Policy recommendations to overcome fragmentation

Tackling the problem of fragmentation in the healthcare system by applying the integrated care approach in Austria

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Abstract

Introduction and Background: People grow older. This leads to an increase in complex, often multiple chronic diseases. Especially vulnerable people and those who are suffering from mult-morbidities are in need of a variety of medical, mental and social care services. However, fragmentation of the healthcare system, which is partly caused by specialization, challenges coordination and cooperation of services. My master’s thesis, “Policy recommendations to overcome fragmentation,” therefore refers to the healthcare system as the “patient” who is examined. My diagnosis then is fragmentation and the recommended therapy integrated care.

Objectives: The goal of the thesis is to clarify why integrated care has become such an important topic in healthcare and which tools are used to achieve it. I will, however, also give recommendations on how to coordinate services and tasks in order to overcome fragmentation, and in this case in Austria.

Methods: The thesis is based on a qualitative document analysis. It is divided into five parts, Introduction, Background, Integrated Care, Integration Strategies and Developing Policy Recommendations. In order to assess 32 best-practice projects in Austria, an analytical framework was created. The six elements the framework comprises (view on health, way of coordination, degree, configuration, type and technologies) are based on the prior theoretical presentation.

Results and conclusion: A fragmented system may result in both qualitatively deficient outcomes and more or less unbearable costs. It can even adversely affect the outcomes for the patient. Integrated care is an umbrella term combining all programs and tools which aim to reduce fragmentation, increase coordination as well as continuity of care, and which should result in improved quality of care and enhanced cost-effectiveness. The tools used can range from humanistic to technical. Programs can be population-based or indication-based. The programs can be different in type (micro, meso, macro level) and make use of various technologies, like financial, administrative, informational, normative, organizational, service delivery-oriented and clinical. Physicians in Austria are still highly autonomous, hence it seems like the country is giving some room for an artistic management approach. Consequently, my recommendations are strongly influenced by Glouberman and Mintzberg’s humanistic strategy on integration of health care.
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# Table of Contents

Abstract .......................................................................................................................... I  
Acknowledgement .......................................................................................................... II  
Table of Contents ........................................................................................................... III  
List of Figures .................................................................................................................. IV  
List of Tables .................................................................................................................... IV  
List of Appendix .............................................................................................................. V  
List of Appreviations ....................................................................................................... V  
1 Introduction .................................................................................................................... 1  
1.1 Overview .................................................................................................................... 1  
1.2 Obstacles of and changes in the Healthcare sector ...................................................... 1  
1.3 Problem Statement ................................................................................................... 7  
1.4 Objectives & Research Question ............................................................................. 9  
1.5 Methodology & Structure ....................................................................................... 10  
2 Background .................................................................................................................. 13  
2.1 Healthcare Systems ............................................................................................... 13  
2.1.1 Health .................................................................................................................. 13  
2.1.2 Healthcare .......................................................................................................... 18  
2.1.3 Systems ............................................................................................................... 22  
2.1.4 Healthcare Systems ........................................................................................... 24  
2.2 Fragmentation of the Healthcare Sector .................................................................. 30  
3 Integrated Care ............................................................................................................ 35  
3.1 Technical and Humanistic Integration .................................................................... 36  
3.2 Trends of Integrated Care ...................................................................................... 42  
3.3 Conceptualizing Integrated Care ............................................................................ 49  
3.3.1 Degree ................................................................................................................ 49  
3.3.2 Configuration ..................................................................................................... 52  
3.3.3 Types .................................................................................................................. 54  
3.3.4 Framework ........................................................................................................ 56  
3.3.5 Technologies of Integration .............................................................................. 59  
4 Integration Strategies ................................................................................................. 62  
4.1 Pathways .................................................................................................................. 62  
4.2 Glouberman and Mintzberg ..................................................................................... 67  
4.3 Porter and Lee ......................................................................................................... 72  
4.4 Discussion ............................................................................................................... 78  
5 Developing Policy Recommendations ...................................................................... 80  
5.1 Power Distribution in Austria ................................................................................ 80  
5.1.1 Structure of the Healthcare System .................................................................. 81  
5.1.2 Health Sector .................................................................................................... 82  
5.1.3 Long-Term Care Sector ................................................................................... 84  
5.1.4 Analyzing Problems and the Power Distribution .............................................. 85  
5.2 Projects in Austria ................................................................................................. 89  
5.2.1 Strategic Projects .............................................................................................. 89  
5.2.2 Operational Projects ........................................................................................ 98  
5.3 Discussion ............................................................................................................... 102  
5.4 Recommendations ................................................................................................. 105  
6 Summary ..................................................................................................................... 113  
References ....................................................................................................................... 119  
Appendix ......................................................................................................................... 135
List of Figures

Figure 1: Intervention Complexity - Episodes of care and number of elements in the Intervention ................................................................. 4
Figure 2: Change Factors ................................................................................................................. 6
Figure 3: Different views on health ........................................................................................................ 16
Figure 4: The health-illness continuum ...................................................................................... 17
Figure 5: Chain of ill-Health ........................................................................................................... 17
Figure 6: Five blocks of healthcare ................................................................................................. 22
Figure 7: Health service provision .................................................................................................. 26
Figure 8: The dynamic architecture and interconnectedness of the health system building blocks ............................................................................................................................... 28
Figure 9: The changing hospital system ........................................................................................... 31
Figure 10: Roots of Integrated Care .................................................................................................. 43
Figure 11: Levels of integration and user need ............................................................................... 51
Figure 12: Conceptual framework for integrated care based on the integrative functions of primary (health) care: ................................................................................................... 57
Figure 13: Overview on the history and concept of care pathways ................................................. 64
Figure 14: Four aggregation levels of the pathway product ............................................................ 66
Figure 15: Web Model ....................................................................................................................... 69
Figure 16: Curtains of the Healthsystem ......................................................................................... 70
Figure 17: The value agenda ............................................................................................................ 73

List of Tables

Table 1: 8 elements of PHC ................................................................................................................. 20
Table 2: typical system-level interventions targeting individual or multiple building blocks. 29
Table 3: Integrated Care Definitions ................................................................................................. 36
Table 4: Technical and humanistic approach ..................................................................................... 42
Table 5: Trends of Integrated Care .................................................................................................... 48
Table 6: Technical vs Systemic view on Breadth ............................................................................ 53
Table 7: Integrated care dimensions of the Rainbow Model of Integrated Care .................................. 59
Table 8: Analysis strategic projects ................................................................................................... 96
Table 9: Analysis operational projects ............................................................................................ 100
Table 10: Ten key areas of integration ............................................................................................ 107
Table 11: Policy Recommendations Austria .................................................................................... 112
List of Appendix

A 1: Analysis of Projects in Total Numbers ................................................................. 135
A 2: Strategic Programs .............................................................................................. 136
A 3: Programs within Art 15a Agreement .................................................................. 137
A 4: Indication-Based Integrated Care Programs ....................................................... 138
A 5: Population-Based Integrated Care Programs ...................................................... 142

List of Abbreviations

HiAP     Health in All Policies
IPU     Integrated Practice Unit
PC     Primary Care
PHC     Primary Health Care
UHC     Universal Health Coverage
1 Introduction

1.1 Overview

With the growing specialization, and partly as a result of it, fragmentation of the healthcare system, the need for coordination and cooperation of services and service providers increases. This need emerges at different levels throughout patients’ total cure and care processes. Increased and enhanced coordination is required if the quality improvement to which specialization leads is to be fully realized, also as patients see it, but also if access to health care is to be kept good and the system is to function in a cost-efficient way (Kodner & Spreeuwenberg, 2002, p. 2).

It is a widespread impression that western health care systems have not fully lived up to the needs for coordination which specialization of health care has resulted in. Thus, one often hears that the health care system is being described as fragmented. Since the 1990s, but especially since the turn of the century, integrated care has become a key catchword in the health care policy debate for this reason. It is also the topic of my thesis. The “patient” I will examine in this thesis, then, is the healthcare system. I will start by “taking its history”, that is trying to show how and why it has become so specialized, and how that specialization has led to fragmentation (the “diagnosis”). I will then look at typical ways of “treating” this condition. In this regard, I will look specifically at how such strategic and operational projects, or “therapies”, have been tried out in Austria. I will close by discussing the merits of these strategies – strategies of integrated care. That discussion will lead to some tentative conclusions – my recommendations.

1.2 Obstacles of and changes in the Healthcare sector

Current health care systems are far away from an ideal status. Regularly, media publish articles about long waiting times, inadequate access, medical errors and insufficient quality of health and social services (Gröne & Garcia-Barbero, 2001, p. 1). So what are the problems the current

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1 In this thesis, integrated care will be referred to as the overall goal. By contrast integration are the tools facilitating integrated care.
healthcare system is facing? How can we be sure that integration actually is the right way to go?

Looking at healthcare from a systematic perspective, it can be stated that healthcare systems and organizations are among the **most complicated and interrelated existing structures in modern society**. An analysis of single healthcare entities shows that they pool many different educational backgrounds. People in those bodies have diverse work “cultures” and speak different “languages”, which often makes optimal coordination and cooperation difficult. From a broader perspective, the variety of existing care and cure organizations, insurance companies, lobbyists, lawmakers, etc. show that it is hard to work across institutional boundaries, due to different structures, investors, incentives, laws, understandings and perspectives on healthcare topics (Kodner & Spreeuwenberg, 2002, p. 1ff).

Moreover, there are external developments which challenge the healthcare system. **Technologies** like the internet empowered patients to a certain extent. Individuals have the possibility to gather information about diseases they (or their family members) are suffering from. Due to patients’ special interest in one specific condition, it can happen that they are better informed about the latest treatment procedures for this particular condition than the physician. Hence, patients’ awareness of their rights and expectations towards physicians’ performance is increasing (Gröne & Garcia-Barbero, 2001, p. 3).

Medical knowledge is growing fast and produces diverse diagnostic procedures and different methods of treatment. For this reason, different clinicians, hospitals, regions, etc. use various treatments, which leads to an inconsistency of quality and costs of care for the same diagnoses. (Noseworthy, 2013; Ouwens, Wollersheim, Hermens, Hulscher, & Grol, 2005, p. 141f). This indicates that the fast technical and scientific developments in the healthcare sector generate an information overload. Another effect of this trend is that physicians, nurses, hospitals, consultants and systems had to separate practices by specialty in order to ensure that they can still work as experts in their fields. Physicians usually specialize “along several axes: Surgical or internal medicine […] [,] age range of patients […] [,] diagnostic or therapeutic […] [,] organ-based or technique based” (Murty, 2015, p. 93).

The major issue of specialization “appears[st] when a given problem does not easily fit within a defined specialty or crosses over between specialties” (Ball, Simborg, Albright, & Douglas, 1995, p. 324). In other words, specialists create clusters for several situations from what they have learned in their specialties. Mintzberg called this behavior, typical for professional
bureaucracies, “pigeonholing”. This way of thinking helps simplify complex tasks and can be valuable, especially in emergencies. However, this gives rise to concerns because especially now, with an ageing population, the number of complex, multiple and long lasting chronic diseases increases. A more holistic understanding of the body, how each of its parts is working together is thus of crucial importance. Therefore, knowledge coupling and inter-sectorial cooperation become necessary (Mintzberg, 1979, p. 352ff).

At this point, the epidemiological and demographic changes are worth mentioning. Improved living conditions have increased the longevity of the population. According to the report “Health at a Glance: Europe 2012” (2014, p. 9) the “[l]ife expectancy at birth in European Union (EU) member states has increased by more than five years on average since 1990”. Furthermore, the share of elderly people in proportion to society as a whole is growing. The EU expects more than 20% of the European citizens to be at least 65 years old by the year 2025. Especially the share of people aged over 80 will grow (European Commission, 2015). The trend of aging populations confronts the healthcare system with the need of increased capacities. Due to the fact that illnesses get more complicated, the cost of treatment is rising as well. This development, combined with decreasing fertility rates and globalization that leads to emigration of young adults, raises concern over how to finance the European system in the future (Gröne & Garcia-Barbero, 2001, p. 3). Reframing it, because of the raising demands for health care, it is important to reduce the processing time of patients in order to raise volumes. On the other hand, it needs to be considered that the cost of the treatments provided to more people in shorter time periods will steadily increase due to the complexity of diseases (WHO Service Delivery and Safety, 2015, 2015, p. 9f; Wittke, 2006, p. 46; World Health Organization, p. 105f, 127).

This demographic trend causes a shift in terms of frequency and type of diseases. More specifically, a shift from acute to chronic and from less complicated to highly complex diseases can be observed. As depicted in Figure 1, the intricacy as well as the cost intensity of health interventions is increasing, because (multiple) chronic conditions are calling for multiple interconnected interventions, supplied from various providers and multidisciplinary teams at different levels of care over long laps of time (Atun, Jongh, Secci, Ohiri, & Adeyi, 2010, p. 107f).
In Europe, eight out of ten people older than 65 are affected by chronic diseases (e.g. cancer, mental disorders, diabetes, cardiovascular diseases) (Bundesministerium für Gesundheit, 2015a). Moreover, 77% of all diseases are chronic in nature and 86% of total deaths are caused by those kinds of diseases (European Chronic Disease Alliance (ECDA) 2012). Even more so, the latest trends depict an increase in multi-morbidity. “Approximately one in four adults have two or more chronic conditions, and half of older adults have three or more chronic conditions” (Boyd & Fortin, 2010, p. 452).

Chronic diseases, especially multi-morbidities, represent various challenges for individuals, service providers and the entire system. To treat those diseases, it is not enough for patients to just take medication (like with many communicable diseases), if they suffer from non-communicable diseases, they usually have to actively change their life-styles (diet, sports, alcohol, drugs.). A precondition for this is a close patient-physician relationship that is usually based on trust (Bopp, 2013, p. 1f).

Moreover, people’s vulnerability is increasing, because along with the natural signs of aging like physical and mental disabilities, people are suffering from chronic diseases that make their needs even more complex. Suffering from severe long-lasting functional limitations affect one’s quality of life and hence, also one’s autonomy. Therefore, health problems are multifaceted. They are often social and psychological as well as medical (Goodwin, 2003, p. 1; Kodner & Spreeuwenberg, 2002, p. 3).

One of the challenges for physicians is that there are no or only very few guidelines which they can rely on to cope with complex diseases. Patients with multiple morbidities are often on different medications, something that may have unpredictable side effects. Furthermore,
patients are usually treated by several specialists and general practitioners, as well as by other personnel. In unfavorable cases, one caregiver is not aware of the treatment procedures and methods of the other (Bopp, 2013, p. 1f).

In addition to this, expenditure of the European health budget on chronic diseases already ranges between 70 and 80 percent (Bundesministerium für Gesundheit, 2015a). However, sooner or later, we will face the predicted numbers of chronic diseases. Only if healthcare (systems) adjust(s) to the current changes will we be able to provide appropriate care and stay financially viable.

Over the years, European countries have established a cure based system. However, this epidemiological development requires a health care system that is specialized in care. Consequently, many states were put on the spot and have started researches in order to find new institutional, technological and systemic solutions. To overcome the problems related to demographic change, the emergence of (multiple) chronic conditions and the increased demand for health services, we have to broaden our conception of healthcare systems. Models need to include cure and care professionals, as well as social, mental and conventional health organizations. The various health providers have to integrate their services in order to manage complex and multiple chronic conditions (Goodwin, 2003, p. 1ff; Gröne & Garcia-Barbero, 2001, p. 1). Rephrasing it, “patient care has changed from individual consultation to multi-professional teamwork and this usually involves many […] care providers” (Ouwens et al., 2005, p. 141).

There is yet another factor that aligns with the widened perception of healthcare. Over the past decades, the understanding of health has changed tremendously. For a long time, people considered health simply as the absence of diseases. In 1946, the WHO expanded the meaning of the term and started to consider health as a condition of emotional, social and physical wellbeing (Bundesministerium für Gesundheit, 2015b). Taking this into account, it becomes obvious that healthcare systems shouldn’t solely include cure, but also care aspects. To emphasize this, I will refer to health as a dynamic process. Hence one’s state of health can range on a continuum between total disability and optimal health (see Chapter 2.1.1 Health).

“Figure 2” summarizes and structures the previously mentioned difficulties of and changes in the healthcare system. In order to better understand the change-drivers I have divided them into demand-side and supply-side drivers. In response to these challenges, we need a system that supplies a broad spectrum of cure and care services. Even though the demand side is putting
pressure on health systems, we can find its opportunities on the supply side. One of the main strengths of the supply side is specialization, a reasonable reaction on the pressures arising. To get the highest quality out of specialization it is necessary to integrate in order to avoid fragmentation. In other words, one of the main risks the changes are leading to in case integration is not provided, is fragmentation (Gröne & Garcia-Barbero, 2001, p. 6f).

Therefore, it is important to offer integrated care which aims to “address fragmentation in patient services, and enable better coordinated and more continuous care” (Shaw, Rosen, & Rumbold, 2011, p. 3) on the one hand and, on the other hand, to simultaneously apply a patient-centered approach to strengthen the relationship and trust between patient and service provider (Hoffmann, Bennett, & Del Mar, 2013, p. 349).

Integrated Care Strategies

Thus, the question arises as to how such a strategy can be created and implemented. There is no one “universal” solution, mainly because preliminary conditions (needs, culture, values, goals, context, etc.) vary across regions (WHO Service Delivery and Safety, 2015, p. 19).
Tactics on how to integrate care are discussed in literature. However, nearly every report interprets “integrated care” differently and focuses on diverse parts and levels of integrated care. “Like a Rorschach test, the term is often used by different people to mean different things” (Kodner, 2009, p. 7). Even though the scope of integration initiatives differs widely, the shared aim of the initiatives is to improve coordination and to integrate services (Gröne & Garcia-Barbero, 2001, p. 7).

Due to this, and the previously mentioned extended perspective of (social, mental, health) care, I decided to use a rather broad definition of integrated care. Mrs. Sabine Weißenhofer, one of my Austrian contact persons provided the following definition. Integrated care is “patient (and person) oriented continuous and inter-sectorial and multi-disciplinary care, ranging from process- to organizational integration. It not only affects the healthcare sector, but also relevant adjacent fields”. Nevertheless, it has to be added that integrated care gets defined in more detail in Chapter 3 “Integrated Care”.

Based on this understanding of integrated care, the present thesis will also include integration of services that cut across institutional boundaries. Such integration will be referred to as multi-organizational integration (and pathways).

1.3 Problem Statement

Our cure and care system is highly specialized, but disintegrated at the same time. Like Mintzberg said, there are only two possibilities of reducing disintegration, either we reduce segmentation, or we increase integration. Before deciding what to do we have to keep in mind that specialization is not only a problem, but also one of the biggest assets of the health system. Hence, it is clear that we have to find a way to better coordinate services across the care continuum (Glouberman & Mintzberg, 1997, p. 2).

In order to provide “seamless” care, which is the goal, coordination must be perfect both within and across organizations. There is a lot of literature available about integration within organizations. There is much less available about cross-organizational integration. It is there, however, that need for integration is greatest. This is so, as I have mentioned before, since “the scope of demand is likely to be characterized by the presentation of multiple disorders with functional, psychological and social dimensions which can be better dealt with by integrated forms of health and social service provision” (Gröne & Garcia-Barbero, 2001, p. 3). Hence, it
is a matter of priority to focus not only on integration within health establishments, but also, and primarily, across care providing institutions.

However, when trying to develop integrated multi-organizational paths we encounter several obstacles. Services at diverse levels of the care-chain base their work on different elements (diagnoses, health status, outcomes…) (Shaw et al., 2011, p. 14). Perhaps most importantly, our health care system primarily focuses on managing diseases instead of on the person suffering from the illness (Stange, 2009, p. 101). This biases the integration efforts in favor of hospitals, the most disease-oriented care providers, and severely reduces the scope of the integration efforts and of care in general. It leads, one might say, to truncated integration, or simply, truncated care.

Another integration problem has to do with health professionals. Like Mintzberg said in his book “Structure in five: Designing effective organisations” (1993, pp. 23,189–192) most healthcare entities can be regarded as professional bureaucracies. Much of the power in such organizations is to be found in the operating core, where professionals traditionally have had a great amount of autonomy. This may add to the problem of integration mentioned above, both inside and across institutions. It should be added that the two types of problems are related, in that clinical physicians (especially) are trained, and therefore tend to be disease-oriented. Moreover, inside medicine those who are most disease-oriented, (hospital-based) specialists, tend to dominate the profession (Glouberman & Mintzberg, 1997, p. 13f).

These integration problems are exacerbated by the positions normally taken by the industry which provides the health care system with commodities of many sorts and the attitudes of most people, especially as they become patients: They all tend to favor the concrete (and often acute) disease orientation over the more combined disease, diffuse care, disease prevention and health (promotion) orientation. In other words, the balance of power is stacked against those who plead the cause of a more holistic, and therefore cross-organizational, form of integration (Glouberman & Mintzberg, 1997, pp. 13–17).

We already know that there is no “one-size-fits-all” way of integrated care. A strategy can only be effective if it is accepted by the key stakeholders, the healthcare staff, the health care managers and policy-makers, the key industry players, patient groups, and the population at large. Integration efforts must adapt to the distribution of power. Since this may vary from country to country and region to region, integration strategies and recommendations will also have to vary to some degree. But even if they have to vary to some extent they also tend to have
a content that has a general tendency. Thus, we may talk of recommendations that tend to pull in a technical and industrial direction and recommendations with a more humanistic and artistic orientation. The former approach is characterized by logistical, either managed or negotiated, programming. In other words, it tackles integration in an “external” way, often from above. By contrast a humanistic perspective includes elements of mobilization (empowering), decentralization and mutual adaption and communication at the operational level (Glouberman & Mintzberg, 1997, pp. 2–8). Consequently an artistic approach recognizes the potential “coming from within the system” (Dowton Consulting International, 2015)?

My normative challenge, then, is to find out whether the first or the second strategy, or some combination of the two strategies, would be the best for Austria when it comes to integration. When I try to answer this question, I must also take into consideration the existing distribution of power in Austrian health care: The “best” strategy is one that strikes a balance between what is wanted from a normative health point of view and what is “politically” possible.

1.4 Objectives & Research Question

The overall goal of this thesis is to give recommendations to coordinate services and tasks in order to overcome especially cross-organizational boundaries in Austria.

However, before being able to establish an integrated care scheme it is necessary to identify its underlying factors. Therefore, the following work should provide a profound understanding of healthcare systems, the changes they have undergone, and what they are suffering from. Even though many scholars have already discussed these issues, I take the view that this information is essential for the elaboration of recommendations. When treating patients with complex, chronic diseases it is a similar situation. Before health professionals are able to treat a patient appropriately, they have to know something about his/her individual background. Only then is it possible to get a clear picture of the patient’s disease and situation and an idea of how to treat him or her in an optimal way. In other words, it does not make sense to treat the symptoms without having analyzed the roots of the problem. My first task then, is to provide an understanding of the integration problems, or bottlenecks, of the current health care system.

In addition to the identification of the “patient” (the healthcare system) and the determination of the “disease” of this thesis (the fragmentation of services), an important aim is to understand integrated care (the recommended “therapy”). As shown above, the main problems of integrated care are the various definitions and the diverse views of integrated care, hence this thesis aims
to discuss various meanings of the term, to give an overview of the taxonomy of integration and to summarize what the existing techniques of integrated care are.

The different sectors within a healthcare system are not single fragments but one inter-sectoral/interdisciplinary interdependent unity. It is therefore important to strengthen cooperation and coordination within, but also between health (care) providers. Still, services provided at different stages of the care process are often based on diverse aspects, especially diagnoses and degree of health/disability. This thesis will therefore elaborate on strategies to overcome the supply deficit at the interfaces by comparing technical and humanistic integration approaches. The thesis will explain the two perspectives based on the pathway approach, Glouberman and Mintzberg’s as well as Porter and Lee’s integration strategies.

Consequently my final objective is to give recommendations for the Austrian environment in order to overcome possible implementation barriers. That being said, the following research questions arise:

1. Why has integration become such an important topic in health care and which tools are used to achieve it?
2. What could integrated care policy recommendations for Austria look like, aiming at connecting care paths that also cut across institutional boundaries, and which are politically feasible?

### 1.5 Methodology & Structure

This master thesis is empirically based on a qualitative document analysis. Since the reality I am to try to describe and characterize is very complex, to a large extent cross-national and also in flux, I will by and large base my analyses on secondary sources – that is, studies of the reality I am to study (Mayring, 2008, pp. 40–64). My main strategy has been to use what is generally considered the most representative databases for the literature that is relevant for me. Thus, I have carried out research in databases such as Emerald, JSTOR, PubMed, Chochrane Library, PDQ-Evidence, McMaster Health Forum, Google Scholar and the International Journal of Integrated Care. Especially the latter one, a peer-reviewed scientific journal that continuously issues original articles in the field of integrated care, and which is considered to be the primary journal for integration research, was of crucial importance for my literature search. I have also, but less systematically so, used other sources, books, articles in “other” journals and, not least, (other) online literature.
The thesis is divided into five parts, Introduction, Background, Integrated Care, Integration Strategies and Developing Policy Recommendations. This complex topic is therefore presented clearly and comprehensibly and shows the connection between the historical development of the healthcare system and the importance of integrated care that prioritizes patients’ needs. The theoretical background of integration will allow conclusions as to how to formulate and implement “integrated care” recommendations.

In the first part (Introduction) I already elaborated the challenges of integration which were created as a function of changes to the healthcare sector, both on the supply and the need/demand side. In the second part (Healthcare System) I focus on the healthcare system. Thus, in this section, I introduce the «patient» of the thesis: the healthcare system. After an examination of the healthcare system, the «patient» is «diagnosed» as suffering from a particular condition that I call fragmentation.

In the third part (Integrated Care) I discuss possible solutions to, or «treatment» of, the problems mentioned in the previous section: patient-centered integrated care. I will explain the difference between technical and humanistic approaches, give an overview of the trends of integrated care, conceptualize integration by discussing its different degrees (linkage/coordination/full integration), configuration (horizontal/vertical), types (systemic/organizational/professional/clinical/functional/normative) and techniques (funding/administrative/informational/organizational/health delivery/clinical/normative).

In part four (Integration Strategies) I will use the pathway approach, Glouberman and Mintzberg’s as well as Porter and Lee’s integration strategies as examples in order to show how different integrated care can be tackled. The way in which it is approached depends on whether the initiators favor a technical, a humanistic or a mixed method. By doing this I want to find out the differences and which tools can be adapted to the Austrian environment.

Consequently, the chapters “Background”, “Integrated Care” and “Integration Strategies” of the thesis are of descriptive, theoretical and analytical nature. Moreover, each of these three sections partially answers the first research question (Why has integration become such an important topic and which techniques are used to achieve it?).

Part five (Developing Policy Recommendations) gives answer to the second research question (What could integrated care recommendations for Austria aiming at connecting pathways that cut across institutional boundaries look like?). In this chapter I first explain the Austrian
healthcare system, its power distribution and I identify the barriers. With the help of three contact persons from Austria it was possible to identify best-practice projects. Mr. Christoph Dachs is a physician and is cofounder of the “Gesundheitsnetzwerk Tennengau”, an integrated care project in Austria. Mrs. Sabine Weißenhofer works for the “Gesundheit Österreich GmbH” and is primarily in charge of integrated care programs. Mrs. Viktoria Stein is the Senior Fellow Integrated Care at the International Foundation for Integrated Care. One of the contact persons, Mrs. Weißenhofer, was available for an interview. I summarized her statements and included them in the thesis. Then, I analyzed strategic and operational best-practice projects in Austria according to a self-established framework based on the findings of the theoretical chapters (Background and Integrated Care). The table includes the categories (1) view on health, (2) way of coordination, (3) degree, (4) configuration, (5) type and (6) technologies. I determined the focus of the various programs with the support of the framework. The main elements of this chapter is to conclude if Austria rather favors a humanistic or a technical way of integration. Based on the acquired knowledge of the previous chapters and the Austrian situation, strategic recommendations were developed. Consequently, the last chapter includes analytical, strategic as well as normative elements.

In the “Summary” I conclude the thesis by showing how my main findings and recommendations give answers to my research questions.

Nevertheless, some limitations can be stated. First of all, due to the variety of literature, it was not possible to consider reviewing all available studies. Moreover, especially when it comes to chapter 5 “Developing Policy Recommendations”, it can be observed that not all existing Austrian integrated care projects have been taken into account, but solely best-practice examples, due to lack of time. In addition to that, the projects have been assessed by myself. However, it is difficult to clearly categorize integrated care initiatives, because the boarders between the various types and techniques are quite vague. Hence, there is a chance that another person would assess it in a slightly different way. Moreover, based on the project descriptions, I was able to determine if the way integration is managed in each project is rather humanistic or technical. However, I could not determine if the health professionals of the various projects are working in a more humanistic or technical oriented way with their patients. In other words, the project analysis is limited, because I don’t have data about the physicians’ working habits. Do they try to empower the patient and focus on a patient’s individual life style factors, or do they only look at the disease?
2 Background

“Of all the forms of inequality, injustice in health care is the most shocking and inhumane.”

Martin Luther King, Jr.

Even though technology is getting better and better health outcomes are still less than good (enough). Moreover, between as well as within countries health inequities are unacceptably high. This is an issue every country is facing. The failure of healthcare systems contributes much to the existing general economic disparities. The current system is unable to provide sufficient information, medication and treatments to all those who are in need at the right time, at an acceptable cost, in the right amount and on a reliable basis. Hence, we have to improve the healthcare system (WHO, 2007, p. 1).

But who is this patient named “healthcare system” and what exactly is this disease, called “fragmentation”? Which negative effects does fragmentation have on the healthcare system? In the introduction part, I summarized difficulties and changes of the healthcare system. In this chapter, I will give an overview of the interrelated elements that together constitute healthcare systems. I will also present the phenomenon of fragmentation in more detail.

2.1 Healthcare Systems

Before elaborating on healthcare systems (also called health care systems or health systems) it is important to understand the terms “health”, “healthcare” and “systems”.

2.1.1 Health

In general, health systems and policies try to sustain and increase populations’ health status. This thesis is about improving a part of the health system by improving the delivery process of health services that cut organizational borders. Hence, it also contributes to people’s health. However, defining health is not easy and many scholars have been discussing extensively how it can be done without coming to an answer that “all” can agree on. There are many perspectives and approaches on how to define health. Different professions in different health settings have various ideas of health. Nevertheless, most of the definitions share two aspects. First, health is a state either of an entire community or of an individual. Second, health status is influenced by numerous factors. Understandings of health can range from the very broad to the very narrow (Green, 2007, p. 8; Kronenfeld, 2002, p. 22).
Probably the most traditional definition labels health as the absence of disease and ailment. In other words, under this assumption health is determined by the functionality of the organs of the body. The ICD10 can be seen as a guideline for what is regarded as deviation from a person’s ordinary health status (Green, 2007, p. 8). This can is a “negative” explanation, because it does not actually elucidate what health is, but solely what it is not, namely illness.

Focusing on the emergence and development of diseases is called pathogenesis. This point of view is reasonable to some extent, because a doctor’s purpose, at least in acute care, is to treat illnesses or prevent people from dying. This approach could also be justified with Karl Popper’s critical rationalism. He was a famous Austrian-British philosopher of the 20th century. In his book “The Open Society and Its Enemies” he proposes a maxim of “minimizing misery” rather than one of “maximizing happiness”. One of his arguments is that eliminating suffering is more important and urgent than increasing happiness. Especially from a moral perspective, someone who feels pain is in higher need of help than someone who is fine anyway. Moreover, he argues that happiness has much more to do with an individual perception. Consequently, he suggests that reform work should always start out by identifying problems. Furthermore, he claims “that the reduction of avoidable misery belongs to the agenda of public policy [...] while the maximization of one’s happiness should be left to one’s private endeavour” (Popper, Ryan, & Gombrich, 2013, p. 501). Instead of following an ideal, holistic view of the “good” society, it is essential to eliminate existing complications. According to Popper it would otherwise lead us to dictatorship and totalitarianism. Therefore, the first approach, thinking organically or technically about a patient’s pathology, seems to be comprehensible in the case of medical doctors (Popper et al., 2013, Chapter 9, 24, 25).

Probably this is also the reason why this viewpoint has been espoused so widely. Nevertheless, critics complain about the narrow focus on biological health, without considering a person’s background and/or health behavior. Therefore, the WHO, tried to widen the conception of health (Kronenfeld, 2002, p. 21). “[O]ver the last 40 years many nations have gradually broadened their health policy focus to be more in line with the expanded definition” (Kronenfeld, 2002, p. 22)

The WHO constitution (1946) defines health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (WHO, 1946). Thus the WHO added nonphysical elements that are important for quality of life to the traditional physical health approach (Raithel, Dollinger, & Hörmann, 2009, p. 233). Instead of functional
limitations (technical health definition) this one is focused on people’s ability to perform and participate in daily life (Mooney, 2003, p. 18f).

The WHO definition is largely criticized for its idealistic and subjective understanding of health (Raithel et al., 2009, p. 233). It is said to be utopian, because it is quite unlikely that a person continuously feels entirely comfortable from a social, mental and physical perspective. Individuals’ definitions of well-being can differ quite a lot because it depends on what a person needs and values. For one person an injury in the leg might not be that tragic, however, for another the full physical capacity is necessary to experience quality of life. The inability to walk and run may also cause mental issues for those who regard physical activity as essential for well-being. Furthermore, a person can feel entirely well, even though he/she is suffering from a severe, not yet diagnosed disease. This explains why the WHO definition is considered as being subjective (OÖ Gebietskrankenkasse, 2012, p. 6f).

Another problem that automatically arises with subjectivity is the inability to measure health. Hence, it is important to have a concrete idea of the term health, because we need to determine whether our interventions and procedures are effective or not. In addition to that, most physicians are not asking about a patient’s health status, but rather about a person’s illness. Nevertheless, the broader perspective is important, because there are still unanswered questions. What about people who want to be seen as whole persons, not just as carriers of diseases? What about people’s social network and physical strength that are definitely framing a person’s health and recovery? What about chronically ill people who need continuous care not only medically, but also socially and/or mentally (Mooney, 2003, p. 18)?

The broader holistic perspective on health “sees the health of an individual or community as being concerned not only with physical (and mental) status, but also with social and economic relationships” (Green, 2007, p. 8). Therefore, it is a common view in primary health care that health goes beyond organic reasoning. It also has to do with empowering communities as well as individuals as regards health and reducing social inequities in health (Green, 2007, p. 8). Aaron Antonovsky (1923-1994), an American-Israeli sociologist introduced the concept of solutogenesis in his book “Health, Stress and Coping” (1979). The word derives from the Latin word “salus” (health) and the Greek “genesis” (origin) which can be translated as health emergence. In the year 1970 he studied the health status of women who were detained in concentration camps. He observed that around 29% of the women were in surprisingly good overall health. Hence, for him the question arose how people can stay or get healthy again despite being exposed to enormous stress (Bengel, Strittmatter, & Willmann, 2009, p. 20f, 24).
In other words, salutogenesis is a concept that focuses on factors that promote people’s well-being, rather than on those that cause illnesses. The core of the answer lies in his so called “sense of coherence”. Different people react differently in the same situations, dependent on their basic attitude. Hence, it can be argued that salutogenesis follows the perception that medicine has also a pedagogical and consequently also a dialogical component. Like Albert Schweitzer, a French physician and philosopher, once said: “Each patient carries his own doctor inside him. They come to us [doctors] not knowing that truth. We are at our best when we give the doctor who resides within each patient a chance to go to work” (Cousins, 1979, p. 69). In other words, it is also important to have a health system that make efforts to mobilize people.

Nevertheless, it has to be added that Antonovsky does not refer to health as an absolute condition. In contrast, he claims that people can be more or less healthy and more or less ill. Summarizing, we may say that salutogenesis is not the opposite of pathogenesis, but is complementing it (Tameling, 2014, p. 51ff).

In the following Figure 3, the main information about holistic and the technical health approaches is summarized.

**Figure 3: Different views on health**

<table>
<thead>
<tr>
<th>Holistic</th>
<th>Technical/ Biological</th>
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<tbody>
<tr>
<td>- Primary Health Care perspective</td>
<td></td>
</tr>
<tr>
<td>- Broad perspective</td>
<td></td>
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<tr>
<td>- Salutogenesis</td>
<td></td>
</tr>
<tr>
<td>- Active</td>
<td></td>
</tr>
<tr>
<td>- Ability to function in daily life</td>
<td></td>
</tr>
<tr>
<td>- Factors that influence health (behaviour, economic &amp; social status, mental capacities)</td>
<td></td>
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<tr>
<td>- Medical/reductionist perspective</td>
<td></td>
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<tr>
<td>- Narrow perspective</td>
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<tr>
<td>- Pathogenesis</td>
<td></td>
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<tr>
<td>- Reactive</td>
<td></td>
</tr>
<tr>
<td>- Dysfunction of organs</td>
<td></td>
</tr>
<tr>
<td>- Disease/diagnostic related</td>
<td></td>
</tr>
</tbody>
</table>

Source: author’s own representation

For this thesis, it is important to include not just a biological, but also a holistic approach. Therefore, I will refer to health as a dynamic process that includes various stages on a continuum from total disability or death, until optimal health, including social, mental and physical well-being. In other words, a person can be conceived as being neither fully healthy nor fully ill. Nevertheless, it has to be mentioned that these are the two extremes and it is not the objective of health services to achieve “optimal health”. Rather it is of importance to manage the shift between the technical “treatment/disease model” that is prevalent in acute healthcare
services (cure) and the holistic “salutogenic/mobilization/wellness model” that is needed not just for public health issues, but also for social and psychological care.

Therefore, moving more towards the solutogenic model is almost necessary when treating people with severe chronic illnesses. This model stands for optimal health. When the question of functionality arises both the objective and the subjective view become relevant. The latter perception relates to the patient’s personal perception of quality of life, whereas the objective interpretation describes the prevalence/absence of diseases and a person’s ability to handle the activities of daily life. The health-illness continuum, depicted in Figure 4, refers to this approach (Hunt, 2009, p. 31f).

**Figure 4: The health-illness continuum**

![Image of the health-illness continuum]

*Source: adapted from Hunt (2009, p. 32)*

A number of factors influence a person’s health-illness history (cf. Figure 5). The chain of factors that shape a persons’ life from a health point of view can be considered from the narrow/technical perspective that simply looks at the immediate malfunctioning of organs (including the mind), the immediate factors that have given rise to them and the possible techniques for curing the diseased organs (Treatment Model). The broader perspective implies the necessity to look beyond the immediate causes of the disease; that is, to go further back in the causal chain, to factors of an ecological, an ethical, an economic, a social and an individual nature, and to treat the patient by also intervening into these factors (Raithel et al., 2009, p. 234).

**Figure 5: Chain of ill-Health**

![Image of the chain of ill-health]

*Source: author’s own representation*
In conclusion, we may say that there are medical cases in which it is important to think beyond the technical understanding of health. In such cases, it is important to consider the question of a person’s background as well. But the carer needs to develop a trusting relationship with the patient or client if he or she is to have a chance to strengthen a patients’ ability to cope and, even more, to prosper. A carer can only gain the necessary knowledge to do so if he or she takes an active interest in the person (patient) in question and his or her “entire” situation. If he or she succeeds in doing so, he or she can slowly shift from using the restricted treatment model to the open salutogenic model.

We may also put it this way: On the one hand, depending on the health professional’s responsibilities (prevent diseases, promote health, cure, care, prevent from dying, perform surgery) it is important to look at health from a more holistic and more narrative perspective. On the other hand, if we want to improve health delivery by integrating organizations, it is important not solely to refer to diseases and physical needs, but also to a person’s qualitative needs (continuity, social care). Hence, it becomes a challenge to make clearer which profession is responsible for which care model (treatment vs. salutogenesis) and how the various responsibilities can be connected (Hunt, 2009, p. 31f).

### 2.1.2 Healthcare

Healthcare is the provision of preventative or medical interventions in order to improve patients’ overall health (Business Dictionary, n.d./a).

The times in which only one physician treated a person over the course of their entire lifespan are over. Changes on the demand side (ageing, multi-morbidities, raised expectations, etc.) as well as alterations on the supply side (technological advancement, complicated diagnostic and treatment procedures, specialization, etc.) of healthcare have transformed the setting in which services are delivered (Hagenbichler, 2005, p. 16). Modern healthcare is delivered by a variety of professionals that are working (at least in an ideal case) together interdisciplinarily (Zweigenthal et al., 2009, p. 8).

The kind of healthcare that is delivered can be differentiated depending on the intensity and the time of intervention. Hence, the various healthcare services can be delivered in either a public health, primary care, secondary care, tertiary care or a long-term care setting. In the following I will refer to them as the five columns of healthcare (Noack, 2006).
Public Health includes disease prevention and health promotion initiatives that aim at improving communities’, or entire populations’ mental, social and physical well-being. The focus lies on decreasing incidents of premature deaths, diseases and disabilities (Kirch, 2008, p. 1172). This approach is clearly connected with the holistic WHO definition of health. At the center of public health thinking is the development of health, also called salutogenesis (Egger & Razum, 2014, p. 1).

- **Health Promotion** is about increasing health resources by adapting people’s behavior and environments. Typical health promotion activities are interventions to improve the quality of food and water, the availability of sanitary facilities, as well as the regulation of medications (The Free Dictionary, n.d./a).

- **Disease Prevention** is directed towards the reduction of risk factors related to well-defined diseases. Moreover, it primarily comprises services of health education, preventive medical check-ups and vaccinations (The Free Dictionary, n.d./a).

Unlike in public health the medical healthcare approach, usually divided into primary, secondary and tertiary care, focuses on the emergence of diseases (pathogenesis). Moreover, the patient-provider relationship is at the center of the approach (Egger & Razum, 2014, p. 1).

- Before focusing on Primary Care (PC), it is important to differentiate the term from Primary Health Care (PHC). These two expressions are often confused or used interchangeably. In short, PC refers to health and medical services provided in first contact practices like general practices and community clinics, whereas PHC follows a broader understanding of care. It is one of the core values of the WHO “which describes an approach to health policy and service provision that includes both services delivered to individuals (primary care services) and population-level ‘public health-type’ functions.” (Muldoon, Hogg, & Levitt, 2006, p. 409).

PHC provides services that are essential for healthy living to every person and to entire populations irrespective of their health and income level. In addition to this PHC includes the following eight elements presented in Table 1. As we can see that table, PC is part of the broader PHC concept. The target group of the first three types of measures is entire populations. Measures four, five and six can be provided both in a public health and in a formal healthcare setting. This table, then, shows that the work of PC providers also includes primary and secondary prevention elements. In other words, it is important to detect and treat
diseases already at an early stage (Kirch, 2008, p. 1143). The last two elements are part of PC services.

Table 1: 8 elements of PHC

<table>
<thead>
<tr>
<th></th>
<th>Bring into place education, in order to enhance detection, prevention and combat of diseases which are prevalent locally.</th>
<th>Intersectoral coordination (basic/primary needs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Secure the food supply and its security</td>
<td>Preventive medicine either provided in public health or primary care setting</td>
</tr>
<tr>
<td>3</td>
<td>Provide safe drinking water and have sanitary facilities</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Develop mother-and-child healthcare programs, including family planning</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Have immunization programs against the prevailing infectious diseases</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Ensure prevention and control of locally endemic diseases</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Establish appropriate treatment for common communicable and non-communicable diseases</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Ensure the provision of essential drugs</td>
<td>Curative medicine at primary care level.</td>
</tr>
</tbody>
</table>

Source: (Basavanthappa, 2013, p. 197; Bhardwaj, 2012, p. 137; Hampel, 2003, p. 10)

This shows that in contrast to PHC PC is offering its services only to individuals that are demanding it. Promotion as well as prevention has just a secondary role. Restoring health and curing diseases, as well as referring patients to specialists, are at the center of attention in PC (Barnes et al., 1995, p. 8f).

PC providers perform several tasks:

“(a) medical diagnosis and treatment, (b) psychological diagnosis and treatment, (c) personal support of patients of all backgrounds in all stages of illness, (d) communication of information about prevention, diagnosis, treatment, and prognosis, and (e) prevention and care of chronic disease and disability though risk assessment, health education, early disease detection, preventive treatment, and behavioral change.“ (Goroll & Mulley, 2011)

Its core values are people-centeredness, integration, comprehensiveness and continuity. Moreover, it focuses on those illnesses and chronic diseases that are treatable either at home or on a periodic outpatient basis. Based on this understanding, PC is a specialty focused on general medicine and the treatment of (outpatient) diseases. Most typical PC specialties include “general internal medicine, combined medicine [.] [...] pediatrics, general pediatrics, and family practice” (Goroll & Mulley, 2011).
Countries with an advanced PC often include more than solely general practitioners. They can include multi-professional teams of nurses, psychologists, social workers, psychotherapists, speech therapists, midwives, occupational/ergo therapists, nutritionists, pharmacists and physiotherapists (Czypionka & Ulinski, 2014, p. 7).

Due to the fact that it is often the first contact point with the health care system, PC is easy to access (low-threshold) (Hagenbichler, 2005, p. 30). In case the patient’s condition requires further consultation, or more specialized knowledge, PC providers refer the patient to other health care providers. To fulfill this role PC providers should coordinate with specialized hospitals and diagnostic services on the one hand, and on the other hand with NGOs (e.g. alcoholics anonymous) and specialized prevention services (e.g. cancer screenings) (Czypionka & Ulinski, 2014, p. 3; Timby, 2009, p. 53f). Concluding, it can be said that PC is a community-based service considered to be rather holistic. Hence, the “wellness model” is of relevance for PC (Goroll & Mulley, 2011).

- The next level is **secondary care**, to which patients’ usually get referred by a PC provider. Without a referral secondary care can, in many countries, just be entered in case of emergency (Timby, 2009, p. 53f). Healthcare at this stage is already more specialized than at primary level and is provided by hospitals, clinics and rescue services (Kinsella & Kinsella, 2006, p. 68). Typical secondary care specializations are: surgery, dermatology, pediatrics, psychiatry, obstetrics, etc. Due to the strong specialization in secondary care, coordination between services is especially important at this stage (Oliver-Baxter, Brown, & Bywood, 2013, p. 16).

- Specialty hospitals, which provide services that are highly specialized and often involve the use of complicated technologies, are called **tertiary care** services (Timby, 2009, p. 53f). These types of care usually take place in an inpatient setting. In order to enter tertiary care a referral from either primary or secondary care is (normally) required. This most specialized field of care includes services like neurosurgery, plastic surgery, palliative medicine and cardiac surgery.

After receiving treatment in primary, secondary and tertiary care organizations patients’ can go on to **restorative and continuing care**, the last stage of healthcare delivery. Due to demand for increased efficiency, patients are often released from hospitals after short time periods. Therefore, the extent of this care has increased. The care provided here is focused on nursing, and refers to the totality of care for elderly, long-term patients or for disabled people (Noack, 2006, p. 2).
• **Restorative care** is delivered in an interdisciplinary team of health professionals and refers to typical post-care and rehabilitation. Here patients are enabled to handle daily tasks. Characteristic examples of this care are home care, extended care and rehabilitation. (Dunbrack, 2003, p. 1; Potter, Griffin Perry, Stockert, & Hall, 2016, p. 20f; The Free Dictionary, n.d./b).

• **Continuing care** is focused on the part of the population that is terminally ill or disabled and will need support over a continuing period of time. In order to meet the requirements a diversity of personal, social and health services have to be provided. Moreover, the importance of this type of care will continuously rise due to the demographic and epidemiological changes taking place now. It can be provided at home (home care), within institutions (hospices, nursing homes or centers, retirement homes) or in communities (senior centers, adult day care centers) (Potter et al., 2016, p. 21f).

Summarizing this section, «healthcare» can be said to comprise five main blocks. Health services are provided in public health, medical care (primary care, secondary care, tertiary care) and long-term care settings (Figure 6).

![Figure 6: Five blocks of healthcare](source: author’s own representation)

2.1.3 **Systems**

Next, the term “system” has to be examined. In general, systems consist of various elements that are interdependent and interrelated. Depending on its structure, the parts can influence each
other to different extents, and the whole the fragments. The cooperation between the individual fragments of a system is necessary if it is to achieve its aim (Business Dictionary, n.d./b). Even though individual parts of systems can be identified and examined, the real power of systems does not lie in the sum of its parts, but in the way the several fragments are connected with each other and create a whole. A whole, which has its own integrity, or in another words is autopoietic (Griffin, Black Nembhard, & DeFlitch Christopher, 2016, p. 26).

Maturana and Varela, two Chilean biologists, adapted the technical word cybernetic, into a context related to living organisms. Around the 1970s, they created the term “autopoiesis”. The word is Greek and can be translated into “self-creation”. The authors state that systems can be labeled as “living organisms” as soon as they are able to organize and maintain themselves (Maturana & Varela, 2015, p. 35). In contrast to theoretical static and rigid systems, dynamic ones carry the program to adapt and change within themselves. Autopoietic, dynamic systems are a whole of various sub-systems that are interrelated with each other. These living organisms/individuals are structured based on internal as well as external communication and information exchange (Arnold, 2011, p. 1).

Prerequisite for this is that systems are organized autonomously on the one hand and are structurally coupled to the environment on the other. Consequently, in order to manage self-preservation, there has to be a “give-and-take” between systems/organizations and their environment (Maturana & Varela, 2015, p. 85ff). Nevertheless, it has to be added that the surrounding of a system does not have direct power to force a system to change, but it can give incentives for alteration. Consequently, the external environment of a system can only disturb the internal process of systems by giving stimulus. This means that the milieu triggers changes in the structure of autopoietic entities. In another step the change of an autopoietic systems may initiate alterations somewhere else in the environment (Maturana & Varela, 2015, p. 85). Even though an organization can live based on its own laws (autonomous) autopoietic systems are not able to sustain themselves without any kind of external support. Together with their environment autopoietic systems are in need of working together (symbiosis) in order to secure survival (Maturana & Varela, 2015, p. 99). Consequently, the key message here is that to look at relations and relationships should be of highest interest. Since its emergence autopoise has become an important element in systems thinking.

There are numerous types of systems that are usually composed of smaller interdependent and interrelated systems. Let us take the human body as an example. It is a system that consists of several functional subsystems like neurological, musculoskeletal, cardiovascular, hormonal and
respiratory ones. Even though all of them are self-contained, the bigger system, the entire body, only works if these subsystems work in perfect coordination. The interplay of the subsystems is a precondition for the functioning of the whole system. In addition to that, systems react to internal and external feedback and are susceptible to changes in the environment. In other words, “the interconnectivity of the various subsystems and its extension as a whole into the environment form the building blocks of larger systems such as family, community and nations” (Johnson & Stoskopf, 2010, p. 3). Therefore, it is not far-fetched to state that people (natural/biological systems) are on the one hand participants in, and on the other initiators of larger community systems (human-created systems).

In addition to these characteristics, especially human-established systems usually possess the following features:

- Human-established systems tend to generalize reality.
- Human-established systems share the same basic components, like inputs (physical-, economical- & human resources, etc.), outputs (services, products). When processing them some alteration can be accomplished.
- The organization of human-established systems is based on the connection of their various processes and parts.
- These parts and processes are linked to each other on a structural and a functional basis (Johnson & Stoskopf, 2010, p. 4).

### 2.1.4 Healthcare Systems

After having identified the terms “health”, “healthcare” and “systems” we can address our last term here, “healthcare systems”.

Organizations definitely count as the most common and best-known systems created by man. Since the first human beings, mankind has had some sort of natural instinct for mutual aid, in order to ensure safety, food and shelter and procreation. Those collaborative actions ask for at least some type of organization. The same applies to the provision of health care. Hence, “to meet the criteria of health as a state of complete physical, mental, and social well-being, individuals, communities, organizations, and nation states have worked together to form elaborate and diverse health systems throughout the world” (Johnson & Stoskopf, 2010, p. 4).

One health system can primarily be differentiated from another by looking at the level of input with regard to material, financial and human resources. Patients count as “inputs” and are at the
core of health systems: We develop health systems because people fall ill, are injured and die “prematurely.” As already mentioned in the introduction, the complexity of health systems per se is one cause that contributed to its fiscal, access, quality and safety problems (Griffin et al., 2016, p. 25).

Building Blocks of HC-Systems

Healthcare systems differ from country to country, from region to region, etc., due to differing rules, laws, cultures and economic status. Yet they also have key similarities, which means that they consist of the same type of basic building blocks.

In short, a health system consists of all entities, groups, individuals and activities whose primary purpose is to promote, regain and preserve health. These entities are either governmental or non-governmental. They include public health agencies and primary, secondary and tertiary care entities.

To be more precise, the WHO summarizes that health systems should deliver “quality services to all people, when and where they need them. The exact configuration of services varies from country to country” (WHO, n.d). Even though healthcare systems are highly complex, all health systems (should) share six characteristics (service delivery; health workforce; health information; medical devices, technologies and vaccines; health financing; leadership and governance). By understanding the interrelated building blocks, it gets easier to improve, adopt and take decisions that best contribute to the strengthening of health systems. Basically, the framework of the six functions was established by the WHO and comprises the goals of health systems. Moreover, the six elements are commonly used in national as well as international contexts and are essential for the functioning of healthcare systems (Johnson & Stoskopf, 2010, p. 6f). If the six building blocks are implemented on an optimal level, they will provide access, coverage, quality and safety (Figure 8).

Each of the “blocks” is related to some anticipated features that will be summarized in the following:

- Service provision is about organization and management of inputs and services. I am aware that both the word “service provision” as well as the following explanation of this has a technical tone. It obviously derives mostly from the more mechanical thinking typical for technicians. Using more active words like “to care” or “treating people” a more humanistic point of view could have been represented. Nevertheless, “service delivery” is the standard
term used and its explanation helps to get a first impression of how services emerge. Like depicted in Figure 7 the “provision function refers to the combination of inputs [human resources, physical capital, and consumables] into a production process that takes place in a particular organizational or home setting, and that leads to the delivery of a series of interventions” (Adams et al., 2002, p. 1).

Figure 7: Health service provision

These services can be seen as outputs and are provided not just through personal, but also through non-personal interventions. The former one is provided individually on a curative and/or caring basis and can result in positive externalities. Personal interventions are those I will especially focus on in this thesis. The latter type of services and interventions is provided to broad population groups via mass media, education or improvement of sanitation and hygiene, to name a couple of them. In that case, there is no direct contact with individual persons. However, there is a significant tendency towards positive externalities (Adams et al., 2002, p. 3; Johnson & Stoskopf, 2010, p. 7). Health care provision usually gets measured based on these three “levels”: the inputs, the processes and organizational structure, as well as the quality and the quantity of non/personal health services (Adams et al., 2002, p. 1). Examples of activities in this building “block” are the reduction of barriers to healthcare in order to increase demand, creation of integrated-service-packages, establishing networks between several types and levels of healthcare providers and the improvement of management, quality, infrastructure as well as logistic systems (WHO, 2007, p. 14f).

- Individuals who are involved in tasks, with the objective of providing protection and improving health are healthcare professionals (health workforce). There are substantial differences in gender-composition, abilities, knowledge and educational level of health workers between countries. (WHO, 2007, p. 16f).
• **Health information** is about gathering and structuring data on health and health systems. Therefore, it is also an essential aspect for well-functioning governance and leadership. Health information is concerned with three fields: (1) health condition, (2) social determinants of health and (3) health systems performance (WHO, 2007, p. 18f).

• The degree of fairness, quality, safety, efficiency and effectiveness can vary in a health system, depending on its access to vital **medical devices, technologies and vaccines** (WHO, 2007, p. 20).

• **Health financing** can vary between systems with respect to their budgets, priority settings, transparency, and financing mechanisms (e.g.: out of pocket payments, pooled pre-payment) (WHO, 2007, p. 21f).

• **Leadership and Governance** (also labeled stewardship) are seen as the most complicated and decisive building “blocks.” Stewardship includes elements like organization, monitoring and accountability. Governments are responsible for decision-making and relationship building with policy fields where actions can arise which influence health. Stewardship is in need of technical as well as political action in order to function (data generation, policy strategies, inter-sectorial networking, design systems and regulations, etc.). This again highlights the interrelations and interdependency between the various building blocks (WHO, 2007, p. 23f).

The six “blocks” have different responsibilities. The blocks leadership and governance as well as health information usually provide the fundamental regulations and strategies. Health workforce and financing can be considered as the key inputs to healthcare systems. The provision of services, the delivery of medical products and technologies contribute directly to the outputs (dissemination and availability of care.) (WHO, 2010, p. vii).

Finally, there is one last group of actors, the patient, who is at the center of the delivery of health. Hence, the six mentioned building “blocks” are (or at least should be) located around people (Figure 8).
But why are people at the core of the system? In short, people are the most important drivers of health systems, because they are the reason we have health systems. (1) People get ill, get injured, have disabilities and as they grow older get more vulnerable. In other words, people are in need of care. Based on this fact it can be said that (2) patients have concrete expectations of health services. (3) The population have to pay taxes/social contributions, hence, they are funding a large proportion of the system (Gilson, 2012, p. 21). (4) The human right to health includes affordable and qualitative access to health care at the right time (WHO Media Centre, 2015). (5) Finally, consumers can be considered as co-producers since they can influence their health status depending on their lifestyle and health-seeking behaviors (Gilson, 2012, p. 21).

When looking at Table 2 one can see that the topic of this thesis best fits in the section “service delivery”. Common interventions of this building block aim at providing continuity of care, integrated services and community involvement.
Table 2: typical system-level interventions targeting individual or multiple building blocks

<table>
<thead>
<tr>
<th>Building block</th>
<th>Common types of interventions</th>
</tr>
</thead>
</table>
| Governance                     | • Decentralization  
• Civil society participation  
• Licensure, accreditation, registration |
| Financing                       | • User fees  
• Conditional cash transfer (demand side)  
• Pay-for performance (supply side)  
• Health insurance  
• Provider financing modalities  
• Sector Wide Approaches (SWAs) and basket funding |
| Human Resources                 | • Integrated Training  
• Quality improvement, performance management  
• Incentives for retention or remote area deployment |
| Information                     | • Shifting to electronic (versus manual) medical records  
• Integrated data systems & enterprise architecture for HIS design  
• Coordination of national household surveys (e.g. timing of data collected) |
| Medical products, vaccines and technologies | • New approaches to pharmacovigilance  
• Supply chain management  
• Integrated delivery of products and interventions |
| Service delivery                | • Approaches to ensure continuity of care  
• Integration of services versus centrally managed programs  
• Community outreach versus fixed clinics |
| Multiple building blocks        | • Health sector reforms  
• District health system strengthening |

Source: (Savigny & Adam, 2009, p. 46)

As I have mentioned before a system consists of sub-systems that again can be composed of smaller systems and so on. The healthcare system comprises the six building blocks. Within the “service delivery” block is a hospital system, within this a research system. All these systems and sub-systems are interrelated: a change in one element of the system can have an impact on the other health system building blocks and the system as a whole, and as that happens the system as a whole “strikes” back and changes its subsystems (Savigny & Adam, 2009, p. 32). Thus, each of the six health system parts is in a dynamic relationship with multiple actors at various levels and with the system as a whole. Due to this it is important to also include the other aspects of the healthcare system building blocks, and see them as a whole when creating policy recommendations that strengthen inter-organizational integrated care (WHO, 2007, p. 4).

However, systems as we describe them are only simplifications of the often highly complex reality. Therefore, when someone acts, like authorities, the results are often at least partly different from what was intended. This is why the conservative British politician and philosopher Edmund Burke warned against acting radically – like the French opposition did in 1789: Radical action demands an understanding of society that no one has or can hope to get. So when today we try to bring into place a better way of integrating fragmented health care services we must expect to have some “Burkean” experiences (Burke, 1790). Thus, the lack of a full understanding of the interrelatedness between the six building blocks and about the extent
to which other sectors/systems (infrastructure, politics, food) influence the health system, is not taken fully into account in our model. Moreover, people’s individual behaviors with respect to health promotion and protection as well as health seeking, is not sufficiently considered. The scheme also does not address elements like social and economic inequities. On the contrary, the division of health systems “helps put boundaries around this complex construct and permits the identification of indicators and measurement strategies for monitoring progress” (WHO, 2010, p. vii).

### 2.2 Fragmentation of the Healthcare Sector

*Just as too many cooks can spoil the broth, too many decision makers can spoil health care.*

Einer Ellhauge.

In the introduction, I have referred to the changes in health care from the demand as well as from the supply side. But what exactly is fragmentation and how did the elements mentioned in the first chapter lead to fragmentation? These are the issues I shall try to clarify in the following section.

Basically, fragmentation describes a situation in which the attention of research lies on understanding in a non-systemic or reductive way. Moreover, the attention on action, which is our main concern here, lies on the functioning of parts of a system without taking into consideration how they are interrelated with the overall system (Stange, 2009, p. 101). For healthcare action, this means that the various actors are not working together but are mainly focused on their fields of expertise and their tasks. The various healthcare programs are thus narrowly aimed at specific population groups, diseases, risks, health status and/or field of expertise (Elhauge, 2010, p. 2f; Montenegro et al., 2011, p. 1f).

It is important to add that segmentation only raises concerns when the absence of shared decision-making leads to bad results. Hence, one usually does not talk about fragmentation unless it caused some sort of damage. I will therefore refer to fragmentation as “undesirable” segmentation. The term disintegration or integration refers to a continuum of more or less aligned decision-making within and between sub-systems.

Fragmentation in health occurs in different domains, namely policy, training and education, information, economic resources, and community perceptions (Gofin & Gofin, 2010, p. 126). Disintegration happens not only across sectors and entities, but also within organizations, as
between different departments in a hospital. Each actor is solely concerned with a fraction of the whole problem. Usually the measurement and discussion of overall results is disregarded (Porter & Guth, 2012, p. 173).

But when and why does fragmentation occur in general? As soon as research problems become complex, it is common to break them down into smaller and smaller problems (reductionism). That is, researchers trace problems that manifest at organ or tissue level down to their molecular and even lower levels. In many areas, this kind of specialized research has led to astonishing progress in the understanding of how biological, physiological or human-created systems work. Researchers have been able to identify both the single parts of systems and their interconnections. However, in health care “[s]pecialized information has expanded without a similar expansion in our ability to integrate, prioritize, and personalize narrowly construed information” (Stange, 2009, p. 101).

In order to find out why fragmentation takes place in healthcare we have to look at the changes of the healthcare sector. For this, I will refer to the demand and supply side drivers mentioned in the Introduction (Chapter 1.2). However, this time the emphasis will lie on the interrelation between these factors and their consequences.

During the era of physician rule (“iatrocracy”), one doctor was usually responsible for all health issues of his or her patients. Physicians during this era were autonomous and often seen as almost infallible by their patients. But in the decades after World War II, the complexity of health care increased manifold, largely due to advancements in technology and medical science. Combined with the other demand and supply side drivers this development led to “greater specialization and a ‘silo approach’ to healthcare” (Enthoven, 2009, p. 285).

Between the 1960s and 1970s, the health system was mainly comprised of general hospitals; cf. Figure 9. From the 1970s to the 1990s, the number of hospital beds was reduced significantly and the first sub-specializations emerged. From then onwards “a number of services are grouping around acute hospitals: day care facilities, ambulant clinics, health centres, nursing homes, and residencies” (Gröne & Garcia-Barbero, 2001, p. 6).
Instead of having a broad knowledge, physicians are now experts in particular fields of health, and do not always explicitly relate their knowledge and what they are doing to what other specialists are thinking and doing. They have kept their culture of individual autonomy, and therefore often think that coordination means that others should adapt to them (Enthoven, 2009, p. 285; Reid, Compton, & Grossman, 2005, p. 12). But does this also lead to negative results? Does it become an instance of fragmentation?

To answer this question we have to look more concretely on the demographic and epidemiological changes that have taken place and are taking place. Improved living conditions lead to an increase in life expectancy. In Europe, chronic diseases are the top cause of mortality. Now, we are also confronted with a higher incidence of multi-morbidity. “Over one third of the European population above the age of 15 have a chronic disease and two out of three people reaching retirement age will have at least two chronic conditions” (Spongenberg, 2014). People affected by complicated diseases are in need of the help from highly trained professionals. Moreover, they require treatment from not only one provider, but from multiple ones with different backgrounds and in various settings (Enthoven, 2009, p. 285; Stange, 2009, p. 101).

Therefore, it is necessary to combine the knowledge of various specialists, and to do so on a team basis. Nevertheless, even though the tasks of physicians have changed, their training and education remain individually based. These “solo or small single-specialty group practices” (Enthoven, 2009, p. 285) lead to a segmented health system, dominated by specialists and subspecialists (Stange, 2009).

Diverse actors that work with the same patient problem, but from another perspective or specialty, often are financially compensated for what they are doing, not e.g. according to the
outcome for the patient. Thus the mode of financing contributes to the disintegration of professionals and, more generally, of care. Fragmentation (negative effects) of services especially takes place in a remuneration system that rewards the quantity instead of the quality of the outcome (Porter & Guth, 2012, p. 173)

The result of this development is lack of communication between sectors and professions. This adversely affects the quality of care. Poorly aligned working cultures often lead to service duplication as well as to too numerous doctor visits. It may also result in waste of resources (Gofin & Gofin, 2010, p. 125). In other words, the structure of health systems, including education, organizational structure, communication culture, evaluation mechanisms and financing policies promotes segmentation. A system like this may result in both qualitatively deficient outcomes and more or less unbearable costs (Stange, 2009). Finally, it can even adversely affect the outcomes for the patient:

- Patients often have to see multiple care providers, but if the collaboration within and between health care providers is deficient, delayed health provision is the consequence (Masseria, Irwin, Thomson, Gemmill, & Mossialos, 2009, p. 2).

- People with multiple chronic conditions are especially vulnerable. Most of the current “[c]linical guidelines and disease management programs focus on single conditions, and clinical research often excludes persons with multiple chronic conditions” (Vogeli et al., 2007, p. 391). Understanding multi-chronic conditions requires a team of different health professionals who are working together. Moreover, multi-morbid people have to visit a greater range of care professionals, and do so more often than other health care demanders (Vogeli et al., 2007, p. 392). When there are too many providers who are not coordinating their services well, it makes it more difficult for the patients to find their way through the system. This, combined with the delayed health provision, leads to a decrease in the value of the care people receive.

- In fragmented systems people “experience lack of access to services, loss of continuity of care and the failure of health services to meet their needs” (Montenegro et al., 2011, p. 1). Thus, less than good integration leads to patient dissatisfaction and often also distrust of the system. This is a big problem, because a trustworthy patient-physician relationship is a precondition for patients’ adherence to instructions regarding the taking of medication and advice about change of life style (Montenegro et al., 2011, p. 1).
The development I have described and that we see a lot of in most developed countries, reflects the fact that “the delivery of care has been designed around doctors and institutions, not around the patient” (Olsen, Yong, & Saunders, 2010, p. 519). The continuing segmentation of healthcare into increasingly narrow specialties gave us health professionals with highly focused, but isolated, technical abilities. Instead of rewarding team-based practice, specialization was encouraged, both culturally and financially. The incentives for more integrated services are fewer, and often more or less missing (Olsen et al., 2010).
3 Integrated Care

“If you think about how healthcare is delivered, it’s on an ad hoc basis. Someone comes into a hospital, someone comes into a pharmacy, someone comes into a doctor’s office. But beyond those touchpoints, the patients are on their own. There’s no real continuity of care.”

Christopher A. Viehbacher – CEO, Sanofi

If we learned one thing from the previous chapter, it is that our fragmented healthcare system inhibits continuity of care; cf. the above quotation. Thus, by reducing fragmentation and strengthening coordination, to create good continuity of care, much could be attained. We know now that fragmentation can be reduced by promoting community and PC, as well as information sharing. Of special relevance are remuneration policies that incentivize knowledge sharing, teamwork, inter-organizational collaboration and integration in general. Programs doing those things are integrated care programs (Nolte et al., 2012, p. 126f; Ouwens et al., 2005, p. 142).

There is, as I see it, a difference between “integrated care” and “integration of care”. Integrated care refers to a state of affairs, and especially the perfect state – i.e. a situation where the care process flows smoothly, without any kind of “friction,” with perfect “subjective” and “objective” quality and with maximum efficiency. Thus, when we have perfectly integrated care no fragmentation exists, but perfectly integrated care is more than absence of fragmentation (something negative); it also includes the presence of the holistic-salutogenic factors (Nolte & McKee, 2008, p. 65; Ouwens et al., 2005, p. 142).

Integration of care refers to the activities undertaken to achieve integrated care. Integrated care, then, is a summary word for the means picked to reach the goal of integrated care (Kodner & Spreeuwenberg, 2002, p. 1f; Shaw et al., 2011, p. 7).

When we want to define integrated care in greater detail, it gets difficult, as the literature shows. Howarth and Haigh (2007, p. 1) say that integrated care is a quagmire of definitions. Kodner and Spreeuwenberg (2002, p. 1) state that integrated care as a concept is extremely vague: It is like a Rorschach test. Sun et al. (2014, p. 3) conducted a comprehensive literature review in 2014. They found out that the first study about integrated care was written in 1947. Until 1992, not more than about 10 articles were published each year. Especially from 1995 to 1998, there was an enormous increase in publications from 16 to 617 per year. Since then the amount of publications has been fluctuating, but there have always been over 300 publications annually.
Armitage, Suter, Oelke, and Adair (2009, p. 4) conducted a systematic review in which they identified about 175 different concepts and definitions of integrated care. Some of the narrowest definitions “referred to continuity of care within the healthcare system”. This “basis” is then expanded by several authors in different directions. Some added social services, focused on patients with complicated health issues or emphasized population based care. Due to its deviations in practice, integrated care cannot be seen as one concrete concept (Vondeling, 2004, p. 2). It is rather an umbrella term combining all programs and tools with the aim to reduce fragmentation, increase coordination as well as continuity of care, which should finally result in improved quality of care and enhanced cost-effectiveness. Table 3 provides a preliminary overview of the variety of integrated care definitions.

Table 3: Integrated Care Definitions

<table>
<thead>
<tr>
<th>Author</th>
<th>Original Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Øvretveit (1998)</td>
<td>Integrated Care</td>
<td>The methods and type of organization that will provide the most cost-effective preventative and caring services to those with the greatest health needs and that will ensure continuity of care and co-ordination between different services</td>
</tr>
<tr>
<td>Leutz 1999</td>
<td>Integrated Care</td>
<td>The search to connect the healthcare system (acute, primary medical and skilled) with other human service systems (e.g., long-term care, education and vocational and housing services) to improve outcomes (clinical, satisfaction and efficiency)</td>
</tr>
<tr>
<td>Contandriopoulos, Denis, Touati, &amp; Rodríguez, 2003, p. 8</td>
<td>Integration</td>
<td>Integration is the process that involves creating and maintaining, over time, a common structure between independent stakeholders (and organizations) for the purpose of coordinating their interdependence in order to enable them to work together on a collective project.</td>
</tr>
<tr>
<td>Nolte &amp; Pitchforth, 2014, p. 6</td>
<td>Integrated Care</td>
<td>Initiatives seeking to improve outcomes for those with (complex) chronic health problems and needs by overcoming issues of fragmentation through linkage or coordination of services of different providers along the continuum of care.</td>
</tr>
</tbody>
</table>

All of these definitions are good and useful. When looking for a definition that is rather pragmatic than idealistic, then Kodner and Spreeuwenberg’s description of integration may be of interest. Their definition is based on the statement that disjointedness in healthcare is unavoidable. They say healthcare integration can be seen “as a step in the process of health systems and health care [and cure] delivery becoming more complete and comprehensive” (Kodner & Spreeuwenberg, 2002, p. 2).

3.1 Technical and Humanistic Integration
Before continuing the current discussion of integrated care, I shall clarify what I mean by the terms humanistic and technical, because the rest of the thesis will be based on this understanding. In general, humanistic (holistic, systemic) and technical refer to two different ways of understanding any phenomenon.

**General explanation**

A humanistic perspective can be said to be an instance of a holistic perspective. Recapturing Chapter 2.1.3, “Systems”, a holistic/systemic perspective says that parts and wholes are interdependent: Each sub-system is part of an interrelated bigger system which again is part of another overarching system, or, in other words, parts reflect wholes and wholes parts (Schneider, Brinker-Meyendriesch, & Schneider, 2003, p. 232; Stefan, 2013, p. 357). Thus, cells cannot only be understood based on their separate cell components (molecules), since these also reflect the cell as a whole. It is the same with organisms, which consist of organs, which again consist of cells. Instead of focusing on their single components, they must all be understood interactively and/or holistically (Eberwein, 2009, p. 13f; Köchy, 1997, p. 13f). Nevertheless, at the same time, each of these natural wholes, like the cell, the organ, the organism, has its own integrity. This means they are autopoietic. This becomes particularly and perhaps uniquely clear when we understand the human being as a combined biological and mental unit: His or her integrity does not only show in the way in which the body upholds and protects itself, but also in the way in which the person can consciously protect and develop itself (Eberwein, 2009, p. 13f).

The physicist Fritjof Capra, who bases his book “The Web of Life” on Maturana and Varela’s theory of autopoietic systems, follows a humanistic system perspective by emphasizing individuals’ ability to reflect their roles. In other words, they are not victims of their roles. (The Web of Life p.297f). Thus the systems perspective can be called humanistic when it recognizes the role of the person as a consciously autopoietic being, or when the person is given what is also called agency status.

Social agency, then, is the ability of a person (an agent) to act in a way that changes a system and create new opportunities. Anthony Giddens, the British sociologist, focused on the question of how a person can achieve agency status in a world in which social structures, related to income, education, gender, age etc determine one’s status in society, to a great extent. (Eichner, 2014, p. 28f). This shows that structures can both foster and limit agency. Nevertheless, there is a reciprocal relation between structures and agency. This means that a person’s actions
(agency) are not determined solely by structures. Every person has the ability to transcend the structures that “try” to harness and bind him or her. This is what systemic humanism is all about. (Barnes, 2000, p. 27).

This also highlights Burke’s view that radical action demands an understanding of society that no one has. Hence, intervening in complex systems by using technical linear, one-dimensional approaches can lead to unintentional (often negative) outcomes. It is more appropriate to be aware of one’s restricted impact, but at the same time to mobilize the forces one commands and use them with wisdom and shrewdness. (Arnold, 2011, p. 1).

Speaking more generally, humanism is about the idea of humanity and the ambition to improve human existence. At the core of humanism lies the conviction that we must respect a person’s dignity and integrity. Moreover, humanists trust people’s ability to learn and grow, and to be empathic. Finally, the aspiration for humanism is to create an environment in which people can develop in an optimal way, given their potential (Eberwein, 2009, p. 6f). Even though I now talk about systems thinking from a humanistic perspective, it has to be added that systems’ thinking need not be so. In (post-modern) sociology the “agency” is sometimes more or less seen as fiction (or a construct), a consequence of larger systemic (environmental) forces. (Eichner, 2014, p. 27).

**Technical** understandings are based on reductionist thinking. This means that a phenomenon should always be explained based on the characteristics of its parts, down to its lowest complexity level. In its most extreme, this means that any system, including a person, can be seen as a function of the workings of molecules and atoms. The single parts of a whole (e.g.: molecules and atoms) are characterized by isolation from outside units. In other words, each system is composed of the sum of its parts rather than the interrelatedness between them. Any “wholeness” then, becomes an aggregate, a function of necessities (laws) and chance (e.g. mutations), and as such loses intrinsic value (Köchy, 1997, pp. 60–63; Vella, 2008).

Within social science, the systems theorist would take as his or her point of departure wholes, like persons and collectivities, and look at persons as having traits that reflect their social attachments (Eberwein, 2009, p. 6, 13f). Reductionists, on the other hand, would try to explain behavior based on the more isolated, non-social traits of individuals and look at collectivities as functions of the behavior of a number of individuals, i.e. on their utility-maximizing decisions (Franks, 2010, p. 10). Margaret Thatcher for instance, who was a staunch “atomistically” oriented individualist, rejected all kinds of collectivism. She emphasized this
point in an interview in 1987 with Women’s Own, saying “There is no such thing as society”. Hence, not the state or any other collectivity can, or at least should, play an original role (Abbott, 2003, p. 146).

To the reductionist the individual is a social atom. This unit is not further divisible (individual in Latin means indivisible) (Booss & Krickeberg, 1976, p. 214). To the systems theorist the individual is both an individual and a social being: Many, if not all of an individual’s characteristics, reflect both, his or her moral and social nature. Nevertheless, finally it has to be added that most humanists (like Aristotele) do not think that the technical approach is irrelevant. The mechanistic way of thinking is not faulty, but can be referred to as being incomplete, they hold (Vella, 2008).

**View on Health**

Thus a systemically oriented scholar would prefer to look at health with reference to the being (system) as a whole, which includes his or her condition in relation to his or her personality and wider situation (holistic). In addition to the awareness of the holistic perspective, a humanist recognizes and accepts a person’s autonomy. In other words, the goal is to remove the disease/health issue, but do so in a “salutary” way (a quality of life-enhancing way) (Woolfe, Strawbridge, Douglas, & Dryden, 2009, p. 132). Referring back to the definitions of health in Chapter 2.1.1 one might say the WHO has tried to represent, in principle, a humanistic health perspective.

By contrast, the technical ”operator”, who is predominant in the acute medical domain, prefers to focus on a patient’s condition, and to do so in a reductive (technical) way. Hence, the objective of the technical operator is to “remove” the condition which is defined as negative (for instance a disease, pain, etc.). Technically oriented practices “focus on pathology and on the therapeutic techniques [...] rather than on the person” (Creek, 2009, p. 33). By doing so the operator risks reducing symptoms while ignoring their causes.

**View on Management and Coordination/Integration**

I have so far used the terms humanistic and technical with respect to health and medicine. I shall now use them to characterize management and coordination.

Broadly speaking there are two pure ways in which organizations can coordinate their activities. They can do it technically and they can do it humanistically (systemically). The technical way
of coordinating may also be called logistical: It is (pre)managed or (pre)programmed. The humanistic way of coordinating may also be called artistic; it takes place at the clinical level and is characterized by traditions, and more or less creative and mutual adaptations. Glouberman and Mintzberg call such coordination craft-like. In practice, the two ways of coordinating (and managing, more generally) are mixed, but often with the former as the dominant way of doing it (Glouberman & Mintzberg, 1997, p. 4-9, 14f).

The technical approach emerged out of Frederick Taylor’s applied theory of scientific management, launched in 1911. In 1945, the more artistic-humanistic management approach arose from Elton Mayo’s so-called human relations approach. Taylor’s approach was clearly hierarchic, even authoritarian, and was met with protests, at times even violent, from workers in the “taylorized” factories. Mayo’s approach contained more bottom-up elements, but did not challenge owners’ and managers’ superior authority. Mayo’s concern was to treat employees as more than “factors of production.” To Taylor employees were, in principle, to be regarded in an instrumental way. As time went by, the two approaches came to be combined, but most of the time so that Taylor’s ideas dominated. Since the 1960s and 1970s, Taylor’s approach has been modified and developed into a more transactional approach by some researchers (Walshe, 2006, p. 16f).

Managers who are humanistic in orientation and manage from above - and most of those who were inspired by Mayo and his successors did and do so - have a paternalistic style of managing. They know, in a fatherly or motherly, well-intentioned, way, what is best for their employees. Humanistically oriented managers who are more democratically inclined manage in a dialogical way, though in case of conflict they also tend to have the last word. It is difficult for a manager to tear down the hierarchy completely. To do so can amount to abdicating as managers (Adler, 1992, p. 515; Sloan, 1992, p. 1308f).

To better understand these methods in combination with coordination it is necessary to make a short excursion to Glouberman and Mintzberg and their interpretation of contingency theory. In their book “Managing the Care of Health and the Cure of Diseases” they point out that to organize consists of two main tasks. First, tasks have to be divided into their (sub-) tasks. This means, as we have seen, specialization. The activities conducted by specialized healthcare workers are, however, at risk of getting “pigeonholed into pet categories and then assumed to be coordinated by virtue of what everyone is supposed to know about the work of everyone else” (Glouberman & Mintzberg, 1997, p. 5). In this way, specialization not only makes coordination more technically demanding, it also makes it more culturally challenging. A “micro” mentality
that focuses solely on hospitals and departments and even smaller units, has to be “overcome” as well. The combined challenges can be met, say Glouberman and Mintzberg (1997, p. 6f), in two broad types of ways, through “coordination by management” that is, hierarchically, and through the “opening up (of) communication”, that is, in a more interactive and less hierarchical way.

In the first case, then, the coordinative tasks are separated from the clinical tasks and moved up a level. A specialized managerial level is established, to create coordination from above. Those who manage from this level tend to become fairly technically oriented, but they must not be so. They can mobilize and "servant" managers. In the other case, the role of coordination remains at the clinical level and is carried out through mutual adjustment and by use of the evolved routines and traditions (opening up of communication).

We may say that the technical approach implies the use of the tools “plan, measure, control”. This is an approach which is most appropriate for work processes that are easy to standardize, like the production of commodities, but not for work which to some extent must remain little standardizeable, like many types of health care. Since in health care one must constantly expect the unexpected, the technical approach has obvious limitations. Glouberman and Mintzberg (1997, p. 6) “believe that, for the most part, [...] [the technical approach] apply barely to health care and disease cure.” However, the development of evidence based medicine shows that there is a potential for standardization of both procedures and whole pathways/supply chains.

The humanistic-artistic approach implies that planning and doing is based on more “artistic” liaison tools such as mutual adaption and teamwork (Unger, Macq, Bredo, & Boelaert, 2000, p. 1007). Glouberman and Mintzberg (1997, p. 7) say that “[m]utual adjustment means flexible communication among peers, so that the unexpected can be dealt with adaptively and collaboratively.” Under this consideration, the role of the manager is to empower the (front-line) workers of an organization. In other words, with this approach the behavioral solutions are emerging within the organization, among the practical problem-solvers, but also, interactively, between (servant) managers and care providers (Dowton Consulting International, 2015; Lister, n.d.). In this way, humanistic-artistic integration can, to a large extent, take place between providers at the same level, but also across “levels” of specialization. Therefore, it can be argued that an artistic form of coordination is most appropriate for the part of the care provision that is most interdependent, specialized and complex (Graeme, 2006, p. 16ff; Unger et al., 2000, p. 1007).
During iatrocracy, the era when physicians dominated the health care system, humanistic/artistic integration was quite extensive, but with the physicians as the primary “artists.” There were solely minor attempts to direct and supervise them and those attempts tended to be more informal than formal (Berg, 2008). Moreover, the key stakeholders, managers and healthcare staff have to be included in the planning process, with the obligations associated with that (Shaw et al., 2011, p. 12f). Hence, it may be that in countries which are still strongly based on the tradition of iatrocracy a humanistic approach is more appropriate than a technical one.

In order to give a comprehensive overview of the humanistic and technical approaches, their main elements are summarized in the following table.

<table>
<thead>
<tr>
<th></th>
<th>Technical</th>
<th>Humanistic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General</strong></td>
<td>Reductionist thinking</td>
<td>Holistic &amp; systemic</td>
</tr>
<tr>
<td></td>
<td>Parts are independent</td>
<td>All parts are interrelated</td>
</tr>
<tr>
<td><strong>Medical/Health</strong></td>
<td>Focus on diseases</td>
<td>Focus on person (in society)</td>
</tr>
<tr>
<td></td>
<td>Remove negative conditions</td>
<td>Increase quality of life</td>
</tr>
<tr>
<td><strong>Management</strong></td>
<td>Logistical thinking</td>
<td>Artistic thinking</td>
</tr>
<tr>
<td></td>
<td>Based on Taylor</td>
<td>Based on Mayo</td>
</tr>
<tr>
<td></td>
<td>Employees are seen as egoistic and treated instrumentally</td>
<td>Employees are individuals and in need of human relations</td>
</tr>
<tr>
<td></td>
<td>Power lies in management and programs (standardization of work and outputs)</td>
<td>Power lies in operating core which is characterized by standardization of professional traditions, norms and expected outcomes</td>
</tr>
<tr>
<td></td>
<td>Tools: plan, measure, control</td>
<td>Tools: mutual adaption and teamwork</td>
</tr>
</tbody>
</table>

Source: author’s own representation

### 3.2 Trends of Integrated Care

Coming back to the term “integrated care”, one reason for the variety of definitions could be that health systems are highly complex. Another may be the various roots from which integrated care emerged. Hence, it is not realistic to think that a universally agreed-upon definition and approach of integrated care will emerge.

Even though they share the same overall goals, integrated care programs can differ a lot considering their approach and structure (Ouwens et al., 2005, p. 2). Integrated care can be characterized with a tree that “has many roots and branches” (Kodner, 2009, p. 8). In order to create common ground we have to look at two opposing approaches and viewpoints that reflect two extremes of a continuum. We will put “population-based integrated care” at one extreme
and “indication-based integrated care” at the other (Nolte & McKee, 2008, p. 65). Figure 10 shows that each of the ends can be understood in two ways, depending on whether the health problem is either more or less sharply delimited or more or less complex (holistic).

Figure 10: Roots of Integrated Care

![Diagram of Roots of Integrated Care](image)

Source: author’s own representation

**Population-Based Integrated Care**

Broadly speaking, there are two types of population-based integrated care, which are based on their differing political and/or academic perspectives. Population-based care can differ in the extent to which it integrates the social\(^2\) and health care\(^3\) domain and the care and cure sector (Leichsenring, 2004, p. 2f). On the one side, there is (1) internal integration, which is more extensively focused on the healthcare sector, on the other side there is (2) external integration, which is following a broader, whole system perspective. These types are accompanied by organizational strategies referring to the degree of collaborative working. This can range from linkage (separate structure), over coordination (approximated structures) to full integration (tightly connected structures via contractual agreement, work alliances or mergers) (Leichsenring, 2004, p. 3ff). In Chapter 3.3.1, “Degree”, I will elaborate further on the degrees of integration.

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\(^2\) Social care services: offered by social professionals (home helpers, social workers)

\(^3\) Health care services: offered by medically trained professionals (physicians, nurses) in hospitals, clinics, day care, nursing homes and directly in a community.
1. Leichsenring (2004, p. 3f) talks about integrated care strategies that follow a rather medical perspective by focusing on the healthcare system (internal integration). He attributes the “public health discourse” and the “managed care discourse” to the healthcare realm. The point of departure for integrated care is of relevance when arguing why these two discourses can be referred to the healthcare domain. Both the managed care as well as the public health discourse start integration from a healthcare (more medical) perspective. Only then do they broaden their perspective by adding social care principles.

According to the working definition of the European Regional Office of the World Health Organization, “Integrated Care is a concept bringing together inputs, delivery, management and organization of services related to diagnosis, treatment, care rehabilitation and health promotion. Integration is a means to improve the services in relation to access, quality, user satisfaction and efficiency” (Gröne & Garcia-Barbero, 2001, p. 7). This characterization reflects a strong internal (healthcare) integration perspective. Due to its clear focus on organizational interfaces, it can be categorized into the managed care discourse.

Kodner and Spreeuwenberg’s (2002, p. 3) definition of integration is linked to the public health discourse by following a more “patient-centric view on integrated care”. Nevertheless, they also start with a rather managed care explanation, before they extend their perspective by including support and social services: “Integration is a coherent set of methods and models on the funding, administrative, organisational, service delivery and clinical levels designed to create connectivity, alignment and collaboration within and between the cure and care sectors. The goal of these methods and models is to enhance quality of care and quality of life [...]” (Kodner & Spreeuwenberg, 2002, p. 3).

The managed care and the public health approach differ with regard to the variety of services they aim to integrate, however, what they seem to have in common is the rather technical view on management. Since these definitions include elements like planning and measuring they are at least partly technical based.

2. On the contrary, there exists a broader (whole) systems approach based on the “person-centered discourse”. This more recent trend tries to overcome fragmentation not just within the medical sector, but especially across the boundaries of health- and social care services. Therefore, it is characterized by de-medicalization, which is reflected in the interdependency between the health and social sector in long-term care. The point of departure of external/whole system/person-centered integration is, in contrast to healthcare integration,
the individual and his/her care needs (Leichsenring, 2004, p. 4f). A definition of this discourse is clearly humanistic and leaves space to integrate in an artistic way.

Now, after presenting the three discourses (managed care, public health, person centered) which represent the health care and system integration, it has to be pointed out that the borders between the discourses are not fully clear (Nolte & McKee, 2008, p. 66). One cannot say that merely one discourse can be labeled as “integrated care”, because each discourse has contributed some tools that are ultimately used by other discourses as well. To give an example, important elements of managed care, “such as payment systems (e.g., capitation), organizational design, provider networking, integrated information systems and care coordination have ultimately ended up in present-day integrated care frameworks” (Kodner, 2009, p. 9). Moreover, case management4, a technique of managed care, is a widely used tool. Therefore, the lines between internal integrated care and external integrated care are ambiguous (Vondeling, 2004, p. 2). Moreover, most population-based integrated care projects include indication-based integrated care elements.

**Indication-Based Integrated Care**

Similar to the Competence Center of Integrated Care Austria, I contrast indication-based integrated care with population-based integrated care. The most common types of indication-based integrated care are probably disease management and clinical pathways/supply chains (Rohrbach, 1999, p. 11).

Disease Management is a concept that conventionally focuses on single, primarily chronic, conditions at a time. After the first attempts in the 1980s (blood glucose monitoring), the American pharmacological industry introduced disease management programs in the early 1990s. They provided training for their clients (especially managed care organizations and employers). The focus of these initiatives was placed on chronic diseases like coronary artery diseases, asthma and diabetes (Matheson, Wilkins, & Psacharopulos, 2006, p. 8ff).

From the mid-1990s onwards, entrepreneurs identified the lack of the link between data collection, information management, technology and care processes in disease management. With the support of evidence-based programs, it was possible to standardize the treatment of

---

4 Case management is defined as the guidance of individuals with complicated and cost intensive care needs through the treatment process. Simultaneously all workflows have to be coordinated in an optimal way. This means the processing time and the costs of treatments should be as low as possible. Bräunig and Greiling (2007, p. 204), Kranzer (2008, p. 62ff)
patient groups with the same (chronic) disease. In other words, those programs started to reduce illnesses down to what they actually are, a negative condition that has to be removed. To put it in other words, this kind of single disease indication-based integrated care is highly pre-programmed. One could also say that physicians lost some of their autonomy. Nevertheless, evidence showed that indication-based programs have the potential to reduce costs and improve health outcomes. Consequently, the approach of disease management got more and more popular and also hospitals and hospital networks started to create in-house strategies (Conill & Horowitz, 1999, p. 7f; Kranzer, 2008, p. 64f).

Such pre-programmed techniques that traditionally focused on single diseases often miss to treat the entire spectrum of needs on the one hand, and on the other miss to treat other diseases that are in correlation with the first. Moreover, they are often not able to adapt their model to the increased number of patients. In addition to that, it has to be noted that “such programs may inadvertently target the most severely ill within a population of individuals with a certain disease, this neglecting other patients in need of improved management” (Conill & Horowitz, 1999, p. 7). Especially due to these weaknesses, another movement took place. In contrast to the first “generation” of disease management (single diseases), more recent programs focus on multiple chronic diseases. Some of these multiple disease management programs are also technical (reductionist) oriented, however, many of these new generation programs started to focus on the patient rather than on the disease. In order to provide disease management programs that are able to offer the level of care the patient needs, it is necessary to include a wider range of services and start following a rather holistic (salutogenic) health approach instead of solely reductionist oriented one. To achieve this a more humanistic and artistic way of coordination is needed as well (Matheson et al., 2006, p. 10; Nolte & McKee, 2008, p. 69).

Briefly, “disease management” programs can range from narrowly focused single disease initiatives to broad interventions that focus on people suffering from diverse illnesses.
Integrated Care, an Umbrella Term of various Perspectives

These observations indicate that integrated care has various roots. On the one hand, there is population-based and on the other, there is indication-based integrated care. Both trends can be either, more salutogenic or more pathogenetic. Even though single indication-based projects (e.g., disease management) include various complex elements like patient-empowerment, operative management, monitoring and evaluation, their focus remains rather narrow compared to the scope of multiple indication-based and population-based models. Moreover, it has to be added that population-based programs usually include indication-based models (Schang, Czyponka, & Thomson, 2013, p. 9).

In addition to a rather pathogenic or salutogenic perspective on health, the way care is coordinated can also range from humanistic (artistic) to technical (pre-planned) approaches. This is irrespective of whether the integrated care initiative focuses on populations, multiple or single diseases. Most observers and policy-makers emphasize the general question, which reflects the popular idea of diagnosis-based standardized patient care pathways (technical approach). Some also emphasize the special questions, hence they talk of the need for some degree of customizing programs or pathways—to accommodate both the special needs of the individual patient and to take into consideration nationally, regionally and locally special conditions (Nolte et al., 2012, p. 126f; Ouwens et al., 2005, p. 142).

Nevertheless, it seems like internal integration and the first generation (single conditions) of disease management are predominately driven by the need to optimize in order to adapt to external pressure. In particular, the WHO definition clearly depicts the fact that the tendency of public health oriented programs is often more technical than systemic/holistic. In other words, they emerged out of a rather logistical and technical inspired trend, whereas external integration and second generation disease management programs are part of a more humanistic, person-centered, bottom-up approach that aims to adapt services to the needs of patients/clients (Kodner & Spreeuwenberg, 2002, p. 5). Consequently, it is more than challenging to draw a clear line between the approaches. In Table 5, definitions for each category are provided. This table shows particularly how blurry the lines between the groups actually are.
<table>
<thead>
<tr>
<th>Author</th>
<th>Definition</th>
<th>Author</th>
<th>Definition</th>
<th>Author</th>
<th>Definition</th>
<th>Author</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colmert, Clausen, &amp; Bengtsson, 2003, p. 6f</td>
<td>The [integration of] health and social services implies that the services are provided to all elderly – independent of where they live – by integrated teams of home-helpers, home nurses etc. [...]The decision of support is made on request from GP’s, hospitals, the elderly or relatives.</td>
<td>Gröne &amp; Garcia-Barbero, 2001, p. 7</td>
<td>a concept bringing together inputs, delivery, management and organization of services related to diagnosis, treatment, care, rehabilitation and health promotion. Integration is a means to improve the services in relation to access, quality, user satisfaction and efficiency</td>
<td>Epstein &amp; Sherwood, 1996, p. 832</td>
<td>a systematic population-based approach to identify persons at risk, intervenes with specific programs of care, and measure clinical and other outcomes.</td>
<td>Rothman &amp; Wagner, 2003, p. 257</td>
<td>discrete programs directed at reducing costs and improving outcomes for patients with particular conditions.</td>
</tr>
<tr>
<td>Ex, Gorter, &amp; Janssen, 2003, p. 22</td>
<td>Demand-driven care, in our view, simultaneously means integrated care for, when the requests and needs that the client may experience in various areas are met, integrated care is provided. Integration is realised when (s)he can dispose of the required care provisions, the adequate types, the accurate quantity, and delivered in the appropriate order and at the right moment in time.”</td>
<td>Kodner &amp; Spreeuwenberg, 2002, p. 3</td>
<td>Integration is a coherent set of methods and models on the funding, administrative, organizational, service delivery and clinical levels designed to create connectivity, alignment and collaboration within and between the cure and care sectors</td>
<td>Rich, 1999</td>
<td>address all the patient’s needs (medical and non-medical), maximizing the patient’s functional capacity and quality of life, while reducing hospital admissions and overall cost of care;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** author’s own representation
3.3 Conceptualizing Integrated Care

Coordinated working, shared planning, coordinated care, care programs, case/care management, inter-agency working, intermediate care, shared protocols, managed care, disease management, inter-professional working, whole system working, integrated delivery networks, patient-centered care, shared decision making, integrated care pathways - all these are initiatives that fall under the collective concept/term of integrated care. Even though they share the same overall goal, they differ with respect to their structure and scope (Shaw et al., 2011, p. 4).

In order to understand integrated care and its various approaches better, it is necessary to conceptualize integrated care according to its structures and processes. However, creating classifications in healthcare integration is especially challenging due to various factors. One of the barriers is that it is nearly impossible to define clear boundaries between the stages at which services are delivered. Moreover, each delivery stage is confronted with some uncertainties from time to time, because people have different needs and/or react differently on the same treatment. In other words, patients usually go through the system nonlinearly due to the fact that there is not only one path. Nevertheless, to obtain some structure, integrated care analysts differentiate initiatives based on its degrees, configuration, types and technologies/processes (Nolte & McKee, 2008, p. 71).

3.3.1 Degree

Kodner summarizes in his article “All Together Now: A Conceptual Exploration of Integrated Care” that there are three groups integrated care can be directed towards. The focus can either lie on (1) whole communities (or groups of service payers) regardless of their level of health, (2) vulnerable groups like frail or disabled persons, or (3) people with multiple complicated diseases (chronic illnesses, multi-morbidities) who are most in need of integrated care (Kodner, 2009, p. 11).

Leutz (1999, pp. 83–89) conducted an analysis of integrative health and social service programs. His underlying principle for the question for who and how to integrate in this way is: “You can integrate all of the services for some of the people, some of the services for all of the people, but you can’t integrate all of the services for all of the people” (Leutz, 1999, p. 83). He proposed to integrate organizations/programs/departments/professionals/etc. depending on the level of patients’ needs. The dimension of required care depends, he said, on the severity, stability and duration of the condition, the urgency of treatment, the scope of services as well
as the patients’ ability to self-direct through the system. He talked about three levels of working together, and called them linkage, coordination and full integration:

- **Linkage** means that the included participants are only loosely connected. In order to make sure that the right units are coordinated at the right time, communication between providers and knowledge about others’ tasks are necessary. Linkage integration then, takes place between organizations that function fairly autonomously, i.e. which have their own funding and operational rules. It is primarily people with specific and not too serious healthcare needs who can use organizations which cooperate linkage oriented with other care providers, or in other words the general society (Kodner, 2009, p. 12; Leutz, 1999, p. 84f; Shaw et al., 2011, p. 15).

- **Care** is referred to as being coordinated if there are clear coordinative structures that go beyond the acute care sector. Instead of having fully separate processes and structures, coordinated care means that tools, such as information systems and case managers, are shared between the cooperating organizations. Thus, coordinated services are more closely related to each other than is the case for linked services. Care networks or chains of care are examples of coordinated integration (Leutz, 1999, p. 85; Nolte & McKee, 2008, p. 72). The need for coordination-integration increases as the severity of the conditions the patients are suffering from increases. At this stage, especially vulnerable groups like frail or disabled persons can be located.

- In the case of full integration, resources from various systems are pooled into one overarching “new” program or organization (Leutz, 1999, pp. 85–88). In contrast to the previous forms of integration, this form combines funding, resources and all services either within one organizational entity “*or through contractual agreements between different organizations*” (Nolte & Pitchforth, 2014, p. 4). This kind of integration is particularly relevant for patients with severe, unstable, complex long-term and often multiple conditions.

As can be seen, the three types of integration represent different levels of collaboration between care workers and between institutions, from loose (linkage) to tight (full integration) (Leichsenring, 2004, p. 5). Furthermore, these forms of integration mirror the needs of patients, from those with a need for episodic help, to those who need help on a more or less continuing basis. In Figure 11, these points are summarized.
Moreover, it can be stated that the general population with relatively easily treatable diseases can be treated in a health system in which specialties are working solely linked to each other. However, the more severe the disease or condition of a person, the higher the need of tightly integrated care (Leutz, 1999, p. 83f).

Integrated care can be either more humanistic or technical oriented. Nevertheless, if vulnerable people or people with complicated diseases are at the core of integrated care, it makes sense to focus not only on pathogenetic aspects, but also on salutogenic ones by including for instance social care aspects. In other words, especially integrated care programs that follow a rather holistic health care perspective see nursing and social care (assistance in day-to-day life) as an important ingredient of integrated care. This salutogenic objective is also highlighted by Kodner and Spreeuwenberg (2002, p. 3) who say that “[t]he goal […] is to enhance quality of care and quality of life, consumer satisfaction and system efficiency for patients with complex, long term problems cutting across multiple services, providers and settings”.

Concluding, it seems like Leutz’ explanation of degrees is humanistic when it comes to the view on health on the one hand, because he clearly speaks out for a salutogenic perspective. Nevertheless, he seems to favor a technical approach when it comes to the question of how to coordinate. This approach is reflected in Leutz’ focus on the connection of funding, resources and management.
In contrast, a humanistic manager would probably interpret linkage as a system in which the level of working together is based on standardized professions. Professionals and/or organizations are probably coordinated if values and goals (norms) are standardized. A fully integrated system from a humanistic perspective could be one in which mutual adjustment based on the standardization of professions and norms is a fully integrated and realized value. Nevertheless, one has to be aware of the fact that the humanistic perspective lacks in its perspective of how to coordinate functions like administration, financing, remuneration. In other words, in our technically oriented world some parts of organizations always have to be technically organized.

3.3.2 Configuration

Authors who try to conceptualize integrated care talk about different breadths (horizontal and vertical integration) in which integrated care can occur. In chapter 2.1.2, I talked about five columns of healthcare, each of which is representing one level of care. Vertical integration refers to actions aimed at aligning what takes place at the various levels of care (primary, secondary, tertiary care or community health center, hospital, nursing home and home care agency). By contrast horizontal integration refers to the aligning of services provided within one level of the care delivery process (general practitioners with community care, or combining different specialty hospitals). Those efforts usually go into the direction of multi-professional teams (Gröne & Garcia-Barbero, 2001, p. 7; Kodner, 2009, p. 12; Nolte & Pitchforth, 2014, p. 4).

This way of distinguishing the two types of integration seems to presuppose that a more specialized institution (or department) is hierarchically placed above a less specialized one. Or in other words, that the status of a department/profession is increasing the more specialized it is. And indeed, according to the technical perspective they are: Specialized branches of knowledge are closer to the reductionist research front. In other words, horizontal and vertical integration from a technical point of view include elements of hierarchy and can hence be considered as being unidirectional (linear). This widespread understanding of horizontal and vertical integration indicates that our Western healthcare system tends to favor a technical way of managing (Valentijn, Schepman, Opheij, & Bruijnzeels, 2013, p. 4).

However, according to the humanistic, or systemic, perspective this is not necessarily so: Since the causal arrows go in both, or all, directions, the specialized and “generalized” parts of medicine it can be seen as arrayed both vertically and horizontally, and in the former case in
such a way that they may change hierarchical position, dependent upon the actual situation. We may therefore, rather, say that according to this perspective the various parts of medicine are linked to each other in a network type of way – where nothing is up or down or vis-à-vis something else, or for that matter laterally arranged in relation to each other. This means that coordination should not be very managed by specialized managers and their advisers.

Consequently one could say that horizontal as well as vertical integration can take place in either a more “hierarchical/technical” or “systemic/humanistic” way. It is vertical when it is unidirectional (linear), and horizontal when it is interactive, dialogical – often also network-oriented. The former form of integration is technical, the other humanistic (Chapter 3.3.2).

But as health care institutions, and disciplines, are organized in today’s health care systems, it makes sense to distinguish between vertical and horizontal integration in a rather technical way— where the former refers to integration across (formal) levels and the latter refers to integration within levels (Conrad & Shortell, 1996; Nolte & McKee, 2008, p. 71; Nolte & Pitchforth, 2014, p. 4; Scott & Simoens, 1999; Valentijn et al., 2013, p. 3f; Walshe, 2006, p. 197).

To summarize, we can say that vertical and horizontal coordination/integration are understood differently by those who think technically and those who think systemically. Thus we may have both vertical and horizontal technical coordination and both vertical and horizontal humanistic/systemic coordination (Table 6). Nevertheless, in the way our nowadays health system is structured we tend to use the technical approach.

Table 6: Technical vs Systemic view on Breadth

<table>
<thead>
<tr>
<th>HIERARCHIC/TECHNICAL</th>
<th>SYSTEMIC</th>
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<tbody>
<tr>
<td><strong>Vertical</strong></td>
<td><strong>Horizontal</strong></td>
</tr>
<tr>
<td>Integrating across care levels</td>
<td>Integrating within one level of care</td>
</tr>
<tr>
<td>Primary, secondary, tertiary care</td>
<td>GP with community care; different specialty hospitals</td>
</tr>
<tr>
<td>Authority is rather formally based</td>
<td>Authority is rather informally based</td>
</tr>
</tbody>
</table>

Source: author’s own representation
3.3.3 Types

Integration initiatives can usually be dived into six types (Walshe, 2006, p. 197). Some of these are quite technical, others include less tangible elements like teamwork, values and behavior (Shaw et al., 2011, p. 8). Nevertheless, one integration intervention can include more than one type. The most common integration types mentioned in the literature are systemic, organizational, professional, clinical, normative and functional integration.

1. First of all, there is system integration. System integration focuses on the adaptation of strategies, financial incentives, regulations and policies across a geographical region (nation, federal states, districts, etc.) (MacAdam, 2008, p. 3). This approach is usually associated with the macro, hence societal level of health systems (Reed, Cook, Childs, & McCormack, 2005, p. 3; Valentijn et al., 2013, p. 4). Such integration programs commonly assess population needs and environmental climate (social, economic, political) and build relationships with various stakeholders like insurance companies, patient organizations and municipalities (Valentijn et al., 2015, p. 9).

2. Organizational integration exists when two or more entities try to improve and coordinate care delivery. Combined financial and organizational mechanisms are often key instruments under such integration. Examples are market transactions, network arrangements or mergers and acquisitions (Nolte & McKee, 2008, p. 71; Shaw et al., 2011, p. 8; Valentijn et al., 2013, p. 5f). The different kinds of organizational integration can be described using Leutz Degrees of integration as a basis. Market transactions (based on marked-based governance structures) and mergers/acquisition (achieved through hierarchical structures) represent two extremes on a continuum of organizational integration.

Network arrangements can be located in the middle. Mergers and acquisitions can be paralleled with full integration, whereas the networks can be either linkage or coordination. Markets are characterized by organizations that function autonomously; hence, they are equated with segregation. Their flexibility can be seen as their strength; however, the commitment to joint work is low. By contrast, the links between hierarchically integrated organizations are numerous (Valentijn et al., 2013, p. 5). Mergers refer to the formal fusion of separate entities into a single organization with the same chairman (Walshe, 2006, p. 200). These hierarchical mechanisms represent the other extreme of the continuum, which is also often referred to as full integration. Networks are a consortium of institutions that remain separate, but nevertheless, “agree on intra- and inter-organizational governance arrangements to support integration, such as memoranda of understanding” (Walshe, 2006,
They are often referred to as the golden mean, because they provide a certain level of flexibility but also commitment. Being flexible and committed is something valuable in an environment that demands both market competition and state regulation (Valentijn et al., 2013, p. 5). Nevertheless, the negative side of this approach seems to be the uncertainty about how long it actually takes to achieve commitment and shared decision-making (Gomes-Casseres, 2003).

Alliances and networks are sometimes referred to as “virtual” integration and mergers as “real” integration. Organizations do not have to merge their services in order to provide qualitative services. An example of a merger is the Veterans Health Administration. Nevertheless, there is evidence that virtual (contractual) integration, like in the case of Kaiser Permanente, seems to be as effective, because integration works as soon as incentives for coordination are given on the one hand, and services and teams are brought together on the other. Again, it has to be stressed that there is no one-size-fits all solution (Ham & Curry, 2011, p. 2, 6).

3. With people who suffer from complicated diseases, and thus have multiple care needs, integration of professionals from multiple backgrounds is of particular importance (Valentijn et al., 2013, p. 6f). Effectively implemented professional integration can lead to “combined responsibilities for commissioning services and promote [...] shared accountability, problem solving and decision-making (Valentijn et al., 2013, p. 6). The most common examples are networks of professionals from various backgrounds, both within and across entities (Kodner, 2009, p. 11f). Like with organizations, professional integration can be characterized by linkage, coordination and full integration. Moreover, this type of integration can take place horizontally and vertically. Professional integration usually leads to doubts about traditional roles and hierarchies as well as uncertainties about the autonomy of professionals. Moreover, professionals’ differing work cultures and languages can constitute a large barrier. Especially the differing views of health (technical/disease or holistic/functional oriented) can create difficulties with respect to professional integration. Therefore, it is important to clarify responsibilities and roles (Valentijn et al., 2013, p. 6f).

4. Whenever a single (clinical) process that addresses an individual patient gets integrated in terms of services, time and place, we talk about service or clinical integration (Kodner 2009, 11f). Clear medical guidelines as well as defined roles of professionals and patients (shared decision-making) are key elements in this form of integration (Shaw et al., 2011, p. 8).
5. Functional (sometimes administrative) integration refers to integration that aims at providing the relevant clinical services. Functional integration, then, is about connecting management, information and fiscal systems around care delivery. This type of integration clearly refers to integration from a technical perspective (Shaw et al., 2011, p. 8; Valentijn et al., 2013, p. 7).

6. Normative integration designates the efforts to build shared cultures, values and missions between individuals, professionals and organizations which reflects a humanistic approach (Kodner, 2009, p. 12). Shaw et al. (2011, p. 8) give examples like culture building, such as detecting and closing communication barriers and building relationships of trust between professionals, but also with the potential clients/patients and the local community.

All six aspects of integration – organizational, functional, service-based, clinical, systemic, normative – need simultaneous attention. Many attempts at integration have started at the organizational level. A more profitable approach might be to start at the level of the front-line team and the patient journey and then consider the most appropriate organizational forms to deliver the required level of integration. It is also important to overcome any cultural differences that might exist, within hospitals for example between different specialists, between physicians and nurses, or clinicians and managers and between out-of-hospital care and hospital care (Fulop, Mowlem, & Edwards, 2005, p. 10).

### 3.3.4 Framework

Valentijn et al. (2013) created a comprehensive conceptual framework, called the Rainbow Model (Figure 12). This is a model combining PC functions with those of integrated care. At the core of the framework lies the evidence that “health systems built on the principles of primary care (first contact, continuous, comprehensive, and coordinated care) achieve better health and greater equity in health than systems with a specialty care orientation” (Valentijn et al., 2013, p. 2). This point of view is of special relevance for integrated care initiatives that focus on patient groups with complex health issues that are in need of medical as well as social care. Therefore, integration from a PC perspective means that one needs to engage in inter-organizational collaboration (Valentijn et al., 2013, p. 2).

What is special about this framework is that the authors try to link the technical disease-focused view on health with the more holistic view, which is the goal of many integrative care programs.
As depicted in Figure 12, person-focused care\(^5\) as well as population-based care\(^6\) function as core principles of integration throughout the healthcare system. The person-focused care perspective is at the center of the model. These elements challenge the health system to move away from our disease focused-view on health towards a more holistic and salutogenesis-based view. Following such a perspective is especially important when treating patients with multiple health problems. Nevertheless, it has to be mentioned that this does not mean that acute medicine should start to focus on all psychological and social problems of people (which would exceed the responsibility of the sector). At the center of interest is the support of integration between services that facilitate social, psychological and medical care. Consequently, constant and concurrent vertical and horizontal integration is necessary to enhance patients’, and therefore also populations’ well-being.

\textit{Figure 12: Conceptual framework for integrated care based on the integrative functions of primary (health) care:}

Based on these two principles, the six types of integration are divided into the micro, meso and macro levels of health systems:

System integration can be seen as integration at the macro level that serves an entire (geographical) population (Ham & Curry, 2011, p. 3). Even though the focus should lie on both, treating diseases (technical perspective) and improving people’s ability to function in daily life (holistic perspective), health ministries often prefer to support disease control programs due to

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\(^5\) **Person-focused care** goes beyond the functional view of health by looking on patients’ individual needs, values and preferences.

\(^6\) **Population-based care** approaches health needs and financial, social, political and environmental characteristics of a specific population group.
their quantifiable nature (Unger et al., 2000, p. 1008). Hence, horizontal as well as vertical integration is of importance.

The meso level of health care systems consists of networks (collaboration between services/organizations) and single organizations (hospitals, assisted living). Moreover, integration on that level is focused on population groups with the same condition or disease (Ham & Curry, 2011, p. 3, 4). Considering this, the meso stage can be equated with the “organizational integration” and “professional integration”.

At the micro level are the front-line workers which provide their services to the individual (Ham & Curry, 2011, p. 3, 6). Processes that address individuals throughout discipline, time and place are referred to as clinical integration. Moreover, clinical integration checks if service provision is delivered on a continuous bases. Nevertheless, one has to take into consideration that especially the clinical part is primarily diseases oriented (remove the negative condition). Making clinical experts work in a more patient oriented way is going to be challenging (Valentijn et al., 2013, p. 7).

The two remaining types of integration, normative and functional integration, support the linkage between micro, meso and macro level. The former assists in developing shared goals, values and vision. The latter is structured around service delivery processes and supports integration throughout the levels of health systems by integrating information systems, management and financial functions (Valentijn et al., 2013, p. 7f).

What we can observe here is that integration at each level has a different target “group”. Integration initiatives at the macro level mainly focus on populations in a geographical region, projects at the meso stage on a defined population (specific disease, condition) and on the micro level on the individual patient. Table 7 gives a short summary of the levels and types of integration.
Table 7: Integrated care dimensions of the Rainbow Model of Integrated Care

<table>
<thead>
<tr>
<th>Level</th>
<th>Dimension</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro</td>
<td>Clinical integration</td>
<td>The coordination of person-focused care in a single process across time, place and discipline.</td>
</tr>
<tr>
<td>Meso</td>
<td>Professional integration</td>
<td>Inter-professional partnerships based on shared competences, roles, responsibilities and accountability to deliver a comprehensive continuum of care to a defined population.</td>
</tr>
<tr>
<td>Meso</td>
<td>Organisational integration</td>
<td>Inter-organisational relationships (e.g., contracting, strategic alliances, knowledge networks, mergers), including common governance mechanisms, to deliver comprehensive services to a defined population.</td>
</tr>
<tr>
<td>Macro</td>
<td>System integration</td>
<td>A horizontal and vertical integrated system, based on a coherent set of (informal and formal) rules and policies between care providers and external stakeholders for the benefit of people and populations.</td>
</tr>
<tr>
<td>Micro, Meso, Macro</td>
<td>Functional integration</td>
<td>Key support functions and activities (i.e., financial, management and information systems) structured around the primary process of service delivery to coordinate and support accountability and decision-making between organisations and professionals in order to add overall value to the system.</td>
</tr>
<tr>
<td>Micro, Meso, Macro</td>
<td>Normative integration</td>
<td>The development and maintenance of a common frame of reference (i.e., shared mission, vision, values and culture) between organisations, professional groups and individuals.</td>
</tr>
</tbody>
</table>

Source: Valentijn et al. (2015, p. 3)

3.3.5 Technologies of Integration

Various scholars have identified a range of technologies that build on the previously mentioned “types” of integration. One integrated care program usually combines more than just one of those techniques, which are located throughout the micro, meso and macro levels of health systems (Kodner & Spreeuwenberg, 2002, p. 3f). Nevertheless, it has to be mentioned that some of the technologies are concurrent with the types of integration.

Kodner and Spreeuwenberg (2002) present five domains, each of them including a number of common methods which should help to reduce common barriers to integrated care. Rosa et al (2011) published a research paper based on case studies about integrated care. They also identified integrative processes that support service coordination. Their points mostly cover and partially complement those Kodner and Spreeuwenberg mentioned.

- Funding: The flow of budgetary arrangements and the structure of payment systems can impact all further aspects of integrated care. Especially the social and health care sector is usually characterized by different financing streams. Both articles give examples, like pooling of funds and prepaid capitation (including risk and gain sharing) at various levels (micro, meso, macro), as possible tools to avoid disintegration. (Kodner & Spreeuwenberg, 2002, p. 4; Rosen et al., 2011, p. 29f).

- Administrative (functional) techniques can facilitate between the micro, meso and macro level: Moreover, they help to streamline complex programs, improve the management of system resources and simplify access as well as eligibility. Typical tools are strategic planning, sharing and coordination of human resources, inter-sectoral planning, sharing of

- Organizational: This integrative process is similar to the previously mentioned “organizational type” of integration. Organizations that function well within, but also between each other, have the capacity to improve efficiency and create seamless care. In order to positively influence collaboration between organizations, horizontal (same level of care) as well as vertical (different levels of care) networks supported through informal and formal methods should be established. Commonly used strategies focus on governance arrangements as well as organizational design. Practical examples are discharge and transfer agreements, inter-agency budgeting and planning, jointly managed programs, care networks/strategic alliances, consolidation or mergers (Rosen et al., 2011, p. 27f).

- Service delivery is about employees’ training, tasks, responsibilities, teamwork and staff empathy towards family carers and patients. This can impact access, coordination, continuity, availability and flexibility of care as well as patient satisfaction. Joint training/education throughout organizations and professional groups, sharing of human resources (seconded staff), case/care management, multidisciplinary teams, on-call/around the clock coverage centralized information (referral and intake) and integrated information systems can be seen as techniques of service delivery. Rosen et al. did not include the “service delivery” domain and instead included this piece of information in the “organizational” domain (Rosen et al., 2011, p. 27f).

- Clinical: Kodner and Spreeuwenberg (2002, p. 4) refer to clinical techniques as their last point. This section is about professionals’ consistency of language, criteria, feedback, as well as evidence-based standards and practices “throughout the lifecycle of a particular disease or condition”. Examples are joint care planning, shared clinical records, periodic contact with patient and family, common diagnostic criteria, uniform decision support tools such as medical guidelines, and standard assessment procedures.

The study of Rosen et al. includes two further processes, informational and normative.

- Informational techniques were already partially mentioned in Kodner and Spreeuwenberg’s “service delivery” domain. Mentioning it as a particular section shows that (clinical) information systems, as well as access to that data is getting increasingly important in a health care environment that is constantly specializing. In order to achieve intra- as well as
inter-organizational care, integrated information systems are inevitable. Examples are information systems between units and organizations that facilitate assessment of needs, stratification of risks and monitoring of outcomes. In other words, information systems can help to improve administrative and clinical functions (Kodner & Spreeuwenberg, 2002, pp. 23–26).

- Normative techniques and normative types of integration can be equated with each other. They refer to efforts that aim at creating a joint vision as well as shared values and goals to which all people and entities involved in the process of integration feel committed to.

It has to be added, though, that it is not completely clear which technology or combination of technologies will make integration initiatives work best. As already mentioned, this has to do with the culture and power distribution across regions. There is not a single type or process/technology that leads to improved outcomes. They have to be combined.
4 Integration Strategies

In the following, I will introduce integration strategies where one type represents the technical approach, the other the humanistic approach. Finally, I will show that there are also suggestions regarding how the two approaches can be combined, indeed - integrated.

4.1 Pathways

To find a rather hierarchical and technical strategy, we have to look for integration plans that are based on standardization of work, standardization of outputs and on direct supervision. This can be found to a great extent in the assembly line-type of coordination, the clinical pathways (also integrated care pathways, critical pathways, care pathways). In other words, based on the previously elaborated typology of humanistic and technical, pathways can be seen as natural expressions of the technical way of thinking.

In order to understand the emergence of pathways we have to go back in history. The former trend of physician dominated healthcare systems is referred to as “iatrocracy”. During that time, clinicians autonomously managed their small practices and were observed or “supervised” only to a minor extent by others, like patients, colleagues or public authorities. This was possible, because patients usually had one physician who was responsible for most of their health concerns. In addition to that, healthcare administration was solely “regarded as merely indirect medical practice” (Berg, 2008, p. 117).

Nonetheless, between the 1960s and 1970s, a significant change took place. There was a shift from common sense medical management to more evidence-based, technical and industrialized management. The prime driver for that development was especially, as I have mentioned in the introduction, the supply side (technological) development: This development led to specialization, which again called for efforts to integrate services, that is to more professionalized management. It also led to a cost “explosion”, which, in a time of increasing revenue problems for third party payers, governments and insurance funds, gave rise to efforts to make the health system function more efficiently. This also called for a more professionalized form of management (“managed care”) (Berg, 2008, p. 117f). Given the dominant medical paradigm, this led to attempts to find "technical" ways of coordinating medical and other care-providing activities. Consequently efforts were launched to create more standardized ways of treating diseases, and thus also to alleviate the coordination of the increasingly specialized care
provisions. This industrialized supply chain management, as it was first called, is nowadays known as clinical pathways management. Pathways can be described as “virtual” assembly lines (Berg, 2008, p. 118). The manufacturing industry showed us that “assembly lines” can lead to higher productivity and decreased costs, because “[w]orkers become more efficient as they specialize by developing a skill, creating new technology to aid them, and not wasting time switching between tasks” (Emery, 2012).

Based on these industrialized processes, clinical pathways first emerged in the USA during the 1980s. Like protocols and guidelines clinical pathways (including the process of planning, launching and evaluation) can also be seen as structured care methodologies (Vanhaecht, Panella, van Zelm, & Sermeus, 2010, p. 118). One of the sources of efforts to improve and professionalize coordination was the introduction of the DRG-system in the US in 1983. This later widespread system requires that one looks at the cost side and associates that with the procedures of the different diagnoses. Based on these observations, specific medical interventions and costs are attributed to each DRG (Fleßa, 2013, p. 146f). Given the introduction of this medico-economic system of management, the road was short to think about typical, standardized and systematic ways of treating different diseases, in other words, to talk about (critical) care pathways. Over the course of the 1990s, these efforts were systematized and professionalized and by the 21st century, pathways as a tool was known and used throughout the world (Vanhaecht et al., 2010, p. 118).

The concept of care pathways is now a firmly established concept. Pathways reveal how a person can get “channeled” through a hospital, e.g. based on his or her assigned DRG. The transition is criteria-oriented, which means that a set of standardized treatment plans includes information about the procedures and treatments which are to be conducted, and when, at each action point (“work station”) along the pathway. Clinical pathways are interdisciplinary, and do not only function in a serial way; they usually contain parallel elements. Thus many sub-services may be provided more or less simultaneously, some e.g. in laboratories, others in various types of clinical settings and yet others in planning meetings (Verein zur Förderung Freier Informationen für die Pflege, 2016). Thus, pathways are complex processes, and for that reason often processes where things may go wrong and the need for current adaptation can be great, and much greater than the optimistic and ambitious pathway planners had hoped or anticipated. The European Pathway Association recognizes this to some extent, but not fully, when it defines pathways as “[a] complex intervention for the mutual decision making and
organization of predictable care for a well-defined group of patients during a well-defined period” (European Pathway Association, n.d.).

Depending on the complexity of a case (defined based on diagnosis or functional status) different models for pathway designs are used. As depicted in Figure 13, the organization of clinical pathways depends on the level of predictability of the interventions and the level of agreement within the (multidisciplinary) team. Basically, there are three models which are currently known and used.

Figure 13: Overview on the history and concept of care pathways

The Chain model, located at the lower left part of the figure, is the most traditional. It is highly technical based and assembly line like and therefore most appropriate for diseases whose development is fairly predictable. Chain models are sequential or time-task oriented processes. They are, for instance, usually used for cataract surgery and chemotherapy. In internal medicine, rehabilitation, palliative care, and psychiatry, the progress of health problems is normally seen as less predictable. In such cases, Hub-models are often used: a particular person is assigned to lead the patient through the system. Finally, the Web model is not time-based but goal-based and is required for patient groups with highly complex health (and social) problems (Vanhaecht et al., 2010, p. 119).

The traditional Chain model is now often adapted to the Hub and the Web models. This indicates that the various tasks health care providers perform cannot be divided and then simplified and standardized as much as they can in commodity production. In addition, health care does not always lead to the elimination of the problems (diseases). This means that the patient will have to live on with his or her problems. They may have been alleviated, but they
may also persist, and sometimes get worse. Thus, it becomes necessary to put the patient at the center. He or she has to become a key person or partner in the care of himself or herself. He or she often has to become the “Hub person.”

We thus see a tendency to combine the technical and chain-like organization of pathways with the older, more humanistic and organizationally varied form of care. Reflecting this tendency Vanhaecht et al. (2010, p. 119) say “that every patient is unique, but they have enough in common to ensure that care pathways are a useful norm, and patients and clinicians are able to make choices that differ from these pathways as needed.”.

As we have seen, the efforts to develop pathways started in hospitals, but now it is all about pathways that cut across institutional boundaries. In the literature, the terms for the many types of pathways vary. Clinical pathways are confined to single hospitals. Schrijvers, van Hoorn, and Huiskes (2012, p. 2) for instance define care pathways as those that include “outpatient department’s activities, discharge from the hospital and after-care” and transmural or disease management pathways as even more encompassing.

Reflecting various authors, I will use the term clinical pathways (or critical pathways, care pathways) to describe pathways that focus on the care process ranging from diagnosis to therapy to rehabilitation within hospitals. As I see it, the term patient pathway is broader and involves multi-organizational pathways that take place when crossing organizational boundaries (Verein zur Förderung Freier Informationen für die Pflege, 2016). Hence, it seems that patient pathways are particularly relevant for people with severe chronic diseases, including mental illness and substance abuse conditions.

Due to that, “[d]ifferent professional groups (doctors, nurses, allied health professionals, etc.) need to interact and decide how they will organize the care process and who is responsible and will take the lead in which part” (Vanhaecht et al., 2010, p. 119). This adds another, rather “new” element to pathway thinking, one that can be characterized as at least humanistically inspired.

Pathways are developed at various levels. Lower levels always include the recommendations of the previous pathways. As depicted in Figure 14, the first step is to create a “Model pathway.” This is based on evidence from international and national best practice examples. The final recommendation of this thesis will be given at this level, since it is not organization specific but takes the regional environment into account. The next level contains operational pathways,
pathways that are based on the model pathway but adapted to the characteristics of the specific organizations, often those involved in the various pathways. Assigned pathways are operational pathways that are adapted to the individual needs of patients. When the assigned pathway has been applied, the complete pathway is created. Generally, we may say that pathways, step by step, have to be adapted to the concrete situation, the team, the organization and the patient (Vanhaecht et al., 2010, p. 121).

Figure 14: Four aggregation levels of the pathway product

The tendency in many countries today is to centralize the "pathway" approach more and more. This reflects the technical approach to management. Nevertheless, one has to be aware of the fact that coordination done in advance leads to fairly inflexible pathways. This can easily lead to many unpleasant collisions with an often unpredictable reality (Dykes, 1998, p. 107).

Summary:

Generally, it can be said that pathways are natural extensions of the technical way of thinking. They imply that coordination is done in advance; that is, that the coordinative plan functions as a theory or recipe for practice and is thus separated from practice. This often leads to frustrating encounters with reality. Therefore, those who have promoted the highly technical and standardized pathways have started to include softer artistic/humanistic management elements. Some of the diagnostic tasks, some of the operational tasks and some of the rehabilitative and continuing tasks are fairly complex and require some experiential and almost holistic expertise. Hence nowadays, pathways require more practical and personalized expertise. The Chain model especially can be seen as representing highly quantitative pathways, whereas the Hub and Web models include more qualitative components.
4.2 Glouberman and Mintzberg

Acupuncture has been described as working by redirecting the energy flows in the body. This may serve as a metaphor to help us to think about redirecting the energy flows in the health system. [...] We simply have to find the critical points in the system and then insert the needles with great care – which means that we shall have to open our minds to alternative practices of management (Glouberman & Mintzberg, 1997, p. 19).

This quote shows that Glouberman and Mintzberg distance themselves from the conventional, more technical, management approaches. They are skeptical of the promotion of radical reform, like business reengineering, and the recommendation of Tom Peters that we should “thrive on chaos”. In Peters’ opinion business has to become as versatile, as innovative, as qualitative and especially as aggressive as its competitors. In other words companies have to learn how to thrive on a constantly, (relatively) radically changing world which is characterized by chaos (Peters, 1991). The radical reformers rely, and have to rely on top-down, linear reform, and on one-dimensional control systems. Glouberman and Mintzberg prefer Burke’s more cautious approach to reform. They recommend instead an approach to reform that elicits it more than prescribes it. In this way, they hold, an organization can develop itself in an almost organic way. Thus it becomes more fundamentally autopoietic (Arnold, 2011, p. 1).

In their book “Managing the Care of Health and the Cure of Disease” Glouberman and Mintzberg claim that if coordination is done from above, as the "technicians" often prefer (like in the case of pathways), it leads to rigid coordination systems and to loss of autonomy on the part of health care providers. By contrast, they prefer that coordination be managed in a more collegial and decentralized way, by the health care professionals themselves. This looks like a more humanistic form of coordination. We may therefore refer to it as "soft" coordination.

Basically, Glouberman and Mintzberg divide both the hospital and the health system at large into four worlds which they refer to as Cure, Care, Community and Control: Cure and care to the “front-line”/clinical/operational level, community and control to the managerial level(s). In hospitals, the cure level comprises physicians, care quadrant nurses, community part trustees and control segment managers. In societies at large, the cure level consists of acute hospitals, the care level of community services like long-term care facilities, PC-practitioners and alternate health services. At the upper level, community includes elected officials as well as advocacy/lobby groups. Public health authorities, insurance companies and regulatory agencies
are part of the (public) control quadrant in the Glouberman & Mintzberg typology/model (Glouberman & Mintzberg, 1996, pp. 2–16).

In a perfect situation healthcare would be coordinated solely based on standardization of skills. Without support of other mechanisms, it usually fails, especially because of pigeonholing and lack of communication. Therefore, said mechanism has to be supplemented by standardized norms (cooperative traditions/culture), which is an effective way to enhance mutual adjustment (Glouberman & Mintzberg, 1997, p. 3, 8). They assume that systems work best if coordination takes place non-hierarchically, because “human systems cannot function effectively without a significant degree of goodwill cooperation” (Glouberman & Mintzberg, 1997, p. 8). Complicated, unpredictable events can be tackled by internalized mutual adjustment.

But is this realistic or solely a vision? How can coordination, without clear preprogrammed elements, actually work? Glouberman and Mintzberg argue that the elements they refer to have always been present in healthcare systems. Shared norms can be found among concerned and committed managers, physicians, nurses, etc. Professionals tend to make use of mutual adjustment when confronted with unexpected problems. However, these traditional elements are being challenged now, since today’s health care system is becoming super-specialized and increasingly exposed to financial constraints. This often favors managerial/technical approaches (Glouberman & Mintzberg, 1997, p. 9).

For Glouberman and Mintzberg it is important to tackle integration not in one of the four worlds, but in all of them. In order to achieve this they talk about coordination of the provided services and of collaboration across the four worlds. The needs of managed coordination and collaboration are mainly caused by flagging inclinations to cooperate (Glouberman & Mintzberg, 1997, p. 9f).

**Clinical coordination:**

We saw in the previous section that many clinical operations today are based on the Chain model. In Glouberman and Mintzberg’s opinion, this is a classic example of pigeonholed work flows. These interventions are tightly controlled with respect to who gets treated. Moreover, they are also highly programmed. However, according to Glouberman and Mintzberg, people’s health needs become more and more complex in our current health system and instead of requiring relatively inflexible mechanisms, more flexible ones are needed. The Web model, which is well known in rheumatology, is a type of coordination that is more network-like and
keeps the power in the operating core. The key feature of this model, depicted in Figure 15, is coordination by open discussion (Glouberman & Mintzberg, 1997, p. 11f).

The positive feature of a Web model is that collective coordination is strengthened when mutual adjustment is needed. In other words, the clinicians have to be present, because mutual adjustment “simply cannot take place on the run” (Glouberman & Mintzberg, 1997, p. 12). If cooperative traditions and cultures are given, the individual professional takes responsibility for common needs. However, in order to make this happen the structure of the system has to change. Today, the system is often too disconnected and works too much at intervals. To overcome these problems, clinicians’ distribution of time and their attitude towards teamwork have to be altered, according to Glouberman and Mintzberg. This highlights how crucial it is that coordination of the delivery of services in the cure/clinical domain has to be taken care of by the managed rather than by the managers (Glouberman & Mintzberg, 1997, p. 12).

**Community coordination**

The lower level of the health system, namely the acute cure and the community care worlds, are divided by so-called specialized “curtains.” As already shown in chapter 3.3.2, “Configuration”, in our rather technically oriented society the status of the practitioner is higher the higher his or her level of specialization. The curtains from the right hand side to the left represent increasing degrees of professional specialization and therefore also of reputation (Figure 16). The “higher status” practices (physicians cure focus) tend to represent more risky and invasive forms of interventions, that is, interventions that were also seen as more awe-inspiring. It was beneath the super-specialists to make use of the simpler types of interventions; they were for the “lower status” specialties to apply. From a general health point of view, these less spectacular interventions were, however, often more effective. Thus, the dominance of the left side of the continuum leads to an imbalance in the health system. The predominant world of cure often also defines the field of research. This ends in a vicious circle that does not give the lower status sectors the opportunity to show their full potential (Glouberman & Mintzberg, 1997, pp. 13–16).
Hence, Glouberman and Mintzberg think that we should aim to shift attention and interventions to the right to achieve a greater equilibrium between the worlds of cure and care. In order to reorganize the health system, we have to promote licensing of alternate treatments and community building between the curtains. Glouberman and Mintzberg mention dentistry as a practical example of an occupation that has been accepted in the field of medicine. As a next step, they propose to coordinate across the community sector. Here, “management will have to be effected by the managed” (Glouberman & Mintzberg, 1997, p. 18), they say.

Today, general practitioners are either not responsible for the navigation of patients through the system, or are not as good at it anymore. In addition, they tend to refer patients to “higher status” services instead of considering softer “alternative” practices. Therefore, Glouberman and Mintzberg (1997, p. 19) suggest the introduction of a new set of actors that can “help people maneuver through the complexity of the service network”.

Collaborative Management of the Institutions

Managers of health facilities should not coordinate in a very hierarchical way, as it is conventionally done. Glouberman and Mintzberg talk about a craft style form of management. It is, they say, important to become a so-called craft style manager who tries to make the work environment of professionals as comfortable as possible in order to promote intrinsic motivation. Such managers help to strengthen self-management by supporting the creation of bridges between professionals and by promoting the creation of norms that support mutual adjustment. Furthermore, they ensure that everyone has a say. This is important if the decision-making is to become truly collaborative. Finally, they claim that it is important to maintain the
relationships to the external stakeholders. We may say, then, that such a manager has to be “soft” when it comes to coordination within the organization but has to be “hard” when the organizational boarders have to be protected (Glouberman & Mintzberg, 1997, p. 22f). These persons accept management as “continuous care,” and are able to build bridges across the different quadrants of health care. Finally, these are persons who “have the style and the energy to get the best out of other people” (Glouberman & Mintzberg, 1997, p. 25).

Collaborative Management of the entire system

According to Glouberman and Mintzberg it is unlikely that anyone can coordinate the entire system on a collaborative basis as long as we use traditional approaches like hierarchies and markets. Since the health sector is so complex, and therefore requires ample room for flexibility, hierarchical management will not function well. The effect of markets is that every provider works independently and that the distance between service suppliers and service demanders becomes too wide (Glouberman & Mintzberg, 1997, p. 26f). As alternatives, they mention:

- Social ownership which should increase people’s personal commitment to the services (Glouberman & Mintzberg, 1997, p. 29).
- Instead of strengthening economies of scale, more attention should be given to the personal (human) scale throughout the system (Glouberman & Mintzberg, 1997, p. 30). Moving away from mass processing to more personal and smaller systems will foster “[m]otivation, commitment, and sense of belonging” (Glouberman & Mintzberg, 1997, p. 29).
- Involved leaders who are aware of the fact that the cure of disease and the care of health is for individuals, and is based on quality rather than on quantity, should replace “cold,” detached leaders (Glouberman & Mintzberg, 1997, p. 30).
- Glouberman and Mintzberg (1997, p. 31) recommend the establishment of collaborative networks (relationships) to strengthen mutual adaption. As mentioned in Chapter 3.3.3, “Types,” this type of collaboration is often referred to as the golden mean between markets and hierarchies. It promotes communication and consequently mutual adjustment.
- Finally, Glouberman and Mintzberg talk about guiding principles which should help health care to move away from competitive and hierarchical systems towards a system that is built on shared values and consensus (Glouberman & Mintzberg, 1997, p. 31f).

Summary
Glouberman and Mintzberg do not only favor a humanistic way of coordination but also a holistic point of view when it comes to health. They obviously try to bridge the gap between (more) disease-oriented practices and salutogenic practices by integrating the cure with the care sector. They even go further than many other systems-oriented observers by including alternative care into their coordination strategy. Irrespective of which of “their” four worlds they talk about, it is essential to strengthen shared culture and enhance mutual adjustment. This also means that “[p]ractitioners have to develop greater appreciation of the managerial processes, and managers as well as community representatives have to reflect a deeper understanding of the clinical operations” (Glouberman & Mintzberg, 1997, p. 33). Given Glouberman’s and Mintzberg’s strategy, it follows that multi-organizational coordination is only possible if the individual institutions and their personnel are integrated first. In other words, one has to start to integrate at the micro level, before proceeding to the meso and macro levels.

4.3 Porter and Lee

“[P]roviders need a strategy that transcends traditional cost reduction and responds to new payment models. If providers can improve patient outcomes, they can sustain or grow their market share. If they can improve the efficiency of providing excellent care, they will enter any contracting discussion from a position of strength. Those providers that increase value will be the most competitive (Porter & Lee, 2013, p. 4f).

Michael E. Porter and Thomas H. Lee presented their “value agenda” under the title “The Strategy That Will Fix Health Care.” This strategy of integration can be placed between the technical pathway approach and the humanistic way of creating culture and mutual adjustment.

In their article, they criticize the health system for focusing on quantity rather than on quality. Since our current system is stacked against quality, they say, even highly committed clinicians have a low chance of providing good services. The most important thing that has to be done, in Porter and Lee’s opinion, is to adjust the structure. Only thus, they claim, can one increase value for the patient. They define patient value as “the best outcomes at the lowest cost” (Porter & Lee, 2013, p. 3). Their concrete formula for value is patients’ health outcomes relative to the costs of delivering outcomes. Both the outcomes and the costs refer to the full care cycle, not only to single interventions, like current practices and accounting systems tend to do. In other words, at the core of all interventions we have to place the patient and his/her needs. By focusing on
the delivery of value we will be able to change the way in which our health system is currently structured, controlled/measured and reimbursed, Porter and Lee claim (Porter & Lee, 2013, p. 3ff).

Porter and Lee’s strategy appears logistically and technically based since they focus so strongly on the measurement of costs. Nevertheless, their view of health seems to be fairly humanistic, since they put the patient as a person, and not the disease, at the center of their attention. This orientation can be interpreted as a standardized norm (shared culture/vision), which obviously reflects a “softer” managerial approach. In other words, Porter and Lee’s approach is partly technical, but only partially so. They also lay great emphasis on the role of the patient (the customer). Thus, the medical problem is defined not just in medico-technical terms but also in socio-personal (mobilizing) terms.

In order to create a system that is structured around the patients’ needs Porter and Lee recommend that one take six interrelated steps (Figure 17). Their six strategic steps are more effective the more of them are realized, not sequentially, but simultaneously (Porter & Lee, 2013, p. 5):

(1) **Integrated Practice Units:** Our current system is organized around physicians’ expertise (specialties and concrete services), and divided into what is sometimes called silos. These silos lead to patients being referred from one department (silo) to another, with each referral often being associated with long waiting times. Moreover, each step of the patient’s journey has its own administration. This causes high administrative costs. Furthermore, the services provided are not provided by a team, but by the person that is currently available.
Therefore, Porter and Lee made the creation of dedicated teams key actors in their Integrated Practice Units (IPUs) and thus also the core of their “value agenda.” Such teams focus on the patients’ needs. In acute care, IPUs focus on the conditions of clients; in PC around specific patient-groups, like frail and elderly patients, healthy adults or children and teenagers. By doing this, Porter and Lee want to strengthen multidisciplinary teams that focus on specific conditions instead of our traditional siloed specialties (Porter & Lee, 2013, pp. 5–8).

Currently, it is the norm that most Western hospitals and/or PC facilities treat all kind of diseases. Their main argument for why health facilities should not focus on all types of health issues but rather on specific conditions is the volume. The authors claim that only if one spends a certain time with a specific health issue well-integrated, experienced teams can develop (Porter & Lee, 2013, p. 14f).

As already indicated at the beginning, IPUs are responsible for the entire care cycle of a patient’s disease as well as other connected conditions that often arise as a consequence of the former one (e.g.: diabetes can lead to eye disorders). This involves out- and inpatient services, rehabilitative care, follow-up as well as other support services like patient education, engagement of families in the care process, behavioral health, social work and nutrition. In an ideal case, members of a team are at the same location. This makes it easier to communicate not only formally, but also informally, on a regular basis. Informal communication can be interpreted as mutual adjustment, or, in other words, as a humanistic coordination principle. Nevertheless, cross-departmental/organizational teams are closely related. In order to reduce administrative costs and patients’ difficulties with scheduling through the whole “care cycle,” an IPU consists of only a single administrative office. Furthermore, the head of a clinical care or a physician team monitor the process of each patient. There is one joint platform for the team. This platform includes information about processes, costs and outcomes for each patient. The common value, to provide qualitative care, leads to shared accountability and responsibility with respect to costs and outcomes (Porter & Lee, 2013, p. 6f).

(2) Measure outcomes and costs for every patient: Porter and Lee refer to this action as probably the most important one in order to improve health care. At the moment we are primarily measuring process activities, including the compliance of doctors to guidelines (Porter & Lee, 2013, pp. 5–8). Moreover, a very low volume constitutes a problem for the measurement of outcomes and costs. Because most suppliers provide an insufficient number of the same services by the same team, the statistical validity is usually not given and outcome as well as costs measurements cannot be carried out (Porter, 2011, 55:30-56:50).
The “value agenda” emphasizes that “[t]he only true measures of quality are the outcomes that matter to patients” (Porter & Lee, 2013, p. 7). But why isn’t everyone doing it? The simple explanation is that it is easier to measure processes. Every single specialization/department can measure its own process activities. The first difficulty with outcomes is their definition. Achieved or retained health status (survival, degree of health like functionality, pain), process of recovery (time to recovery, dis/utility of care like complications, discomfort, delays, diagnostic errors) and sustainability of health are the three levels of health outcomes that are relevant according to the authors. Hence, it is inevitable to standardize the measurement of outcomes (Porter & Lee, 2013, p. 9f).

But it is not just the determination of medical outcomes, widely understood, that is lacking. The measurement of costs is also insufficient. Currently, we tend to attribute costs to departments rather than to the full cycle of care underlying the various medical conditions. What is needed is to “understand (...) the resources used in a patient’s care, including personnel, equipment, and facilities; the capacity cost of supplying each resource; and the support costs associated with care, such as IT and administration” (Porter & Lee, 2013, p. 11). After assessing all of this the costs can be contrasted with the corresponding achieved outcomes (Porter & Lee, 2013, p. 10ff).

(3) Move to bundled payments for the full care cycle: The theme of this stage is obviously remuneration. In Porter’s and Lee’s opinion, fee-for service and global capitation are not the right way. These approaches merely lead to either reinforcement of capacity without taking the patient value/quality into account (fee-for service), or to less spending which, however, is not automatically linked to improved outcomes (global capitation). Instead, they recommend bundled payments for a particular medical condition or a specified patient population. Such packages have to contain “severity adjustments [..]; care guarantees that hold the provider responsible for avoidable complications [..]; and mandatory outcomes reporting” (Porter & Lee, 2013, p. 12). Especially in the US, many patients get acute care in a highly sophisticated clinic which is often far away from the place where they actually reside. The follow-up and rehabilitation services are provided closer to their homes, by services providers who have little to do with the acute care professionals. The mapping of care processes of patients, which this form of financing “necessitates”, should strengthen coordination across locations and professions. Thus, bundled payment may result in teambuilding and shared commitment and, eventually, in higher value of care (Porter & Lee, 2013, p. 12ff).
(4) **Integrate care delivery across separate facilities:** By implementing cross-organizational care, delivery fragmentation as well as duplication of care can be reduced. Providers have to think of four actions when creating such cross-organizational forms of cooperation, i.e. collaborative networks.

- **Defining the scope of services.** This means that providers shall remove those services they are not good at and instead focus on services where they can excel.
- **Concentrate volume in fewer locations.** As we have seen, it is important to achieve a certain level of volume in order to build good teams, improve performance and appropriately measure costs and outcomes. Therefore, it is counterproductive if there are too many IPUs of the same service line in the same region. This only hinders the achievement of high volumes.
- **Choose the right location for each service.** This means that uncomplicated common procedures do not have to be provided by highly specialized and cost-intensive clinics. These treatments can easily be shifted to outpatient facilities.
- **Integrate care across locations.** A patient should receive frequently delivered treatments at only one location. Nevertheless, it can happen that a person undergoes surgery in a hospital somewhere, and wishes to continue with the rehabilitation closer to his/her home. The IPU manager who has been assigned to that particular patient has to take these things into account when planning the full care cycle (Porter & Lee, 2013, pp. 14–17).

(5) **Expand geographical reach:** Porter and Lee criticize that health care is still too strongly focused on local regions. Especially as soon as providers have become excellent with “their” particular medical condition it is time to expand their services throughout other regional areas. By doing this, experts can deliver their high quality care also across regions. It is important to keep in mind that this is not solely about expanding reach and volume, but also, and not least, about improving patient value (Porter & Lee, 2013, p. 17f).

(6) **Build on an enabling IT platform:** Finally, IT systems that support multidisciplinary care have to be implemented. An appropriate information technology platform is patient-centered, uses a common language, comprises all kinds of important information (test results, physician notes, images, etc.), provides templates for various medical conditions and is available to all legitimized personnel (IPU team, the patient him/herself) (Porter & Lee, 2013, p. 18).

**Summary:**
Overall, it seems that Porter and Lee involved quite a range of coordination principles and mechanisms. First, they focus on pre-planned programs (IPUs). Secondly, they see the answer to many of a health system’s challenges in measuring outcomes relative to the costs. As previously mentioned the tools “plan, measure, control” can be associated primarily with a technical management approach. Moreover, IPUs also include some degree of work standardization. Consequently, Porter and Lee clearly follow a technical way of integration in this respect. Nevertheless, this approach is softened by placing the value for the patient, as seen by the patient, at the heart of their strategy. In addition to that, they also promote artistic elements like the creation of shared values, teamwork and mutual adjustment among health professionals.

Hence, it seems that Porter and Lee try to keep some flexibility in the IPUs by applying artistic elements in order to keep clinicians partly autonomous. This approach is probably motivated to some degree by "strategic" concerns: They know that they must have the key clinicians, especially the physicians, on board. Being a doctor himself, Mr. Lee is of course acutely aware of this. To conclude, one might say that the authors envision a tripartite management (coordination) system - where the three parties are the managers, the health care personnel (teams) and the patients.

Nevertheless, the whole strategy is only feasible if we stop thinking that every region and every hospital needs to provide a full range of services. In a time of easy mobility, it rarely takes long for a person to travel to the appropriate care provider. Better quality care will more than make up for the possible travelling time, Porter and Lee argue. From a systemic and humanistic perspective it may, however, be argued that to be treated in an institution that is large, and thus somewhat “alien,” and located far away from the patient’s home, will increase the likelihood that the care becomes context-less and abstract and the patient a more passive receiver of care. Low-income patients will also have a lower probability to seek out perhaps more expensive services some distance away. From a wider systemic perspective, one may also say that the concentration of increasingly specialized services in large population centers contributes to undermine the self-reliance and eventually sustainability of smaller cities and towns. It leads to a more abstract, metropolized society, fit primarily for the academically trained (upper) middle-class.
4.4 Discussion

Care pathways can primarily be seen as technical, since they are based on preprogrammed coordination. Even though clinical pathways emerged out of traditional technical thinking, patient pathways can be managed in a more humanistic way. Glouberman and Mintzberg’s approach is primarily humanistic because their idea of coordination is based on an (organically) evolved tradition, on culture and norms and on current, mutual adaptation (which also involves patients). Porter and Lee are trying to combine the two approaches. However, they seem to rely more on the technical than the humanistic mentality. Thus, they focus heavily on economies of scale and on the standardization of care and outcome measures. They do, however, modify their industrial bent by relying to a considerable extent on “destandardizing” teamwork, a teamwork that also involves the patient and, sometimes, his or her relatives. In any case, in our current society it seems more than challenging to be fully humanistically or fully technically oriented.

We may also note that Glouberman and Mintzberg and Porter and Lee have two quite differing ways of presenting their theories. Porter and Lee talk about their strategy as the solution that will fix healthcare, whereas Glouberman and Mintzberg say that their intention “is not to propose definitive solutions to these complex problems […] but to stimulate new lines of thinking, in order to encourage new means of acting” (Glouberman & Mintzberg, 1997, p. 10). Moreover, Porter highlights his points with a number of well-chosen cases. Glouberman and Mintzberg talk also, in contrast to Porter and Lee, about more qualitative, intangible elements and do not include concrete and validated data.

Their styles hence reflect their messages: Porter and Lee have done most of the thinking themselves, in advance, and present a blueprint that can almost be implemented by the people in the health care sector. Thus, they function fairly hierarchically. Glouberman and Mintzberg think more about how to make health care personnel think than telling them what to think. They mobilize, and do not direct, like Porter and Lee.

Today pathways tend to coordinate services based on the existing structure of health systems. Porter and Lee, as well as Glouberman and Mintzberg, want to change the structure of the systems. Glouberman and Mintzberg’s strategy seems to be the broadest coordination approach, since they are trying to connect acute health services with the entire spectrum of community care services, including alternate care. Initially, Porter and Lee mention a variety of partners but in the proceeding discussion, they focus especially on hospitals and primary care providers. The more traditional pathway approach focuses on the clinical level. Only the more recent,
more humanistic forms of pathways also refer to cross-sectoral integration. But even if Porter and Lee’s approach is somewhat more delimited, it is, like those who promote a more typically technical approach, more detailed and, as we have seen, preprogrammed. Theirs is a tight form of integration, Glouberman and Mintzberg’s is a looser form of integration.

In the following part about Austria, it is time to figure out which type of integrated care has been dominant in Austria.
5 Developing Policy Recommendations

In this part of the thesis, I will look at the Austrian environment. I want to find out when and how the topic of integration became important in Austria, what has been done so far, what is currently being done and finish by giving recommendations about what should be done. Especially in order to find answers to the question “What should be done?” I will look at the power distribution in Austria and whether it favors a more humanistic or a more technical approach. In addition to that, I am going to analyze whether current projects included more artistic or pre-planned components. By doing this a variance analysis can be conducted, from which final conclusions can be drawn.

5.1 Power Distribution in Austria

Austria is a country located in central Europe. It is a democratic republic that consists of nine federal countries (Bundesministerium für Gesundheit, 2013a, p. 2). Austria is a high income country and with a GDP of 43.547 $ per capita it was ranked as the 16th most wealthiest country worldwide in the year 2015 (Statista GmbH, 2015). According to data from 2013, Austria has the second largest number of doctors per capita with 5 physicians per 1000 population in the OECD comparison (OECD, 2015, p. 81).

Health is an important value for the Austrian society. Consequently, a well-functioning care and cure sector is an important element of political discussions. Moreover, Austria is affected by a global development that has resulted in institutional fragmentation, also in health. Fast technological and scientific developments and a comprehensive social health insurance has led to increased life expectancy. At the same time, this development puts pressure on the state while confronting it with issues like increased health care spending, demographic change and a shift to more complicated diseases that are often related to life style factors (Statistik Austria, 2012; Wirtschaftskammer Österreich, 2014). Cardiovascular diseases and cancer are currently the leading causes of death in Austria (Statistik Austria, 2014).

Therefore, politicians in Austria talk a lot about how to reduce life years spent in illness and how to offer care to those who are ill that makes it possible for them to retain their dignity until the end of their lives. In other words, in Austria the conception of what it means to treat patients has expanded as well. Hence, care that is mutually agreed upon between inpatient, outpatient,
cure and social care services as well as prevention and health promotion has to be created (Nowak, Ladurner, Juraszovich, & Hofmarcher, 2011, p. 22, 25).

The core of good and sound, well-integrated care should, therefore, be both increased life expectancy and healthy life years. But the policies to achieve these goals must also accommodate to a lesser or greater degree the interests of the key stakeholders, and foremost among them, the Medical Chamber. In order to get to know the stakeholders and their interests we have to take a closer look at the structure of the Austrian healthcare system (Schauppenlehner, 2009, p. 125).

5.1.1 Structure of the Healthcare System

Founded on the value of solidarity the Austrian healthcare system is economically based on statutory social insurance. Social insurance agencies do not compete with each other, because memberships are regulated by law (Wiener Zeitung GmbH, 2016a). The social contribution payments make it possible for the entire population to have access to services regardless of personal income (Bundesministerium für Gesundheit, 2013a, p. 7).

Social insurance is of three kinds, accident, health and pension insurance. The “Hauptverband” is the umbrella organization of the Austrian social security agencies. In 2015, 99.9% of the Austrian population had health insurance (Hauptverband der österreichischen Sozialversicherung, 2016, p. 13). Some of the twenty-two social insurance agencies (organized based on region and occupation) comprise more types of insurance, others only single ones. Depending on a person’s occupation different laws regulate which insurance company is responsible (Hauptverband der österreichischen Sozialversicherung, 2012, p. 340f; Wiener Zeitung GmbH, 2016a). Consequently, one of the main complicating factors arising with the Austrian social insurance system is that different insurance agencies may cover ” basic health services, rehabilitation, accidents and retirement” (Eger, Gleichweit, Rieder, & Viktoria Stein, 2009, p. 2). It is also a complicating factor that around one third of the Austrian population holds a private supplementary insurance (Bundesministerium für Gesundheit, 2016a).

Even though Austria is based on the Bismarck model, long-term care is not included in social insurance. But where does the money for such care come from?

In 2014, total healthcare expenditures amounted to 36,253 million Euros, or 11% of Austria’s GDP. Around 74.8% of these expenditures were raised by public sources (Statistik Austria, 2016). This includes the federal (“Bund”), country/provincial (“Länder”) and regional levels as
well as the social insurance providers. In other words, health expenses are primarily covered by public means through statutory social insurance contributions and taxes (Bundesministerium für Gesundheit, 2016a). The rest of the expenses come from private sources like private households and private insurance companies. The population’s direct contribution in the form of out-of-pocket payments, which accounts for around 15% of health spending, also have to be taken into consideration (Nowak et al., 2011, p. 22, 24). Prescription charges, daily fees for hospital stays and deductibles are usually paid out-of-pocket (Bundesministerium für Gesundheit, 2016a). Most of the overall budget is spent on hospitals, second most on ambulatory care, followed by pharmaceuticals and long-term care (Bachner et al., 2013, p. 4).

To conclude, it can be said that even though the Austrian financing of health care is primarily based on the Bismark model (system of contribution/insurance) it also includes elements of the Beveridge model (taxes). Thus, we may say that Austria uses two differing models to finance the same things. We may add that the Austrian system is characterized by a distinct division between the public health, health care and social sectors.

5.1.2 Health Sector

The health sector comprises outpatient and inpatient care as well as health promotion and disease prevention.

- **Outpatient care:** Resident and practicing general physicians, specialists and dentists provide outpatient care. Outpatient wards of hospitals and insurance agencies as well as independent outpatient clinics are also included in the outpatient care sector (Bundesministerium für Gesundheit, 2016a). According to Schang et al. (2013, p. 20) less than 1% of non-hospital based outpatient physicians work in so called “Gruppenpraxen” (group practices). Thus solo medical practitioners are clearly dominating the outpatient sector, and to a much larger degree than it is the case in Beveridge countries and in the United States. This probably reflects the stronger hold the iatrotic culture has on Austrian physicians than it does on physicians farther west.

- **Inpatient Care:** This type of care is provided by all hospitals, whether they are public, private non-profit based or profit based. The owners and/or operators of the hospitals are countries/provinces (“Länder”), municipalities, religious organizations, private operators or the umbrella organization for social security agencies (Bundesministerium für Gesundheit, 2016a). In Austria, inpatient care plays a major role. This is partly a reflection of the fact that Austria has one of the highest acute hospital bed rates in the developed world (OECD,
2014, p. 70). This again reflects the late introduction in the country of more activity- or results-based forms of (contract) financing: Austria kept its “iatrocracy-friendly” per diem form of financing, a system that encourages long-term stays. The new system, gradually introduced (especially in the 1990s: DRG in 1997, and with the broader governance reforms of 2005) promotes, though in varying degrees, competition for achieving higher scores in order to get more money out of the fixed pools of funds. The idea is that with competition with capped budgets providers are forced to be more efficient and/or achieve better quality, depending on what the payers assign priority to (Nowak et al., 2011, p. 28f).

- **Health Promotion and Disease Prevention**: Due to the above-described trend of prolonged life expectancy, while years spent in illness increase, it is important to not only treat existing diseases but also to prevent people from getting sick. Hence, Austria sees a huge potential in supporting people to improve and sustain their health status. Since 1998, health promotion that aims at promoting healthy life styles and environments is a duty of the social health insurance agencies (Bundesministerium für Gesundheit, 2016a).

But how is the health sector organized and reimbursed? The obligatory insurance-based system is designed by the federal government (“Bundesstaat”) and its nine countries/provinces (“Länder”). The federal government (“Bundesstaat”) is responsible for overall political issues, like the legislation for health professionals, consumer health (e.g. food safety), the creation of framework legislation for the hospital sector, controlling various health authorities, protecting populations’ health status and needs, and the coordination between key actors (Bundesministerium für Gesundheit, 2016a; Nowak et al., 2011, p. 24).

The provinces (provincial health funds) are responsible for the implementation of legislation as well as for the organization and financing of hospitals. By covering around 45% of all health expenditures, the social security agencies bear most of the costs. The health insurance agencies compensate health professionals in outpatient settings through a mix of fee-for-service and flat fees per visit (Bundesministerium für Gesundheit, 2016a; Nowak et al., 2011, p. 24; Schang et al., 2013, p. 19). These financial contracts of compensation for physicians are negotiated between the health insurance companies and the Medical Chamber. In addition to that, social insurance agencies have to provide a fixed lump-sum (around 30% in 2014) of their budget to the compensation fund for hospitals (Hauptverband der österreichischen Sozialversicherung, 2016, p. 15). Even though health insurance agencies have to give part of their earnings to the inpatient sector, they are not (directly) entitled to have a say in the use of this money, because only the provinces (countries) are authorized to decide on the use of hospital funds (Vasilica
Marisescu, 2010, p. 109). This makes each sector try to reduce their own costs at the expense of the others.

In addition to public authorities and the health insurance agencies, advocacy groups like the employer and employee associations (chamber of commerce and medical association) are also vocal participants in the health care debate (Nowak et al., 2011, p. 24). Due to the variety of actors in the Austrian health system, the challenges of coordination are great. The responsibilities of the various actors in the Austrian healthcare system are regulated by law (Bundesministerium für Gesundheit, 2013a, p. 6).

5.1.3 Long-Term Care Sector

Long-term care (nursing) services are primarily for elderly, impaired people and children in need of special care. This means that people who require permanent support and care (65 hours per month) for a minimum of 6 months due to physical and/or mental impairment are qualified for benefits (Wiener Zeitung GmbH, 2016b). In Austria, more than 5% of the people receive (long-term) care allowances (Feffer-Holik, 2016).

Moreover, the care sector comprises a number of public actors, including the federal state, provinces, municipalities and social insurance agencies. Since 1993, people who fulfill the requirements to qualify for long-term care receive either “cash for care payments” (care allowance) or other benefits in kind in the form of social services (mobile care and support), day care centers or residential arrangements (Nowak et al., 2011, p. 25).

Basically, financial allowances are provided by the federal government (“Bund”) while the benefits in kind are provided by the countries (“Länder”). In essence the care sector is financed through taxes, not social insurance contributions (Bundesministerium für Gesundheit, 2013a, p. 19). However, especially the legislation regarding benefits in kind is uncoordinated. Such benefits are regulated in various guidelines, which often differ from region to region. The differences between countries (“Länder”) is considerable with respect to standards and extent of supply (Nowak et al., 2011, p. 26).

The support provided by the welfare state helps, but it is definitely insufficient compared to the actual “necessary” benefits, as perhaps most, people see it. It is, however, unknown how high the actual private costs are. But there is no doubt that the care sector is highly dependent upon the support of private individuals that care for their relatives/dependents/friends (Bundesministerium für Gesundheit, 2013a, p. 4; Nowak et al., 2011, p. 25f). Opinion polls
show that more than half of the Austrian population preferred their parents to be cared for at home. Between 80 and 85% of people requiring (long-term) care are treated at home. Primarily female family members take care of this task. (Nowak et al., 2011, p. 26).

5.1.4 Analyzing Problems and the Power Distribution

Demographic change and a shift from acute to more complicated chronic conditions is a problem Austria is also confronted with. Hence, health politics in Austria is under pressure to strengthen integrated care not just between the outpatient and hospital sectors, but also between long-term care (nursing), social care, health promotion and disease prevention (Nowak et al., 2011, p. 25).

However, the complex structure of the health system described above results in a lack of coordination between the actors and constitutes a significant barrier to integrating not only the in- and outpatient care sectors, but also the care, cure and social sectors. According to Schang et al. (2013, p. 9) poor integration can happen with respect to financing, organization and governance.

Financing: Complex System Structures

Uncoordinated actions arise, as explained above, because the federal government creates the legal framework while the provinces ("Länder") decide on the organization of hospitals and the social insurance agencies about the outpatient sector. Therefore, neither the state nor the health insurance agencies feel fully responsible for strengthening integration. In other words, due to a “lack of [...] shared financial responsibility” (Schang et al., 2013, p. 19) between the ambulatory, hospital and long-term care services the competences as well as the control mechanisms are fragmented. Consequently, one could say that all actors work in their own interests and try to pass on the costs to other providers instead of approaching the overarching objectives of the health system. Like my contact person Mrs. Weißenhofer said “It is challenging to generate utility for all stakeholders. Especially, because it is difficult to establish common ground as soon as one party has more disadvantages than another”.

In order to make this point more clear, we should take a closer look at the inpatient sector. From a social insurance perspective, it is cheaper if a treatment takes place in a hospital rather than in an outpatient practice. The reason for this is that the costs for the hospital treatment are already included in the lump sum the social insurance agencies have to pay into the hospital fund. By contrast, a good hospital manager most likely tries to “outsource” some tests or the
prescription of drugs to outpatient departments, because the performance-oriented financing system includes the prescription costs and pre-tests anyway, irrespective of whether they were conducted on site or not. To put it differently, hospitals do not get a separate reimbursement for prescriptions and specific diagnostic procedures. Such problems arise between the outpatient and inpatient sector, but affect the social health sector as well (e.g. mobile services, care services) (Vasilica Marisescu, 2010, p. 109).

These examples clearly show a lack of cooperation and trust between the various actors and the need for a shared overarching goal. Even national and international studies point out that the level of efficiency in the Austrian health sector could be improved considerably. One of the main causes of the unrealized efficiency potential is the fragmentation between the responsible actors. The variety of payment schemes contributes to this development (Hofmarcher, 2013, p. XIV).

The mix of contribution and tax based financing on the one hand has the consequence that the exposure of wage costs to health insurance contributions is relatively low. On the other hand, coordination at the interfaces between the outpatient and inpatient sector is time and cost intensive. Coordination arises also between health and long-term care services (Hofmarcher, 2013, p. 290).

**Organization: Weak Connection between Providers**

In addition to cost transfers, failing cooperation between health providers causes **undersupply, oversupply or mis-provision of services** in Austria (Nowak et al., 2011, p. 25).

Schang et al. (2013, p. 20) conducted research in which they found out that it is common that physicians tend to refer patients more or less “randomly” to various providers. This problem is based on a lack of clearly defined responsibilities of various service providers, which leads to loose connections between them. There is no precise definition of the duties of a GP. This means it is up to the physician to decide at what time and to which provider s/he refers the patient.

Weak connections between the players can result in undersupply, which means that a person who obviously needs treatment does not get it, due to e.g. delayed hospital admission. It is also common that people stay at hospitals even though their condition could be treated at home (mis-provision). Especially diagnostic procedures are often done twice, first in the outpatient sector and then in hospitals. This usually happens when tests show that a patient has a condition that has to be treated in an inpatient setting. Either physicians distrust their outpatient colleagues, or a lack of coordination leads to duplication of examinations (over-supply) (Nowak et al., 2011,
In some cases, the performance-oriented hospital payment system facilitates over-supply.

One could argue that binding commitments between the various “players” in the health care system are missing in Austria. It is, however, also obvious that the medical culture in Austria still is based on the autonomy conceptions of iatrocracy.

**Governance: Monitoring**

Most integrated care initiatives, such as disease management programs, include evidence-based guidelines. Such guidelines should help to sustain a certain level of quality. However, in Austria physicians are not monitored on whether they adhere to these guidelines or not. Quality measurements are conducted, but solely in an inpatient setting. “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” (Schang et al., 2013, p. 21). At this point, we can see again that doctors, especially GPs, are still highly autonomous and get monitored only to a small extent.

It also has to be added that evidence-based medicine is important. Nevertheless, solely focusing on physicians’ adherence to scientific norms is not enough to achieve high quality and integrated care. Individual patient circumstances also have to be taken into account. Moreover, due to the fast developing knowledge today’s evidence-based practices will probably already be outdated tomorrow (Porter & Lee, 2013, p. 13).

Still, in our world one has to evaluate and measure to some extent. In Austria, the introduction of an electronic data exchange system has been discussed. The information deficits at the interfaces arise because each provider, ranging from hospitals to single practices, possesses his or her own internal information database. With the introduction of an electronic patient record (ELGA) and an e-prescription system inter-organizational and inter-sectorial communication could be improved (Schang et al., 2013, p. 21). Especially the Medical Chamber, however, has been rejecting the idea of ELGA since the beginning with the argument that patient’s data protection may be endangered. Others think that physicians are not just afraid of the safety of the patients, but also of an increase in liability risk and the number of claims, or in other words to become “transparent doctors” whose every treatment step will be documented in detail (Der ORF, 2012).
Reflection

Thus it follows that a workable integrated care strategy has to include the opinions of at least the social insurance agencies, the federal government, the “Länder” and the associations of health professionals (Nolte et al., 2012, p. 141). It is obvious that none of the actors is willing to give up much, if any, of their power. In the current system, cooperation/integration with a focus on the patient usually leads to loss of influence and money on the part of one or more of the key stakeholders.

This analysis warrants three observations: (1) Money goes in the direction of those areas in which the stakeholders are strongest. Moreover, (2) the structure of the system supports treatments which are best rewarded instead of providing those services that would bring most utility to the patient. Consequently, it is important to question the internal structure of the health system that clearly constitutes a barrier to effective integrated care (Offermanns, 2011, p. 31f). Finally (3), it can be noted that in Austria there is still an “old” iatrocratic understanding of the role of physicians. Health professionals, therefore, expect a “bottom”-up approach rather than a ”top”-down approach when it comes to health initiatives.

Hence, the biggest barrier to an ambitious integration policy seems to be the fact that there are so many strong stakeholders involved. Moreover, none of the stakeholders dares to give up some of their position because they fear that others may take advantage of them. Thus, the system becomes not just culturally but also “politically” gridlocked. So far, the focus of interest has been money, instead of the patient. However, in a world characterized by an aging population it is becoming more and more important to put the patient at the center of attention when it comes to interventions. But how can this be done if the focus lies on the individual interests of each stakeholder, and the stakeholders, in addition, compete with each other?

With this analysis, I have shown that physicians (especially PC) are still highly independent professionals in Austria. Given this fact, Mintzberg and Lee’s integration approach could be fruitful in the Austrian environment. Creating shared norms (values, culture), standardizing professions and relying on mutual adjustment could be fruitful in the Austrian environment.
5.2 Projects in Austria

In the following, I will compare various national integration initiatives. For my analysis of the integration projects, I will discuss to which extent they represent humanistic and technical ideas of integration.

We have seen that the Austrian health system as a whole is a system with many strong actors. Not just the government has power, but also the medical associations, the provinces and the health insurers. Consequently, it seems that Austria most likely favors a more humanistic, or at least artistic way of coordination, yet does so in a way that makes allowance for the preservation of the interests of the entrenched interests, not least those of physicians. In case the federal or one or more country governments or institutional managers were to introduce integrative projects without having gotten the rest of the actors “on board”, their projects would most likely fail. Knowing this, potential political and managerial reformers are often likely to “sit still.” In the following, however, we will see how the politics of health care play out in Austria (Schang et al., 2013, p. 6).

The general discussion about integrated care started with the realization of the fragmentation of the ambulatory, hospital and social care sectors, clinically as well as financially (Schang et al., 2013, p. 22). The initiatives and projects in Austria range from strategic approaches, like legal regulations and agreements, to more clinically operational ventures (Becka & Schuppenlehner, n. d., p. 4).

5.2.1 Strategic Projects

Over time, many strategic efforts have been made in order to tackle the above mentioned problems of changed care needs and the difficulties based on the structure of the Austrian system. Some of the strategic integrated care programs have a legal basis (Becka & Schuppenlehner, n. d., p. 5).

Reforms in the 1990s

The first reform initiatives in the 1990s were motivated primarily by the aim to contain costs (Nowak et al., 2011, p. 27). In 1992, psychotherapy was included in the obligatory services of social health insurance (Graf, 2003, p. 29). The introduction of care allowances in the course of the Federal Long-Term Care Allowance Act (in German known as “Bundespflegegesetz”) in 1993 was a remarkable step in the direction of supporting integrated care. It “allows a cash-benefit to individuals according to their needs of help and care, through the whole of Austria”
(Grilz-Wolf, Strümpel, Leichsenring, & Komp, 2013, p. 4). This was designed to give people in need of care the possibility to live a self-determined life focused on individual wants and needs. Moreover, it was one of the first long-term care regulations at the federal level (Grilz-Wolf et al., 2013, p. 4; Rieger, Hardt, Sennhauser, Wahn, & Zach, 2013, p. 1130):

The “Fonds Gesundes Österreich” (Austrian Health Promotion Foundation), based on the Health Promotion Act, was launched in 1998. Together with the patients’ rights legislation to strengthen patients’ self-determination, preventive medicine and health promotion entered the discussion of health politics. More generally, the new legislation and initiatives based on it provided and still provide project funding, but also comprise own projects (Fonds Gesundes Österreich, 2014; Nowak et al., 2011, p. 26). The latter efforts to integrate have to come primarily from various social actors and entrepreneurs. This may be seen as a humanistically inspired form of integration. Nevertheless, how the funded projects are coordinated in the further process is up to the initiators of those projects.

The Agreement according to Federal Constitution Article 15a on the Organization and Financing of the Healthcare system (Vereinbarung gemäß Art. 15a über die Organisation und Finanzierung des Gesundheitswesens) is the general basis of integrated care and specifies the organization and funding of the health system. In the 1990s, the federal government, the provincial governments and the social insurance agencies began to link the funding of hospitals to concrete outcome measures (Nowak et al., 2011; Welldone GmbH, 2010, p. 1). The LKF-System (performance-oriented funding system) was implemented in 1997 (Potocnik, Septmeber 2006, p. 16).

Nevertheless, the parties were not prepared for a fundamental reorganization of the power distribution or competences referring to finance and service delivery. The reason for this was that none of the parties was willing to give up any of their powers. Hence, it was not possible to centralize health care governance to the federal level. As a result, it became necessary to achieve a better coordination of health care coordination between the federal and provincial governments and the social insurance agencies (Nowak et al., 2011, p. 27).

Reforms from 2000 onwards

The Health Reform of 2005 focused on the connection between the outpatient and inpatient sector. Efficiency, patient security as well as transparency were at the top of the agenda. Laws about quality standards were enacted. In addition, e-health, with the patient E-Card, was introduced. Another step was the further development of the performance-oriented hospital
financing system and investments in health promotion and disease prevention (Nowak et al., 2011, p. 28; Vasilica Marisescu, 2010, p. 110).

The issue of fragmented administration was confronted in the Austrian health reform in 2005 with the Agreement according to **Federal Constitution Article 15a on the Organization and Financing** of the Healthcare system as its theoretical foundation. In order to reduce expenditures and improve the structure of the system and the cooperation between the actors, a Federal Health Agency (Bundesgesundheitsagentur) consisting of a Federal Health Commission (Bundesgesundheitskommission) and nine Regional Health Funds (Landesgesundheitsfonds) with Health Platforms (Gesundheitsplattform) was established (Herber, 2007, p. 8). These organizations include representatives of the federal government, the social insurance agencies, patient representatives, physician representatives and representatives of the regional governments. This was the first time that legislation was enacted that gave the countries (Länder) and the social insurance agencies shared responsibilities in healthcare. Moreover, other important stakeholders were included. By involving all kinds of service and financial partners, the Federal Health Agency and the nine Health Platforms at country level took a first step in the direction of shared funding, governance and over-all responsibility for health care in Austria (Hofmarcher, 2013, p. 28; Nowak et al., 2011, p. 28). The regulations accompanying the legislation give providers at the provincial level incentives to improve the coordination of care delivery between the outpatient and inpatient sector and to increase efficiency.

Since the health reform in 2005, innovative integrated care projects are funded via the so-called **“Reform Pool Project”**. The federal government, together with the social insurance agencies, created a pool of funds at the provincial level. This pool is an integral part of the Article 15a agreement on the organization and financing of the healthcare system (Eger et al., 2009, p. 5; Schang et al., 2013, p. 22). At the time the funds were introduced, they were available for medical purposes and for projects that focused on the shift of services from either the inpatient to the outpatient sector, or from the outpatient to the inpatient sector, depending on where services could be delivered most cost-effectively (Bundesministerium für Gesundheit, 2014b).

The scope of “Reform Pool Projects” was expanded within the revised version of the Agreement according to Article 15a agreement on the Organization and Financing in 2008. The projects since include initiatives that focus on integration between the interfaces of health (inpatient, outpatient) and long-term care (Bundesministerium für Gesundheit, 2014b). In other words, the importance of adequate treatment of chronic diseases was publicly recognized (Nolte et al.,
2012, p. 130). By promoting not only cooperation within healthcare, but also the support of interface-management to long-term care shows that Austria tries to approach the WHO definition of health, taking salutogenetic aspects into consideration (Welldone GmbH, 2010, p. 1) as well. Since then various projects have been implemented in order to overcome problems of coordination. The most common operational projects were and still are disease management programs. The operational project will be presented in the next section (Nolte et al., 2012, p. 132).

It also has to be mentioned that the way in which those projects can be implemented can vary in their level of radicalism. “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” (Schang et al., 2013, p. 23). Consequently, Austria seems to pursue a “softer” strategy than other countries.

In addition to the “Reformpool” the **Austrian Structural Plan for Health** (Strukturplan Gesundheit) is also regulated within the scope of Article 15a on Organization and Financing of Healthcare. The plan was created in order to support integrated care in Austria (Hofmarcher, 2013, p. 56). It focuses on how to create operational integration plans based on the health care supply structure of Austria. Thus, it provides information about quantitative care needs, like the number of beds needed for a medical specialization, but also about the minimum frequency a hospital has to conduct a (surgical) intervention in order be routinized and to secure a specific level of quality. It also identifies the time it takes a patient from one geographical region to reach the closest emergency department. Data about the geographical need for rehabilitation centers and how to maintain primary care for patients are included in the Health Structure Plan (Brenner, 2015). Nowadays, the framework does not solely focus on hospitals as a siloed sector, but takes all of the regional healthcare providers into account (outpatient and rehabilitation clinics, interfaces to long-term care) (Bundesministerium für Gesundheit, 2016b). Moreover, it is the binding basis for the plans made at regional level (Regional Health Structure Plan, or: Regionale Strukturpläne Gesundheit). The latter means that the general plan gets adapted to regional circumstances (Bundesministerium für Gesundheit, 2016b; Stöger & Paretta, 2009, p. 24).

The **“Masterplan Gesundheit”**, introduced in 2010 by the social insurance agencies also follows a holistically integrated care approach. It takes patients’ (and populations’) personal needs into account. At the same time, the Austrian umbrella agency of social security agencies
highlights the importance of disease management programs. Referring to the coordinative
perspective, the umbrella organization of social security agencies knew that it is not possible to
face the stakeholders with a fait accompli. Instead the social insurance agency invited all
healthcare partners to meet for a dialogue (Becka & Schauppenlehner, n. d., p. 5; Schelling &
Reischl, 2010).

The **Health Target Framework** (Rahmen-Gesundheitsziele), which was introduced in 2011
by the Federal Commission of Health and the Council of Ministers, functions as an orientation
framework for the current health reform (Bundesministerium für Gesundheit, 2013d). The
“Rahmen-Gesundheitsziele” follow the Health 2020 concept of the WHO by using the principle
of “Health in All Policies” (HiAP) as a strategic tool. In total the framework goals number 10,
all of which should help to increase people’s average healthy life years by two years within the
next 20 years. It should be added that the HiAP concept was not only embraced by the
government and the social insurance agencies but also by 40 institutions and the general public.
Consequently, a partner-like target governance system which creates shared responsibilities and
good working conditions in healthcare in order to achieve qualitative health services can be
accounted to a rather humanistic perspective (Bundesministerium für Gesundheit, n.d./b).
Moreover, the goals are to be evidence-based, relevant and measurable (Bundesministerium für
Gesundheit, 2013c).

The health targets that are relevant for integrated care are goals 3 and 10. The first one entails
increasing peoples’ health literacy so that they understand how to navigate the health care
system. The latter objective refers to the provision of sustainable, qualitative and efficient care
for all. This also implies that a special focus should be placed on health promotion, disease
prevention, PC and the creation of integrated care systems and networks (Bundesministerium
für Gesundheit, 2013b).

Regulations according to the Article 15a agreement on the Organization and Financing of the
Healthcare system have constantly been adjusted. The most recent revision was published in
the course of the **health Reform 2013**.

> “Major elements of the 2013 health reform are: (1) the creation of institutional capacity
> for the effective realization of the “governance by objectives” approach, (2) enhanced
> primary care capacity, (3) standardization of care processes (discharge management),
> (4) monitoring of health indicators and (5) the definition of accounting standards to
> better enable adherence to the budget cap.” (Hofmarcher, 2013, p. 10)

Especially section 2 of the Art. 15a agreement on Organization and Financing focuses on
integrated care by mentioning integrated planning, interface-management, health telematics,
performance-based financing systems and inter-sectoral financing of the outpatient sector. The legislation places a new focus on coordinated care and support of primary care models in order to increase the efficiency of the health care system.

Following the Health Target Framework, the health reform 2013 established a new Agreement according to **Federal Constitution Article 15a on Governance by Objectives** of the Healthcare system (Zielsteuerung Gesundheit). This agreement is also the new basis for the adapted Article 15a on the Organization and Financing of the Healthcare system (Bundesministerium für Gesundheit, 2014a). The inter-sectorial target-governance at the core of the health reform has the overall aim to achieve better coordination between services. That agreement was decided fairly between the federal and regional governments as well as with the social insurance agencies. The Health Reform Law 2013 says that the strategic goals and programs have to be specified first in contracts at federal level (Bundes-Zielsteuerungsverträge). In order to realize those goals at the provincial level province target-governance contracts have to be created (Landes-Zielsteuerungsverträge). This means that each contract must confirm the values that are the basis for the goals and the operative measurements. The obviously new approach in that agreement is that the reform goals should be attained by joint decision-making between the main stakeholders. Thus, by trying to narrow the gap between the key stakeholders of the Austrian health system by establishing common objectives, we may say that the current health reform is trying to include more humanistic elements. At the same time it may have strategic reasons, because if the federal government is to achieve anything it must take the power relations into account.

The first attempts of launching **ELGA**, an electronic patient record, took place in 2006. The legal basis for ELGA can be found in the Article 15a agreement on Organization and Financing, Article 7. The debates about the electronic health data system ELGA have been going on constantly ever since. The involvement of stakeholders, especially patients and physicians, is considered important in the ELGA discussion. This means that politics clearly try to achieve commitment by pursuing a dialogue approach. The result was regular revisions of the legislation and other adaptions of the system. Moreover, it led to delays in the implementation phase (Meier, 2009, p. 78). As previously mentioned, especially the Medical Chamber has raised concerns about the protection of privacy. The project will be implemented slowly in two regions of Austria. In the beginning, ELGA will only be used in hospitals and should later be rolled out in PC and pharmacies. It will be interesting to follow the developments in the coming years, because especially general practitioners are not used to being monitored to this extent. The Medical Chamber has already said that in case the physicians feel that the system is not user-
friendly and too bureaucratic the medical profession will reject the program (derStandard.at, 2015).

The most recent attempt of politics to strengthen integrated care is the “Primary Health Care Law” (Gesetz zur Primärversorgung). In Austria, this legislation is highly debated. The aim is to achieve a legal basis for the cooperation of physicians and other health professionals (about services, including therapeutic and health promotion services) in so called Primary Health Care Centers (PHC). By creating connections between various health professionals, longer opening hours for the patient will be guaranteed. At the same time coordination between specialists should help Primary Health Care Providers to achieve a better work-life balance (Redaktion Gesundheitsportal, 2015). Furthermore, the government expects fewer people to go to ambulatory departments. There are also plans to staff PHC-Centers with specialists who can deal with particular but commonly occurring diseases, for instance diabetes (Riss, 2016b).

However, this example also illustrates how slow the progress of introducing a law can be as soon as a key stakeholder (in this case the Medical Chamber) is against a draft or feels that it is being insufficiently involved. The concept of Primary Health Center was already agreed upon in 2014. Nonetheless, the concrete structure is not fixed yet because the medical association is rejecting the current draft of the law. The reason is the proposed direct contracts between health insurance agencies and individual physicians (derStandard.at, 2016). It is, for example, claimed that the law aims at weakening the Medical Chamber (aerztezeitung.at, 2015). Moreover, physicians are afraid that traditional general practices will be abolished and also that the solo medical practices will not be competitive enough in the more institutionalized market of tomorrow (Riss, 2016b). The government on the other hand tries to calm the medical sector by assuring that the traditional GP care will remain an important part of the outpatient sector of tomorrow. Primary Health Care should, says the government, in fact strengthen general practices by encouraging medical professionals to work in teams (Bundesministerium für Gesundheit, n.d./a).

As depicted in Table 8, I analyzed the nine strategic programs based on the taxonomy described in chapter 3.3. The table summarizes the answers; in the appendix (A 1, A 2, A 3) more detailed tables can be found.
Table 8: Analysis strategic projects

<table>
<thead>
<tr>
<th>TAXONOMY</th>
<th>STRATEGIC PROJECTS</th>
<th>N=9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pathogenetic</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Salutogenetic</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Both</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Technical</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Humanistic</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Both</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Linkage</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Coordination</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Full integration</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Horizontal</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Vertical</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Both</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>System</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Organisational</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Professional</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Clinical</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Functional</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Normative</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Funding</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Informational</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Administrative</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Organisational</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Service delivery</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Clinical</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Normative</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Source: authors own representation

Results:

Integrated care policies were, up until the 1990s, more indirectly than directly addressed. In the 1990s, the first initiatives were taken that showed that politics tried to include also a more salutogenetic view on health. In general the strategic projects show that political authorities have tried to include a salutogenetic view of health since that time, because Austrian strategic programs focus not only on people’s illnesses but also on their mental background, dignity, ability to self-mobilize and their different preferences (Welldone GmbH, 2010, p. 1). This is also reflected in Table 8, which shows that only two of the nine mentioned strategic projects were following a pathogenic point of view. In the 1990s, the first efforts were taken to integrate the out- and inpatient sectors. Since the health reform in 2005, more ambitious efforts have been introduced to focus not only on the elimination of diseases, but also on improving people’s overall health needs by adding health promotion and disease prevention measures to the agenda.
At that time, integrated care also became a buzzword in the Austrian environment. 2005 has been the watershed year in the development of Austrian health policy.

Basically, integrated care is anchored in the Federal Constitution Article 15a agreement on the Organization and Financing of the Health system and since 2013 also in the Article 15a agreement Target-Governance. The health reform in 2005 was revolutionary for Austria in that it clarified competences and responsibilities between the key stakeholders for the first time. Since then the problem of fragmented administration is at the core of strategic programs. Of special relevance is the “Reform Pool Project” that was established in 2005 and expanded its scope in 2008 to support not only integrated care projects between the outpatient and inpatient sector, but also connected the interfaces to long-term care providers. In 2013, the Target-Governance agreement focused on closing the accountability gap of the key players by focusing on common objectives and values.

The idea that the disjointed key players have to get motivated by sharing the same visions is present in Austria. The focus on shared decision-making between the key interest groups shows that the goals of health reforms and strategic programs are largely based on cooperation, teamwork and dialogues. One may therefore say the strategic programs are developed in a way that at least to some extent reflects systemic thinking. This may complicate and delay the implementation of the strategic programs and can lead to dissatisfaction among some, but may also make the changes that will eventually be implemented more sustainable. They will for example commit the stakeholders more strongly to the reforms.

Nevertheless, the content of the strategies varies. Some put a stronger emphasis on achieving integration at the “lower levels” (organizational, professional, clinical) by creating shared culture, vision and goals which should lead to mutual adjustment (humanistic). In our world it is, however, not possible to only focus on values. We also have to check effectiveness in order to develop further. But like Porter and Lee already explained, it is important to measure value of outcomes rather than output and compliance to guidelines. An example for a more humanistically oriented program is the Health Target-Framework and the Art 15a agreement on Governance by Objectives. They actually do not give clear structures, but represent declarations of intent (memoranda). By contrast, other projects like the Austrian Structural Plan include mainly quantitative data which helps to pre-plan which services to provide and where. This means it is possible that strategic programs and legislation were decided in a humanistic way, but can include relatively linear, pre-planned elements with respect to their content and way of implementation. This is for instance the case with ELGA, Masterplan Gesundheit and
the Article 15a on the Organization and Financing of the HC-System. Like depicted in Table 8, five of the nine strategic programs follow a humanistic approach, three include technical and humanistic elements whereas three programs are exclusively technical. This shows that there is a humanistic tendency in strategic programs as well.

Regarding integration, most strategic programs focus on linkage or coordination. Only the “Reform Pool Project” and “Primary Health Care Centers” also include full integration (Degree). It seems like both, integration at the same level, as well as integration between different levels of care, are relevant (Configuration). Most of the strategic programs can be characterized as system integration. This can be explained through the fact that the programs tackle issues like the needs of the population, the social, economic and political climate and they try to strengthen relationships with stakeholders such as insurance agencies, municipalities, patients and medical associations. Only ELGA and the Primary Health Centers are not typical systemic initiatives. They rather try to integrate the interfaces between organizational, professional and clinical levels (Types). The integration techniques used range from funding, information efforts, administrative measures, normative initiatives, clinical and service delivery reforms to smaller or larger reorganizations. Funding, informational and administrative techniques are most common (for more details see Appendix: A 1, A 2, A 3).

5.2.2 Operational Projects

In the following, I will give an overview of the operational projects in Austria. In the previous presentation of various strategic programs, it became clear that physicians are still highly autonomous. Hence, it is important to determine how the various types of programs take the operative core (physicians, nurses) into account.

In addition to the differentiation between strategic and operational projects, the Competence Center of Integrated Care Austria divides projects into two main categories, population-based integrated care and indication-based integrated care. These approaches reflect the two origins of integrated care, which has also been presented in Chapter 3.2, “Trends of Integrated Care”.

The most typical examples of indication-based initiatives are disease-management programs and process improvements of treatments (Competence Center Integrierte Versorgung, n.d.). In other words, indication-based projects focus on a group of people suffering from a specific disease (e.g.: diabetes, asthma). Within those initiatives, they create systematic, inter-sectoral, long-term approaches in order to treat the target group (mainly chronically ill) by using
evidence-based practices. The overall goal of such initiatives is to delay, or in the best case even to prevent, the occurrence of specific diseases (Becka & Schauppenlehner, n. d., p. 3).

By contrast, population-based integrated care focuses mainly on a specific geographical region and a segment of the population characterized by the same risk factors. Examples of typical target groups of population-based integrated care projects are pregnant women, children and teenagers, healthy adults, frail, elderly, disabled, etc. (Karin, Höfler, & Rossa, 2012, p. 22f). Especially for vulnerable elderly people, case management serves as an example. In the case of a general practitioner, model GPs function as first points of contact and are responsible for the coordination and guidance through the system of people with health issues (Competence Center Integrierte Versorgung, n.d.).

To be more concrete, the Competence Center Integrated Care Austria defines such programs as non-indication specific, quality-oriented, cooperative, efficient, effective and timely. Population-based integrated care projects usually include a variety of indication-based models (Becka & Schauppenlehner, n. d., p. 3).

Accordingly to Mrs. Weißenhofer we use both in Austria, indication-based and population-based integrated care projects. “However, when taking the sum of programs into account, indication-based approaches are predominant. Around two-thirds of all integrated care projects can be considered indication-based”.

For the following discussion of the operational projects, I have referred to Austrian best-practice examples. Either contact persons have recommended those projects, or studies or other reports have highlighted their importance. As shown in Table 9, I have analyzed nine indication-based projects and 11 population-based ones. The table summarizes the answers. In the appendix more detailed tables can be found (A 1, A 4, A 5).
Table 9: Analysis operational projects

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<th>Population-Based n=12</th>
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</tr>
<tr>
<td>Humanistic</td>
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<td>7</td>
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<tr>
<td>Both</td>
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<td>5</td>
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<td>Linkage</td>
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<td>System</td>
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<td>Normative</td>
<td>1</td>
<td>9</td>
</tr>
</tbody>
</table>

Source: authors own representation

Results

For the analysis of the operational projects, I have analyzed 20 projects. Eight of them were indication-based and 12 population-based.

The indication-based programs mentioned are projects focusing on diabetes, dementia, stroke, dialysis, problems with breathing independently, mental diseases and chronic wounds. So far only “Therapie Aktiv,” a disease-management program against diabetes, is rolled-out in nearly the whole of Austria (Nagy, 2013).

The themes of the included population-based programs are of a wide variety. One is about the reduction of inappropriate prescriptions, another about interface management, a third about activities aimed at making it possible for different generations to live together in one house, a fourth about the development of networks between health and social organizations in various areas, and a fifth about managing the interface between hospice and palliative care as well as PHC-centers.
Before I present the results, I have to point out that it is not an easy task to clearly categorize integrated care projects. The lines between the various types and techniques of integrated care are usually quite blurry.

**View on Health** (pathogenic/salutogenic): The table shows that both indication-based projects and population-based projects in Austria try not only to focus on illnesses, but also on improving quality of life. The salutogenic approach to health is clearly predominant. Most best-practice examples focus on salutogenesis, which is especially important when working with vulnerable and elderly people. The strategic projects that can often be seen as regulatory frameworks for operational projects primarily focus on salutogenesis. This is probably also one reason why operational projects show a clear tendency towards mobilizing and including the patient in the care process.

**Technical/Humanistic Integration**: Indication-based projects tend to be technical, whereas population-based projects are rather systemic/humanistic. The table shows that four out of the eight indication-based projects are technical, two humanistic and two combined humanistic and technical. By contrast, none of the population-based projects is solely technical. Seven are primarily humanistic and five of the twelve best-practice examples are mixed. Hence, it can be said that in the rare case where population-based programs include technical approaches they are softened with humanistic elements.

**Degree** (linkage/coordination/full integration): Integrated care projects can include more than just one degree. They can for instance establish linkages to less important stakeholders which are not primarily relevant for the immediate treatments/services, but coordinated or even fully integrated with those with whom they have to work together more frequently. Linkage and coordination are the most common integration types used in indication-based projects. In population based programs linkage and coordination predominate as well. Only two out of the eleven population-based projects can be considered fully integrated (“House of Generations” and “Ambulante Geriatrische Remobilisation”).

**Breadth** (horizontal/vertical): Indication-based projects tend to integrate services at the same level of care, whereas population-based projects seem to be both horizontally and vertically integrated. As we saw in Chapter 3.3.4, Framework, if one wants to enhance patients’ quality of life, it is important to constantly integrate vertically and horizontally. The Austrian best-practice examples, then, are trying to do just that.
Types (systemic/organizational/professional/clinical/functional/normative): One project can usually be associated with more than just one type of integration. All indication-based projects are, naturally, clinical. Most indication-based projects also are professionally and functionally integrated. The majority of the population-based projects is professional, organizational and normative. This clearly shows that indication-based projects take place more on the micro level and that they tend to be rather technical. The latter also means that these projects have a high amount of functional elements. The high prevalence of normative integration shows that values and norms are of greater importance when it comes to population-based integration.

Techniques (financial/administrative/organizational/service delivery-oriented/clinical/normative): None of the projects include financial techniques (funding). Both types of integration projects, population as well as indication based ones, include informational, administrative, organizational, service delivery-oriented, clinical and normative techniques. Normative elements predominate, as expected, in population-based programs. In indication-based programs, they are not that relevant. Clinical techniques again are more used in indication-based projects and organizational ones in population-based initiatives. Nevertheless, service delivery, informational and administrative techniques are of importance for both categories.

5.3 Discussion

We have seen that the stakeholders involved in health are strong. A consequence of this is the fact that strategic decision-making and funding in general is fairly decentralized. This may lead to more “customized” solutions, but also to solutions that reflect the stakeholders’ own interests more than those of the patient or of public health. In this tug-of-war between “holistic” purposes and group interests, the iatrocatic culture continues to play a role: It gives physicians some advantages.

The strategic as well as the recommended operational projects show a trend towards the humanistic direction. Especially Article 15a Agreement “Governance by Objectives” clearly shows that Austria acknowledges that the various stakeholders can only be coordinated by creating a shared vision. Moreover, it seems that the strategic projects offer a framework for the operational projects. In the analysis of the strategic and operational projects, we see that only the strategic projects regulate the financial part. Hence, the complicated structure and the connection with separate funding of the cure and care sectors constitute barriers for effective
integration. The operational best-practice examples are consequently trying to integrate services within the given structure. Indication-based projects tend to be rather technical, whereas population-based ones are more humanistic, systemically understood.

**Strategic Programs:**

Due to the fact that the complex and fragmented structure of the health system (especially the political/federal structure) is one of its main strengths, but at the same time one of its biggest weaknesses it remains to be seen how sustainable a radical change would be. Nevertheless, it is obvious that coordination between the actors has to be strengthened. Even though the problem of fragmented administration is at the core of strategic programs since the Austrian health reform in 2005 an integrated care culture is developing only slowly.

There have been many ambitious attempts in recent years to move in a more “holistic” direction, but still the current (finance) system promotes a “disintegrative” competition rather than integration. Consequently, as mentioned, the stakeholders at the system as well as at the operating levels are encouraged to work more in their own interests than in the interests of the patients. The connection of strategic plans with values was definitely a step in a more integrative and systemic direction. Thus, Austria created, as recommended by Glouberman and Mintzberg, guiding principles built on consensus, something that helps society to move away from a combination of hierarchical and competitive systems. Nevertheless, there is still space for taking new integrative initiatives and going further in this direction.

Even in technical pre-programmed projects the idea and consequently the commitment of the various parties usually comes from the key stakeholders, including the medical and patient associations. Nevertheless, one has to be aware of the fact that the medical associations still do not represent all physicians. To implement the health system approach at the institutional level in a humanistic way depends on how the operational projects are devised.

**Operational projects:**

It is interesting to see that my contact persons as well as the literature recommended even more population-based examples than indication-based ones. This becomes especially interesting when taking into account that indication-based projects are more often implemented than population-based ones. This indicates two things, first, that indication-based projects are easier to implement and to follow up through outcomes measures, second, that population-based projects seem to become increasingly important in the Austrian discussion.
Both indication-based and population-based programs often justify the recommendation to strengthening the outpatient sector by claiming it will disburden the inpatient setting. This is a defensive justification, and perhaps one that in important respects is a delusion: People get sick and die (although later) no matter how successful a preventive program is. Anyway, even if public health measures do disburden the specialized and costly care sector, and thus lead to better access, they do not necessarily improve quality of care and also do not increase value for the patient.

Indication-based projects are obviously more technically oriented and are focusing less on the integration of norms. Also the focus lies primarily on the clinical level. For the implementation of population-based projects a humanistic approach is followed in Austria. Here, the creation of shared culture and values between the various stakeholders is more common. This is an element that is obviously missing in indication-based projects. They are just technical; the norms are associated only with the specific outcomes of treatments. But since the Austrian culture obviously emphasizes (also) a humanistic approach, it is essential to focus additionally on the norms of health we are to “optimize” the outcomes of the country’s health care system.

In addition to giving room for an artistic way of integration a (at least) partial bottom-up approach is probably necessary to achieve sustainable integration, given the power configuration of Austrian health care. There are examples in Austria that clearly depict how different the result is depending on the approach chosen in order to implement integrated care.

As we have seen the focus of the current health reform is the implementation of PHC-centers. However, so far it has only been possible to establish one operational PHC project, the PHC-Center Mariahilf. An already existing group practice decided to expand and become a PHC-Center. The project was developed together with the city councilor for health- and social affairs, “Wiener Gebietskrankenkasse” (Vienna Area Health Fund), Medical Chamber Vienna, district leader of Vienna’s sixths district and the group practice team. In other words, the project was not solely developed bottom-up but also in a rather humanistic way (Hauptverband der österreichischen Sozialversicherungsträger, n.d.; Mayrofer, Mückstein, & Lamel, n.d.)

A second PHC-Center, called “PHC-Center SMZ Ost” is planned. The project is going to be right next to the eponymous hospital. The aim is to work closely together with the outpatient department of the hospital and in direct consultation with physicians of the clinic in order to disburden the outpatient departments (Weilguni, 2015). Nevertheless, the pilot project “PHC-Center SMZ Ost” had problems finding interested physicians. The health insurance agency
wanted the project to start in 2015. Now, one year later and after many public invitations to tender, they finally found suitable applicants (Riss, 2016a). A reason for the start-up difficulties of the projects could be that the initiators of the project had given it a rather fixed legal structure before they began looking for health professionals. By contrast, in Mariahilf the current PHC-Center was a group practice before the concept and implementation process were launched. The development and implementation of the concept and plan for the more integrated center were done by the team of health professionals themselves (Weilguni, 2015).

This is also what Mrs. Weißenhofer is emphasizing when mentioning that “projects which were implemented on a top-down basis are lacking some aspects. Especially in earlier times, professionals assumed it was possible to develop one concept that is then applicable for all of Austria. Meanwhile we know it is not like that. Managers reacted and instead are now rather establishing minimum requirements. Additionally, concepts are created on a national basis, but are revised on a regional level in further processing, due to regional differences. Consequently, it is important that integrated care projects are adapted to regional needs”.

This observation shows once more how important it is to include all stakeholders in the development process in a genuine way. If physicians and other health professionals encounter pre-defined structures they just have to adapt to, they have always put up resistance. On the other hand, it is clear that there have to be some (advance) regulations. They cannot go too far, though. The operating core must become involved in a serious way. The operating core people must have a chance to put a visible stamp on what comes out of the development process.

5.4 Recommendations

Even though the Austrian environment seems to favor a humanistic perspective to some extent, it also allows for a fair amount of pre-planning and performance measurement. Especially in a world that is constantly asking for evidence it is not possible to be solely and traditionally humanistic. In order to identify mistakes and to improve one has to evaluate.

Even Glouberman and Mintzberg are for some kind of measuring. They talk about licensing in order to achieve a greater equilibrium between the cure and care sector. In Austria the cure (hospital) sector is clearly dominating, hence, licensing of alternate treatments and community building should also be promoted.

Nevertheless, one has to be aware of the fact that data about treatments often do not give absolute answers, but depict a trend. Especially in a complex field like medicine, in which
various patients react differently to the same treatments, it is not sufficient only to rely on quantitative data. Moreover, patients’ individual needs can vary considerably. Consequently, the main normative question is not whether effectiveness is measured or not, but rather if the projects leave enough space for their participants to improvise and to act artistically.

Moreover, an effective strategy usually includes a broad set of complementary tools to cover the various needs of the stakeholders and population (patients). In my recommendations I will try to focus primarily on how the humanistic perspective can be used to improve integration of care, but I will also draw on (versions of) the technical perspective.

The projects should include (formal and informal) evaluations, to get premises for constantly improving the integration of the care. Indeed, the projects and their organizations should be turned into dynamically learning projects and organizations (Armitage et al., 2009, p. 1). The term “learning organization” describes organizations which are able to constantly adapt to external and internal stimuli. Incididents are used for development processes in order to increase knowlede and to adapt to the new circumstances in an innovative way. Peter Senge, who coined the term “organizational learning” talks about five skills which are essential for such organizations/projects. These elements are personal mastery/self-development, mental models, shared visioning, team learning, systems thinking (Senge, 1992).

Suter, Oelke, Adair, and Armitage (2009) conducted a systematic review aiming to help decision-makers picking principles that have proven to be effective when implementing integrated care projects. Some of these points are more humanistic, others more technical. Throughout the variety of types of integrated care they found that successful interventions had ten key elements in common: “These principles were independent of type of integration model, healthcare context or patient population served” (Suter et al., 2009, p. 2). These points may also be relevant for Austrian integrated care strategies. According to Suter et al. (2009) the key guiding principles for effective integrated care programs fall into ten categories: (1) financial management, (2) information systems, (3) performance management, (4) geographic coverage policies, (5) governance structure, (6) comprehensive services across the care continuum, (7) physician integration, (8) patient focus, (9) standardized care delivery through inter-professional teams, and (10) organizational culture and leadership. Table 10 shortly describes measures that can be subsumed under the various categories.
Table 10: Ten key areas of integration

<table>
<thead>
<tr>
<th>Financial management</th>
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<tbody>
<tr>
<td>- Aligning service funding to ensure equitable funding distribution between different services or levels of services</td>
</tr>
<tr>
<td>- Devising funding mechanisms so that they promote interprofessional teamwork and health promotion</td>
</tr>
<tr>
<td>- Securing funding to encourage sustainable change</td>
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Information systems

<table>
<thead>
<tr>
<th>Information systems</th>
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</thead>
<tbody>
<tr>
<td>- Installing state of the art information system to collect, track and report activities</td>
</tr>
<tr>
<td>- Installing information systems that enhance communication and information flow across the continuum of care</td>
</tr>
</tbody>
</table>

Organizational culture and leadership

<table>
<thead>
<tr>
<th>Organizational culture and leadership</th>
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<tbody>
<tr>
<td>- Putting in place organizational support with demonstration of commitment</td>
</tr>
<tr>
<td>- Appointing leaders with vision who are able to create a strong, cohesive culture</td>
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</table>

Performance management

<table>
<thead>
<tr>
<th>Performance management</th>
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</thead>
<tbody>
<tr>
<td>- Creating commitment to quality, evaluation and continuous care improvement</td>
</tr>
<tr>
<td>- Seeing to it that diagnosis, treatment and care interventions are linked to clinical outcomes</td>
</tr>
</tbody>
</table>

Geographic coverage and rostering

<table>
<thead>
<tr>
<th>Geographic coverage and rostering</th>
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</thead>
<tbody>
<tr>
<td>- Introducing measures to maximize patient accessibility and minimize duplication</td>
</tr>
<tr>
<td>- Create an overview roster of the distribution of responsibilities for identified populations, and of the rights of patients to choose and exit</td>
</tr>
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</table>

Governance Structure

<table>
<thead>
<tr>
<th>Governance Structure</th>
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<tbody>
<tr>
<td>- Creating a governance structure which includes all important stakeholder groups</td>
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<tr>
<td>- Creating an organizational structure that promotes coordination across settings and levels of care</td>
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Comprehensive services across the care continuum

<table>
<thead>
<tr>
<th>Comprehensive services across the care continuum</th>
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<tbody>
<tr>
<td>- Making arrangements to facilitate cooperation between health and social care organisations</td>
</tr>
<tr>
<td>- Creating a service structure which has multiple points of access</td>
</tr>
<tr>
<td>- Creating a structure that emphasizes wellness, health promotion and primary care</td>
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</table>

Physician Integration

<table>
<thead>
<tr>
<th>Physician Integration</th>
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</thead>
<tbody>
<tr>
<td>- Organizing the care organizations so that physicians are the gateways to integrated healthcare: The integration of physicians is pivotal for the implementation and maintenance of the single-point-of entry or universal electronic patient records</td>
</tr>
<tr>
<td>- Making arrangements to engage physicians in leading roles</td>
</tr>
</tbody>
</table>

Patient Focus

<table>
<thead>
<tr>
<th>Patient Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Putting the patient’s needs at the center of actions</td>
</tr>
<tr>
<td>- Engaging and mobilizing the patient</td>
</tr>
<tr>
<td>- Assessing needs of population</td>
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Standardized care delivery through interprofessional teams

<table>
<thead>
<tr>
<th>Standardized care delivery through interprofessional teams</th>
</tr>
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<tbody>
<tr>
<td>- Introducing interprofessional teams across the continuum of care</td>
</tr>
<tr>
<td>- Introducing provider-developed, evidence-based care guidelines and protocols to enforce one standard or care regardless of where patients are treated</td>
</tr>
</tbody>
</table>

Source: (Suter et al., 2009, p. 11)

Seen from an Austrian point of view, we miss both some single initiatives and an emphasis on the importance of seeing the various initiatives as a whole in this overview. This is what I am going to add in the following.
One of the most important technical reforms needed to achieve integrated care is to (1) **improve the financing system**. Since the various parties – and there are several, as we have seen – work in their own interest to such an extent, it is necessary to strengthen the parties’ responsibility for the well-being of people. A possible way could be the establishment of **bundled payments**, as recommended by Porter and Lee. At the same time, bundled payments shouldn’t be seen as a fully technical form of financing: They “force” the parties to take a patient-oriented and “holistic” view of the use of resources. In this way, they can also contribute to building up a shared, care-to-cure oriented culture, something more explicitly humanistically oriented Glouberman and Mintzberg call for.

Austria is lagging behind when it comes to the introduction of advanced (2) information systems (ELGA, e-health). The challenges associated with the up-grading of such systems can likely only be met by following a more dialogical approach, especially vis-à-vis physicians, the persons on whom an effective integration depends above all.

Most of the previously presented projects are “mobilizing” – and thus rather humanistically oriented – projects: They try to include and commit health professionals to take responsibility for patients. We have not had the opportunity to find out to which extent the projects were implemented by (3) good leaders with a strong, “holistic” vision. These are “mobilizing” leaders, or, as Glouberman and Mintzberg call them, **craft-style managers**. With leaders of this type, the integrative goals of cohesion and motivation can be achieved. To develop such managers should be a key ingredient in health management **education programs**. Due to the fact that craft-style managers often manage to convince and commit professionals to work towards constant improvement, quality of treatments and evaluation also (4) performance management could be positively affected by such training sessions.

When looking at category (5), geographic coverage, two things have to be mentioned. First, apart from some disease-management programs, there are no integrated care projects that have been implemented throughout Austria. This shows that more could still be done in the area of ambitious integration. Second, if we stick to the view that Austria gives some space for humanistic solutions, Austria should focus on giving the integration programs a more personal – and that means small – scale by holding back on large scale, impersonal mass processing. One of the concerns about the PHC-Centers is that some physicians fear that they may lose the possibility of engaging in a more personal and contextualized contact with their patients and instead be forced into an industrial, assembly-line type of care (Huber-Eibl, 2015). They represent a widespread culture in Austria that **definitely favors smaller and personal**
organizations/systems. But we still have to coordinate and strengthen a culture for integration, because single practices that work independently make it hard to meet the challenges associated with an ageing society and the consequent increase in the volume of complex diseases. Consequently the challenge will be to find a way to integrate various professionals and/or organizations, but in a way that is not “mass production”.

There is also room to improve the (6) governance structures of integrated care, especially with regard to the inclusion of all the important stakeholders. Since integrated care is still a rather new development in Austria, its implementation requires that all parties involved show a genuine will to cooperate. Even though it seems like most researchers, managers, health professionals and politicians are aware of that fact, many practical examples show that awareness is not always translated into practice. In order to make integrated care more attractive incentives have to be given to the initiators, the providers and the patient (Becka & Schauppenlehner, n. d., p. 4).

Referring to financing Mrs. Weißenhofer pointed out that “[f]inancial incentives can increase the amount of implemented projects on a short-term basis. In other words, such methods of financing impact not only the number, but also the type of projects tested. Nevertheless, one has to be aware of that financial incentives will most likely not strengthen project development in the long term”.

A good integrated care strategy is one that focuses on the patient’s individual needs and that takes the expectations of the various stakeholders into account. At the moment, physicians have fairly little to say in health politics, even though it is important to involve them in the decision-making process. These days, only the Medical Chamber is involved. We know, however, that especially physicians in the primary care sector are still highly autonomous. Therefore, other associates, like the association of general medicine, should be included in the political decision-making process to a higher extent. Since integrated care, widely understood, is of particular importance for chronically ill people, the nursing profession should also be more directly involved in political decision-making, nationally as well as regionally and locally.

The main obstacle to achieve (7) comprehensive services across the care continuum is, to my mind, the fragmented funding system. In spite of the existence of this barrier to integration, the strategic as well as the operational projects introduced in later years show that the key decision-making bodies are trying to cooperate with the providers of health and social care to create a
more integrated care providing system. Especially Austria’s strong focus on salutogenesis works in favor of such integrative efforts.

Raising physicians’ awareness of the importance of integrated care is important in order to strengthen (8) physician engagement in the integrative efforts which are now being introduced. To achieve this the current legislation and strategic projects should function as frameworks rather than setting up binding rules about how integration has to take place. Only in this way will the operating core have incentives to become integration champions. In other words, strategic programs should create an environment in which the operating core is empowered and mobilized to work on integrated care. Like in the political field at the operational level, too, health professionals have to be involved more than they currently are. Moreover, as already mentioned, integrated care should be a topic in the education/training programs for health care professionals.

The analysis of the operational projects shows that population-based programs are becoming more and more popular. Furthermore, most population-based initiatives try to strengthen cooperation between two or more institutions. Therefore, they can also be associated with “organizational integration.” However, as we have seen in Glouberman and Mintzberg’s, but also in Porter and Lee’s integrated care strategy integration should start at the clinical level and should then be continued on to the “higher” levels. This is especially because success of a project is associated with the commitment of the stakeholders. Thus Grilz-Wolf et al. (2013, p. 25) say that “in successful projects, the staff members have to take up the ideas of a project within the organization to be able to take it outside and to cooperate with staff from other areas”. This means that integration at the clinical level has to include more humanistic (normative) and bottom-up elements in order to motivate physicians, before focusing on higher organizational levels. Mrs. Weißenhofer approves this by mentioning the following in our interview: “Especially when referring to Austrian disease management programs it can be identified that the top-down focus which follows is too strong. Even though the physicians who engaged in disease management accepted the program in a positive way and were able to generate added value. In the future it is important to include more bottom-up elements”.

(9) Focusing on patients is another important aspect integrated care projects should include. However, a real patient focus is only partly possible in Austria. On the one hand, most integrated care projects follow a salutogenic approach which helps to empower the patients. On the other hand, the structure of the health system itself often makes the providers act in their own interests rather than in a way that would be best for the patient.
The last component of the systematic review refers to (10) the standardization of care, which takes place at the clinical level. Even though this is obviously a technical concern, it is softened when evidence-based guidelines are developed by/with the providers (bottom-up approach), but also are differentiated based on current experiences of the clinicians and customized in practice. This shows again that in Austria a humanistic approach has a solid footing, but also that in many cases it is inevitable to make use of more technical tools. In that case, however, the structure should be developed together with the operating core. In other words, by strengthening teamwork, coordination translates into practice by the managed rather than by the managers.

As shown in Table 9, most indication-based projects are mainly technically organized. Nevertheless, this does not mean that they are failing in any way. Various technically introduced projects have already proved to be highly effective. Contact persons Mrs. Weißenhofer, as well as Mr. Christoph Dachs mentioned that one of the main reasons why technically introduced projects are failing is the strong top-down approach. To succeed, it seems, indication-based projects have to emerge from the operating core (bottom-up). Moreover, all programs, irrespective of whether they are humanistically or technically oriented, should include the main stakeholders in the discussion. In other words, technical approaches have to be softened by including more interest groups into the dialogues. Especially at the clinical level, indication-based integrated care programs should not focus too much on the chain-model, but rather on the hub- or the web-model (see Chapter 4.1 Pathways).

Finally, it has to be added that both indication-based and population based programs often focus on strengthening the outpatient sector to disburden the inpatient setting. However, only improving access, if it at all succeeds in doing so. without improving quality, does not lead to increased value for the patient.

In summary, it can be said that a humanistic approach enjoys wide support in Austria. This means that creation and cultivation of shared norms (values, culture), mobilization of the professions (which also means that integrated care and teamwork can be made central in education/training processes) and the development of the will to achieve mutual adjustment can and should be nurtured in the Austrian health care environment.

When we look at the integrated care approaches being developed in Austria today, we see that Austria actually knows where it wants to go – namely in, to us, the right direction. But obviously just knowing in which direction to go does not give us the solution of how to get there. In
Austria, many barriers make it hard to achieve true integrated care. The biggest obstacle is probably the fragmented power distribution between the key actors. The fragmented financial structure is, as we have seen, largely a reflection of that power fragmentation. These forms of fragmentation encourage self-serving – and in practice that often means non-integrative – behavior.

Below I summarize my pro-integrative recommendations.

**Table 11: Policy Recommendations Austria**

<table>
<thead>
<tr>
<th>Technically</th>
<th>Humanistically</th>
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<tbody>
<tr>
<td>Licensing of alternate treatments</td>
<td>See to it that projects leave enough space to improvise/to act artistically</td>
</tr>
<tr>
<td>Improve financing system (e.g. bundled payments)</td>
<td>Start integration efforts at the clinical level and then roll them out upwards</td>
</tr>
<tr>
<td>Introduce financial incentives for integrated care</td>
<td>In the strategic programs: creating an environment which empowers and mobilizes</td>
</tr>
<tr>
<td>Conduct regular, systematic evaluations of activities and projects</td>
<td>the operating core</td>
</tr>
<tr>
<td>Put in place programs for systematic, continuing quality improvement</td>
<td>In the strategic programs: include not solely the Medical Chamber, but also</td>
</tr>
<tr>
<td></td>
<td>representatives of other, associate health care groups (GPs, nurses)</td>
</tr>
<tr>
<td></td>
<td>Identify and promote craft-style management and introduce training programs to</td>
</tr>
<tr>
<td></td>
<td>develop managers who can manage in this way</td>
</tr>
<tr>
<td></td>
<td>Promote smaller and more personal organizations/systems (personal scale)</td>
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<tr>
<td></td>
<td>Let strategies follow a bottom-up approach to knowledge application and</td>
</tr>
<tr>
<td></td>
<td>development</td>
</tr>
<tr>
<td></td>
<td>Let the clinical level include more humanistic (normative) elements</td>
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<tr>
<td></td>
<td>Indication-based projects: let the clinical level focus on the hub- or web-model</td>
</tr>
<tr>
<td></td>
<td>projects and their organizations should be made into dynamically learning</td>
</tr>
<tr>
<td></td>
<td>projects and organizations</td>
</tr>
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- Include a broad set of complementary tools
- Give incentives to the initiators of ideas, the providers of services and those who receive the services, the patient
- Adapt the structure of the health system to the needs of the patient and, indirectly, the health care professionals
- projects and their organizations should be made into dynamically learning projects and organizations

Source: author’s own representation
6 Summary

One of the objectives of this thesis is to analyze the “patient”, the healthcare system. In order to do so, it is important to understand what is meant by the words “health,” “health care,” “systems” and “healthcare systems”(Chapter 2.1).

In this thesis, I refer to health as a dynamic process that can range from optimal health (social, mental and physical well-being) to total disability or death. With respect to the medical domain one may look solely at a patient’s condition, and do so in a reductive way (pathogenically), or look at his or her condition in relation to his or her personality and wider situation (salutogenic) (Chapter 2.1.1). Healthcare, then, is the provision of various preventative and medical interventions in order to improve patients’ overall health. The type of offered healthcare can be differentiated depending on the intensity and the time of the intervention. Hence, various healthcare services can be provided in either a public health, a primary care, a secondary care, a tertiary care and a long-term care setting (Chapter 2.1.2). Systems are characterized not by the sum of their parts but by their cooperation between the individual parts, they consist of. Together these parts create a whole, a whole which has its own integrity, that is, autopoietic (“self-creating”). (Chapter 2.1.3).

After having clarified these terms I go on to explain the word “healthcare system.” We human beings develop healthcare systems because people fall ill, are injured and die “prematurely.” Even though healthcare systems are highly complex, all health systems (should) share six elements. These elements are (1) service delivery; (2) health workforce; (3) health information; (4) medical devices, technologies and vaccines; (5) health financing and (6) leadership and governance. The interplay of these elements is fundamental to the functioning of healthcare systems. The main focus of this thesis lies on the service provision. Nevertheless, as mentioned before, autopoietic systems, like health systems and their sub-systems, are interrelated in a way that a change in one element of the system can also impact the other elements and the system as a whole. Thus, it is important to see the elements as part of a whole system when we develop policy recommendations for a well-functioning, integrated health care system (Chapter 2.1.4).

After having presented my “patient,” the healthcare system, I start examining what it is suffering from. During iatrocracy, physicians were highly autonomous. However, after World War II, the advancements in technology and medical science, combined with the demand and supply side drivers mentioned in the introduction (1.3 Obstacles of and Changes in the Healthcare System), led not just to an increase in specialization but also to a so-called “silo”
approach to healthcare. Especially the increase in multi morbidity requires the help of highly trained professionals from various backgrounds. Physicians have kept their culture of individual autonomy, and therefore often think that coordination means that others should adapt to them. However, to tackle multi-morbidity, it is necessary to combine the knowledge of various specialists, on a team basis. These trends especially led to **fragmentation** of the health system, a condition I label as “undesirable” segmentation. The structure of health systems, including education, organizational structure, communication culture, evaluation mechanisms and financing policies, promotes segmentation. A fragmented system may result in both qualitatively deficient outcomes and more or less unbearable costs. Moreover, it can even adversely affect the outcomes for the patient, like for instance delayed provision of care, focus solely on single conditions instead on multiple chronic diseases, difficulties with coordinating through the system, patient dissatisfaction and distrust of the health system generally. Thus, integrated care programs, which aim at reducing fragmentation and strengthening coordination as well as continuity of care, are trying to tackle these problems (Chapter 2.2). Chapters 1.3 and 2.2 try to answer the first part of research question one - why has integration become such an important topic in health care?

In addition to the identification of the “patient” (the healthcare system) and the determination of the “disease” (the fragmentation of services), an important objective of mine is to determine how integrated care, my recommended “therapy”, can be fashioned. There is no universal definition of **integrated care**. Basically, it can be said that the narrowest definitions refer to continuous care within the healthcare sector. Several authors then develop this “basis” in different directions. My conclusion is that integrated care can be regarded as an umbrella term, covering all programs and tools whose aim it is to reduce fragmentation, increase coordination as well as continuity of care, leading, finally, to improved quality of care and enhanced cost-effectiveness (Chapter 3).

Even though integrated care initiatives share the same goal, they differ considerably in approach and structure. First of all, integrated care can follow either a more **humanistic** approach, which is characterized by mutual adaption and teamwork, or a rather **technical** point of view, characterized by preplanning, precise tools, performance measurement and control. The initiative in humanistic integration lies in the operating core i.e. among the clinicians, and is carried out through standardization of professional traditions, norms and expected outcomes. By contrast, technical integration has as its point of departure management and planning apparatus. Technicians often insist on defining the outcome (of the treatment process) in a very
precise/operational way - so that it can be measured. Hence, these outcomes can rather be seen as outputs. They is carried out through plans which function as increasingly detailed directives (direct orders), but plans may also be shaped by bargaining between managers and stakeholders, including employees. Through the plans, both work processes and outcomes are specified in advance (standardization of work and outputs) (Chapter 3.1).

Integrated care programs can also be divided broadly into population-based and indication-based programs. The former deal with complex (holistic) problems, the latter with more or less sharply delimited problems. Population-based integrated care can be further divided into internal integration of care, which refers to programs that primarily focus on the integration of healthcare services, and external integration, which is characterized by a de-medicalized, social care approach that clearly puts the patient-in-society at the core. Indication-based programs emerged out of single-disease programs but expanded over time to multiple disease programs. Population-based programs usually include indication-based models. Indication-based as well as population-based integrated care can be both salutogenic and pathogenetic. Even though single indication-based projects (e.g. disease management) include various complex elements like patient-empowerment, operative management, monitoring and evaluation, their focus remains rather narrow compared to the scope of multiple indication-based and population-based models. In addition to a pathogenic or salutogenic perspective on health, the way care is coordinated can also range from humanistic (artistic) to technical (pre-planned). This is irrespective of whether the integrated care initiative focuses on populations or on multiple or single diseases. Nevertheless, the trend seems to be that internal integration and single-disease integration are rather technically oriented, whereas external integration and multiple-disease programs are more humanistically oriented (Chapter 3.2).

One may differentiate integration initiatives based on what I will call its degrees, breadth, types and technologies/processes used (Chapter 3.3).

Leutz (1999) talks about three degrees of integration. He calls them linkage, coordination and full integration. The first represents the loosest, the last the tightest form of integration. The more severe the disease or condition of a person, the higher the need for tightly integrated care. Leutz is prone to the salutogenic perspective. That makes sense, especially from an egalitarian point of view, since vulnerable people or people with complicated diseases are especially dependent on integrated care. Nevertheless, he seems to favor a technical approach when it comes to the question of how to coordinate (Chapter 3.3.1).
Integration of care can also be described based on its configuration. This says something about the direction in which cooperation and integration go. They can go between levels of specialization and inside the various levels. Often the former case of integration is referred to as vertical, the second as horizontal. But in both cases the integration can take place in either a "vertical" or "horizontal" way. It is vertical when it is unidirectional (linear), and horizontal when it is interactive, dialogical – often also network-oriented. The former form of integration is technical, the other humanistic (Chapter 3.3.2).

Observers also talk about types of integrated care. The most common integration types are systemic, organizational, professional, clinical, normative and functional. One integration program can include more than one type. Moreover, all six aspects of integration need simultaneous attention. Some of these types are quite technical, others include less tangible elements like teamwork, values and behavior (Chapter 3.3.3). Finally, we may also talk about technologies of integration. The technologies, which can be found throughout the micro, meso and macro levels of health systems, build on the previously mentioned «types» of integration. The most common domains mentioned by various authors are financial (funding), administrative, organizational, service delivery-oriented, clinical, informational and normative. One integrated care program usually combines more than just one of these techniques. Which technology, or combination of technologies, will make integration initiatives work best, has a lot to do with the culture and power distribution across regions. There is not a single type or process/technology which always leads to improved outcomes. They have to be combined to achieve the best results (Chapter 3.3.5).

One of the objectives of the thesis is to develop integration strategies (for Austria). I am using two opposing perspectives, the technical and the humanistic one, for this purpose. Care pathways can primarily be seen as technical, since they are based on preprogrammed coordination. But even though the concept of clinical pathways emerged out of traditional technical thinking, patient pathways can also be managed in a more humanistic way. Glouberman and Mintzberg’s approach is primarily humanistic because their idea of coordination is based on an (organically) evolved tradition, on culture and norms and on current, mutual adaptation (which also involves patients). Porter and Lee are trying to combine the two approaches. However, they seem to focus more on the technical than the humanistic approach. Nevertheless, in our society it seems more than challenging to be fully humanistically or fully technically oriented. Moreover, a key message of this chapter is that one has to start to integrate at the micro level, before proceeding to the meso and macro levels (Chapter 4). In chapters 3.3
(Conceptualizing Integrated Care) and 4 (Integration Strategies) I give answers to the second part of the first research question (Which tools are used to achieve integrated care?).

To answer the second research question (What could integrated care policy recommendations for Austria, aiming at connecting care paths that also cut across institutional boundaries, and which are politically feasible, look like?) I ask whether the first or the second strategy, or some combination of the two strategies, would be the best for Austria.

At the core of a good and sound integrated care, a recommendation should be the objective of increased life expectancy combined with healthy life years on the one hand. On the other hand, one must also take into account the power distribution and the expectations of system partners in healthcare. Austria uses two different models to finance the same things (Bismark and Beveridge system). In addition to public authorities and the health insurance agencies, advocacy groups like the employer and employee associations (chamber of commerce and medical association) also wield much power. The complex structure of the health system results in a pronounced lack of coordination between the actors and constitutes an enormous barrier to achieve effective and efficient integrated care between the inpatient and outpatient care sectors, but also among the care, cure and social sectors. The analysis of the power distribution shows that (especially PC) physicians are still fairly independent professionals in Austria. This means that Glouberman and Mintzberg’s integration approach could be fruitful in the Austrian environment (Chapter 5.1).

The general discussion of integrated care starts with acknowledging the fragmentation of the ambulatory, hospital and social care sectors, as well as the financial "sector.” It is especially since 2005 that the efforts to integrate care programs in Austria have increased. The initiatives and projects launched range from strategic approaches like legal regulations and agreements to local, very operational ventures. The operational projects can be divided into population and indication-based projects. The 32 Austrian best-practice integration projects I present and discuss are analyzed according to a framework/table based on the findings of the theoretical chapters (2 Background, 3 Integrated Care). The table includes the categories (1) view on health, (2) way of coordination, (3) degree, (4) configuration, (5) type and (6) technologies. Based on this framework the focus of the various programs is discussed and characterized. I find that the trend in the salutogenic and humanistic direction is reflected in the strategic as well as in the recommended operational projects. Referring to the strategic projects in particular, Article 15a Agreement “Governance by Objectives” shows that Austria is aware of the fact that the various stakeholders can most likely be coordinated by creating a shared vision.
Furthermore, strategic programs primarily focus on integration at the macro level (system integration). The best-practice examples on the operational level indication-based projects tend to be rather technical, whereas population-based ones tend to be more humanistic. Indication-based projects are mainly clinical in type (micro level), whereas the majority of population-based programs focuses on organizational integration (meso level). Nevertheless, Austria seems to be going in the direction of population-based projects that are developed both bottom-up and are fairly humanistically oriented (Chapter 5.2, Chapter 5.3).

Even though the Austrian environment clearly seems to give room for a humanistic perspective, it should be added that this does not mean that there is no measurement and pre-planning going on. In a world that is constantly asking for evidence, it is not possible to be solely humanistic. Therefore, the final policy recommendations include mostly humanistic, but also technical suggestions. I suggest that a wider spectrum of complementary tools has to be used. Furthermore, the initiators, the providers and the patients have to be incentivized to work towards integrated care. I also suggest that the structure of the Austrian health system, which probably constitutes the biggest barrier for seamless care, has to be altered. The technical recommendations include a financial system that focuses on patient value. Moreover, evaluation as well as quality measurements have to be strengthened and improved. From a humanistic perspective, Austria should focus more on the creation of projects that leave enough space for the operating core, the clinicians, to work artistically. This can be done by establishing strategic programs that promote an environment of empowerment and mobilization. In order to achieve effective integrated care which cuts across institutional boundaries, integration has to start at the clinical level and then be rolled out upwards. For this to work, I claim, it is important that educational programs which strengthen craft-style management, a focus on organizational learning, and an emphasis on a personal scale instead of economies of scale, be developed. In general, projects seem to be most effective when they are created and adapted based on a bottom-up approach (Chapter 5.4).
References


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Vereinbarung gemäß Art. 15a B-VG über die Organisation und Finanzierung des Gesundheitswesens, National Council (Nationalrat) 01.01.2008.

Vereinbarung gemäß Art. 15a B-VG Zielsteuerung-Gesundheit, National Council (Nationalrat) 01.01.2013.


http://www.wgkk.at/portal27/portal/wgkkgeportal/content/contentWindow?contentid=10007.750387&action=2


## Appendix

### A 1: Analysis of Projects in Total Numbers

<table>
<thead>
<tr>
<th></th>
<th><strong>Strategic Projects</strong></th>
<th><strong>Indication-Based Pr.s</strong></th>
<th><strong>Population-Based Pr.s</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>n=11</em></td>
<td><em>n=8</em></td>
<td><em>n=12</em></td>
</tr>
<tr>
<td>Pathogenic</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Salutogenic</td>
<td>8</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>Both</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Technical</td>
<td>3</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Humanistic</td>
<td>5</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Both</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Linkage</td>
<td>9</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Coordination</td>
<td>6</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Full integration</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Horizontal</td>
<td>2</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Vertical</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Both</td>
<td>7</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>System</td>
<td>9</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Organizational</td>
<td>4</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>Professional</td>
<td>1</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>Clinical</td>
<td>2</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Functional</td>
<td>4</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Normative</td>
<td>3</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Funding</td>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Informational</td>
<td>5</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Administrative</td>
<td>5</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Organizational</td>
<td>4</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>Service delivery</td>
<td>3</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>Clinical</td>
<td>3</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Normative</td>
<td>3</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Year Establ.</td>
<td>Program</td>
<td>Health (Salutogenic/Pathogenic)</td>
<td>Coordination (Humanistic/Technical)</td>
</tr>
<tr>
<td>-------------</td>
<td>---------</td>
<td>--------------------------------</td>
<td>------------------------------------</td>
</tr>
<tr>
<td>1992</td>
<td>Psychotherapy</td>
<td>Salutogenic</td>
<td>Technical</td>
</tr>
<tr>
<td>1993</td>
<td>Federal Long-Term Care Allowance</td>
<td>Salutogenic</td>
<td>Technical</td>
</tr>
<tr>
<td>1998</td>
<td>Fonds Gesundes Österreich</td>
<td>Salutogenic</td>
<td>Humanistic</td>
</tr>
<tr>
<td>2010</td>
<td>Masterplan Gesundheit</td>
<td>Salutogenetic</td>
<td>Technical: <em>wants to promote pre-programmed projects</em> Humanistic: <em>creates shared vision</em></td>
</tr>
<tr>
<td>2011</td>
<td>Health Target Framework</td>
<td>Salutogenic</td>
<td>Humanistic: <em>creates shared vision</em></td>
</tr>
<tr>
<td>2013</td>
<td>Federal Constitution Article 15a on target governance</td>
<td>Salutogenic</td>
<td>Primarily humanistic</td>
</tr>
</tbody>
</table>
### A 3: Programs within Art. 15a Agreement

<table>
<thead>
<tr>
<th>Year</th>
<th>Program</th>
<th>Health (Salutogenic/Pathogenic)</th>
<th>Coordination (Humanistic/Technical)</th>
<th>Degree</th>
<th>Breadth</th>
<th>Type</th>
<th>Technologies</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>Reformpool Project</td>
<td>depending on the project -&gt; hence both: pathogenic &amp; salutogenic with a stronger focus on the latter (since 2008)</td>
<td>Humanistic: not pre-planned how to create projects</td>
<td>Linkage to full integration</td>
<td>Vertical, horizontal</td>
<td>Systemic,</td>
<td>Funding, clinical, informational</td>
</tr>
<tr>
<td>2006 – 2012</td>
<td>Austrian Structural Plan for Health</td>
<td>Pathogenic</td>
<td>Technical: plan is based on quantitative data</td>
<td>Linkage</td>
<td>Primarily horizontal</td>
<td>System, organization</td>
<td>organizational, service delivery</td>
</tr>
<tr>
<td>2006 ongoing</td>
<td>ELGA – electronic patient record</td>
<td>Pathogenic</td>
<td>technical: based on plan, measure, control; no space for being artistic humanistic: legislators try to create shared values, do not solely implement, but include stakeholders’ opinions</td>
<td>Coordination</td>
<td>Horizontal, vertical</td>
<td>Clinical, organizational, functional</td>
<td>Administrative, information, clinical, organization</td>
</tr>
<tr>
<td>2014 ongoing</td>
<td>Primary Health Care Law</td>
<td>Salutogenic</td>
<td>Humanistic: all key stakeholders are included in discussions, physicians are not forced to be part of a PHC-Center</td>
<td>Coordination, full integration</td>
<td>Horizontal</td>
<td>Organizational, professional, clinical, functional, normative</td>
<td>Funding, Administrative, service delivery-oriented, clinical, informational, normative</td>
</tr>
</tbody>
</table>

The disease management program was developed in cooperation between the social insurance agency and the Austrian Medical Chamber. A specially trained disease management physician, who is functioning as disease-manager accompanies the patient. The doctor coordinates important medical examinations to prevent early bad health consequences and to ensure that follow-up treatments in specialized facilities take place. Aims at providing a structured care plan for people who are suffering from Diabetes Type 2. The entire care process is taken into account. The concept includes (1) patient empowerment, (2) physician training/education, (3) care-paths and medical guidelines, (4) quality management, (5) documentation forms (Bundesministerium für Gesundheit, 2014c)

### Netzwerk aktiv – Besser leben mit Demenz (since 2005)

In cooperation with representatives of all stakeholders a concept for a voluntary integrated care network with a case management approach was developed. Specialists of various disciplines and different levels of care are responsible for a continuous treatment of (often multi-morbid) dementia which includes clearly defined interfaces. First the actors have to conduct training in networking. An evidence-based medical guideline was created in cooperation with professional societies to improve treatment for outpatient practices. Additionally a care-path was established that leads patients throughout the network of providers. The care paths include components about case and care management, empowerment of patients and relatives, information, data and network management, integration of existing structures as well as education and training of care providers. The concept is adapted to regional contexts. Finally quality management and constant monitoring and evaluation instruments are used. (Eger, Höfler, Levinsky, Gerald: Lohr, Claudi, Mayrhofer, & Rossa, 2011; WGKK - Wiener Gebietskrankenkasse, n.d.)

<table>
<thead>
<tr>
<th>Salutogenic</th>
<th>Technical components (care-paths, quality management); humanistic aspects (patient-empowerment, physician training)</th>
<th>Linkage coordination</th>
<th>Horizontal vertical</th>
<th>Professional, clinical functional</th>
<th>Services delivery-oriented, clinical, administrative, informational</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient empowerment, Seams taken into account range from mobile care, psychologists, social workers, legal advice, pharmacists, self-help groups, outpatient and inpatient care to nursing homes.</td>
<td>Technical pre-planned guidelines is rather a pathway concept (standardization of work) Partly humanistic: concept leaves some space for individual artistic action -&gt; Care management cannot be too much planned in advance, -&gt; training is a humanistic element.</td>
<td>Linkage, coordination</td>
<td>Vertical &amp; horizontal integration stronger focus on vertical integration</td>
<td>Organizational professional, clinical, functional</td>
<td>Informational, administrative, organizational, service provision-oriented, clinical</td>
</tr>
</tbody>
</table>
**Gesundheitsdialog Diabetes Mellitus (2010)**

The initiative „Health Dialogue Diabetes Mellitus“ provides the possibility of creating an intensive dialogue between (resident) physicians and patients suffering from diabetes mellitus with the support of telemedicine. The objective is to achieve reliable, permanent and individual care. The patients’ autonomy should be strengthened sustainably in order to change his/her health behavior. The focus is on the interplay between technique and prevention. The project includes the following elements: (1) in person conversations with the GP, (2) 3 week-stay in the health facility „Breitenstein“ in which the patient gets counseled and trained in using the technical device, a medical check-up is conducted, diet advice is given and physical activity carried out. (3) Advice about writing a Diabetic’s diary “DiabMemory”, (4) the (blood) levels get controlled and monitored electronically via the physician.


<table>
<thead>
<tr>
<th>Mainly pathogenetic, Partly salutogenetic</th>
</tr>
</thead>
<tbody>
<tr>
<td>The range of services provided at the stay at the health facility, Focus on prevention</td>
</tr>
<tr>
<td>Technical linkage</td>
</tr>
<tr>
<td>Horizontal Clinical Functional Informational Administrative Clinical</td>
</tr>
</tbody>
</table>

**Integrierte Versorgung Schlaganfall in Oberösterreich (2005)**

To improve stroke care from the first signs until the rehabilitation at home most healthcare providers in Upper Austria (Red Cross, 16 clinics which treat stroke patients, 3 rehab-clinics, outpatient rehab units, Medical Association) are cooperating with each other. The integrated stroke care includes population sensitization with media campaigns, discussions with other organizations and implementation of a quality management system that is established based on a communication cycle between partners and employer/principal. The communication cycle includes the elements knowledge, quality and transparency. In addition to the improvement of processes within the treatment facilities also the analysis of the interfaces is of importance (interface-management). Interface-management consists of a health and social platform as well as unified documents (e.g.: discharge papers)

(OÖ GKK Forum Gesundheit, 2015)

| Salutogenic Also includes attempts to sensitize society and individuals to lead healthy lives and to recognize a stroke quickly |
| Technical Linkage Coordination |
| Vertical Organizational, professional, clinical, functional, partly normative |
| Informational, administrative, organizational, service delivery-oriented, clinical, normative |
**Mobile Dialyse Vorarlberg (2010)**
The dialysis-patients who are not able to carry out the treatment (peritoneal dialysis) by themselves can get support from a so-called mobile team. That team is working in close cooperation with GPs, nursing personnel, nursing homes, dependents in order to provide continuous care. Another important element is the training of care (nursing) personnel. (Schaffler & Steininger, 2013, p. 11; Vorarlberg Online, 2011)

**Langzeitbeatmung & Entwöhnung (2009)**
This project is developed for people who are not able to breathe independently (without machines). The elderly home “Karl Borromäus” is offering an alternative to already “theraped” people, staying at intensive care units. In a comfortable atmosphere with only 8 other people patients get a family-like and “normal life” ambience. The long-term ventilation therapy and weaning station in the old people’s home offers a variety of services ranging from physio-, logo- and ergotherapy to psychology. Important elements of the project are also regular training at weaning-centers and especially individual therapies. Many of the medical professionals have various additional qualifications, like kinesthetic care, intensive care, neurorehabilitation, aroma therapy, acupressure, etc. Many patients who were already labeled as “incurable” succeeded in weaning off ventilation machines. (Caritas der Diözese Linz, n.d.; Schaffler & Steininger, 2013, p. 9)

**Integrierte Versorgung Demenz in Oberösterreich (IVDOÖ) Pilotprojekt – Bezirk Kirchdorf, Stadt Wels (2013)**
The city Wels, the district of Kirchdorf and local health and social care providers established services for people with dementia and their relatives with the aim of increasing their quality of life. Other objectives are the optimization of medical prescriptions, reduction of transportation and hospital stays. The treatment procedures for dementia patients are improved by increasing the professional expertise. In order to improve patients’ quality of life initiatives were established on an individual (diagnosis, periodic contact with patient & family),

<table>
<thead>
<tr>
<th>Pathogenic focusing on the health problem</th>
<th>Technical: Work procedure is standardized</th>
<th>Linkage</th>
<th>Mainly horizontal</th>
<th>Professional, clinical</th>
<th>Service delivery-oriented, clinical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salutogenic Living-room character, alternate methods like aroma therapy, offer the patient a comfortable environment</td>
<td>Humanistic Pre-planned just to a very low extent; focus lies definitely on individual therapies.</td>
<td>Linkage, coordination</td>
<td>Horizontal</td>
<td>Professional, clinical</td>
<td>Service delivery-oriented, clinical</td>
</tr>
<tr>
<td>Salutogenic Improve people’s quality of life</td>
<td>Humanistic No fixed packages, try to adapt services on needs of families and individuals</td>
<td>Linkage Coordination</td>
<td>Vertical diagnosis, treatment, long-term care</td>
<td>Organizational Professional Clinical Functional</td>
<td>Organizational Service delivery Clinical Informational</td>
</tr>
</tbody>
</table>
organizational (care networks, transfer agreements) and societally level (media campaigns). The services are provided from three types of institutions: (1) counselling centers for dementia patients; (2) day-centers and (3) old people’s homes and care homes. The employees in these institutions are supported by psychologists. Constant evaluations are conducted via guided interviews, focus groups and telephone interviews.

(Amt der Oö. Landesregierung, 2013; Oberösterreichische Gebietskrankenkasse, 2016)

**Integratives Wundmanagement (2009)**

The goal is to identify people with chronic wounds fast and timely in PC. With a referral from their attending physicians the patients come to the «Wound Outpatient Department». The procedures and treatments standards are specified/pinpointed. Comprehensive diagnosis of the underlying disease are made there. Then the necessary treatment and measurements are arranged. The «wound-team» leads the patient to the relevant specialities both in the hospital and in the outpatient/extramural sector. With a defined treatment plan and fixed appointments for the regular follow-up visits the patient is referred back to the referring physician or a project physician. There the remaining post-treatments are conducted.

(Wiener Gebietskrankenkasse, Ärztekammer für Wien, Krankenhaus Göttlicher Heiland, 2009, p. 3)
Reducing inappropriate prescriptions in Upper Styria, Austria (2013)

In many areas physicians prescribe drugs inappropriately. The project implemented in Styria is tackling that problem with various strategies: (1) GPs and nurses were offered an interdisciplinary training that focused on communication between professionals and how to identify inadequate drugs. After termination of this training participants receive a certificate. (2) Simultaneously local prescription patterns were observed with the help of volunteering elderly from old people’s homes. (3) All local medical professionals received guiding documents regarding how to conduct a rational prescribing behavior. The not yet finished evaluation already shows increased debates about how to overcome inappropriate prescribing patterns. (Barbazza, Peterson, Trivellato Andrade, & Waddell, 2016, p. 321)

Haus der Generationen, Schwaz a one-stop shop for providing health and social services in Schwaz, Austria (opened 2009)

The House of Generations emerged out of the realization that mentally impaired, elderly as well as socioeconomically disadvantaged families are in need of more extensive social care. Assisted living for elderly and people with mental disabilities, as well as affordable apartments for families are available in the building. The house offers various creative workshops, training opportunities, seminars and events (e.g. music festivals). All this supports the sense of belonging in the community. In the on-site shop mentally challenged people have the possibility to get trained and to work. Social care, professional nursing and a municipal day-care center is available as well. An important value of the house is that the old support the young and the young the old with cooking, child-care, cleaning or the like. Social workers and GPs work closely with the house of generations.
**Gesundheitsnetzwerk Tennengau (Case- and Care management) (1998)**

The project is a cooperative society of the main providers of the health and social sector in Tennengau. The 29 organizations are working in a close network and function as a model project for integrated care. Its main objectives are to promote the health of the healthy, get the ill well again, support the chronically ill, and help the dying to retain their dignity. The program provides numerous projects which focus on improving coordination and the range of services in the social and health field. Projects are e.g. (1) the Internet platform «gesundheitsnetzwerk.at», (2) discharge management – based on the principles of case and care management (3) electronic transmission of patient records to GPs, (4) regular training sessions, (5) dementia-project (6) handover/discharge of patients together with patient, performed by home care and hospital care staff (7) healthy weight loss for obese people.

(Gesundheitsnetzwerk.at, n.d.; Göbel & Schwaiger, 2010)

**Nahtstellenmanagement Oberösterreich**

The project “Interface Management Upper Austria” organized workshops in which representatives of the social and health sectors were invited in order to assess the current interface-management situation. Both strengths and weaknesses were analyzed. The results of the workshops were used to develop binding guidelines and instruments. Before they got implemented in the whole of Upper Austria (in 2011) they were tested in two pilot regions. «Region coordination teams» were created which were responsible for adapting the guidelines to the regional circumstances and needs. A precondition for making the project work is the implementation of shared platforms and unified information systems for the health and social system of Upper Austria and its sub-regions. Moreover, an anonymous IT feedback-program for professionals is available.

(OÖGKK - Forum Gesundheit, 2016; Schaffler & Steininger, 2013, p. 8)

<table>
<thead>
<tr>
<th>Salutogenic</th>
<th>The cooperation by itself is conceptualized in a rather humanistic way</th>
<th>Linkage to coordination</th>
<th>Horizontal, vertical</th>
<th>System-oriented, organizational, professional, normative</th>
<th>Informational, administrative, organizational, service delivery-oriented, normative</th>
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<tbody>
<tr>
<td>Salutogentic: The inclusion of the social sector is of high relevance</td>
<td>Technical Obligatory guideline Humanistic The program was developed by inclusion of various stakeholders (workshops, IT-feedback platform)</td>
<td>Linkage coordination</td>
<td>Vertical Horizontal</td>
<td>Organizational Professional Functional</td>
<td>Informational Administrative Organizational Service delivery</td>
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<th>Bauernhof (Klein et al., 2017, p. 8ff; VIH, 2016)</th>
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| The project promotes the health of the healthy, get the ill well again, support the chronically ill, and help the dying to retain their dignity. The program provides numerous projects which focus on improving coordination and the range of services in the social and health field. Projects are e.g. (1) the Internet platform «bauernhof.at», (2) discharge management – based on the principles of case and care management (3) electronic transmission of patient records to GPs, (4) regular training sessions, (5) dementia-project (6) handover/discharge of patients together with patient, performed by home care and hospital care staff (7) healthy weight loss for obese people.

(Bauernhof.at, n.d.; Göbel & Schwaiger, 2010)
Central in the program “Integrated Interface Management” is a working group (consortium) consisting of various institutions and companies from the health- and social sectors. This cooperation has moved the various institutions closer to one another. New ways of cooperation in respect to communication and exchange of experiences have originated. The vision is to determine and react on the needs of patients, physicians and nursing personnel. The projects are broad-ranging, from telemedicine and e-learning portals to case management. Most sub-projects have to do with establishing a dialogue between various health professionals. Also training from both physician and patient sides seems to be very important.

(WE.G.E. 42, n.d.)

**Verein „KOMPASS“ Deutschlandsberg (2001)**
The association „KOMPASS“ is a meeting platform of all relevant health and social care providers in the region Deutschlandsberg (Austria). The participants are the cooperative leadership of the clinic, representatives of the nursing services, the resident doctors, the social welfare association, the psychosocial aid organizations, the hospice association, people from nursing homes and many others. The task of the association „KOMPASS“ is mainly information exchange and networking. When service providers of the various institutions get to know each other well the integration of patient care is facilitated. There are regular meetings. In addition they also offer an internet platform for patients, relatives and (social and health) professionals in which important information about integrated care is published.

(Schaffler & Steininger, 2013, p. 9; Verein Kompass, n.d.)

**Styriamed.Net**
Styriamed is a network of physicians in the province of Styria. It connects interested resident doctors and hospitals in order to improve cooperation between all partners in the health system. The participating physicians are coordinating their opening hours and vacation days. The network is based on arranged processes, organizational structure as well as a shared care culture. The core of the treatment processes are admissions,
hospitalization and discharge management. Regular working groups organized by health professionals of the Styriamed network help to strengthen the dialogue and facilitate the connection between the out- and inpatient sectors. (styriamed.net, n.d.)

**Ambulante geriatrische Remobilisation**  
(Ambulatory geriatric remobilization)

Ambulatory geriatric remobilization is a new type of geriatric care. Such programs offer patients the possibility to receive the geriatric care at home instead of having to go to the hospital. A geriatric team consists of specialists in geriatrics, psychology, social security, geriatric nursing, and physio- as well as ergotheraphy. Such geriatric teams are able to help multimorbid patients at home tackling their daily challenges. The GP of the patient is included in all cases. In addition to the geriatric care provided within the «ambulante geriatrische Remobilisation» cooperation with other service suppliers like residential physicians, home nurses and other therapists, are essential. (A.ö. KRANKENHAUS der Elisabethinen, n.d.; Schaffler & Steininger, 2013, p. 10)

**Integrierte Hospiz- und Palliativversorgung in Niederösterreich (2006)**

The overall goal of the project “Integrated Hospice and Palliative Care in Lower Austria” is qualitative nursing, medical, psychosocial and spiritual care of incurable and dying patients. The support of relatives is also an important part of the project. In order to make the project work effectively the existing structures of the health and social care sectors are included. All people, institutions and project partners that are involved in the structural development, the organization and/or the care delivery process are actively included in the development process. Establishing and adapting goals, as well as the implementation of these goals are checked, and discussed jointly on a regular basis. Training and organizational development processes are used to establish a good hospice and palliative care culture. The project also offers workshops at schools to sensitize children to the fact that they will encounter loss of close relatives and also in other ways will be faced with death.
Primary Health Care Center Mariahilf

The PHC Mariahilf is one of two pilot projects in Vienna. In 2010 two physicians founded a group-practice. Now the practice wants to expand and develop into a PHC-Center. This development emerged out of the teams' commitment and conviction that a new approach to health is necessary. At the core of the team are three GPs, licensed medical nurses and medical receptionists. In addition social workers and psychotherapists are associated with the center. The big advantage of this type of integrated care for the physicians is that they have family-friendly working hours. Not just the organization within the PHC-Center is important, but also the close cooperation with regional health providers. The model is not only attractive for physicians but also of great interest for the patients since it is offering them expanded opening-hours. Comprehensive coordinated care, provided by representatives of various professions from the health and social sector, is especially beneficial for people with chronic illnesses.

(Hauptverband der österreichischen Sozialversicherungsträger, n.d.; Mayrofer et al., n.d.)

<table>
<thead>
<tr>
<th>Salutogenic</th>
<th>Humanistic: Decision to expand was made in the team (bottom-up), Program was developed around the existing group practice</th>
<th>Coordination, full integration</th>
<th>Mainly horizontal</th>
<th>Organizational, professional, normative, functional, normative</th>
<th>Informational, administrative, organizational, service delivery-oriented, normative</th>
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The psychiatric ambulatory center aims at connecting inpatient and outpatient services. Cases that do not necessarily have to be hospitalized are forwarded to the outpatient services of “pro mente” (an organization for mentally handicapped people). The project aims at expanding and improving acute outpatient services. The quality of outpatient care is improved by providing multi-professional teams with background in medicine, physiotherapy, clinical psychology, nursing, social work and psychosocial care. The cooperators have the same IT-system in order to share documents and schedule appointments. Team meetings are scheduled once a week. Admissions and discharge management for inpatients is also an important part of the program.
This project “Social Psychiatric Rehabilitation of patients with Special Needs” is offering effective, efficient and psychosocial rehabilitation of adult patients suffering primarily from cognitive disabilities, psychiatric diseases and/or severe behavioral problems. It does so by including the social environment of the patients. The patients get diagnoses and receive multi-professional therapy, tailored to the individual needs of patients, and in such a way that it promotes their independence. During the therapy it is seen to it that the patients have a place to live and a job. During the therapy continuous communication with the entire support system is carried out. This support system can range from parents, siblings, trustees, therapists to medical specialists. Moreover, for post-care also pedagogical coaching sessions are organized. To strengthen the interfaces between various specialty and treatment areas there is close collaboration between the psychiatric and the somatic departments, as well as regular meetings with other care providers. Intensive training programs for the employees in respect to dealing with patients are conducted.

(CompuGroup Medical CEE GmbH, n.d.; Webredaktion KHR, 2014)

<table>
<thead>
<tr>
<th>Salutogenic</th>
<th>Humanistic</th>
<th>Linkage, coordination</th>
<th>Mainly horizontal, partly vertical</th>
<th>Organizational, professional, clinical, normative</th>
<th>Informational, administrative, organizational service delivery-oriented, clinical, normative</th>
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<tbody>
<tr>
<td></td>
<td>Individual treatment, integrate via group meetings and commitment of health and social professionals</td>
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**Sozialpsychiatrische Rehabilitation von Patienten mit besonderen Bedürfnissen**

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(CompuGroup Medical CEE GmbH, n.d.; Webredaktion KHR, 2014)