

## CASE STUDY:

# Gesundes Kinzigtal Germany

### Partner Authors

Alexander Pimperl, PhD  
Helmut Hildebrandt, PhD (h.c.)  
Oliver Groene, MA, MSc, PhD  
Timo Schulte, MBA  
Ingo Meyer, MA  
Martin Wetzel, MD

### Duke Authors

Krishna Udayakumar, MD, MBA  
Jonathan Gonzalez-Smith, MPAFF  
Kushal Kadakia  
Andrea Thoumi, MSc, MPP

### Series Editor

Mark McClellan, MD, PhD, Director, Duke-Margolis Center for Health Policy



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This case study is part of the **Accountable Care in Practice: Global Perspectives** series produced by Duke University's Robert J. Margolis, MD, Center for Health Policy and supported by the Commonwealth Fund. The series explores how organizations across the world have taken steps to improve health outcomes by adopting accountable care policy reforms within diverse organizational and environmental contexts. The aim is to assist US stakeholders to apply the results of these reforms. We consider the critical success factors with each organization's implementation process that could be translated in the US. Additional resources, including an explanation of the accountable care framework, can be found at the Duke-Margolis website.

## Case Study: Gesundes Kinzigtal, Germany

### Overview

Gesundes Kinzigtal Ltd (Gesundes Kinzigtal) is a privately run health management company that operates an integrated care system in rural southwest Germany and serves a middle to lower-income population with a high proportion of non-communicable diseases (NCDs, commonly referred to as chronic diseases in the United States).

**Table 1: Overview of Gesundes Kinzigtal**

Model	Health System	Innovations in Care	Key Outcomes
<ul style="list-style-type: none"> <li>Health management company that coordinates between multiple types of providers and two insurance funds, covering about 46% of the total population (all ages, no exclusion)</li> <li>Initially 10-year contract (now unlimited) to automatically cover all 33,000 people living in the region that are insured by the two cooperating insurance funds</li> <li>10,000 patients are actively enrolled in specific care programs</li> </ul>	<ul style="list-style-type: none"> <li>National health insurance through multiple sickness funds with private options (mainly amenity features)</li> <li>Primary care delivered through private sector with access granted through health insurances</li> <li>Shared risk through sickness funds, which negotiate with providers</li> <li>Reimbursement system for physicians is combination of capitation and FFS / hospital services via diagnosis related groups (DRGs)</li> </ul>	<ul style="list-style-type: none"> <li>Long-term shared savings contract for geographically-defined population (morbidity and age adjusted, and measured against pre- intervention period)</li> <li>Evidence-based and locally adapted interventions to reduce progression of diseases</li> <li>Comprehensive EHR and business intelligence system with predictive modelling</li> <li>Interventions beyond health care, including prevention, public health and the social arena</li> <li>Activation of patients, shared decision making and self-management support</li> </ul>	<ul style="list-style-type: none"> <li>Financially self-sufficient</li> <li>From 2007-2014 total savings of ~\$38.2 million (USD 2014). In 2014: €5.5 million (~\$7 million, USD 2014); (7.4 percent)</li> <li>92 percent patient satisfaction rate</li> <li>Mean age of death 1.4 years higher than in control group</li> </ul>

**Program goals:** The Triple Aim of improving population health, improving the patient experience of care and reducing unnecessary costs on the way, with a focus on patients with complex needs.

**How this is achieved:** Providers in the Gesundes Kinzigtal organization developed a shared savings contract with insurers to provide population-based care for a region with varying care needs. The model includes strong stakeholder engagement, electronic integration across providers, patient involvement and-empowerment, and data-driven management. The model focuses on patients with high needs and high costs, as the German health system does not manage the care for this population group well, but also emphasizes prevention, health promotion and public health to generate value for the population in the long run.

**Results:** For 11 years, sustained improvements in health outcomes, including lower hospitalization rates, higher life expectancy and higher mean age at the time of death than in a control group, 92 percent patient satisfaction rate, and exclusively financed out of shared savings (after start-up financing for the first year); total cost savings of ~\$38.2 million (USD 2014 from 2007-2014, cost reduction of 7 percent per insured person in the ninth year (2014) of the project (€5.5 million total, \$7 million USD 2014).

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### Factors that supported reforms:

- National policy environment facilitated structural changes and upfront investment
- Regional nature of the model incorporates accountability and “peer” control
- Physicians co-developed the model, increasing buy-in. Physicians are also shareholders, balancing payer, patient and physician interests
- Patient advisory board embeds patient voice

### Relevance for US context:

The Gesundes Kinzigtal case study provides insights for how physician-owned or rural accountable care organizations (ACOs), or patient-centered medical homes (PCMH) in the United States (US) can further implement healthcare reforms to better manage NCDs, especially for high-need, high-cost populations.

Figure 1: Translation Opportunities

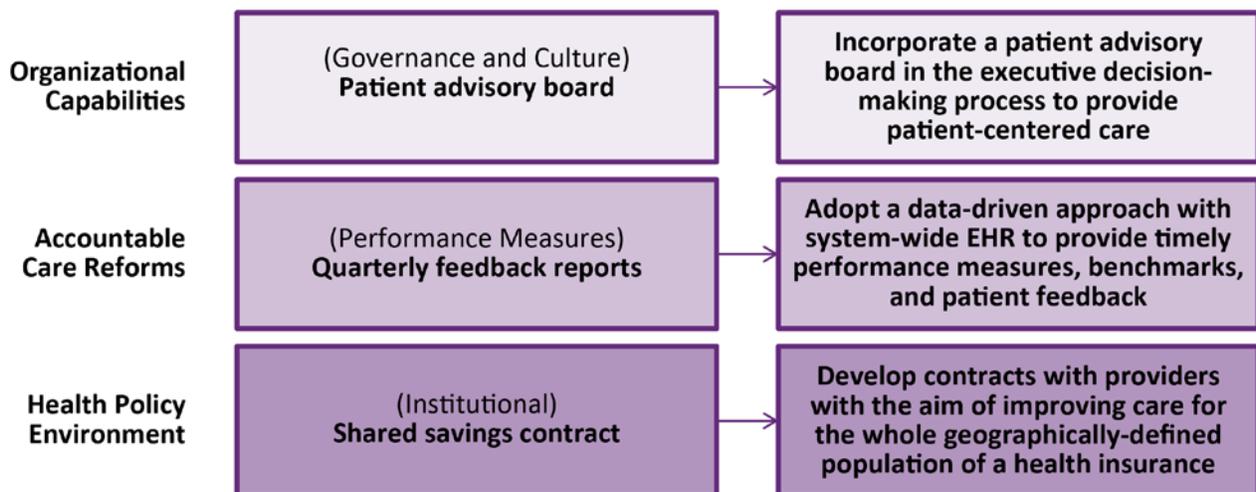


Figure 1 illustrates components of Gesundes Kinzigtal’s accountable care implementation process that are relevant for US stakeholders. These include environmental factors (bottom tier) and organizational capabilities (top tier) that influence the success of Gesundes Kinzigtal’s accountable care reforms (middle tier). The last column translates these lessons to a US context. Table 3 in Part IV provides additional translation opportunities.

Part 1 provides an overview of the German health system context; Part II discusses Gesundes Kinzigtal’s care plan using the Accountable Care Framework; Part III discusses the results of Gesundes Kinzigtal’s reforms; Part IV analyzes the internal and organizational factors (in addition to those in Figure 1) that supported or hindered these reforms.

## Part I: Health System Context

### NATIONAL CONTEXT

#### National Context

[Germany](#) provides universal health care that is funded through payroll taxes. The German system is decentralized, with regional and state governments having administrative and political responsibility for providing healthcare services. Regional non-profit organizations, known as sickness funds, manage healthcare benefits and are regulated by the health ministry. Sickness funds negotiate with physician and hospital associations to determine reimbursement rates and the types of benefits provided (mainly amenity features), including preventative services, physician services, mental health care, and prescription drugs.<sup>1</sup> Local providers operate independently of one another depending on the local market, and Germans can freely choose between new sickness funds (in 2016 there were 118) after an 18-month waiting period.

Germany provides universal health coverage for all legal residents and spends 11.3 percent of its gross domestic product (GDP) on health care. Like many industrialized countries, Germany faces the challenge of delivering high quality care at a low cost for a population with a high burden of NCDs. More than 90 percent of deaths per year are due to NCDs, exceeding the Organisation for Economic Co-operation and Development (OECD) country average.<sup>2,3</sup> One problem is Germany's fragmented care, which emphasizes acute care rather than preventative and outcome-based approaches, which has led to higher hospital admission rates and prolonged inpatient stays.<sup>4</sup>

In 2000, the German government passed the Statutory Health Insurance Reform Act to begin to address these challenges and allow sickness funds and provider groups, like accountable care organizations, to directly contract with each other. From 2004 to 2008, the Statutory Health Insurance Modernization Act enabled sickness funds to allocate one percent of expenditures to integrated care programs by allowing them to reduce remuneration to all their providers by one percent.<sup>5</sup> As a result, sickness funds had the option to provide accountable care organizations with additional resources to implement care innovations. Integrated care programs and contracts accounted in 2011 for around 1 percent of all care expenditures.<sup>6</sup>

### GESUNDES KINZIGTAL BACKGROUND

Gesundes Kinzigtal was formed as a pilot project between two regional organizations—MQNK, a local physicians network encompassing more than third of the local independent primary care physicians, specialists, and hospitalists, and OptiMedis AG, a health management company specializing in the management of integrated care (see Figure 1)—to create a population-based health model. MQNK and OptiMedis AG developed a 10-year shared savings contract and leveraged the 2004 national law to negotiate with two sickness funds—Allgemeine Ortskrankenkassen Baden-Württemberg (AOK) and Landwirtschaftliche Krankenkasse Baden-Württemberg (LKK)—that cover ~46 percent of the residents in Kinzigtal.

The contract provided Gesundes Kinzigtal with initial funding of approximately \$4.9 million (USD 2004), and Gesundes Kinzigtal received an annual prepayment based on predicted savings to coordinate care across contracted providers and manage health services for individuals enrolled in the program.

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Gesundes Kinzigtal focuses on attracting patients who can benefit the most from their programs. However, Gesundes Kinzigtal is held accountable for the health of all insurees of the two cooperating sickness funds living in the region and any member of either sickness fund in the Kinzigtal region can enroll without an increase in premiums or loss of freedom to choose a provider. The enrollment process can be initiated by the general practitioner, who becomes a “doctor of trust” to coordinate care, or by the patients themselves through a specialist, online, or directly at the Gesundes Kinzigtal office. As of 2014, one-third of the eligible population had enrolled in the program, which is more than 10,000 individuals.

### GESUNDES KINZIGTAL STRUCTURE

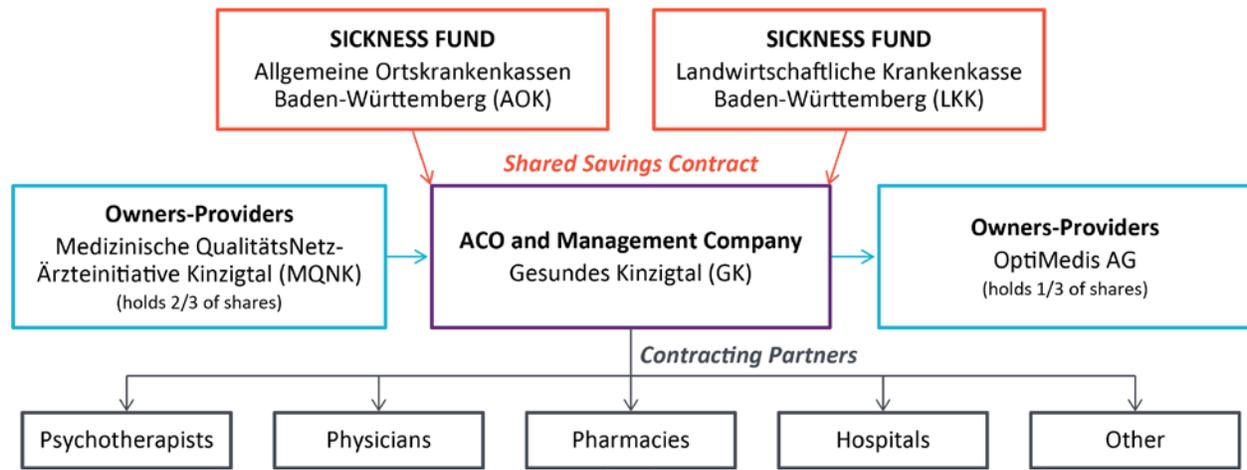
Gesundes Kinzigtal currently works with more than 260 organizations and institutions, including physician practices, hospitals, nursing homes, local municipalities, and local small and medium sized enterprises. The providers, in turn, also cooperate and – to some extent – compete with each other for patients.<sup>7</sup> Physician practices are reimbursed under a traditional fee-for-service (FFS) system, which comprises 80-90 percent of their income.<sup>8</sup> Gesundes Kinzigtal also provides additional reimbursements for provider services that stimulate value, such as time spent with a patient to set goals or physical training in long term care to prevent falls. Additionally, because MQNK owns two-thirds of Gesundes Kinzigtal, providers also receive a share of the company’s profit through a shareholder arrangement and have an impact on the decision-making process.

Gesundes Kinzigtal also has a unique revenue structure. Instead of a fee for service model, the organization keeps a portion of the realized savings—the difference between health care costs of AOK and LKK insurees before Gesundes Kinzigtal started and after Gesundes Kinzigtal was established and the difference between the general cost trend in Germany. This measure is risk adjusted for demographic and market factors.<sup>5</sup>

Gesundes Kinzigtal’s decision-making process includes input by four advisory councils, a patient board that meets biannually, a patient ombudsman, a physician’s board, and a provider’s board.<sup>9</sup> Enrolled patients elect five members to the patient board; MQNK elects physicians to the physician board; other providers elect a provider’s board that is comprised of a hospitalist, nurse, physiotherapist and two additional physician representatives. All business-critical decisions require the consensus of the Physician’s Board and the CEO, who is appointed by OptiMedis AG.

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Figure 2: Organizational Structure of Gesundes Kinzigtal



## Part II: Accountable Care Reforms

This case study uses the accountable care framework to assess Gesundes Kinzigtal's reforms. The framework consists of five accountable care policy pillars: identifying and **stratifying target populations**, implementing **performance measures** related to quality and experience of care, providing data and other mechanisms to help providers identify opportunities to **continuously improve**, restructure **financial and non-financial incentives** to align payments with target outcomes, and **coordinating and transforming care** to improve delivery.

### STRATIFICATION OF PATIENT POPULATION

In comparison to other sickness funds in the region the Kinzigtal population is characterized by lower-socioeconomic status, elderly (17.8 percent of the female population and 11.5 percent of the male enrolled population are older than 75), and have an elevated risk for NCDs.<sup>9,10</sup> Although enrollment is voluntary, Gesundes Kinzigtal providers are encouraged to identify patients who are at risk for certain diseases and enroll them to the appropriate Gesundes Kinzigtal health programs—an “inverted risk selection.”<sup>5</sup> For example, providers identify patients at risk for osteoporosis through an intensive medical examination. The exam involves a health questionnaire and, where appropriate, a bone density assessment in order to stratify patients into three risk groups: slightly elevated, elevated, or highly elevated risk of fracture due to osteoporosis.

Gesundes Kinzigtal also identifies high-risk patients using predictive modelling and other data analysis techniques.<sup>5</sup>

### MEASURING HEALTH SYSTEM PERFORMANCE

Gesundes Kinzigtal has implemented a variety of performance measures that are designed to assess outcomes that matter to patients, providers and payers. Measures include the total cost per patient, patient and provider satisfaction, percent of patients with avoidable negative health outcomes, percent of patients/physicians adhering to clinical guidelines, quality of life, percent of patients with avoidable hospitalizations, percent of patients with a prescription of antibiotics, and percent of patients in integrated care. A range of stakeholders, including the patient advisory board and physicians, have been involved in the measure development process. The data source includes claims, patient satisfaction surveys and other structured documentation.

### MECHANISMS FOR CONTINUOUS IMPROVEMENT

Providers in Gesundes Kinzigtal have access to timely, actionable data that are tracked and publicized through external and internal evaluations. Patients provide consent for providers to have electronic access to all relevant diagnoses and treatment information.

#### Internal evaluations

Gesundes Kinzigtal tracks metrics using a comprehensive electronic health records (EHR) database, patient survey data, and a business intelligence (BI) system developed by OptiMedis. The two sickness funds provide data for the BI system. Data include: basic claims data (age, sex, residence), data on diagnoses and services in ambulatory care, prescribing data for office-based physicians, hospital data

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(admission/discharge diagnoses, length of stay, surgeries and procedures, diagnosis-related groups), sick leave data, and data on nursing care/long-term care.<sup>11</sup> Gesundes Kinzigtal also publically shares its achieved savings (the difference between expected costs and actual costs) and other evaluations.

Gesundes Kinzigtal uses the metrics to assess system-wide performance and identify opportunities to improve access, quality, efficiency, and patient experience. For example, general physicians (GP) receive performance feedback reports every quarter, known as “Health Services Cockpit” (HSC), which is similar to a quality dashboard in the US (Figure 2). These interactive web-based reports include detailed data about provider performance in comparison to other providers within and outside of the Gesundes Kinzigtal network.<sup>11</sup> The HSC also provides detailed information at the case, patient, or service level for each indicator. The information is in addition provided in newsletters, physician-led quality review meetings known as “quality circles,” clinical visits, and annual meetings with the CEO of Gesundes Kinzigtal.<sup>12</sup> These metrics serve as a non-financial motivation for physicians to improve their medical practice.

### **External evaluations**

Gesundes Kinzigtal introduced a quality management system that is certified by the International Organization for Standardization (ISO). An external quality institution (DQS) audits Gesundes Kinzigtal annually and Gesundes Kinzigtal implements changes every two to three years based on audit results. Gesundes Kinzigtal, in conjunction with the University of Freiburg and the two sickness funds, also commissioned an independent scientific review agency, Evaluations-Koordinierungsstelle Integrierte Versorgung (EKIV). EKIV solicits and oversees proposals by research institutions to evaluate Gesundes Kinzigtal’s program outcomes. For example, since 2006, Cologne University has worked with EKIV to compare the quality of service at Gesundes Kinzigtal to those in other regions of the AOK and LKK sickness funds with normal practices. The study is updated annually. Results are released publicly for transparency and accountability and used internally for continuous improvement, i.e., discussed with the physicians and other providers and incorporated into the “Health Services Cockpit” (HSC).

### **CLAIMS & EHR DATA**

Claims & EHR data is used to coordinate care, track patient histories, monitor and improve care, identify groups of high-risk patients, design targeted early interventions, and better understand regional variances of disease prevalence and treatment utilization. Gesundes Kinzigtal encourages providers to adopt the EHR system by providing financial support for the implementation costs, deploying IT support staff, and linking some financial reimbursements to EHR use, independent of metrics.

### **FINANCIAL AND NON-FINANCIAL SUPPORTS**

Gesundes Kinzigtal developed a four-tiered payment model. Providers are largely paid on a FFS model by the sickness funds to avoid provider shortages. However, Gesundes Kinzigtal includes add-on payments to encourage coordination between patient goals and physician actions. These payments also reward value-based activities, such as goal-setting agreements between doctors and patients, adding extra services for clients, such as nursing homes that offer physical training to prevent falls, and participating in the EHR.<sup>8</sup> Physicians are also reimbursed at an hourly rate for work conducted with project groups or quality circles. The payment is the same amount for all experts within the group and has been agreed

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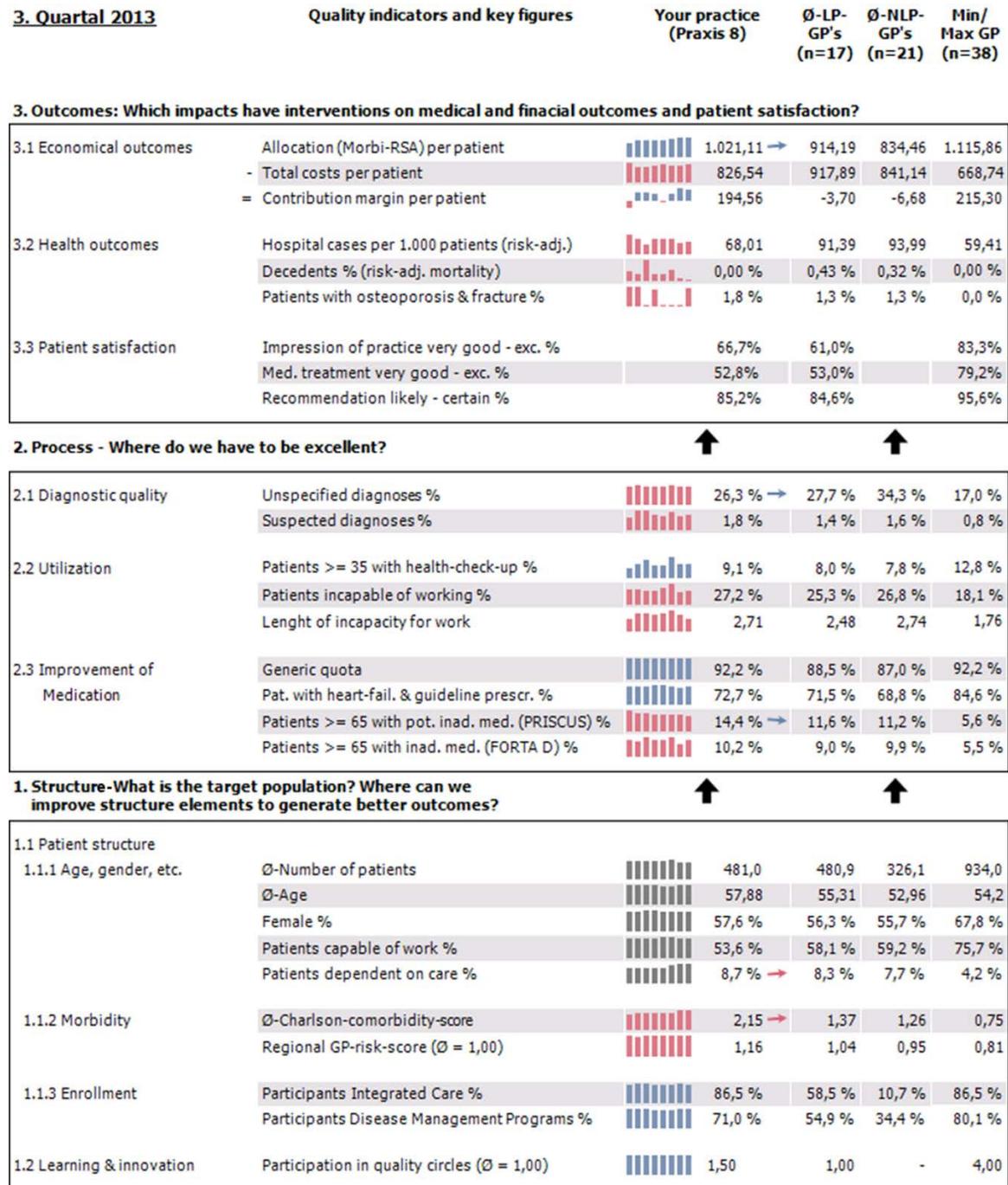
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upon by Gesundes Kinzigtal and the Physician's board. It comprises up to 10 percent of the total reimbursement. In addition, the HSC digital report provides non-financial motivation for providers to improve their medical practice.

Currently, Gesundes Kinzigtal is developing a payment model to replace the traditional FFS model for physicians for all Gesundes Kinzigtal enrolled patients in total. This new model will provide a per-patient per-quarter payment (based on historic FFS values plus a 10 percent increase). The aim of the new model is to simplify payment and unburden physicians from administrative tasks involved in FFS tracking. The new model is supported by a strong evaluation and performance management system, including the EHR system, peer-reviews, and management reviews based on patient outcomes.

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Figure 3: Health Services Cockpit for the GP Practice (sample data)



Note. Ø = mean, GP = general physician, LP = Gesundes Kinzigtal physician colleague, NLP = GP in the region not contracted to Gesundes Kinzigtal, respectively not participating in the ACO, Min/Max= minimum/maximum value for a measure. Bar graphs: every indicator has sparklines (small inline charts) showing the development over time as well as trend arrows indicating significant increases or decreases. The colors blue, red and grey are used to indicate that a value of an indicator should be kept high (=blue), low (=red) or if the measure has just a general information character (=grey), for instance. Figure lists outcomes at top and factors influencing outcomes below (structure and process).

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### CARE COORDINATION AND TRANSFORMATION

Gesundes Kinzigtal has implemented multidisciplinary care teams that include general practitioners, specialists, psychotherapists, hospitals, nursing homes, ambulatory agencies, physiotherapists, and social workers. Gesundes Kinzigtal also uses non-medical services to improve health. For example, Gesundes Kinzigtal has agreements with pharmacies, gyms, private companies that provide workplace health promotion, and adult education centers.<sup>5</sup> Through these arrangements Gesundes Kinzigtal has been able to shift care, where appropriate, from high-cost providers to more cost-efficient environments. For example, to prevent avoidable and costly hospital admissions, patients choose a “doctor of trust”—any physician, specialist, or psychotherapist within the Gesundes Kinzigtal network—who is responsible for health assessment, helping the patient navigate the healthcare system, coordinating care, and managing all follow-up care.<sup>10</sup> In turn, case managers and trained physician assistants are used to unburden doctors from tasks that lower-skilled workers can perform.

Shared decision-making between patients and providers and self-management initiatives also support care coordination. Patients actively participate in treatment decisions, working together with providers and health coaches employed by Gesundes Kinzigtal to develop individual treatment plans and goals.<sup>10</sup> Self-care programs include free exercise sessions for chronic patients but also reduced prices for membership in a Kinzigtal owned health training facility (medical gym), smoking cessation and nutritional and health counselling for patients with issues like high blood sugar levels, depression, or back ache. Gesundes Kinzigtal offers a smartphone app that patients can use to track their exercise with rewards such as rebates for sports equipment and groceries. Other efforts to promote better patient engagement include a NCD self-management program (adopted from the Stanford Chronic Disease Self-Management Program) focused on improving coping skills and an online communication tool to reduce unnecessary wait time for appointments.<sup>13,14</sup>

Gesundes Kinzigtal has leveraged technology to provide improved care coordination. Gesundes Kinzigtal utilizes a system-wide EHR that allows providers electronic access to comprehensive patient and treatment information and electronic pathways for the Gesundes Kinzigtal health programs.<sup>11,15</sup> Gesundes Kinzigtal is currently implementing an “Open Notes” project in order to give patients direct access to the central EHR.<sup>16</sup> Additionally, Gesundes Kinzigtal is piloting online doctor-patient communication tools to reduce unnecessary travel and waiting periods and mobile rehabilitation teams to support geriatric patients in their homes.

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Part III: Results of Accountable Care Innovations

Independent research by EKIV shows Gesundes Kinzigtal has impacted health outcomes positively for its members.<sup>4,8,17,18</sup> Figure 4 details several of these results. An ongoing study in conjunction with Cologne University showed that Gesundes Kinzigtal has led to reduction in costs, better allocation of services, and health outcome improvements. During the study, the prevalence of fractures among patients diagnosed with osteoporosis was at least 10 percent lower in the Gesundes Kinzigtal group than with the age-adjusted control group receiving standard care (Table 2).<sup>19,20</sup> Results from a quasi-experimental study on the mortality of patients with heart failure demonstrated that mortality rates were 10 percent lower for patients enrolled in the Gesundes Kinzigtal health program than the control group.<sup>21</sup> Another recent quasi-experimental study covering 2006-2009 revealed that 635 fewer potential life years have been lost by insurees enrolled at Gesundes Kinzigtal in comparison to a control group.<sup>11</sup>

Patient satisfaction is consistently high, with 92 percent of patients agreeing to recommend Gesundes Kinzigtal to friends or relatives (according to Gesundes Kinzigtal surveys in 2013 and 2015).<sup>22</sup>

Table 2: Examples of Reductions in Cost and Improvements in Care

Dimension	Measure	Results	Source
Health Outcomes	Patients with osteoporosis with fractures % (index: 2005)	7 percent less than control group	Köster et al. <sup>19,20</sup>
	Years of Potential Life Lost and Gained (YPLLG)	635 less potential life years have been lost in intervention group than control group	Pimperl et al. <sup>17</sup>
	Mean age at the time of death	The mean age at the time of death is about 1.4 year higher in the intervention group	Pimperl et al. <sup>17</sup>
Patient Experience	Experienced health improvement	24 percent of those questioned stated that they would now live "more healthy" than before enrolment in Gesundes Kinzigtal	GEKIM survey <sup>22</sup>
	Patient satisfaction	92 % would recommend Gesundes Kinzigtal	GEKIM survey <sup>22</sup>
Cost-effectiveness	Cost savings relative to the costs normally expected for the Gesundes Kinzigtal population concerned	2014: \$7 million (7 percent), USD 2014	Gesundes Kinzigtal GmbH <sup>23</sup>

Note: Intervention and control groups vary by study.

In 2014 alone (nine years after the start of the intervention), Gesundes Kinzigtal saved \$7 million (USD 2014) relative to the general population, or \$211 (USD 2014) in savings per insuree (7 percent).<sup>23</sup> The net cost savings of AOK BW have been about \$700,000 (self-reported) per year since 2007 (the beginning of shared savings contract after approximately \$4.9 million, USD 2004, in start-up funding). LKK BW saved roughly \$416 (USD 2010) per insuree living in Kinzigtal in comparison to a control region—a 17 percent difference in costs.<sup>8</sup> Part of this was driven by a reduction in hospitalization—from 2005-2010, the number of hospitalizations for LKK BW members increased by 10 percent while hospitalization rates for the comparative group increased by 33 percent, a difference of 23 percent.<sup>8</sup>

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Part IV: Implementation Challenges

This section identifies key components of Gesundes Kinzigtal’s reforms, including internal and external factors that facilitated Gesundes Kinzigtal’s implementation of their model, and offers translation opportunities that could support further reforms in the US (provided in Table 3). This section also discusses some of the challenges that Gesundes Kinzigtal faced.

Table 3: Translation Opportunities

	Component	Success Factor	Translation Opportunity
<b>Organizational Competencies</b> (from provider perspective)	<b>Patient Engagement</b>	<ul style="list-style-type: none"> <li>• Patient Membership Meetings</li> <li>• Patient Advisory Board</li> </ul>	<ul style="list-style-type: none"> <li>• Organized “townhall” membership meetings asking patients for their advice to optimize care</li> <li>• Incorporate a patient advisory board in the executive decision-making process to provide patient-centered care</li> </ul>
	<b>Governance and Culture</b>	<ul style="list-style-type: none"> <li>• Cooperation is based on a non-hierarchical leadership principle – supporting the providers but not directing them</li> <li>• Physician Ownership (majority shareholder) combined with health sciences trained management as co-owners</li> <li>• Long-standing history of collaboration across physicians in the area (specifically MQNK)</li> <li>• Close regional working environment and communication facilitated a culture of trust between providers, payers and general population</li> </ul>	<ul style="list-style-type: none"> <li>• Cultivate leadership and management competence within non-hierarchical environments</li> <li>• Develop impactful incentives (managed by health science trained management team) such as including physicians as shareholders, to attract physicians to enter ACOs</li> <li>• To foster a close working environment, work at the payer or organizational level with working groups and interdisciplinary quality circles.</li> <li>• Create centralized support units for the regional health management organizations for overarching tasks such as data warehousing and analytics.</li> </ul>
	<b>Patient Risk Stratification</b>	Uses claims, clinical data and patient characteristics to group patients by disease severity	Leverage clinical records, biomedical, and demographic records to identify and stratify patients based on care needs
<b>Accountable Care Policies</b> (from multi-stakeholder perspective)	<b>Population</b>	The contract includes all insurees of the region of the two cooperating sickness funds.	To foster population health and avoid gaming through patient or provider selection focus on contracts for the population of a whole region (not only those who are mainly served by participating physicians)
	<b>Performance Measures</b>	<ul style="list-style-type: none"> <li>• The regional health management organization was involved in developing the evaluation metrics. The regional health management organization also involved patients and physicians in the process.</li> <li>• No “black box”: Both, the payers as well as the regional health management organization are able to analyze all data of the population.</li> </ul>	Support scientific evaluation and share claims data with ACO/providers to allow them to monitor the provision of care of the whole population and implement a data-driven management approach

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Table 3: Translation Opportunities (continued from previous page)

	Component	Success Factor	Translation Opportunity
<b>Accountable Care Policies</b> (from multi-stakeholder perspective) (continued from previous page)	<b>Continuous Improvements</b>	<ul style="list-style-type: none"> <li>Quarterly performance report using claims, EHR and survey data are provided and discussed</li> <li>Staff and providers meet regularly in working groups to continuously improve procedures and interventions (using internal and external evaluation data)</li> </ul>	Provide timely feedback reports drawing from patient surveys and clinical and cost data Employ enough qualified staff for organizing and moderating working groups and quality circles
	<b>Financial &amp; Non-Financial Incentives</b>	<ul style="list-style-type: none"> <li>Signed first contract for a ten-year term. Long-term contract provided an incentive to focus on prevention.</li> <li>Developing a payment model to replace traditional FFS. Supplementary payments to providers for additional services (e.g. using EHR, shared decision making, training assistants). Gesundes Kinzigtal worked strongly to reconnect health care provision to the original “spirit” of health care providers: helping people</li> <li>Providers develop, utilize, and discuss benchmarks that assess peers’ behavior and un-/successful practices (e.g. patient case stories).</li> </ul>	<ul style="list-style-type: none"> <li>Offer long-term shared savings contracts that support investment in the health of the population (achieving an ROI within this time). Develop a “culture of health and mutual improvement”</li> <li>Capitated payments can be implemented incrementally.</li> <li>Effective multi-channel communication and feedback report system</li> <li>Self-monitoring and benchmarking by peer review</li> <li>Develop a system-wide EHR that generates transparency</li> <li>Size of organization should foster collaboration and trust between providers.</li> </ul>
	<b>Care Coordination and Transformation</b>	<ul style="list-style-type: none"> <li>Shared-decision making between patients and providers</li> <li>Self-management training courses for patients</li> <li>Health coaching and case management for especially complicated situations</li> </ul>	<ul style="list-style-type: none"> <li>Provide timely feedback reports drawing from patient surveys and clinical and cost data</li> <li>Employ enough qualified staff for organizing and moderating working groups and quality circles</li> </ul>
<b>Health Policy Environment</b> (from policymaker perspective)	<b>Regulatory</b>	SHI Modernization ACT enabled programs, such as providing upfront investment or advance payments, to finance the transition and help new models become self-sustaining	Recognize incremental pace of change and use shared savings with upfront investment or advance payments to build a financial foundation for value-based payments
	<b>Political</b>	Shared savings contract enabled long-term financial plans for risk-sharing and reimbursement negotiated prior to delivery reform	<ul style="list-style-type: none"> <li>Address conflicting financial incentive systems early on to secure buy-in from physicians, payers, and patients</li> <li>Set and communicate a clear value-based contracting policy path to be implemented.</li> </ul>

CHALLENGES

Resistance to experiment with accountable care

Insurers have been slow to pilot Accountable Care Models in Germany. Impediments include:

- A lack of incentives to invest in accountable care projects (especially after the 2004 law expired in 2008) and no surplus financing was given to insurers to promote care and payment innovation.
- A free rider dilemma. From Gesundes Kinzigtal’s perspective, insurers seek to benefit from care innovations without sharing the risk and the generated benefits

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- A lack of consensus about the method to calculate shared-savings and evaluate population-based integrated care models

According to Gesundes Kinzigtal, providers have been hesitant to implement ACO reform because of a cultural aversion to risk and a lack of financial incentives to compensate for the risk of investment in new models. Providers may also fear the loss of autonomy that could result from a centralized management system. Gesundes Kinzigtal did not experience these challenges mostly because of the close link with the already existing physician network MQNK. OptiMedis/Gesundes Kinzigtal was also able to address these challenges due to the following measures:

- Establishing a culture of trust with the providers by working closely
- Engaging providers through frequent educational meetings to discuss cultural and technical changes required to implement accountable care
- Lowering financial and technical barriers for providers to contract with the regional management company through for example investment in additional “risk-free” remuneration for providers (e.g. hourly fee for work in project groups or quality circles) and providers’ IT infrastructure.
- Additionally, Gesundes Kinzigtal won financing to extend its scientific evaluation as part of the 2015 German Act to Strengthen Care (GKV-VSG) endowment fund, which provides €300 million annually (\$317 million USD 2016) for the next four years to foster innovations in health care. Also, a second “Kinzigtal-similar” regional health management organization of OptiMedis was granted €6.3 million (\$6.65 million USD 2016) for start-up investment.

**Administrative and technological burden to reorganizing care** — Transitioning to accountable care can be difficult and may overburden health providers. In Gesundes Kinzigtal, physicians faced steep learning curves from new technologies, resources, processes and internal guidelines and the organization also found it difficult to recruit local staff, given the rural location. To overcome this Gesundes Kinzigtal hired additional temporary non-regional staff and shifted tasks from physicians to assistants, where appropriate, to disburden physicians. Gesundes Kinzigtal also provided educational seminars to all practice staff and physicians and regularly sent staff to providers to facilitate implementation of guidelines and processes.

**Implementation Barrier: Resistance to adopting electronic health records system** — It took Gesundes Kinzigtal more than five years to implement their electronic networking system. Gesundes Kinzigtal first developed an integrated EHR and business intelligence system at a time when the use of claims data and shared electronic data was not prevalent in Germany. Additionally, the Gesundes Kinzigtal EHR was used as a supplement to each practice’s own EHR system and not directly integrated in the workflow. As a result, initial uptake by clinical and non-clinical staff was slow.<sup>15</sup> In response, Gesundes Kinzigtal created a second, centralized interoperable EHR incorporated in the providers’ workflow that has been adopted by about 85 percent of ambulatory physician offices.<sup>9</sup> Gesundes Kinzigtal is also planning on enabling patients to access the EHR.

*Gesundes Kinzigtal provided the source data for this document and is responsible for the accuracy of the content. Please contact Alexander Pimperl (alexander.pimperl@gmail.com) for further questions or comments.*

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