider representatives.

(3) Power/ capacity: equal involvement together with payers

Germany and Austria illustrate two different combinations of aspects of power. The *formal involvement* of providers in the design of DMPs was high in Germany, and low in Austria. In Austria, the DMP Therapie Aktiv was developed with input from individual practitioners, but there was little formal involvement of the Chamber of Physicians in the process. Compared to Austria, Germany has a more formalised mode of self-governance in the Federal Joint Committee (G-BA), with equal input from payers and providers. Physician representatives have high formal participation in the development and definition of quality standards of DMPs at national level. On the other hand, actual political power of physician representatives to impede progress in DMPs is relatively low in Germany, but high in Austria. In Germany, the formalised mode of self-governance legally requires provider representatives to implement statutory duties (such as to develop DMPs). Constraints imposed by a system of mutual adjustments also mean that if provider representatives had blocked the design of DMPs, which was financially highly important to payers, then payers might have been likely to in turn impede progress in areas that were more important to provider representatives. In Austria, in contrast, the real political power of the Chamber of Physicians seems less constrained. For example, the duty of organising extramural rests with SHI alone, as opposed to Germany, where SGB V states that SHI and KV have a joint duty in securing healthcare provision (SGB V, § 72). By contrast, there is no way SHI can conclude selective contracts with physicians, but is obliged to collective contracting even with all specialities jointly. Therefore, SHI does not only need to involve physician representatives whenever trying new ways of health care delivery, but also to get their consent.

Practitioners

(1a) Motivation: financial incentives

In both countries, practitioners receive compensation for services provided to DMP patients and documentation. Physicians are paid for their service provided and, in addition, receive a capitation payment per treated DMP-patient per quarter. In Austria, the level of financial incentives is defined by individual sickness funds. In Lower Austria, for example, the physician is remunerated with €53 for the first examination and afterwards is paid €25 per quarter in addition to usual fees. For the training of insulin-dependent patients in small groups (3 to 5), a doctor receives €1,064 (Czypionka et al., 2011).

In Germany, physician payment seems slightly lower. Sickness funds receive a flat fee to remunerate physicians (2009: €125; 2012: €122,88) for each enrolled patient per year (AOK, 2012), which is uniform across sickness funds and is set each year by the national SHI confederation. How sickness funds distribute these incentives among doctors is defined in regional contracts, but generally there is a flat fee for primary documentation, advice and enrolment (about €25) and a fee for quarterly follow-up appointments and documentation (about €15) (Ärztezeitung, 2012). Additional compensation is paid for patient education sessions and trainings. The DMP contract in the region of KV Bayern, for instance, includes patient training modules eg on diabetes self-management, intensified insulin therapy which physicians may offer to (depending on the specific module) groups of 4 to 12 patients in 4 to 12 sessions for €25 to €50 per patient per session (KVB, 2011).

A key difference lies the ways in which these incentives are embedded in general provider payment systems. In Germany, financial incentives for DMPs are appreciated as extra-budgetary income which provides the opportunity for additional revenues, beyond a capped budget. In Austria, in contrast, where degressive value scales but no budgets exist, DMPs appear to be seen as services which might ‘crowd out’ other (in sum more) profitable services. For a purely economically-oriented physician, this may lead to the conclusion that the effort required to implement a DMP exceeds the potential monetary gain derived from spending one’s time on other tasks.

For ambulatory SHI physicians in Germany, DMPs were the first nationwide case where a commitment to evidence-based care was explicitly linked to financial rewards. Such rewards were perceived not only as economic gains but also as a signal of appreciation. In light of perceived trends towards more services to be delivered in a budget without corresponding pay increases, the introduction of an extra-budgetary reward positively contrasted with overall remuneration trends. Thus, in a context where incomes of generalist practices had been perceived as stagnating or declining for years in real terms, these incentives served as a welcome extra source of income.

(1b) Motivation: professional values

Interviews with stakeholders in Germany and Austria point to the complex impact of professional values on physicians' motivation to decide for or against participation in DMPs. One (relatively small) group of physicians, 'forerunners' in adopting principles of evidence-based medicine, appear to have immediately embraced the idea of DMPs as offering opportunities to offer better care to patients.

The interviews suggest that, from a medical standpoint, a relatively large group of doctors may at least initially feel ambivalent about DMPs.

In both Austria and Germany, office-based physicians are used to work independently, making decisions based on professional judgement. As DMPs are accompanied by guidelines and documentation, the classical argument advanced by opponents is the fear that DMPs might restrict the physician's therapeutic freedom and interfere with the doctor-patient relationship. However, additional complexity arises as not all physicians seem to agree about the boundaries of their work. Experience from both Austria and Germany suggests that physicians may either feel unwilling or unable to go beyond treating symptoms of a disease, and also tackle root causes that stem from behavioural and social factors. A physician representative in Austria thinks people are primarily responsible for themselves and neither payers nor providers should convince them to participate in a DMP. Apart from these wider questions of optimal disease management, formal enrolment of patients in a DMP can also be perceived as burdensome.

(2) Information: role of opinion leaders

In Austria, a key problem appears to result from the transmission of inaccurate information to physicians. There appears to be an imbalance of information, in particular as regards rumours of enormous bureaucracy. DMP opponents dominate any positive voices and the potentially counter-balancing role of SHI in communicating benefits of the DMP to (individual) physicians is perceived as rather passive. In many cases physicians are misinformed and think documentation is more time-consuming than it is. In practice, once a patient is enrolled and the initial documentation is made, the physician only has to fill in a one-page form a year for every patient. According to a payer representative, administrative requirements were already reduced to almost a half and now work electronically via the physicians' software. However, the software needs to be purchased, maintained and updated regularly creating additional costs.

Experiences from Austria and Germany point to a powerful role of medical representatives and local opinion leaders in shaping physicians' acceptance of guidelines. Following the cascades of information and influence at a practice level, patients usually trust their family practitioner most, and will be inclined to follow the doctor's recommendation for or against participation in the DMP. Doctors in turn, although traditionally reputed as "lone fighters" in both Austria and Germany, do not operate in a social vacuum but are influenced by prevailing positions in the medical community. In Germany, stakeholders interviewed attribute the high participation among providers in part also to targeted communication strategies of payers who won over opinion leader eg by sending out outreach teams directly into physician practices to explain financial and medical benefits of DMPs.

(3a) Power/capacity: medical aspects

Patients' representatives and diabetes specialists in Austria attribute low participation partly to physicians' insufficient ability to treat diabetes correctly. It appears that seemingly standard tasks such as measurement of blood glucose levels or handling of insulin are skills that especially older practitioners do not always possess. The existing training course for the DMP is seen as too short given the complexity of the disease. Documentation requirements would reveal their lacking abilities. Physicians may be

reluctant to admit that more training is needed, also in light of prevailing public opinion, expressed for instance by the Chamber of Physicians, that doctors can treat diabetes perfectly and the quality of care as good. As neither outcome nor process measurement exists in the outpatient sector, it is difficult to find an objective reference point against that claim.

(3b) Power/ capacity: organisational aspects

Physicians think of documentation as an additional burden, although it is financially compensated. In Lower Austria, a physician receives €53 for the first examination and €25 for all subsequent examinations and additionally €1,064 for an insulin group training and €690.39 for a non-insulin group respectively. However, office-based physicians in Austria and Germany are self-employed and their services have to pay off economically. In Austria, the physician faces opportunity costs in the form of other services not provided, especially without support by trained staff. This issue is particularly pertinent in Austria where doctors are generally paid by fee-for-service without a ceiling. Although degression-rules are in place for some services, no general budget cap exists as it is the case in Germany. In Germany, financial incentives for DMPs are appreciated as extra-budgetary and thus as extra income, while in Austria, doctors can create this income with other services. Instead of a DMP-session, the physician could offer a number of other (in sum more) profitable services.

Participation in a DMP thus also raises capacity issues, as it confronts an office-based physician with the need to re-organise, and to some extent standardise, practice workflows to cope with a higher number of more frequent routine medical tasks (eg regular blood pressure measurement). Re-organising their practice in line with DMP rules will pay off only when a certain threshold of patients is reached, which, depending on the practice, may fall somewhere between 80 and 250 patients participating in the DMP, according to Austria experts' estimates. Therefore, when a physician suspects fewer than this threshold number of patients to be eligible for enrolment, she might discourage even the ones who are interested.

In Austria, contract physicians mainly work in single practice, which also appears to limit economies of scale in re-organising practice flows. In Germany, single-practices

are still wide-spread, but the number of group practices has grown over the past years. Experience from Germany suggests that for physicians who have managed to enrol and treat a relatively high number, eg 80 to 100 patients with diabetes, delegation to and collaboration with the receptionist and/or the medical assistant is critical. The availability of differentiated supply structures in the outpatient sector, such as second-level diabetic specialist care in Germany, also appears to be a facilitating factor in centralising key tasks (eg patient training) and offering treatment for more complex patients. However, in some instances, this second-level also introduces additional coordination challenges and some generalist physicians suspect their colleagues of “luring” patients away.

Patients

(1) Motivation: financial incentives

Both in Austria and in Germany, patients are by default in ‘standard care’. Participation in a DMP or other novel care programme thus requires an active choice and confirmation of enrolment in such a programme. This seeks to ensure informed consent, stimulate patients' active involvement in the care process, and to know the number and characteristics of programme participants. In Germany, payers have started to offer financial incentives for patients to participate in DMPs. Since 2007, sickness funds are even required by Law to offer their insurees special optional tariffs (eg bonuses, waiving the quarterly ambulatory practice fee of €10) should they decide to enrol in a DMP or other novel form of care. In Austria, no financial incentives exist for patients, although their introduction had been discussed briefly.

(2) Information

Interviews with Austrian experts suggest that patients do not seem to be adequately informed about the availability and benefits of DMPs, as DMPs are largely “invisible” both in public debates and during physician consultations. Sickness funds also do not communicate extensively with their insurees about the opportunities of joining DMPs.

In Germany, both payers and providers started media campaigns and other information measures to communicate benefits of DMPs to patients. Different routes of communication have been used. These include:

- Telephone advice;
- Personal letters inviting insurees to participate in a care model;
- Programme-specific flyers;
- Information magazines sent to all insurees regularly;
- Information sessions.

Not only is communication as such important. An appropriate style of communication, personalised and prepared to respond to a patient's potentially difficult medical and social situation, is also seen as essential by German sickness fund representatives, in order to enable the patient to ask questions and address potential concerns.

(3) Capacity

Interviewees note that DMPs tend to be, by definition, indication-oriented, not necessarily focused on the patient's holistic health needs. Despite the availability of certain patient education modules in both countries, some interviewees note that the general approach of DMPs does too little to address the needs of multi-morbid patients, for whom it might be difficult to participate in two or more DMPs but with little inter-linkage between these different structured care programmes. Capacity of especially of older patients is also partly seen as difficult by stakeholders interviewed, given the behavioural changes that are required in DMPs and that have found to be difficult to implement and sustain in practice in some instances.

Summary of critical points

In summary, some critical points can be identified from the relative success in implementing DMPs in Germany as compared to Austria:

- Efforts in Germany to ensure medical credibility of DMPs through a robust evidence review process and strong consultation of the medical community;
- Equal input of payers and providers in developing DMPs;
- Strong financial incentives for payers and provider representatives especially in the initial phases of implementation, when DMPs had not yet been embedded into routine care and there was scepticism about their impact;
- Strong efforts to provide financial incentives to practitioners and patients, but also intensive communication strategies involving medical opinion leaders, media campaigns and other informational measures to address practitioners and patients personally.

Table 8: Actor characteristics affecting the implementation of DMPs

	Motivation		Information		Power/ Capacity	
	AT	DE	AT	DE	AT	DE
Payers	Low: no additional funds provided for DMPs, needs to come out of existing funds	High (until 2009): linkage to RSA Medium (since 2009): programme costs are covered	Medium/ low: limited evaluation, available studies seen to suffer from methodological shortcomings	Medium/ high: evaluation and publication of (clinical) outcomes and costs is mandatory	Medium/ high: template for DMP was centrally provided	Medium/ high: national template for DMP contracts facilitated development
Provider representatives	Medium/ low: non-participation has no impact; belief that quality of care is already good	Medium/ high: non-participation would enable direct contracts with practitioners	Medium: visibility of DMPs varies	High: DMPs were a highly visible policy	Low: formal involvement High: real political influence	High: formal involvement Medium: real political influence
Individual providers	Medium/ low: no budgets, DMPs crowd out other profitable services	High: DMPs are extrabudgetary services	Low: often false information about administrative effort	High: strong communication through peers, SHI and physician advisers	Often low: lack of delegation reduces logistic capacity especially in small solo practices	Mostly high: re-organisation of workflows via training of medical assistants was key
Patients	Variable: DMP design may only reach selective “healthy volunteers”	Variable: DMP design may only reach selective “healthy volunteers”	Low: little transparency about availability and benefits of DMPs	High: strong communication by SHI and physicians	Variable: capacity to participate varies	Variable: capacity to participate varies

Source: Austrian and German case studies.

6. Conclusions

With the introduction of DMPs and the Reformpool, Austria has taken measures to address perceived fragmentation in health care delivery. The comparative analysis we have carried out suggests the following key barriers to implementation of these measures.

6.1 Motivation: incentive to participate?

The current incentive structures in Austria do not sufficiently motivate or reward key actors involved in implementing policies to improve care coordination. In Germany the development of integrated care from 2004 onwards can be clearly attributed to the introduction of start-up funding which compensated payers and providers for investing in infrastructure, while strong financial incentives for payers and provider representatives to establish DMPs were passed on to practitioners and patients, leading to high provider participation and patient enrolment rates. Germany funded these initiatives by redistributing health system resources via linkage to the RSA and an earmarked reduction of 1 per cent in total hospital and SHI physician remuneration.

The direct transferability of the German approaches to creating financial incentives to Austria is limited given that the Austrian RSA redistributes only about 2 per cent of expenses between provincial sickness funds (Hofmarcher, 2012) and the Chamber of Physicians would be likely to block any reduction in provider remuneration. However, the Federal level could (perhaps via the Federal Health Agency) provide earmarked funds to finance templates for the development, implementation and evaluation of innovative projects (see Section 7).

6.2 Information: do key players know enough about the policy and its intended effects?

We found considerable information deficits in Austria and Germany regarding the availability and content of novel forms of care and their intended health and economic effects. Lack of information lowers transparency and undermines incentives to participate. One exception was the case of DMPs in Germany. The period following the

introduction of DMPs was characterised by scepticism and distrust, particularly among office-based physicians. In response, payer and provider representatives launched extensive communication efforts targeting practitioners and patients and the involvement of peers and opinion leaders in these efforts proved to be critical to improving information about the availability and content of DMPs.

In Austria stronger emphasis on robust evaluation and better communication about innovative care models are likely to play an essential role in increasing acceptance and uptake of these models among payers, providers and patients.

6.3 Power and capacity: are key actors able to participate in novel forms of care?

Our analysis suggests it is appropriate to question the power and capacity of those responsible for implementing care coordination policies in Austria. Payers seems to lack the technical capacity to develop and roll-out innovative care projects. It would therefore be useful to establish a central mechanism that supports the implementation process but does not interfere with provincial-level competences.

The veto power of provider representatives has led to immobility and distrust on the part of payers and providers, as perceived by those we interviewed. Unless changes in the regulatory framework can successfully shift the balance of power, it seems advisable for SHI institutions to engage in more dialogue with provider representatives and practitioners to improve understanding and trust on both sides and facilitate progress.

With regard to individual practitioners, our analysis clearly suggests that the financial incentives currently in place have not been sufficient to increase participation rates. Greater practical support to re-organise practice workflows and informal peer support to address provider questions about clinical and organisational aspects may help to strengthen the capacity of office-based physicians.

Finally, for patients, it may be necessary to review the content of available programmes. This includes asking whether programmes are appropriately designed to reach target groups.

7. Recommendations

This section discusses how the health system in Austria can move forward in improving care coordination for people with chronic conditions. We begin by recommending an important shift in emphasis, which we believe is an essential first step. We then identify actions intended to strengthen care coordination policy. Many of these actions fall within the remit of social health insurance but several will involve other actors. The section concludes with a reminder of some of the weaknesses of the Austrian health system that need to be addressed alongside efforts to improve care coordination. Unless these issues are addressed it may, in our view, be difficult to make progress.

7.1 A shift in emphasis: from disease management to improving quality through coordinated care

Current debate on care coordination in Austria focuses on how to increase the participation of physicians and patients in the diabetes DMP *Therapie Aktiv*. Social health insurance has set itself a goal of increasing patient enrolment to two thirds of pharmaceutically treated diabetes patients by 2015 (Hauptverband, 2012). Our analysis suggests it would be more appropriate and more effective to move away from focusing on individual disease management programmes and, instead, to focus on care coordination as part of a broader strategy to improve quality in health care delivery. We think this is important for the following reasons.

First, it is important to distinguish policy goals from policy tools. Ensuring the provision of high quality health care is an instrumental goal that, if met, will help the health system to meet its ultimate objective – to improve health (WHO, 2000). Both theory and evidence indicate that the absence of coordination is a common cause of poor quality in health care delivery and has a significant effect on patient outcomes and costs (Ovretveit, 2011). Efforts to strengthen care coordination should therefore come under the broad umbrella of improving quality – in other words, care coordination is a tool rather than an end in itself. The same is true of disease management programmes; although achieving a significant rate of participation in *Therapie Aktiv* may indicate a

degree of policy success, participation rates are obviously not the ultimate outcome of interest.

Second, participation in a DMP does not guarantee that a patient will receive the specified care or that their care will be more coordinated as a result. In France, for example, a scheme to encourage people with chronic conditions to adhere to a care protocol has been deemed a success because it has a high participation rate. However, policymakers are unable to determine whether patients actually follow the protocol.

Third, our interviews with Austrian and German stakeholders suggest that the concept and language of ‘programmes’ may undermine efforts to strengthen care coordination by polarising opinion, particularly among providers but also among patients. Providers may regard DMPs as a threat to professional autonomy, while patients may feel that participating in a programme limits their choice. Consequently, these groups may position themselves as being ‘for’ or ‘against’ DMPs. In contrast, it would be difficult to find people opposing concepts such as coordinated care or quality of care.

7.2 Actions to strengthen care coordination policy

- 1. Make management of chronic conditions the norm.** In countries such as England and the Netherlands people with chronic conditions are not asked to enrol in a DMP. Rather, providers are encouraged to offer them recommended ‘best practice’ as a matter of course – for example, eligible patients will routinely be invited to take part in smoking cessation programmes or attend information sessions and exercise classes. We therefore recommend that social health insurance abandon the current system of requiring physicians and patients to participate in a DMP and instead encourage all relevant providers to offer all relevant patients services identified in advance as best practice. This recommendation is supported by the finding that some Austrian physicians were put off from participating in DMPs due to having to read through what they perceived as being a lengthy contract.
- 2. Financial incentives targeted at physicians should reward adherence to best practice.** We recommend that social health insurance abandon the current system of

financially rewarding individual physicians who agree to participate in a DMP. Rather, the financial reward should be attached to evidence of a physician actually providing services identified in advance as best practice or reaching pre-determined quality targets. Austria can draw on international experience here. There are a growing number of health systems in which monitoring quality, providing feedback to physicians and linking payment to performance (Wambach & Lindenthal, 2009) is used to improve care quality for patients with chronic conditions. In England the Quality and Outcomes Framework (QOF) introduced in 2004 rewards GPs for achieving better clinical outcomes and improving process and structural quality measured through 134 indicators.⁶ In France GPs are now paid more if they provide better care to patients as measured through 16 indicators related to process and intermediate outcome quality (CAPI, Contrat d'amélioration des pratiques individuelles) (Aubert & Polton, 2009).⁷ The development of appropriate indicators for Austria would be guided by context-specific considerations. These might include acceptability among stakeholders and feasibility in terms of indicators that can be derived from routine data versus those that require additional investments (eg computerising primary care practices).

3. Social health insurance should engage in regular dialogue with patients, providers and their representatives. This could take place in different ways, but the aim is to create a forum for discussion and agreement on best practice for patients with chronic conditions. In addition to identifying key elements of best practice, this sort of dialogue should be used to develop an understanding of best practice guidelines as decision support tools to improve quality and not as instruments of control. Events should be organised and led by experienced and

⁶ For more information see the accompanying Measurement Report. Examples of indicators include the proportion of diabetic patients receiving a regular eye exam, the percentage of people diagnosed with hypertension (diagnosed after 1 April 2009) who are given lifestyle advice in the preceding 15 months for increasing physical activity, smoking cessation, safe alcohol consumption and healthy diet, the percentage of patients with diabetes with a record of a foot examination and risk classification. The current risk classification system distinguishes between 1) low risk (normal sensation, palpable pulses), 2) increased risk (neuropathy or absent pulses), 3) high risk (neuropathy or absent pulses plus deformity or skin changes in previous ulcer) or 4) ulcerated foot within the preceding 15 months .

⁷ Indicators relate to process quality (e.g. eye checks, HbA1c checks) for patients with diabetes; results-based objective for treating high blood pressure (the target is to normalise blood pressure for 50% of the patients over three years), prevention (e.g. objective is to achieve 75% vaccination rate for over 65 years old patients), targets related to minimising prescribing of ineffective, addictive or harmful drugs (e.g. benzodiazepines) and optimising generic prescribing .

neutral facilitators and held at regular intervals. Recent examples include efforts to engage the public in Canada (Gauvin, 2012) and stakeholder engagement through health conferences in Germany (Brand & Michelsen, 2012). More generally, international experience on implementing Health in All Policies (McQueen et al., 2012) provides insights into the importance of engagement beyond government in implementing complex policies in a context where multiple interests are at stake. These examples illustrate how Austrian social health insurance could move towards a more dialogue-based culture of communication with patients, providers and their representatives.

Social health insurance, the insured and patients

- 4. Find out how patients think their care could be improved.** Social health insurance would benefit from asking people with chronic conditions if and how they feel the care they receive could be improved. This would help to identify potential problems and demonstrate to patients that their views are taken seriously. The annual *LIVE* statement could be used to survey patients, although it might result in selection bias. Another approach would be to conduct specific surveys to find out more about patients' views and needs. Examples of patient surveys can be found in the Netherlands, Denmark and the UK. An accompanying report gives examples of topic guides for measuring continuity of care, which could be adapted for use in Austria.

- 5. Raise public awareness of the benefits of care coordination.** Our interviews suggest social health insurance is currently perceived as being rather passive when it comes to care coordination. To address this, social health insurance could initiate a public awareness campaign in collaboration with patient associations. Working with patient associations might help to allay fears about social health insurance 'interfering' in the doctor-patient-relationship. Generic communication strategies such as advertising, magazines and flyers are used in many European countries,

regardless of how the health system is financed and organised, and should be more frequently used in Austria.

- 6. Align incentives to improve access to care.** At present people with chronic conditions are asked to visit their physician more frequently. Some sickness funds still impose user charges for each visit, albeit with a reduced rate for those enrolled in a DMP. Because it does not make economic sense to create financial barriers to access to effective care, we recommend that exemptions from user charges for GP visits and prescription drugs are extended to anyone with a defined chronic condition (including people in sickness funds without user charges for physician visits). Many people with diabetes are already exempt from user charges, so the financial impact on social health insurance would be modest. Such a change would also enhance fairness by putting all those with defined chronic conditions on an equal footing.

Social health insurance and providers

- 7. Find out what challenges physicians face in caring for patients with chronic conditions.** Our interviews suggest that not all doctors find it easy to provide appropriate care for patients with chronic conditions, while some doctors regard DMPs as instruments of control. We recommend that social health insurance works with patient associations to survey individual physicians and professional representatives. The survey should not focus on DMPs but ask broader questions about barriers to care coordination and the provision of good care. In the accompanying measurement report, we provide examples of topic guides for measuring care coordination from the health professional's perspective using qualitative methods. Such approaches could easily be adapted to the Austrian context.
- 8. Engage opinion leaders.** Experience from Austria and Germany suggests it is worth trying to identify and engage local opinion leaders who can support policies

to strengthen care coordination and positively influence their peers. To this end social health insurance could identify suitable physicians and work with them to spread knowledge, experience and an open-minded attitude among physicians about how to improve care coordination and quality.

- 9. Strengthen clinical and organisational support for physicians.** Our interviews suggest that physicians lack both clinical and organisational capacity to provide effective care for people with chronic conditions, especially when their disease has progressed. Professional and organisational issues could be addressed by establishing a peer system in which physicians experienced in (for example) diabetes care are available to advise other physicians on a confidential basis. Providing physicians with relevant IT tools and training would also help to improve office management (provided it is compatible with existing IT equipment).

- 10. Improve patient training through centrally provided mobile units.** The current system of patient training (delivered by individual physicians) does not seem to be effective. Not all doctors are equally willing or able to provide high quality training and yet some are unwilling to send their patients to other local physicians for fear of ‘losing’ them to competitors. To address this, we recommend that social health insurance establish mobile patient training units that can offer group training sessions. The mobile units could be funded using resources currently spent on patient training and would therefore be cost neutral and potentially much more cost-effective.

- 11. Minimise the impact of veto points in the health system.** The position of social health insurance is weakened by the need for collective consent from the Chamber of Physicians. Giving sickness funds the ability to establish selective contracts (ie with individual physicians or groups of physicians) that focus on improving care coordination would help to move things forward. The German experience suggests such an arrangement might be a powerful lever for change.

Social health insurance and sickness funds

12. Establish financial incentives for quality (including care coordination). At present sickness funds have little incentive to be concerned about the quality of care delivery, which is highly problematic. The health care reform currently under discussion could address this by introducing quality objectives linked to financial incentives. The German experience suggests that DMPs were taken up by payers because their introduction was linked to strong financial incentives, emphasising the need to think of strategies to motivate payers to develop and implement care coordination initiatives. One option would be for the release of Federal funding to be made conditional on achieving targets, further developing the instrument of the “Kassenstrukturfonds”.

13. Establish (genuine) financial incentives for coordination at care interfaces. Sickness funds and state governments have little incentive to address care coordination problems at the interface of inpatient and outpatient care. The Reformpool mechanism failed to address this because it did not provide genuinely additional funds – rather, funds were only available if savings were made. A proportion of Federal Health Agency funding (derived from social health insurance and the Federal government) could be withheld from general allocation and earmarked for care coordination projects. This would also help to address capacity problems at regional level. Projects would continue to be implemented on a decentralised basis but the Federal Health Commission could provide a national, evidence-based template for (for example) developing DMPs, which could then be adapted to fit regional contexts.

14. Create a mechanism for rolling out successful projects. A mechanism is needed to transform successful pilot projects into routine care. This could build more strongly on central resources but give sub-national actors the opportunity to adapt projects to their regional context. A mechanism for knowledge exchange (such as a national website) would also mitigate rivalry between institutions.

15. Foster transparency about care coordination initiatives. Experience suggests that without additional funding and legal requirements, those responsible for care

coordination initiatives are reluctant to conduct and publish evaluations. One way of addressing this is to make the evaluation of projects (genuinely) mandatory, based on defined quality criteria and standards for evaluation, and at the same time to provide earmarked funds for evaluation, perhaps through the Federal Health Agency.

16. Foster transparency about health system performance. National and sub-national benchmarking and analysis of current and ‘best’ practice would help to move towards a system of outcome measurement in the Austrian health system. Promoting transparency about health system performance would also help to change perceptions about new forms of care resulting in more income for providers rather than better outcomes for patients. A specific measure would be to initiate research into regional variations in health service use and performance, which is currently undertaken in various countries (Right Care, 2012; Wennberg International Collaborative, 2012). To communicate this type of research evidence, many countries⁸ are developing ‘Atlases of Variation’ which illustrate regional differences in care quality. Evidence of geographic variations in service delivery does not in itself identify whether and what changes in service design ought to be made (Tanenbaum, 2012). However, experience from England suggests that information on variation can help to drive the case for change by increasing the visibility of potential care deficits, encouraging positive ‘reputation effects’ by stimulating improvement among poor performers and especially by creating problem awareness and a common basis for discussion among stakeholders (Schang et al., forthcoming) (for more information see the accompanying Measurement Report).

⁸ Atlases of Health Care Variation have been developed in England on behalf of the Department of Health, in the U.S. by a research institute, in Germany by an independent foundation and by the scientific institute of SHI physicians’ associations, in Spain by a partnership of academic and governmental institutions, and in the Netherlands on behalf of the Dutch health insurers’ association.

7.3 Broader recommendations

As we highlighted in section 4.1, attempts to strengthen care coordination and improve quality will have to address a range of weaknesses in the Austrian health system, particularly in the organisation and delivery of primary care. A recent international comparative cross-sectional study performed in 31 European countries suggests that the Austrian primary care system scores weakly overall, and is particularly weak with regard to primary care workforce development, continuity of care, care coordination and comprehensiveness of care (Kringos et al., 2012). Here we focus on six issues that relate to the financing, structure, organisation and governance of the Austrian health system as a whole. In our view it is essential to address these issues if Austria is to make progress in strengthening care coordination for people with chronic conditions.

1. Finance health care from a single source

The lack of shared financial responsibility for ambulatory, hospital and long-term care⁹ has three potentially detrimental effects. First, patients are in danger of being referred between sectors simply so that payers can shift costs to other sectors. As a result, health care is often not delivered in the most clinically beneficial or cost-effective location (Czypionka et al., 2009). Second, this fragmentation in financing lowers payers' willingness to invest in cross-sectoral coordination, as any benefits might accrue elsewhere. Third, it exacerbates ambulatory-inpatient care interface problems.

To overcome these problems we suggest that all health services should be financed from a single source and funds should follow the patient. This change in financial flows would help to ensure that any care provided is patient-oriented (ie suited to the patient's needs) and cost effective. It would also encourage transparency. However, such a change requires a sustainable financial agreement. The 15a agreement has been shown to be ineffective because negotiations that take place every five years undermine the sort of long-term thinking that is required (Czypionka et al., 2009).

⁹ Hospitals are paid by provincial health funds financed by government (all levels), while SHI and office-based physicians are paid by SHI.

2. Invest in the training of general practitioners

Austria's weak system of primary care has its roots in the training of GPs, which comprises only three years, with most of the time spent in hospitals. This does not prepare physicians for their real field of work as GPs providing comprehensive primary care services. Lack of capability may result in frequent referrals, undermining continuity of care for the patient. Without stronger investment in primary care, policies to strengthen care coordination are unlikely to have significant and lasting effects. Changes to the training programme for GPs will therefore have to be made. Any changes should strengthen the emphasis on family medicine. It will also be important to tighten the framework for continuing professional development (CPD), which should be made compulsory in Austria. It is increasingly common for European countries to make CPD compulsory and even a prerequisite for recertification (Czypionka et al., 2006a).

3. Promote group practices and skill-mix in primary care

International experience suggests it may be difficult for doctors working in solo or small practices to provide well-coordinated care for people with chronic conditions. In England, for example, performance improvements related to the Quality and Outcomes Framework (QOF) have been directly linked to practice ability to organise care (Wang et al., 2006). Research shows that the size and composition of a practice's clinical team have been the most important determinants of achieving a high quality score under the QOF, confirming previous research demonstrating better quality of care for some chronic conditions in larger practices in England (although smaller practices may provide better access to care) (Campbell et al., 2001; Sutton & McLean, 2006). Practices with fewer than four full-time equivalent clinicians (GPs and practice nurses) recorded lower QOF scores (Sutton & McLean, 2006).

This evidence lends support to the promotion of larger clinical teams and greater diversity in primary care practice. Group practice is not a magic bullet, but it is likely to be a step towards improving care coordination if it enables physicians to pool resources to employ assistants and specialist nurses for people with chronic conditions. Social health insurance could encourage this by providing incentives for the delegation of administrative and routine medical tasks (eg blood glucose measurement). Considerable

legal restrictions on group practice constitute another barrier to a more diverse primary care system in Austria. Achieving the full potential of group practices would therefore involve legal changes as well as financial incentives to promote a better skill-mix, including opportunities for practices to employ salaried doctors, to involve more than eight doctors and to involve hospitals.

Changing the way in which providers are paid, so that additional remuneration for improved co-ordination compensates for any loss of income due to sharing of tasks with other professionals, may be necessary. However, policy makers should not assume that doctors will co-operate with other providers simply because they are paid extra to do so. A complementary but longer-term approach to overcoming professional resistance may be to emphasise the benefits of multidisciplinary working for patients and for providers, particularly during the early stages of professional training.

4. Coordinate patient access to health care and across care levels

Patients in Austria have direct access to generalist and specialist outpatient physicians. Poorly coordinated patient access to the health system, combined with the absence of good information flows between providers, is not only potentially harmful to patients but also costly to the health system as a whole. Countries with strong primary care systems, such as the Netherlands and the United Kingdom (Kringos et al., 2012), regard GP gatekeeping as a response to this problem. However, as with group practice, gatekeeping by itself will not resolve coordination problems because it does not automatically improve communication between providers. Having said that, it seems advisable to promote the idea of a regular point of care for patients. Some integrated care networks in Germany have introduced a “care doctor” (Betreuungsarzt) who might be any doctor, including a specialist, and who takes on the task of coordinating patient care over time and across providers.

5. Promote electronic health information systems and information exchange

The availability and appropriate use of electronic health information systems have a large role to play in improving care co-ordination within practices, among providers

and between sectors. Austria would benefit from fostering more effective communication between providers and between providers and patients. Some form of health record (for example, the planned electronic health record ELGA and ePrescription) should be introduced alongside efforts to help physicians (the regular doctor suggested above) to make good use of patient data (Pechar, 2012). However, acceptance of ELGA and ePrescription remains unclear.

6. Develop a culture of excellence and best practice

Better care coordination can be supported through the provision of best-practice clinical guidelines. Most European Union countries have an established national, regional or local clinical guideline programme, and many have developed guidelines for the prevention and management of chronic conditions (Legido-Quigley et al., 2012). The extent of adherence to guidelines among physicians has not been evaluated in Austria and quality monitoring and assessment of office-based physicians remain underdeveloped (Czypionka et al., 2006a). The interviews highlighted scepticism among providers towards evidence-based practice and concerns about public disclosure of performance data. This suggests it is worthwhile doing more to involve physicians (and perhaps also patient groups) in the development of best-practice guidelines and quality standards, so that there is greater understanding of the benefits of an evidence-based approach to clinical practice. These benefits include lower transaction costs for individual physicians, support for professional judgement and better quality of care for patients.

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Appendix: Interview guides

Auf dem Weg zu einer besseren Koordination der Versorgung für Menschen mit chronischen Krankheiten: Eine Analyse von Bestrebungen in Österreich

Ein Projekt der London School of Economics und des Instituts für Höhere Studien im Auftrag des Hauptverbands der österreichischen Sozialversicherungsträger

Projekthintergrund

Angesichts des demographischen Wandels sowie steigender Prävalenz chronischer Krankheiten stellt eine qualitativ hochwertige Versorgung chronisch kranker Menschen eine wachsende Herausforderung für das österreichische Gesundheitssystem dar.

Wir würden Ihnen gerne einige Fragen stellen zu Ihren Ansichten zu den wahrscheinlichen Effekten stärker koordinierter Versorgung, Ihrer Einschätzung aktueller politischer Maßnahmen, und Ihrer Einbindung in den Reformprozess vor und nach 2005.

Mit Ihrer Erlaubnis würden wir das Interview gerne aufnehmen. Ihre Antworten bleiben vertraulich und werden nicht auf Sie persönlich bezogen.

Fragen an Akteure im Reformprozess

Name:

Datum:

Position:

Time:

Organisation:

A. Ansichten zu koordinierter Versorgung in Österreich: Verbesserungsbemühungen zum Status Quo

1. Was ist Ihrer Ansicht nach der *Sinn und Zweck*, die Gesundheitsversorgung für Menschen mit chronischen Krankheiten *besser* zu koordinieren?
2. Welchen *Einfluss*, glauben Sie, hat eine bessere Versorgungskoordination auf:
 - a) Patienten
 - b) Leistungserbringer
 - c) Kostenträger, z.B. Krankenkassen, Länder
 - d) Das Gesundheitssystem insgesamt
3. Wo sehen Sie die größten *Herausforderungen*, eine bessere Versorgungskoordination zu erreichen?

B. Ansichten zum österreichischen Gesundheitssystem

4. Besteht ein Bedarf nach mehr (oder besserer) Versorgungskoordination in Österreich? Warum? Warum nicht?
5. Wo sehen Sie aktuellen Stärken und Schwächen des österreichischen Gesundheitssystems hinsichtlich der folgenden Aspekte, die für eine besser koordinierte Versorgung wichtig sein könnten? (*Anmerkung: Fragen dienen als Gedankenstütze/ später evtl. als „grid for analysis“ zur Problemdiagnose und können auf den jeweiligen Interviewpartner angepasst werden*)
 - a) „Kultur der Evaluation“
 - i. Qualitätsmonitoring und –messung (Prozessqualität und Ergebnisqualität)
 - ii. Informationssysteme auch mit Auswertung der Performance ((i) auf Praxis-/ Krankenhausebene; (ii) verschiedene Leistungserbringer/ –sektoren vernetzend)
 - iii. Rolle der evidenz-basierten Medizin bzw. medizinischer Leitlinien
 - b) Steuerung des Gesundheitswesens

- i. System der „Gemeinsamen Selbstverwaltung“
 - ii. Koordination mit den Ländern
- c) Sektorale Gliederung
 - i. .. der Bedarfsplanung:
 - 1. im ambulanten Sektor
 - 2. im stationären Sektor
 - ii. .. der Finanzierung:
 - 1. Ambulant
 - 2. Stationär
 - 3. Pflege
- d) Organisation der Finanzierung
 - i. Rolle des Wettbewerbs in der GKV
 - ii. Finanzierung niedergelassener Ärzte
 - iii. Finanzierung der Krankenhäuser
- e) Organisation der Leistungserbringung
 - i. Rolle des Hausarztes
 - ii. Rolle des niedergelassenen Facharztes
 - iii. Verfügbarkeit von medizinischen Leistungen (z.B. freier Zugang zum Facharzt)

C. Ansichten zu aktuellen Initiativen, die Versorgungskoordination zu verbessern

- 6. Wo sehen Sie die größten Stärken und Schwächen der folgenden Initiativen
 - a) Disease Management Programme;
 - b) Reformpool und verwandte Projekte;
 - c) Integrierte Versorgungsplanung
 - d) Hausarztzentrierte Versorgung
- 7. Wie könnten Stakeholder zu einer besseren Versorgungskoordination motiviert werden?
- 8. Welche zusätzlichen Maßnahmen könnten die genannten Initiativen und Versorgungskoordination insgesamt verbessern?

D. Einbindung und Position im Reformprozess

- 9. Wie waren Sie oder Ihre Organisation involviert in den verschiedenen Phasen des Reformprozesses, um die Versorgungskoordination zu verbessern? (z.B. Gesundheitsreform 2005, aber auch 15a-VB und operative Maßnahmen wie z.B. ÖSG/ Regionale Strukturplanung Gesundheit)

- a) Identifizierung von Problem: Die Anfangsphase, in der Informationen gesammelt und Probleme in der Leistungserbringung identifiziert wurden
- b) Reform Design: Die Phase, in der mögliche Handlungsoptionen und identifiziert und diskutiert wurden
- c) Gesetzgebung: Die Phase, in der politische Maßnahmen oder neue Handlungsoptionen für Akteure im Gesundheitswesen gesetzlich verankert wurden
- d) Umsetzung: Die Phase, in der Maßnahmen zur Versorgungskoordination auf der Ebene individueller Patienten und Leistungserbringer umgesetzt wurden

10. Wo sehen Sie die Erfolgsfaktoren und Hindernisse in jeder dieser Reformphasen?
11. Haben Sie oder Ihre Organisation eine formelle Position (z.B. befürwortend, neutral, kritisch) im Laufe dieser Phasen eingenommen?
12. Hat sich die Position ihrer Organisation im Laufe des Reformprozesses verändert? Warum oder warum nicht?

E. Weiteres

13. Können Sie uns weitere wichtige Literaturquellen zum Thema empfehlen?
14. Möchten Sie weitere Interviewpartner empfehlen, die wir kontaktieren sollten?
15. Möchten Sie sonst etwas hinzufügen?

Vielen herzlichen Dank für Ihre Mühe.

**Auf dem Weg zu einer besseren Koordination der Versorgung für Menschen mit chronischen Krankheiten:
Eine Analyse von Bestrebungen in Deutschland**

Ein Projekt der London School of Economics und des Instituts für Höhere Studien im Auftrag des Hauptverbands der österreichischen Sozialversicherungsträger

Projekthintergrund

Angesichts des demographischen Wandels sowie steigender Prävalenz chronischer Krankheiten stellt eine qualitativ hochwertige Versorgung chronisch kranker Menschen eine wachsende Herausforderung für das deutsche Gesundheitssystem dar.

Wir würden Ihnen gerne einige Fragen stellen zu Ihrer Einbindung in den Reformprozess, Ihrer Einschätzung aktueller politischer Maßnahmen sowie zu Aspekten des deutschen Gesundheitssystems.

Mit Ihrer Erlaubnis würden wir das Interview gerne aufnehmen. Ihre Antworten bleiben vertraulich und werden nicht auf Sie persönlich bezogen.

Fragen an Akteure im Reformprozess

Name:

Datum:

Position:

Time:

Organisation:

A. Einbindung und Position im Reformprozess

1. Wie waren Sie oder Ihre Organisation involviert in den verschiedenen Phasen des Reformprozesses (i) vor und nach 2000/2004 (bezüglich der Möglichkeit zur integrierten Versorgung); (ii) vor und nach 2002 (bezüglich der Möglichkeit zu DMPs), UND/ODER (iii) vor und nach 2009 (bezüglich der Verpflichtung zur Hausarztzentrierten Versorgung), um die Versorgungskoordination zu verbessern?
 - a) Identifizierung von Problem: Die Anfangsphase, in der Problem in der Leistungserbringung identifiziert wurden
 - b) Reform Design: Die Phase, in der mögliche Handlungsoptionen identifiziert und diskutiert wurden
 - c) Gesetzgebung: Die Phase, in der politische Maßnahmen oder neue Handlungsoptionen für Akteure im Gesundheitswesen gesetzlich verankert wurden
 - d) Umsetzung: Die Phase, in der Maßnahmen zur Versorgungskoordination auf der Ebene individueller Patienten und Leistungserbringer umgesetzt wurden
2. Wo sehen Sie die Erfolgsfaktoren und Hindernisse in jeder dieser Reformphasen?
3. Haben Sie oder Ihre Organisation eine formelle Position (z.B. befürwortend, neutral, kritisch) in jeder dieser Phasen eingenommen?
4. Hat sich die Position ihrer Organisation im Laufe des Reformprozesses verändert? Warum oder warum nicht?

B. Ansichten zu aktuellen Initiativen, die Versorgungskoordination zu verbessern

5. Welche positiven und negativen Effekte hatten die folgenden Instrumente des SGB V auf die Koordination der Versorgung chronisch kranker Menschen?
(Anmerkung: v.a. chronisch Kranke aber eventuell auch andere Erkrankungen mit multiprofessionellem Behandlungsbedarf)
 - a) DMPs (§ 137)
 - b) Integrierte Versorgung (§140)

- c) Hausarztzentrierte Versorgung (§73b SGB)
 - d) Strukturverträge (§73 a)
 - e) Spezielle fachärztliche Versorgung (§73c)
 - f) Medizinische Versorgungszentren (§ 95)
6. Welche Faktoren haben dazu beigetragen, die Versorgungskoordination durch diese Instrumente zu verbessern?
- a) Wie werden Patienten & Ärzte zur Teilnahme motiviert?
7. Welche Herausforderungen bleiben bestehen?
8. Wie könnten diese Herausforderungen angegangen werden?

C. Ansichten zum deutschen Gesundheitssystem

9. Wo sehen Sie aktuellen Stärken und Schwächen des deutschen Gesundheitssystems hinsichtlich der folgenden Aspekte, die für eine besser koordinierte Versorgung wichtig sein könnten?
- a) „Kultur der Evaluation“
 - i. Qualitätsmonitoring und –messung (Prozessqualität und Ergebnisqualität)
 - ii. Informationssysteme auch mit Auswertung der Performance ((i) auf Praxis-/ Krankenhausebene; (ii) verschiedene Leistungserbringer/ –sektoren vernetzend)
 - iii. Rolle der evidenz-basierten Medizin bzw. medizinischer Leitlinien
 - b) Steuerung des Gesundheitswesens
 - i. System der Gemeinsamen Selbstverwaltung
 - ii. Koordination mit den Ländern (Österreich)
 - c) Sektorale Gliederung
 - i. .. der Bedarfsplanung:
 - 1. Zulassungsausschüsse im ambulanten Sektor
 - 2. Landes-Krankenhausplan im stationären Sektor
 - ii. .. der Finanzierung:
 - 1. Ambulant => KV
 - 2. Stationär => GKV/DKG, duale Finanzierung (Länder: investitionen, GKV: laufende)
 - 3. Pflege => Pflegeversicherung
 - 4. Rehabilitation => GKV oder Rentenversicherung
 - 5. Arbeitsunfälle => Berufsgenossenschaften u. Unfallkassen des Bundes und der Länder
 - d) Organisation der Finanzierung
 - i. Rolle des Wettbewerbs in der GKV
 - ii. Finanzierung niedergelassener Ärzte

iii. Finanzierung der Krankenhäuser

e) Organisation der Leistungserbringung

- i. Rolle des Hausarztes (Mögliche Modelle z.B.: (i) „Einzelkämpfer“, der wenig auf medizinische Leitlinien und Kommunikation mit anderen Leistungserbringern setzt; (ii) „populations-orientierter Fallmanager“, der seine Patienten kennt, angemessen häufig untersucht und behandelt, und sie beim Management ihrer Krankheiten unterstützt (iii) „Lotse“, der Übergänge zu anderen Leistungserbringern/-sektoren koordiniert; (iv) „Gatekeeper“, der Zugang zu fachärztlicher Versorgung kontrolliert)
- ii. Rolle des niedergelassenen Facharztes
- iii. Verfügbarkeit von medizinischen Leistungen (z.B. freier Zugang zum Facharzt)

D. Weiteres

10. Können Sie uns weitere wichtige Literaturquellen zum Thema empfehlen?

11. Möchten Sie sonst etwas hinzufügen?

12. Möchten Sie weitere Interviewpartner empfehlen, die wir kontaktieren sollten?

Vielen herzlichen Dank für Ihre Mühe.