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István Széchenyi Economics and Management Doctoral School

Interprofessional Collaboration in Integrated Health Care

Theses of the Doctoral Theses

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1. AIMS AND OBJECTIVES OF THE THESIS

The thesis is assigned to the health sciences and in particular to health services research in the scientific field of public health. Following the definition of Donald Acheson (1988), the World Health Organization (WHO) describes Public Health as "the art and science of preventing disease, prolonging life and promoting health through the organized efforts of society". The European Commission, following Don Nutbeam (1998), adds: "Public health can be regarded as the structures and processes by which the health of the population is understood, protected and promoted through the organized efforts of society" (WHO, 2011).

Almost all health care systems contain emphatically humanistic guiding principles that promise patients the best possible health care. The German Federal Ministry of Education and Research puts this in a nutshell by summarizing the tasks of health services research: Every person should be treated as well and as safely as possible in case of illness. But which services really help in everyday life? And are they also economically justifiable? These are the tasks of health services research (German Federal Ministry of Education and Research, 2022).

The interest of findings of the thesis is in the coordination of the care sectors of the health care system so that people are actually treated in the best possible and safest way in the case of illness and this is also economically justifiable. Science and practice speak of a "best point of service", which is to be aimed for depending on the course of the disease.

The currently highly fragmented Austrian health system, for example, with clear deficits at the interfaces, requires an integrated, patient-centered optimization of care across sectors and professional groups. Similar challenges are also evident in Germany and other countries whose systems are based on similar structural foundations. Decentralized care structures that are oriented towards actual needs and regional care situations offer themselves as a solution. The knowledge of successful networking of health care providers has become a key individual as well as collective competence in health care systems (Mayer, Weghofer, & Mut, 2018). How can outcome-oriented and patient-centered networks be established and maintained in a satisfactory way for both patients and providers? An essential aspect of this is the interdisciplinary cooperation of the health care professions and the understanding of togetherness underlying their common task in the sense of continuous, patient-oriented, as well as cross-institutional and cross-sectoral health care.

Based on this interest in knowledge, the research object is thematically limited to interdisciplinary cooperation within and between health care institutions along the care pathways. In order to promote the common understanding of the integration of health care as well as measures that favor this. The work pursued the goal of contributing to scientific progress in the health sciences and especially in health services research. In this context, the current state of research, especially in the form of international system comparisons, was examined in depth. And the scientific discourse was continued on the basis of the research questions derived from the interest in knowledge as well as by establishing several context-related hypotheses. Randomly selected hospital managers and nursing home directors were surveyed using an online questionnaire. The aim was to create a sufficiently accurate thumbnail of the population. In total, 29 data sets of hospitals (29 of 75 addressed questionnaires were answered) and 29 data sets of nursing home managers (of 57 addressed questionnaires) could be analyzed. The hypotheses were subjected to a statistical testing procedure. In a subsequent qualitative study, which was conducted in the form of a survey of 16 mainly internationally experienced experts from the health care sector (45 open questions, according to a set category scheme were asked), the findings obtained from linking the theoretical analysis with the results of the quantitative study were to be reflected on by proven experts from health care practice in a multi-perspective ("360° all-round view"). The concluding discourse and the answer to the research question is followed by a condensed tabular presentation of one's own findings in the form of recommendations for practice and the creation of necessary conditions for this.

The following figure is intended to illustrate the systematic approach of the research. As stated above, a mixed-methods research design was chosen.

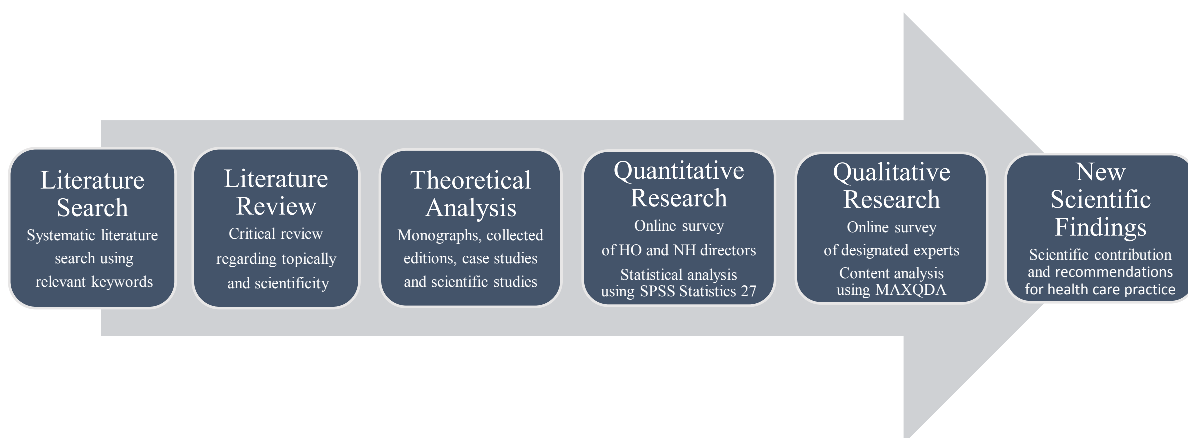

Figure 1 Structure of the Thesis, own illustration

2. RESEARCH QUESTION AND HYPOTHESIS

The research question of this thesis is dealing with the development and implementation of sustainable, humanistic organizational cultures in integrated health care:

How can integrated health care management, based on well-founded values concepts, be developed sustainably?

The sub-research questions ask about their controllability, the management of value-based organizational cultures, and their influence on interprofessional cooperation in care:

How can organizational culture be managed across the boundaries of health care institutions?

and

How can values-based organizational culture improve interprofessional collaboration across organizations?

The thesis was preceded by a systematic literature review and a comprehensive theoretical analysis. The **quantitative survey** was based on a fully standardized questionnaire with mainly closed questions. In addition, contextual statements with answer specifications are also given. Individual open qualitative questions at the end of the content section were intended to provide space for comments on individual topics of interest. Standardized questionnaires were used, which are systematically distributed, processed and returned electronically. The questionnaires were made available via a web link. The addressees were reached on the one hand via the central mail distribution list of the Federal Conference of Hospital Managers of Austria (BUKO) and on the other hand via the distribution list of the Federal Association Lebenswelt Heim. Accordingly, only persons whose expertise on the reality of experience can be taken into account with regard to the research question were interviewed. The survey was preceded by a pretest. The evaluation of the data from the surveys of the two groups (hospital setting and nursing home setting) was carried out according to scientific criteria for quantitative analysis methods using the analysis tool "IBM SPSS Statistics 27".

Hypotheses that were set up within the framework of this thesis (H_1 to H_{10}). In the course of the statistical analysis (see chapter 3 of this booklet), the hypotheses are presented in the form of $h_{0.1}$ to $h_{0.10}$ (null hypotheses) and $h_{1.1}$ to $h_{1.10}$ (alternate hypotheses).

:

- **Interprofessional cooperation:** H_1: There is a difference between hospitals (HOs) and nursing homes (NHs) regarding the view of interprofessional collaboration.
- **Best point of service** (BPoS)**:** H_2: From the organizational point of view of HOs, the realization of BPoSs is evaluated significantly higher than from point of view of NHs.
- **Culture of togetherness:** H_3: In highly developed socio-technical systems like HOs, the culture of togetherness is more highly assessed than in NHs.
- **Optimizing potential through cooperation:** H_4: In highly developed socio-technical systems like HOs, the assessment of savings (optimization) potential is significantly lower than the assessment in long-term care, as in NHs.
- **Different leadership approaches:** H_5: There is a difference between HOs and NHs regarding the view that different health professions need different leadership approaches.
- **Different mindsets:** H_6: There is a difference in the view of HOs and NHs that upcoming generations have changed leadership expectations due to a different mindset.
- **Mission statements performance:** H_7: There is a difference between HOs and NHs regarding the view of the importance of mission statements for the organization.
- **Mission statements' functionality:** H_8: There is a difference regarding trust in guiding principles between HOs and NHs in general.
- **Impact of cultural work:** H_9: There is a difference regarding the importance of cultural work between HOs and NHs in general.
- **Confidence in the effects of integrated health care:** H_{10}: There is a difference regarding the confidence in the effects of integrated HC on patients between HOs and NHs.

In the **qualitative research**, experts from different areas of the Austrian health care system were interviewed. Experts with national and international experience came from health planning, health economics as well as from strategic and operational care areas of the health care system. In addition, experts from health counselling as well as representatives of patient organizations had their say. The survey results were subjected to a qualitative content analysis, which served as a comparative analysis of meaningful material in a systematic and data-reducing procedure. The **category scheme** used for this purpose had the main categories of (1) **Integrated Health Care**, (2) **Culture of Cooperation**, (3) **Leadership in an Interprofessional Context**, (4) **Shared Cultural Understanding** and (5) **Impact of Integrated Health Care**.

The following selection of tables and distribution graphs concentrates on the essential parts of the thesis, which should serve the accentuated presentation of the systematic research process as well as the own findings.

When asked about **Interprofessional cooperation** within health care facilities (HOs or NHs), also between health care facilities (HOs + NHs), distributions of the data without statistically significant differences were found using the statistical test procedure ($h_{0.1}/h_{1.1}$), (see the table below). The hypothesis was as follows: There is no/a difference between HOs and NHs regarding the view of interprofessional collaboration.

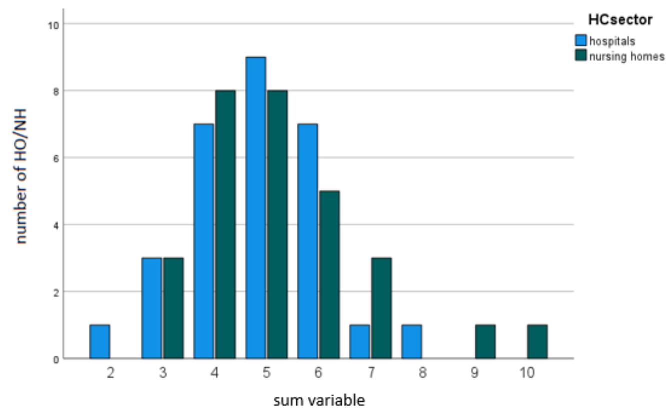

Figure 2 Interprofessional Cooperation (HOs vs. NHs) – histogram, own illustration (used SPSS)

sum variable	**q1 + q2**
Mann-Whitney-U-test	391,500
Wilcoxon-W	826,500
Z	-,463
asymp. sig. (2-sided)	,643

Table 1 Interprofessional cooperation - test statistics, own illustration (used SPSS)

Result of testing: p-value is **0.643** (greater than 0.05). Both institutions (HOs vs. NHs) share the same view of **Interprofessional collaboration**. There were no statistically significant differences between the two groups in the assessment of interprofessional cooperation, both intra- and intersectoral. It is interesting, however, that the survey participants almost exclusively answered with satisfactory to good. Only two of the respondents from the intramural sector answered "sufficient" once each and another two from the long-term care sector answered "insufficient" once each.

The results of the question about the status quo of the **"Best Point of Service"** (BPoS) in the Austrian health care landscape regarding the degree of achievement ($h_{0.2}/h_{1.2}$) did not show a statistically significantly different picture.

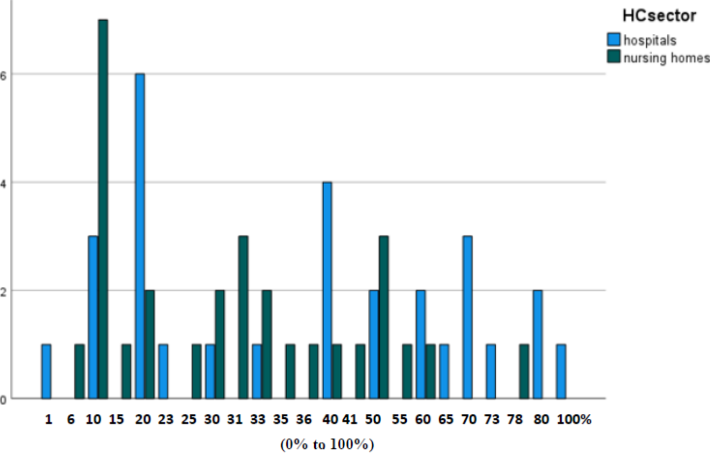

Figure 3 Best Point of Service – histogram, own illustration (used SPSS)

variable	q7
Mann-Whitney-U-test	308,500
Wilcoxon-W	743,500
Z	-1,750
asymp. sig. (2-sided)	,080

group variable: HC sector (HO vs. NH)

Table 2 Best Point of Service - test statistics, own illustration (used SPSS)

Result: p-value is **0.08** (greater than 0.05). Regarding the feasibility of best points of services in the Austrian care landscape there was no statistically significant difference.

The results to the questions about the **Culture of togetherness** in the Austrian health care system ($h_{0.3}/h_{1.3}$) did not show a statistically significantly different picture.

variables	q8	q9
Mann-Whitney-U-test	399,500	355,500
Wilcoxon-W	834,500	790,500
Z	-,358	-1,087
asymp. sig. (2-sided)	,720	,277

group variable: HC sector (HO vs. NH)

Table 3 Culture of Togetherness - test statistics, own illustration (used SPSS)

Result of testing: no statistical significance, p is **0.720** respectively **0.277**.

The result for **Optimizing potential through cooperation** ($h_{0.4}/h_{1.4}$) also shows no statistical significance (see table below: questions q13 and q14).

variables and sum variables	q13	q14	q15	q16 + q17	q18 + q19	q20 + q21
Mann-Whitney-U-test	404,000	290,000	263,000	366,000	415,000	418,500
Wilcoxon-W	839,000	668,000	698,000	801,000	850,000	853,500
Z	-,409	-1,497	-2,650	-,956	-,088	-,036
asymp. sig. (2-sided)	,683	,134	,008	,339	,930	,971

Table 4 Variables and Sum Variables (HOs vs. NHs) - simultaneous tests, own illustration (used SPSS)

The result marked (HOs vs. NHs) in red in the table above is statistically significant, p = **0.008** (less than 0.05) - it shows a statistically significant difference in hospital boards compared to nursing home boards. But the response of all those over 40 years of age (see table 21 to table 23) shows no difference between the generations - in the view that **Different leadership approaches** are needed for different health professionals, p is **0,205** (greater than 0,05), ($h_{0.5}/h_{1.5}$).

	q15
Mann-Whitney-U-Test	256,500
Wilcoxon-W	1202,500
Z	-1,268
asymp. sig. (2-sided)	,205

group variable: Age group > 40 years

Table 5 Response Age Group over 40 - test statistics, own illustration (used SPSS)

The question about **Differences mindsets** ($h_{0.6}/h_{1.6}$) of future generations refers to the associated changes in leadership expectations, i.e., whether a new understanding of leadership will be necessary. The result shows no statistical significance (see table 4: questions q18 and q19).

The result regarding the attributed meaning of the **Mission statements performance** (see table below) shows a statistically significant difference (p = **0.006,** less than 0.05) between HOs and NHs ($h_{0.7}/h_{1.7}$). Accordingly, statistically significant are differences between HOs and NHs regarding the view of the importance of mission statements for the organization. The result shows that the confidence of nursing home managers in the performance and importance of mission statements is significantly higher than that of hospital directors.

sum variables and variable q40	q22 + q23	**q24 to q26**	**q27 to q32**	q33 to q35	**q36 to q39**	**q40**
Mann-Whitney-U-test	386,500	245,000	303,500	313,000	364,500	302,500
Wilcoxon-W	821,500	680,000	738,500	748,000	799,500	737,500
Z	-,649	-2,763	-1,825	-1,691	-,886	-1,896
asymp. sig. (2-sided)	,517	**,006**	,068	,091	,376	,058

Table 6 Other Variables and Sum Variables (HOs vs. NHs) - simultaneous tests, own illustration (used SPSS)

The result regarding the trust in the **Mission statements' functionality** (see table above) shows no difference (p = **0.068**, greater than 0.05) between HOs and NHs ($h_{0.8}/h_{1.8}$: q27 to q32). The associated hypothesis $h_{0.8}/h_{1.8}$ was: There is no/a difference regarding the trust in guiding principles between HOs and NHs in general.

The result regarding the **Impact of cultural work** (see table 6) shows no statistical difference (p = **0.376**, greater than 0.05) between HOs and NHs ($h_{0.9}/h_{1.9}$: q36 to q39). Associated hypothesis $h_{0.9}/h_{1.9}$: There is no/a difference regarding the importance of cultural work between HOs and NHs in general.

The result regarding to **Confidence in the effects of integrated health care** refers to various detailed questions (summarized as a sum variable) on the integration of care, such as "patient orientation," "clear responsibilities," "waiting and treatment times," "transparency and information flow," "quality of the care process," "stress reduction," and "(joint) co-responsibility of all actors." There are no significant differences between the two samples (HO + NH), (p= **0.058**, greater than 0.05). The associated hypothesis $h_{0.10}/h_{1.10}$ is: There is no/a difference regarding the confidence in effects of integrated HC on patients between HOs and NHs.

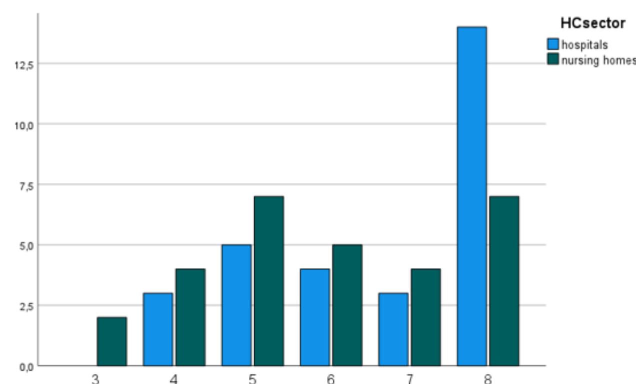

Figure 4 Effects of Integrated Health Care on Patients (HOs vs. NHs) – histogram, own illustration (used SPSS)

The following table shows a summary of the results of the hypothesis testing.

hypotheses	Hypothesis Testing Results	significance level α = 0.05	
Hypothesis H_1	**Interprofessional cooperation** There is a difference between HOs and NHs regarding the view of interprofessional collaboration.	**rejected** result of the significance test	asymp. sig. (2-sided) $p = 0.643$
Hypothesis H_2	**Best point of service** From the organizational point of view of HOs, the realization of BPoSs is evaluated significantly higher than from the point of view of NHs.	**rejected** result of the significance test	asymp. sig. (2-sided) $p = 0.08$
Hypothesis H_3	**Culture of togetherness** In highly developed socio-technical systems like HOs, the culture of togetherness is more highly assessed than in NHs.	**rejected** result of the significance test	asymp. sig. (2-sided) $p = 0.720$
Hypothesis H_4	**Optimizing potential through cooperation** In highly developed socio-technical systems like HOs, the assessment of savings (optimization) potential is significantly lower than the assessment in long-term care, as NHs.	**rejected** result of the significance test	asymp. sig. (2-sided) $p = 0.134$
Hypothesis H_5	**Different leadership approaches** There is a difference between HOs and NHs regarding the view that different health professions need different leadership approaches.	**accepted** result of the significance test	asymp. sig. (2-sided) $p = 0.008$
Hypothesis H_6	**Different mindsets** There is a difference in the view of HOs and NHs that upcoming generations have changed leadership expectations due to a different mindset.	**rejected** result of the significance test	asymp. sig. (2-sided) $p = 0.930$
Hypothesis H_7	**Mission statements performance** There is a difference between HOs and NHs regarding the view of the importance of mission statements for the organization.	**accepted** result of the significance test	asymp. sig. (2-sided) $p = 0.006$
Hypothesis H_8	**Mission statements' functionality** There is a difference regarding trust in guiding principles between HOs and NHs in general.	**rejected** result of the significance test	asymp. sig. (2-sided) $p = 0.068$
Hypothesis H_9	**Impact of cultural work** There is a difference regarding the importance of cultural work between HOs and NHs in general.	**rejected** result of the significance test	asymp. sig. (2-sided) $p = 0.376$
Hypothesis H_{10}	**Confidence in the effects of integrated HC** There is a difference regarding the confidence in the effects of integrated HC on patients between HOs and NHs.	**rejected** result of the significance test	asymp. sig. (2-sided) $p = 0.058$

Table 7 Hypothesis testing results summarized

4. RESULTS AND FINDINGS (OWN FINDINGS)

Interprofessional collaboration in the Austrian health care system is seen as in need of improvement by health policy makers as well as health care managers and experts. **Patients** are not or insufficiently involved. In terms of therapy decisions as little as in the development of structural optimization processes. Insufficient legal and administrative **frameworks** and unclear responsibilities prove to be obstacles. The distribution of **competencies** in the Austrian federal constitution is seen as one of the biggest legal obstacles in the Austrian health care system. The **culture of cooperation** is also becoming a critical success factor: cooperation, coordination and communication as well as "cultural work" are gaining in importance. There is consensus that a living organizational culture would lead to better coordination of care pathways overall and ultimately to optimization of care resources. In addition to direct **personal contacts**, **communication technologies** as well as interprofessional documentation systems are considered prerequisites for successful collaboration, especially in intersectoral cooperation. Furthermore, a regular and continuous **regional exchange** between the management of the health care facilities as well as overarching financing concepts with demand-oriented control are called for. The concept of **"Best Point of Service"** is becoming increasingly important. In addition to better networking in health care, a constructive approach to challenges and problems is required. Existing institutions, such as discharge management in hospitals, are to be subjected to a continuous improvement process. Interprofessional collaboration is to be promoted through a joint basic module right at the start of training. The mentality and behavior of **future generations** are seen as favoring this and require a rethinking of leadership and management approaches. **Co-responsibility** of the entire care pathway by all facility managers becomes a prerequisite, participation becomes the word of the future. Change cannot be achieved in a few years. In general, however, the need for continuous adaptation to the requirements of the times is recognized. **Leadership,** for example, becomes an essential requirement. Direct structures and bureaucratic approaches are increasingly seen as inappropriate. Flat hierarchies and personal responsibility are gaining in importance. Overarching and **regional control** is expected from health policy. Dialogue is to be promoted by involving **health policymakers** and **regional health authorities.** Needs are to be identified and structures are to be aligned accordingly. "Culture and value work" will become the basis of humanistic management in health care. However, a common basic understanding in integrated health care requires a certain grounding at the level of values and targets. Not least, to be able to influence **cross-organizational behavior** over longer periods of time. A prerequisite for this is **organizational maturity**, which

is conducive to a culture of collaboration. Regarding common guiding values and the development of a guiding culture, holistic systemic approaches, as well as uniform goal orientations, are required, especially since values are not static phenomena but develop dynamically and only prevail if they are recognized as conducive. In addition, the emergence of a **guiding culture** of interinstitutional cooperation requires adjustments to structures and framework conditions. A culture that can ultimately serve as the basis for quality-oriented, cooperatively networked, efficient health care that is as effective as it is targeted.

The findings can also be supported by **international comparisons**, such as the work of Shaw et al. (2011). With reference to the British National Health Service (NHS), the team of authors led by medical sociologist Sara Shaw illustrates the different interests and perspectives of the various actors in the British health care system. The main stakeholders whose perspectives need to be considered when setting up and maintaining integrated care were examined. According to the findings of this thesis, the various, partly overlapping approaches of relevant actors necessitate the creation of spaces in which, on the one hand, the various interests are reflected and, on the other hand, a collaborative development for the targeted orientation of health care to the needs of the respective time becomes possible. In addition to the perspective of the affected persons themselves, the patients, Shaw et al. (2011) see the health care providers, whose task ultimately consists in the coordination of services across professional, organizational, and system boundaries, as well as the health professionals in the client-oriented area, who care for patients and also stand by them quasi as advocates, policy-makers, who are committed to the design of integration-friendly policies and whose task it is to ensure suitable framework conditions, financing models, care pathways, and quality standards, as well as to contribute to holistic evaluation models for integrated care. Regional and supra-regional health administrations, which act as supervisors and, on the other hand, as evaluators for valid measurements of the integration of care services. Last but not least, managers are also mentioned, who serve to build and maintain a common culture and shared values, and are responsible for the deployment of resources, management of funding streams, coordination of objectives, supervision of different staff, and management of organizational structures.

5. NEW SCIENTIFIC STATEMENT (THESIS)

In **answering the research question** of how to create and maintain a shared culture in integrated care and how to practice competent integrated care management, the controllability of value-based organizational cultures and their influence on interprofessional collaboration in integrated care takes on central importance.

In order to adapt the Austrian health care system to the requirements of the times, it is important to influence both framework conditions and the behavior of the actors, and in particular to strive for a broad consensus among all stakeholders. The present study can only shed light on one, albeit important, field: interprofessional collaboration between health professionals across institutions and sectors. Interprofessional teamwork is expected at all levels of health care. An adaptation of the Austrian health care system also requires the increased involvement of patients, in structural developments as well as in therapy decisions. The legal and administrative framework as well as the, in many places, unclear distribution of roles must be clarified. The often-cited division of competencies in the Austrian Federal Constitution will not be eliminated so quickly, especially since this would require a qualified parliamentary majority (increased quorums) and should therefore be seen as the basis for further decisions. However, improving cooperation, coordination, and communication, especially at the interfaces, is essential. The fact that this also entails the optimization of resources was clear to almost all respondents in the surveys. Of course, the digital tools that are already technologically available but far too little used must also be put to extensive use, such as documentation that can be used by all health care professionals and is available in all areas of care or possibilities for telemedical consultations. All in view of the central criterion, an increase in the quality of care through the realization of the best points of service.

From the theoretical analysis of the thesis and in all the interviews, it emerged that health care should be considered from a regional point of view and managed accordingly. According to health planning experts, this demand has long been included in health targets and all health plans. Day-to-day work, as is evident in practice, usually requires better coordination, even within the facilities themselves. The worlds of the various professional groups, the cultures of the various care facilities, and the interests of the various service providers are still too different. Even within one and the same professional group, different views prevail. Physicians in private practice themselves often see the distribution of tasks between specialists, hospital physicians, and their own area as unclear. Accordingly, there is a lack of mutual understanding, both on a personal and professional level, not only between the various health care professions but also

within their own discipline. Culture as a link in social coexistence is therefore becoming increasingly important in professional interaction. It is indispensable that values that are claimed jointly are also made visible, i.e., can be experienced by all those involved. Ideally, of course, this should begin at the societal level. According to prevailing opinions in literature and surveys, multidisciplinary cooperation should begin at the beginning of training, in a common basic module.

Networking is becoming the order of the day. This requires visionary leadership and contemporary management. Guiding values must not only be anchored in mission statements, but must also be experienced as a culture. Patients and their individual care needs must be placed at the center of attention along the entire care path. Managers must be seen as coaches and enabler of multiprofessional, cross-sector collaboration. The task of health policy and health administration is to create favorable conditions for health care. - How can a guiding culture for inter-institutional collaboration be created and maintained to overcome the apparent discrepancy between aspiration and reality? By getting to know each other on a personal as well as professional level and by making the patient perspective the central element of all education, training and continuing education paths; by establishing structures for cultural work that enable a comprehensive change toward a guiding or target culture; and by congruent and truthful presentation of the required values internally and externally.

In addition to executives, who are to act as role models for values-based behavior, representatives of health care facilities are needed who are responsible for maintaining values work and are located either in the human resources department or, as in the best practice in Vincent Group facilities presented in the literature section of the paper, at board level. The task of these representatives is to consider measures that will be incorporated into all organizational areas of health care facilities and into continuing education and training concepts. To maintain a guiding culture that also has an effect at the interfaces and across sectors, it is necessary to control the implementation of culture-related goals not only within the organization but also to establish cross-organizational or supraregional control mechanisms. Both the managers of the health care facilities and the experts repeatedly suggested regional coordination conferences of managers from the various sectors. Measures to promote mutual understanding, especially among the various professional groups, were also called for in the survey. The institutionalization of regional conferences would offer opportunities to cultivate both professional and personal networks and value-related exchange. In addition to usual satisfaction measurements of patients and health professionals, outcome measurements of integrated care pathways and the degree to

which needs are met in terms of best points of service, can serve as measurement methods for controlling value-related goals. Linking satisfaction measurements with outcome measurements both at the level of medical care and in terms of cost-effectiveness of comparable facilities enables benchmarking that could meet the highest standards of humanistic management.

The **scientific added value** of this thesis is the realization that no new instruments need to be found for a contemporary adaptation of health care systems, but that existing and proven instruments can be used. Also, it is basically nothing new that leadership concepts are needed that are not so much imposed, but in harmony with the people and their tasks to be fulfilled in a contemporary manner. As can be seen from the interviews, there is both aware of what can be considered coherent and knowledge of how to apply the knowledge. However, structures that have usually evolved both within the organization and at the interfaces also often no longer fit the tasks. The constraints of these realities, as well as the compensatory work that must be done, consume resources that would be better invested elsewhere in the delivery system. Mission statements would also be exhaustively available. What is mostly lacking is implementation. It is a fact that more is needed than just formulating intentions. This is also evident from the demands of the survey participants. In addition, framework conditions are usually outdated and do not allow for developments, even if they have become conscious. The reason for this is often the overly pragmatic approach of decision-makers in health policy and administration. It is important to engage stakeholders and increase patient involvement (including patient representatives). This requires "spaces" in which developments can take place, as well as greater involvement of everyone in structural adaptations and in-process optimization – also intersectoral.

For **practice and training**, the results of the thesis represent a not insignificant added value. Once again, the thesis points to a clear gap between scientific findings and actual practice. A gap that should be closed, not least for reasons of resource scarcity, an argument that is repeatedly invoked in health practice. Best practices could have been picked up long ago. For example, there would be no reason not to consider joint training concepts for health care professions on a multiprofessional basis or to involve representatives of self-help groups, who generally have a high level of knowledge of the system and experience in care planning or structural optimization. Similarly, it would not be out of place to establish regional conferences and invite responsible persons from the regional health care sectors. - Do we need to build up the competence of decision-makers in health policy and administration? Do we need the courage to change? In any case, there needs to be a certain seriousness about wanting to tackle things that have been known for a long time, as well as fewer "barriers" and more "enabling thinking".

Because the time spent just talking about it, especially when it comes to projects that have been identified as beneficial and discussions about them have been going on for many years, even decades, consumes resources.

The following table is intended to provide a concluding presentation of the scientific findings of the thesis, particularly recommendations for health care practice, and the prerequisites necessary to implement measures.

Conditions for Implementation

Improvement potentials	full implementation of existing health targets
	increased use of practical experience
	efficient process design
Involvement of patients	strengthening patient competence
	consideration of personal patient needs
	use of structural knowledge of chronically ill patients
General conditions	adaptation of framework conditions
	clear responsibility and distribution of roles
	transparency of intra- and inter-organizational processes

Recommendations for Integrated Health Care Practice

Different professional worlds	connecting different professional worlds
	cooperation, coordination, communication as key competencies
	multi-professional education and training
Proactive "culture work"	establishing a guiding culture along the care pathway
	realization of a common organizational understanding
	optimization of resources through meaningful task design
Socio-techn. system design	coordination of personal and technology-based communication
	optimization through socio-technical team building
	interprofessional access to documentation systems
Demand orientation	regional overall control of health care
	cross-sectoral financing concepts
	cross-sector exchange relationships
Point of services	transparency in networking structures
	co-responsible health care transition management
	regional cost and outcome controlling
Leadership	participative post-heroic leadership
	gate-opening instead of gatekeeping
	leadership as a culture-building role model
Integrated health care management	shared responsibility of all managers and stakeholders
	promotion of good conditions for integrated care
	promotion of multiprofessional togetherness

Table 8 Findings and Recommendations for Health Care Practice, own illustration

6. CONCLUSION

In this thesis, it has been shown that, despite a certain degree of unchangeable fragmentation of the health care system, there is potential for optimization with not inconsiderable opportunities to increase efficiency and improve outcomes. As outlined in capter 5 (contribution to health care practice and education) continuous improvement of health care pathways requires equally continuous, region-wide (i.e., higher-level) controlling of the operative care goals. Improving coordination in operational health care areas requires accompanied transition of services with appropriate target group differentiation at the interfaces. This is seen both in the literature and by experts from the care practice. In particular, reference is made to the care of the chronically ill, who, in addition to age-related, multimorbid people, require a large share of care resources.

What makes individual health care providers more successful than others, and this can also be seen as a formula for success in the integration of care, may be answered in conclusion with the words of the clinic founder William Mayo (1864, USA), according to which the needs of the patients are to be put first. The guiding principle of the clinic founder has stood the test of time and is considered a model of success, shared in particular by Austrian denominational hospitals "Meeting the needs of the times", Barmherzige Schwestern (BHS, 2020); "Doing good and doing it well", Barmherzige Brüder (BBR, 2020); "Look and act!" (Elisabethinen, 2020). Accordingly, the aspiration to put the needs of the patient first is deeply rooted in the culture and is actually lived. Another guiding principle of the Mayo Clinic also attracts attention: "Medicine is always a team effort", here there are "no stars, but constellations of professionals who want to work together". A statement that could apply as a maxim for action in more than a few hospitals. The demand for a high degree of personal and professional cooperation was clearly expressed in the empirical study. Experts from health care facilities and the environment of the facilities clearly articulated the need to bring guiding principles to life. It is now up to decision-makers at all levels to make this happen, and it is up to leaders and managers in health care facilities to establish and maintain proactive humanistic-oriented value management and a shared, cross-institutional guiding culture modeled on best practices.

What about the tension between patient welfare and economics? A study by the health economist Naegler and medical sociologist Wehkamp (2018), in which possible collisions of economic decisions with patient interests were examined, produced a thoroughly ambivalent finding. The result indicated that normative guidelines would protect physicians and even prevent them from making patient-related decisions also according to economic considerations. The authors' more detailed reasoning led to some clarification, but still lacked clear guidelines. The

lack of normative concretizations that would take into account both the physician's professional ethics and limited resources was objected to. Naegler and Wehkamp (2018) see the need for a fundamental health policy decision, especially since hospital managers would be overwhelmed with this question. Accordingly, it would be obvious that the state of tension "patient interests versus economic efficiency" cannot be eliminated and that a certain degree of tension will probably remain in all health care systems. What health policy can do, however, is to defuse the conflict through appropriate measures. The need to close the gap between the different worlds of health policy, health administration and health care institution was reaffirmed. Accordingly, there is a need for a joint orientation toward those for whom care systems exist: the patients. And increasingly also to a public health overall view. Naegler and Wehkamp (2018) direct the further focus of their work in a historical consideration to the pronounced patient orientation of the founders of hospitals in the past. At that time, hospitals were organized purely on the basis of demand, as "places of mercy." Of course, it is also interesting to note that patient-related decisions were made solely by physicians and exclusively for the benefit of patients, and the interests of other stakeholders did not have to be taken into account. At the same time, it is pointed out that in the meantime the principle of economic efficiency would have to be observed even in facilities such as hospitals that are organized according to need. Whether ethics is a contradiction to economy, however, should not be explained further. - In the present work, the question of whether ethics and economics would be a contradiction was also raised in the course of the empirical investigation. Both in the literature and in the practice of health care, there is a well-founded demand for "responsible economics" in health care.

Finally, it should be remembered once again that historically evolved care structures not only need to be critically examined, but also adapted to the necessities of the time with courage and prudence. Too much friction, especially at the interfaces, both for service providers and patients, ties up energy that could be used more sensibly in healthcare systems and more beneficially for patients. Integrated care concepts provide answers to this. Interprofessional collaboration across institutions is an indispensable prerequisite for this. The results of this work show that, in addition to appropriate health policy frameworks, a shared culture of collaboration across institutional and sectoral boundaries is the link or lubricant for well-organized and coordinated care pathways on which high-quality health care services can be built. Strategies based on shared guiding principles, followed by shared responsibility by all leaders, managers and policy makers, are among the most effective influencing variables of succeeding contemporary health care system design.

The present work offers good follow-up opportunities for further research. In particular, the question of common understanding, the creation of common cultures within and between institutions, needs appropriate answers for science and practice. Hierarchies also need to be questioned and the initiation of a post-heroic era considered. This requires research at all levels of health care. The work can make a comprehensive contribution to this and offers a number of starting points for further scientific discourse. - The focus should always be on the people who are actually at stake, the patients who entrust themselves to health care systems and rightly trust in well-coordinated health care.

7. OWN LITERATURE

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