

Table of contents

Prologue	5
Voices from the healthcare market	7
List of Figures	15
Abbreviations	17
Executive Summary	23
1 Introduction	29
1.1 Target group and subject matter.....	29
1.2 The German healthcare industry and the so called “first healthcare market”	30
1.2.1 Definitional distinction	30
1.2.2 Economic key data	32
1.2.3 Defining challenges and developments in the healthcare system.....	35
2 Basics of the German statutory health insurance (GKV)	43
2.1 The GKV and its specifics	43
2.1.1 Basic principles and key actors	43
2.1.2 Services and service providers	46
2.1.3 Financing and compensation	54
2.1.4 Marketing management in the GKV-market.....	58
2.1.5 The path of innovations into statutory health insurance ..	61
2.2 Health insurance companies and their role in the GKV-market ..	65
2.2.1 Development of the health insurance landscape	65
2.2.2 Business model and economic context	69
2.2.3 Structural organization and responsibilities	74
2.2.4 Innovation management from the health insurance perspective	75

3	Market access through cooperation with health insurance companies	81
3.1	Opportunities, potential and areas of application	81
3.2	Typical legal bases for cooperation	85
3.2.1	Health services in accordance with the statutes of a health insurance company	86
3.2.2	Selective contracts	88
3.2.3	Innovation Fund	95
3.2.4	Other innovation support	100
3.3	Restrictions	105
3.3.1	Medical ethics	105
3.3.2	Data protection and data security	107
3.3.3	Procurement law	110
4	Cooperation with health insurance companies: Tips from practice	113
4.1	Designing healthcare: The care perspective	113
4.1.1	General information on getting started	113
4.1.2	Think about innovations in practical everyday care	114
4.1.3	Close gaps in care and improve care	116
4.1.4	Care innovations in different service areas	117
4.2	Characteristics of promising healthcare innovations from the health insurance perspective	127
4.2.1	Define the target group precisely	127
4.2.2	Create customer benefit and satisfaction	129
4.2.3	Establish partner networks	130
4.2.4	Prove effectiveness	131
4.2.5	Pay attention to the economic framework conditions of the health insurance companies	132
4.2.6	Focus on core product	134
4.3	Important additional conditions for promising partnerships	135
4.3.1	Care solutions must be ready for use	135
4.3.2	The health insurance companies must comply with public procurement law	136
4.3.3	Outsourcing, data protection, data security & use of AI	141
4.3.4	Integration of supply solutions into IT infrastructures	146
4.4	From concept to project	149
4.4.1	Which health insurance company is the right one?	149

4.4.2	Who is the right contact person?	151
4.4.3	Where can the right contacts be found?	153
4.4.4	The team behind the healthcare innovation	156
4.4.5	Pitch Deck—the first impression counts	156
4.4.6	What can be expected from health insurance companies?	160
4.4.7	Time to Market	162
4.4.8	Avoidable mistakes	164
4.4.9	Cooperation with other social insurance providers and private health insurance companies (PKV)	169
5	Effectiveness and efficiency: Evaluation from the payer perspective	173
5.1	Assessment of diagnostic benefit	175
5.2	Assessment of therapeutic benefit	182
5.3	Assessment of economic benefits	187
5.4	Qualitative planning and process evaluation	192
6	Cooperate successfully: Best Practice Examples	195
6.1	PREVENTICUS: Detect atrial fibrillation, prevent strokes	195
6.1.1	Background, subject matter and objective	195
6.1.2	Healthcare benefits	197
6.1.3	Implementation in research and practice	202
6.2	DISQVER: Precision medicine in infection diagnostics	203
6.2.1	Background, subject matter and objective	203
6.2.2	Healthcare benefits	205
6.2.3	Implementation in research and practice	208
6.3	SLTA – Small procedure, big effect: minimally invasive epilepsy surgery	210
6.3.1	Background, subject matter and objective	210
6.3.2	Healthcare benefits	212
6.3.3	Implementation in research and practice	213
6.4	Conclusion: Innovation through cooperation	214
	Sources, further reading and notes	215
	Curriculum Vitae	247

List of Figures

Fig. 0.1:	Health Innovation Canvas.....	27
Fig. 1.1:	The healthcare industry and its sub-areas	31
Fig. 1.2:	Health expenditure by expense carriers in 2020.....	32
Fig. 1.3:	Health spending and life expectancy in OECD country comparison.....	33
Fig. 1.4:	Number of codings in the hospital sector (January to May 2019/2020)	39
Fig. 1.5:	Share of video consultations in outpatient medical care (pre-/post-COVID-19).....	41
Fig. 2.1:	Relationship triangle between the GKV actors.....	44
Abb. 2.2:	Services provided by the GKV	47
Fig. 2.3:	Regular healthcare supply path.....	51
Fig. 2.4:	GKV financing system.....	55
Fig. 2.5:	Statutory health insurance expenditure by service area in 2020 (in billion euros)	57
Fig. 2.6:	Path of product and service innovations into the statutory health insurance	62
Fig. 2.7:	Development of the health insurance landscape (information as of January 1st).....	67
Fig. 2.8:	Healthcare management as a core function of statutory health insurance companies	70
Fig. 2.9:	Structural organization of a health insurance company (excerpt).....	74
Fig. 2.10:	Management goals in statutory health insurance companies..	76
Fig. 3.1:	Classic use cases of cooperation between start-ups and health insurance companies	83

Fig. 3.2:	Structure of a selective contract according to § 140a SGB V..	92
Fig. 3.3:	How the Innovation Fund works	95
Fig. 3.4:	Project phases in the innovation fund.....	98
Fig. 3.5:	Process of a competition in the Healthy Hub.....	104
Fig. 5.1:	Health economic cost-effectiveness diagram	173
Fig. 5.2:	Calculation of diagnostic accuracy	175
Fig. 5.3:	Health economic cost-effectiveness diagram	177
Fig. 5.4:	Basic principle of therapeutic effectiveness studies.....	183
Fig. 5.5:	Alternatives for forming comparison groups	185
Fig. 5.6:	Conducting cost-benefit analyzes by health insurance companies	188
Fig. 5.7:	Structure of an interview guide.....	193
Fig. 6.1:	Smartphone-based AF screening program	197
Fig. 6.2:	Measurement of the heart rhythm with the Preventicus Heartbeats app and resulting reports	199
Fig. 6.3:	Mechanism of action and economic implications of the Preventicus screening program	201
Fig. 6.4:	Infection diagnostic process using the DISQVER method....	204
Fig. 6.5:	Conventional infection diagnostics	205
Fig. 6.6:	Break-even analysis to prevent kidney failure in sepsis patients using the DISQVER method	207
Fig. 6.7:	Example use cases of the DISQVER process.....	209
Fig. 6.8:	Stereotactic laser thermal ablation using the VISUALASE system	211