

# **Navigating Paradoxes in Healthcare Digital Transformation**

A Practice-Oriented Research Report on Technology Adoption and Paradoxes for Healthcare Leaders and Consultants

|                 |                                                            |
|-----------------|------------------------------------------------------------|
| Name            | Iwan Eleveld                                               |
| Student number  | 2872942                                                    |
| Email address   | i.eleveld@student.vu.nl                                    |
| Coordinators    | Marina Pol & Rutger Leer                                   |
| VU Supervisor   | Roy Sijbom                                                 |
| Master          | Business Administration - Leadership and Change Management |
| Faculty         | School of Business and Economics                           |
| Date            | June 30, 2026                                              |
| Number of words | 6598                                                       |

## **Executive summary**

Digital transformation is often presented as part of healthcare's answer to growing workforce shortages, rising demand and sustainability pressures. The ambition is real, and so is the urgency. But a system that is implemented is not yet a system that is meaningfully used. Across healthcare organizations, digital technologies are introduced while professionals quietly work around them, adoption stalls after go-live, and the gap between strategic ambition and daily practice remains stubbornly wide. This practice-oriented report asks why that gap exists and what can be done about it. Developed during a research internship at M&I/Partners, it combines six semi-structured interviews with healthcare leaders, academic literature, findings from the accompanying master's thesis and practice-based material. Together, these sources show that adoption is not a single implementation moment. It is a practical, social and professional process shaped by workflow fit, learning conditions, professional identity, leadership and organizational context.

The central insight is this: what looks like resistance is rarely just unwillingness. It can signal that a technology does not yet fit the reality of care work. Professionals may face fragmented systems, increased workload, limited learning space or concerns about their professional role. And beneath those concerns is a deeper tension. Digital transformation asks healthcare organizations to standardize while adapting locally, to innovate while maintaining continuity, and to give direction while creating ownership. These are not problems to solve by choosing one side. They are paradoxes that need to be navigated.

The report translates these insights into the Healthcare Technology Adoption Framework (HTAF): five conditions that together create the practical, social and professional ground for meaningful technology adoption. Practical workability, implementation intelligence, professional meaning, learning space and paradoxical navigation do not form a checklist. They form an interconnected whole; because poor infrastructure makes learning harder, unread resistance blocks meaning, and without meaning, even the best-designed system stays on the margins of daily care. For M&I/Partners, HTAF offers a diagnostic and conversational tool for digital transformation projects, implementation reviews and adoption challenges after go-live. The message it carries is simple: digital ambition is rarely the problem. The real challenge is building the conditions that make that ambition usable in everyday care.

## 1. Introduction

### 1.1 The problem and the promise

Healthcare is changing, and it cannot change fast enough. Across the world, and particularly in the Netherlands, healthcare organizations are under growing pressure to deliver care that is more efficient, more accessible, and more sustainable (ABF Research, 2025). The numbers behind this pressure are striking. Labour market projections show that, without additional action, workforce shortages will severely limit the sector's capacity to meet future demand. By 2034, around 15% of requested care may no longer be delivered, linked to a projected shortage of approximately 288,600 employees in healthcare and welfare. For patients, the implications are significant: around 15 million GP patient contacts may not take place, 5.0 million outpatient hospital visits may not go ahead, and for 35,000 people no place may be available in nursing home care (ABF Research, 2025; Ingemunniks, 2025). Against this background, prevention, new ways of working, and digital solutions are increasingly central to the broader transformation of the Dutch healthcare system (Rijksoverheid, 2025).

Digital transformation is often presented as part of the answer, and with good reason. Electronic health records, decision-support tools, hybrid care, and data-driven workflows can improve efficiency, coordination, accessibility, and patient outcomes when they are meaningfully used (Kraus et al., 2021; Mas et al., 2023). Yet their promise is not realized when new systems are merely implemented, because digital transformation changes how work is organized in practice (Vial, 2019), and many initiatives struggle to achieve their intended impact (Volpentesta et al., 2023).

### 1.2 Implementation is not adoption

Whether digital transformation succeeds depends not only on the system itself, but on whether healthcare professionals can integrate it into the reality of their daily work (Ullrich et al., 2023; Stoumpos et al., 2023). This integration is harder than it sounds. Healthcare is a professional environment shaped by strong identities, established routines, high accountability, and patient-centred judgement (Pratt et al., 2006). Professionals derive their sense of competence and value from expertise, autonomy, and discretionary decision-making. Digital systems are therefore rarely experienced as neutral tools. They can increase workload, constrain autonomy, or disrupt the professional judgement that defines good care (Leonardi, 2011). When this happens, what looks like resistance is often something simpler: a system that does not fit the work.

Behind every stalled implementation are professionals trying to do good work under

pressure. Digital transformation makes the tensions they already face more visible and more urgent: healthcare organizations must digitalize without dehumanizing care, standardize without undermining professional judgement, and innovate without disrupting the continuity of everyday work (Waldman & Bowen, 2016; Desveaux, 2025). When these tensions are treated as simple either-or choices, digital transformation risks becoming polarized. For example, management may push for efficiency and control, while professionals defend autonomy and care quality. A more productive starting point is to recognize these tensions as paradoxes, meaning competing demands that both remain valuable and must be held together over time (Smith & Lewis, 2011).

### **1.3 Leading adoption through paradoxes**

In navigating these tensions, leadership can play an important role (Waldman & Bowen, 2016). Leaders shape how professionals interpret and respond to digital change, including whether systems are experienced as instruments of control or as tools that support professional work and care quality (Oreg & Berson, 2019). One approach that may be particularly fitting in healthcare is paradoxical leadership, which focuses on balancing competing demands such as control and autonomy, uniformity and individualization, or performance and flexibility (Zhang et al., 2015; Lee et al., 2023). In healthcare digital transformation, this can mean giving direction without overcontrolling, supporting standardization without dismissing professional judgement, and encouraging innovation while recognizing the pressure of everyday care delivery.

This report therefore explores how healthcare leaders and consultants can support meaningful technology adoption in navigating these paradoxes. Paradoxical leadership is used as an important lens, not as a simple solution that automatically increases technology use. The objective of this report is to translate insights from literature, interviews and thesis findings into a practical framework that helps healthcare leaders and consultants understand and support meaningful technology adoption. Accordingly, the central question guiding this report is: How can healthcare leaders and consultants support meaningful technology adoption during healthcare digital transformation?

### **1.4 Research setting, relevance and report structure**

This report was developed as part of a research internship at M&I/Partners, a Dutch strategic consultancy specializing in management, information and ICT for healthcare and governmental organizations. For M&I/Partners, the relevance is direct: consultants in this field do not only support technical implementation; they also help organizations understand

why adoption is difficult, how professionals respond to change, and what makes digital systems workable in practice. The report is structured to move from problem understanding to practical application. Chapter 2 explains the research approach. Chapters 3 and 4 develop the analytical foundation by examining technology adoption as a micro-level challenge and healthcare digital transformation as a paradoxical leadership challenge. Chapter 5 brings in the interview insights, while Chapter 6 translates the findings into the Healthcare Technology Adoption Framework (HTAF). Chapter 7 draws the central conclusions and reflects on what this means for leaders, consultants and M&I/Partners in practice.

## **2. Research Approach**

### **2.1 A practice-oriented qualitative design**

This report adopts a qualitative, practice-oriented research design. The aim is not to test causal relationships, but to understand how technology adoption challenges emerge during healthcare digital transformation and how healthcare leaders and consultants can support meaningful adoption in practice. This design fits the central question because the report focuses on practical experiences, interpretations and tensions in complex healthcare settings, rather than on whether one variable directly predicts another. A qualitative approach is appropriate when the aim is to understand meanings, experiences and interpretations in context (Creswell & Poth, 2018), while the practice-oriented nature of the report aligns with problem-solving approaches to management research, in which academic insights are used to address concrete organizational challenges (Van Aken & Berends, 2018).

The report draws on three main sources of evidence, supported by practice-based material from M&I/Partners and selected healthcare digitalization examples. The primary empirical source consists of six semi-structured interviews with healthcare leaders and professionals in leadership-related roles directly involved in digital transformation initiatives. These interviews show how adoption challenges, leadership tensions and professional responses appear in practice. The second source consists of academic and practice-oriented literature on technology adoption, paradoxical leadership, psychological safety, professional identity and healthcare digital transformation. This literature provides the theoretical basis for interpreting the findings and identifying practical conditions for meaningful technology adoption. The third source consists of findings from the accompanying master's thesis, which provide employee-level evidence on mechanisms such as psychological safety, professional role identity threat and technology adoption. Together, these sources provide the basis for the practical framework developed in Chapter 6.

## 2.2 Interview selection and data collection

Access to interview participants was facilitated through M&I/Partners. Participants were selected through purposive sampling, because the report required respondents with direct experience of healthcare digital transformation and leadership responsibility in or around digital initiatives. Purposive sampling is appropriate when participants are selected because they can provide information-rich insights into the phenomenon under study (Patton, 2015). Participants were healthcare leaders and professionals in leadership-related roles, able to reflect on implementation challenges, professional responses and the practical conditions needed for technology adoption.

The interviews lasted approximately 45 to 60 minutes and were conducted using a semi-structured interview guide (see Appendix A). Semi-structured interviews were chosen because they provide enough structure to explore comparable themes across participants, while leaving space for practical examples, unexpected tensions and context-specific experiences (Kvale & Brinkmann, 2009). The interview guide was developed on the basis of the central research question and relevant literature on technology adoption, paradoxical leadership, psychological safety and professional role identity in healthcare.

## 2.3 Data analysis

The interview data were analyzed through theory-informed thematic analysis (Braun & Clarke, 2006), supported by a Gioia-informed coding procedure (Gioia et al., 2013). The Gioia methodology was used as an analytical logic rather than as a full inductive theory-building design, because the purpose of this report is practice-oriented: to translate empirical patterns, literature and thesis insights into a usable framework for healthcare leaders and consultants.

The analysis combined inductive and deductive elements. First, the anonymized transcripts were coded through open coding, resulting in 863 initial open codes. Because many codes overlapped across interviews or captured similar practical meanings, they were consolidated into a manageable set of first-order concepts while preserving participants' language where possible. Related first-order concepts were then grouped into second-order themes and aggregate dimensions that captured broader patterns across the interviews. This created a transparent analytical route from interview data to the analytical narrative and themes presented in Chapter 5. The selected interview quotes used in Chapter 5 are documented in Table B1, Appendix B, including the original Dutch quotes, English translations, respondents and corresponding codebook themes. Concepts from the literature

and accompanying thesis guided the interpretation without determining the coding structure in advance. Figure C1 in Appendix C presents the summarized Gioia-informed data structure, showing how selected first-order concepts were grouped into second-order themes and aggregate dimensions. The complete coding overview, including the broader set of consolidated first-order concepts and supporting fragments, is available as an accompanying codebook.

During interpretation, the analysis also remained sensitive to practice-oriented ideas relevant to M&I/Partners' consultancy work, including healthcare complexity, the distinction between dilemmas, paradoxes and polarization, local translation in implementation, and the idea of leading without forcing. These ideas were not treated as separate models to be tested, but as additional perspectives that helped translate the findings into the Healthcare Technology Adoption Framework (HTAF).

## **2.4 Ethics, limitations and rigor**

Participation in the interviews was voluntary, and all data were treated confidentially. Quotes and identifying details were anonymized to protect participants and their organizations. The relatively small number of interviews means that the findings are not intended to be statistically generalizable. This is consistent with the exploratory and practice-oriented purpose of the report. The trustworthiness of the qualitative analysis was strengthened through a transparent coding process, comparison across multiple evidence sources, and theory-informed interpretation of empirical patterns (Lincoln & Guba, 1985). Together, the interviews, literature, thesis findings and practice-based reflections provide a grounded basis for developing a practical framework for healthcare digital transformation.

## **3. Technology Adoption as a Micro-Level Challenge**

Implementing a digital system and meaningfully using it are not the same thing. A system can be introduced, configured and made available, while still failing to become part of everyday care practice. This chapter therefore approaches technology adoption in healthcare as a micro-level challenge: not merely as a question of whether digital systems exist, but whether professionals are willing and able to use them meaningfully in daily healthcare work (Greenhalgh et al., 2017).

### **3.1 From technological implementation to adoption**

Introducing a digital system is only the starting point of digital transformation. Real adoption begins when digital systems become part of professionals' daily work. For

healthcare professionals, this means understanding the value of a system and being able to integrate it into routines, decisions and interactions with patients. An electronic patient record, for example, only becomes meaningful when it supports documentation and care coordination, rather than simply adding another digital task. In this sense, implementation requires more than technical rollout; new ways of working need to become embedded in everyday practice (May & Finch, 2009).

Technology adoption also depends on whether professionals feel meaningfully involved in the change. Acceptance is more likely when they receive clear information, have time to participate and see that their suggestions are taken seriously (Ullrich et al., 2023). This matters because digital systems rarely affect only one task. A clinical decision-support system, for example, may be introduced to improve efficiency or decision-making, but can also change how healthcare professionals experience autonomy, expertise, control over care processes and the relationship with patients (Ackerhans et al., 2024). Technology adoption therefore needs to be understood close to the work itself.

### **3.2 Why adoption is difficult**

In both theory and practice, willingness and actual use are not the same. Technology acceptance research has long distinguished between professionals' intention to use technology and their actual use in daily work (Venkatesh et al., 2003), and in healthcare these two do not always align (Ammenwerth, 2019; Xie et al., 2025). Healthcare professionals may understand the value of a system, but still struggle to use it when the system does not fit workflows, routines or available support. Practical barriers such as insufficient training, increased workload, low digital confidence and limited support all shape how professionals respond to digital systems in daily care (May & Finch, 2009; Walzer et al., 2025). This aligns with the exploratory findings from the accompanying master's thesis, where learning resources emerged as particularly relevant for technology use in practice. In other words, technology use depends not only on willingness, but also on whether professionals receive enough time, support and resources to develop the skills needed to use digital systems well.

At the same time, adoption in healthcare is not only a practical challenge, but also an identity-relevant one. When digital systems seem to limit professional judgement or challenge expertise, the question shifts from whether the system works to whether it still feels compatible with good care (Pratt et al., 2006; Ackerhans et al., 2024). In that sense, technology adoption difficulties can reflect a deeper tension between digital standardization and professional role identity. The accompanying master's thesis supports this picture: when

professionals experienced digital change as a threat to their professional identity, their willingness to adopt technology tended to decrease.

### 3.3 Resistance is often not resistance

These practical and identity-related barriers often become visible in how professionals respond to digital transformation. Such responses are frequently labelled as resistance, but resistance should not be understood only as visible opposition or unwillingness. It can also involve cognitive, emotional and behavioural responses to change, such as doubts, discomfort, hesitation or selective use (Oreg, 2006). In healthcare specifically, these responses to digital transformation may reflect uncertainty about whether a system fits daily work, concerns about professional autonomy, or doubts about care quality (Walzer et al., 2025). Resistance is therefore not automatically an attitude problem. It can also be a diagnostic signal that the technology, the implementation process or the support structure does not yet fit the reality of healthcare work (Ford et al., 2008). Table 1 presents examples of such apparent resistance in healthcare digital transformation.

**Table 1**

*Reframing resistance as implementation intelligence*

| What may look like resistance | What it may indicate                               |
|-------------------------------|----------------------------------------------------|
| Reluctance to use a system    | Lack of perceived usefulness                       |
| Workarounds                   | Poor workflow fit                                  |
| Critical feedback             | Concern for patient care or professional judgement |
| Slow adoption                 | Limited training, time or digital confidence       |
| Selective use                 | Technology does not fit daily routines             |

Workarounds deserve particular attention. In healthcare, they often emerge because the complex and variable nature of care work makes it difficult to align digital systems with healthcare processes (Beerepoot & van de Weerd, 2018). Rather than treating workarounds as problematic behaviour, they can therefore be used as a source of practical insight into where systems, procedures or support structures do not yet fit daily work. For healthcare leaders and consultants, this reframing matters. Critical feedback, workarounds and selective use can be treated as implementation intelligence rather than as problems to be managed away. The

question is therefore not only how resistance can be reduced, but what the resistance is trying to show.

### **3.4 A leadership challenge**

This chapter shows that micro-level technology adoption challenges cannot be solved by technical implementation alone. If technology adoption is shaped by perceived usefulness, workflow fit, professional identity, digital confidence and learning conditions, leaders need to do more than announce that a system has been introduced. They need to help professionals understand why the change matters, create space for concerns, and support the practical conditions through which digital systems become part of everyday work (May & Finch, 2009). Taken together, this chapter shows why healthcare digital transformation requires more than technical project management. It requires leaders and consultants who can navigate tensions rather than reduce them to simple either-or choices. Chapter 4 therefore turns to the paradoxical nature of healthcare digital transformation and explores why both-and thinking is needed to support meaningful technology adoption.

## **4. Navigating Paradoxes in Healthcare Digital Transformation**

Chapter 3 showed that technology adoption is not merely a technical challenge, but a micro-level challenge shaped by routines, meaning, identity and learning conditions. This raises a leadership question: what is needed when adoption problems are not simple problems to solve, but tensions that need to be navigated over time? This chapter therefore moves from either-or thinking to both-and thinking. It first briefly explains the difference between dilemmas, polarization and paradoxes, before discussing paradoxical leadership as an approach for navigating healthcare digital transformation.

### **4.1 Dilemmas, polarization and paradoxes**

Before discussing leadership, it is important to clarify what kind of tension we are dealing with. In practice, tensions are often described as “difficult choices”, but not every difficult choice is a paradox. During the M&I/Partners Care-Cure Day, Rutger Leer used a practical distinction between dilemmas, polarization and paradoxes to explain why some tensions can be solved through decision-making, while others need to be continuously navigated (see Appendix D). This distinction is useful for healthcare digital transformation because adoption challenges often become harder when different types of tensions are treated as if they are the same.

### **Dilemma**

A dilemma is a difficult either-or choice. It usually involves two valuable options, where choosing one means giving up something else. For example, a healthcare organization may need to decide which digital project receives priority first when time, budget or capacity is limited. A dilemma can often be managed through prioritization, trade-offs or decision-making.

### **Polarization**

Polarization is different. Here, a tension hardens into opposing camps. In healthcare digital transformation, this can happen when efficiency and standardization become associated with "management", while autonomy and care quality become associated with "professionals". The issue is then no longer only the digital system itself, but how the change is interpreted. People may start defending positions instead of exploring what both sides are actually trying to protect.

### **Paradox**

A paradox goes deeper. Paradoxes are competing demands that seem contradictory, but remain interrelated and simultaneously important over time (Smith & Lewis, 2011). In healthcare digital transformation, this means that organizations cannot simply choose between efficiency and care quality, standardization and professional judgement, or innovation and continuity. These demands may pull in different directions, but they all remain necessary.

## **4.2 Healthcare digital transformation as a paradoxical context**

Healthcare digital transformation is full of tensions that cannot be solved by choosing one side and ignoring the other. Digital technologies are often introduced to improve efficiency, coordination, data use and standardization. At the same time, healthcare organizations must preserve patient-centred care, professional judgement, trust, safety and continuity. This makes healthcare a deeply paradoxical context. The same digital transformation that promises improvement can also threaten values that professionals see as central to good care (Desveaux, 2025). A real-life case makes these tensions more concrete.

### **When Digital Ambition Meets Healthcare Reality: The NPfIT Case**

A well-known example is England's National Programme for IT (NPfIT), which aimed to modernize the National Health Service (NHS) through national electronic health records and secure information exchange. With an estimated cost of £12.7 billion, the programme promised better coordination, safer data exchange and improved patient care

(National Audit Office, 2008). Yet by 2011, the National Audit Office concluded that the money spent on care records systems did not represent value for money (National Audit Office, 2011). The problem was not the ambition itself, but the paradoxical tensions the programme struggled to hold together: the drive for national standardization clashed with the need for local fit, central control undermined professional ownership, and the pace of modernization left little room for trust and practical workability (Robertson et al., 2011). This case illustrates why healthcare digital transformation is not simply an implementation challenge. It is a paradoxical one. The point is not that standardization, data-sharing or efficiency are bad. They are necessary. But when pursued without attention to local fit, professional judgement and practical workability, technology adoption becomes much harder. These tensions need to be held together rather than solved by choosing one side.

“The test of a first-rate intelligence is the ability to hold two opposed ideas in the mind at the same time, and still retain the ability to function” (Fitzgerald, 1936, para. 3).

#### **4.3 Both-and thinking with leadership**

If healthcare digital transformation is characterized by paradoxical tensions, then leadership needs to reflect that. In such contexts, professionals may not only need leaders who provide control, decisions and direction, but also leaders who listen, hold tensions, create space for learning, and help professionals make sense of competing demands. As Fitzgerald suggested, holding two opposed ideas at the same time is not a weakness. In healthcare digital transformation, it may be exactly what leadership requires.

##### **Navigating paradoxes: Paradoxical leadership**

One leadership approach that may fit this challenge particularly well is paradoxical leadership. Paradoxical leadership focuses on balancing competing demands, such as control and autonomy, standardization and local fit, and innovation and continuity, rather than treating them as mutually exclusive (Zhang et al., 2015; Lee et al., 2023). In healthcare digital transformation, this means giving direction without overcontrolling, supporting standardization without dismissing professional judgement, and encouraging innovation while recognizing the pressure of everyday care delivery. Importantly, paradoxical leadership may support technology adoption not by directly pushing technology use, but by shaping how professionals interpret and experience digital change. When leaders acknowledge competing demands rather than dismissing them, they can help professionals make sense of why digital change is both necessary and challenging. This sensegiving role can create conditions in

which concerns can be voiced, questions can be asked, and tensions can be explored rather than avoided (Sparr et al., 2022). This aligns with the accompanying master's thesis, where paradoxical leadership appeared to matter mainly indirectly, by shaping the conditions under which professionals interpret digital change rather than by directly driving technology use.

### **Leading without forcing**

This indirect view of leadership also resonates with the idea of Wu Wei, introduced by Jesse Segers during the Congress “Polarisation and Leadership” as a way of thinking about leadership in complex systems (see Appendix E). In the presentation, Wu Wei was described as “action without forcing”: not passivity, but the ability to create movement without pushing harder. Rather than speaking louder, deciding faster or controlling more, leaders may need to listen, work with what is already present, and recognize that leadership often means choosing between good and good rather than between right and wrong. For paradoxical leaders in healthcare digital transformation, this means knowing when to intervene and when to create space; when to provide direction and when to listen; when to accelerate change and when to slow down so that professionals can make sense of it. Here, Wu Wei is used as a reflective metaphor for leading by creating conditions: holding space for tensions rather than resolving them prematurely. The following chapter brings these ideas closer to practice by exploring how healthcare leaders experienced these tensions in daily digital transformation work.

## **5. What the interviews reveal**

Chapters 3 and 4 established the analytical ground: technology adoption is a micro-level challenge shaped by identity, workflow fit and learning conditions, and navigating it requires both-and leadership. This chapter moves from argument to practice. Six healthcare leaders, all directly involved in digital transformation, reflected on what adoption actually looks like from a leadership and implementation perspective. Their accounts show that adoption is not a single implementation moment, but a practical, social and professional process in which systems, routines, workload, leadership and professional values interact. The original Dutch quotes, English translations and related codebook themes for the quotes used in this chapter are listed in Appendix B.

### **5.1 Adoption starts before professionals use the system**

The interviews first show that adoption starts before professionals decide whether they are willing to use a system. Digital transformation is already conditioned by the wider digital ecosystem in which care work takes place. Respondents described healthcare as dependent on

multiple systems, suppliers, data flows and organizational boundaries. One respondent captured this directly: "Well, when it comes to digitalization, you immediately run into all kinds of complex issues" (Respondent A).

Those "complex issues" were not abstract. They concerned different EHR systems across partner organizations, older system versions, supplier dependency and information that does not automatically move with the patient journey. In such a context, professionals may need to search, re-enter or translate information between systems before digital work becomes usable. Standardization can help, but it also asks organizations to reshape existing routines. Reliability matters just as much. When systems fail, digital dependence becomes visible immediately: "Then there is also the chance that something does not work" (Respondent E). The interviews therefore suggest that trust in digital work does not start with persuasion. It starts with whether infrastructure, data quality and system reliability make digital care feel workable.

## **5.2 Adoption happens in the pressure of everyday care**

That wider ecosystem only becomes meaningful in daily practice. Several respondents emphasized that go-live is not the same as adoption. Digital systems still need to be embedded in routines, supported after implementation and made useful in the middle of ongoing care delivery. Respondent B described implementation as: "a very large change that has to be carried out alongside regular care" (Respondent B).

This matters because care does not pause while a new system is introduced. Professionals have to learn, troubleshoot and change routines while continuing to care for patients. Respondent A pointed to "How little free, usable time healthcare professionals have" (Respondent A). Under such conditions, even a well-designed implementation can stall because there is too little space to learn, reflect or adjust. This is why visible value and workflow fit were so central in the interviews. Professionals are more likely to engage when they can see how digitalization improves care, reduces friction or makes work easier. Abstract promises about innovation alone are not enough. Small usability problems can accumulate into real adoption barriers. Respondent B summarized this sharply as "A lot of clicking, a lot of copy-pasting" (Respondent B). Such frictions may seem minor from a project perspective, but in pressured care environments they can decide whether a digital system becomes part of work or remains something professionals work around.

### **5.3 Resistance is not the opposite of adoption**

The same practical lens changes how resistance should be understood. Respondents did not describe resistance as simple unwillingness. It often appeared as uncertainty, inability, fear of losing competence or attachment to routines that had long made sense. Respondent B summarized the hesitation in one phrase: "I do not know, I cannot do it, isn't it working fine as it is?" (Respondent B). This is not just refusal. It is a signal that digital change has not yet become understandable, safe or meaningful enough.

Sometimes resistance also reflects the disappearance of familiar professional routines. As Respondent A illustrated: "The doctors who dictate are now a dying breed. And we no longer have the typing office" (Respondent A). Digitalization can quietly remove the old workarounds and support structures through which professionals used to function. That makes resistance more informative than it first appears. Respondent D captured the leadership question behind this: "Then I ask myself: what is really being called into question here?" (Respondent D). The answer may be workflow fit, confidence, training, usefulness, trust or professional identity. This does not mean every workaround should remain acceptable. Several respondents also suggested that leaders sometimes need to set boundaries when old routines block adoption. But the starting point changes. Resistance becomes implementation intelligence. It shows where translation has not yet happened.

### **5.4 Leadership turns digital change into professional meaning**

This makes leadership central, but not as a layer above adoption. The interviews suggest that leadership works through translation. Leaders connect digital strategy to daily care, make the purpose of change understandable and show whether they truly stand behind the direction chosen. Respondent A put this plainly: "I do think that, as leaders, we actually have a role-model function in this." (Respondent A). Credibility depends not on being a technical expert, but on understanding enough to guide, explain and model the change convincingly. At the same time, the interviews showed that translation requires more than explaining the change. It also requires a climate in which professionals can admit difficulty, ask questions and voice concerns without being treated as obstructive.

Translation also has to happen locally. Digital strategy only becomes real when teams can connect it to their own work. Respondent F captured the risk of distance between plans and practice: "What you come up with up there may be wonderful, but it does not connect at all with where the work floor actually is" (Respondent F). Bridging roles such as CMIOs, MIOs and NIOs matter because they connect digital transformation to clinical knowledge and

professional credibility. This also sharpens the role of external advisers. Respondents noted that "consultants, just like management teams, are often very enthusiastic about digitalization as a solution" (Respondent B). Enthusiasm is not the problem. The gap between that enthusiasm and work floor readiness is. Without genuine proximity to the realities of daily care, ownership stays with the project rather than with the people who must change their work.

### **5.5 Digitalization touches what it means to be a professional**

The deeper issue is that digitalization does not only affect processes. It touches professional identity, autonomy, judgement and care values. Respondent B made this visible in a sentence that goes to the heart of adoption: "I have doubts. What will be left of my profession?" (Respondent B). Another remark gave the emotional background to that question: "People once entered healthcare to provide care" (Respondent B). The interviews therefore suggest that adoption is not only a question of whether professionals understand a digital system, but whether they can still recognize themselves as good professionals within the digitalized version of their work. When digitalization feels like administration, control or replacement, adoption becomes fragile. When it is translated as support for judgement, patient care and new professional roles, it can create room for experimentation and innovation. Innovation capacity therefore depends not only on digital ambition, but on whether professionals have enough space to experiment with new roles and tools without feeling that their existing expertise is being displaced.

Across the interviews, digital adoption emerges as an interconnected process rather than a sequence of separate implementation steps. Fragmented infrastructure weakens workflow fit, workload limits learning, unread resistance blocks local translation, and identity threat reduces professionals' willingness to experiment with new digital roles. These dynamics reinforce one another. Chapter 6 therefore translates them into the Healthcare Technology Adoption Framework (HTAF): a way to approach technology adoption as a combined challenge of infrastructure, work practice, learning, leadership and professional meaning.

## **6. From Evidence to Action: The Healthcare Technology Adoption Framework**

The previous chapters showed that technology adoption in healthcare is not a linear implementation problem. Digital systems become meaningful not simply when they are introduced, but when professionals can integrate them into daily care work. This chapter introduces the Healthcare Technology Adoption Framework (HTAF): a practice-oriented

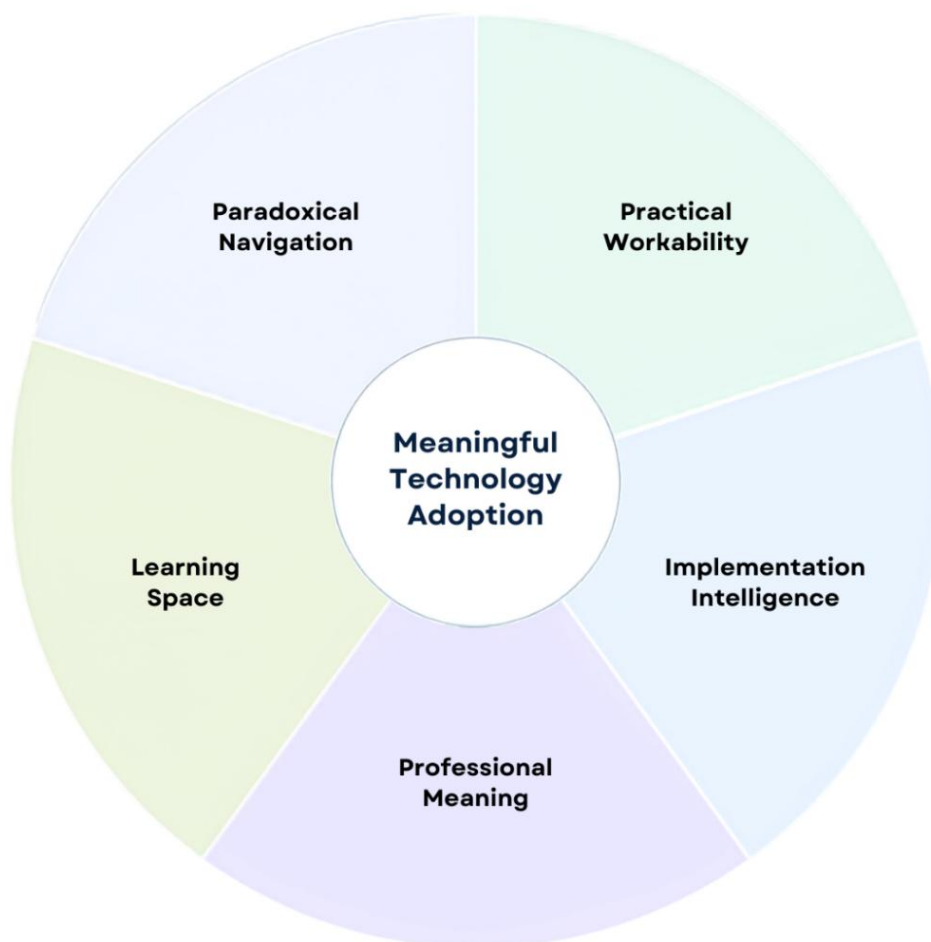
framework that translates the literature, interview insights, thesis findings and case-based reflections into five conditions for meaningful technology adoption. Rather than offering a linear roadmap, HTAF shows which conditions need attention if digital systems are to become part of daily care.

### 6.1 The Healthcare Technology Adoption Framework

Figure 1 presents HTAF as a wheel because meaningful adoption does not unfold in a fixed sequence. The centre represents the shared aim: meaningful technology adoption. The five surrounding segments represent the conditions that need to be created and sustained for that aim: practical workability, implementation intelligence, professional meaning, learning space and paradoxical navigation. The wheel format emphasizes that these conditions are interdependent rather than sequential. Poor workability makes learning harder. Unread resistance blocks professional meaning. Without paradoxical navigation, the other conditions become harder to sustain. A weakness in one condition can therefore weaken the others.

**Figure 1**

*The Healthcare Technology Adoption Framework*



### **Practical Workability**

The first condition is practical workability: digital work needs to be practically possible, reliable and usable in daily care. The interviews showed that adoption can stall before professionals have even decided whether they support a digital system. Healthcare work is shaped by fragmented infrastructures, multiple systems, supplier dependencies, data flows across organizational boundaries and the constant pressure of ongoing care delivery. When information does not move with the patient journey, when systems require duplicate registration, or when professionals need to search, copy and correct information across platforms, digital transformation becomes additional work rather than support for work.

For leaders and consultants, this means that adoption should not start with communication alone, but with a practical workability check. Is the system reliable? Does it reduce or increase friction? Does it fit existing routines, or does it require professionals to compensate for poor design? Small usability problems, such as too many clicks or unclear data flows, may seem minor from a project perspective, but in pressured healthcare environments they can determine whether technology becomes part of daily work or something professionals work around. Meaningful adoption therefore begins with a fundamental question: does this technology actually make care work easier, safer or more reliable?

### **Implementation Intelligence**

The second condition is to treat resistance as implementation intelligence. Resistance in healthcare digital transformation should not automatically be interpreted as unwillingness. It can appear as hesitation, workarounds, selective use or critical feedback, and these responses may reveal where the technology, workflow, support structure or professional meaning does not yet fit. In that sense, resistance is not simply the opposite of adoption. It is often a signal that translation has not yet happened.

For leaders and consultants, this means asking what resistance is trying to show before deciding how to respond. A workaround may indicate poor workflow fit. Slow adoption may point to limited training, time or confidence. Critical feedback may reflect concerns about patient care, professional judgement or usability. This does not mean that every form of resistance should be accepted. Some routines may need to change, and leaders still need to provide direction. However, ignoring resistance can make organizations miss precisely the information needed to improve adoption. A psychologically safe team does not automatically adopt technology more enthusiastically. It may use technology more selectively, and that

selectivity can reveal where the system still does not fit the work. For consultants, this makes resistance a diagnostic resource: not something to manage away, but something to read carefully before deciding how to respond.

### **Professional Meaning**

The third condition is to translate technology into professional meaning. Technology adoption becomes stronger when professionals can recognize technology as supporting their professional judgement, care values and expertise. In healthcare, digital systems are not experienced only as technical tools. They can also affect how professionals understand their role, autonomy, craftsmanship and relationship with patients. When technology is perceived as administration, control or replacement, it can raise the question of what remains of professional work.

For leaders and consultants, this means that digital transformation needs more than a functional explanation of what the system does. It also needs translation into why the technology matters for good care. How does it support professional judgement, improve coordination or safety, and create new forms of expertise rather than undermine existing ones? These questions matter because professional role identity threat can weaken professionals' willingness to adopt technology. Technology should therefore not be framed only as an efficiency instrument or strategic necessity. It needs to be connected to the values and responsibilities that healthcare professionals already care about. Meaningful adoption becomes more likely when professionals can see that digitalization does not replace their professionalism, but can help them practise it differently and, ideally, better.

### **Learning Space**

The fourth condition is to protect learning space after go-live. Go-live is not the end of implementation, but the beginning of actual technology adoption. A digital system may be technically available, but professionals still need time, support and repeated opportunities to learn how to use it well in daily care. This matters especially in healthcare, where new systems are often introduced while regular care continues. Professionals are expected to learn, troubleshoot and adapt routines without care delivery slowing down.

For leaders and consultants, this means that learning should not be treated as a one-off training moment before implementation. Adoption requires structured support after launch: time to practise, accessible help, peer learning, superusers, key-users and roles such as CMIOs, MIOs and NIOs that can connect digital knowledge with professional practice. These learning structures help professionals move from knowing that a system exists to using it

confidently and meaningfully. This condition also reflects the difference between willingness and actual use. Professionals may be open to digital technology, but still struggle to incorporate it into daily routines when support is limited or workload is high. Learning space therefore protects the translation from intention to use. Without it, implementation can remain formally successful but practically unfinished.

### **Paradoxical Navigation**

The fifth condition is to navigate technology adoption paradoxically by organizing direction, space and local ownership. Technology adoption requires both direction and ownership: enough direction to prevent fragmentation, and enough space for professionals to translate technology into workable care practice. This condition connects the other four conditions. Workability, implementation intelligence, professional meaning and learning space do not sustain themselves. They need leadership and consultancy practices that can hold competing demands together. In healthcare digital transformation, these demands are constantly present. Organizations need standardization and local translation, innovation and continuity, efficiency and patient-centred judgement. Treating these tensions as either-or choices can create distance between strategy and practice. Too much top-down control can reduce ownership, while too much local freedom can lead to fragmentation and inconsistent use. Paradoxical navigation means holding both together.

For leaders and consultants, this means giving clear direction without overcontrolling the work floor, creating room for questions without making adoption optional, and supporting standardization while allowing local adaptation. Local ownership is crucial here. Team leaders, CMIOs, MIOs, NIOs, key-users and healthcare professionals themselves can translate digital ambitions into the language, routines and priorities of daily care. In this way, paradoxical navigation does not force adoption from above. It creates the conditions in which professionals can make digital technology part of their own work.

## **6.2 Synthesis**

Together, the five conditions show where technology adoption often breaks down. Not in the ambition itself, but in the gap between digital strategy and the practical, social and professional readiness of daily care. HTAF helps leaders and consultants make that gap visible before digital ambition turns into implementation frustration.

## **7. Conclusion**

This report asked how healthcare leaders and consultants can support meaningful technology adoption during healthcare digital transformation. The central conclusion is that adoption is not strengthened by pushing technology use from above, but by creating the conditions that allow digital systems to become workable, understandable and meaningful in daily care. The Healthcare Technology Adoption Framework (HTAF) brings these conditions together: practical workability, implementation intelligence, professional meaning, learning space and paradoxical navigation. For leaders and consultants, this means looking beyond technical implementation toward the practical, social and professional conditions that determine whether digital systems become part of daily care. These conditions involve tensions that cannot be solved by choosing one side, such as direction and autonomy, standardization and local translation, or innovation and continuity. This is why paradoxical leadership matters. For M&I/Partners, HTAF can serve as a diagnostic and conversational tool for digital transformation projects, implementation reviews and adoption challenges after go-live. The main insight is simple: digital ambition is rarely the problem. The real challenge is building the conditions that make that ambition usable on the work floor.

## References

- Ackerhans, S., Huynh, T., Kaiser, C., & Schultz, C. (2024). Exploring the role of professional identity in the implementation of clinical decision support systems: A narrative review. *Implementation Science*, 19(1), 11.  
<https://doi.org/10.1186/s13012-024-01339-x>
- Ammenwerth, E. (2019). Technology Acceptance Models in Health Informatics: TAM and UTAUT. *Studies in health technology and informatics*, 263, 64–71.  
<https://doi.org/10.3233/SHTI190111>
- ABF Research. (2025, April 18). *Arbeidsmarktscenario's Zorg & Welzijn*.  
<https://abfresearch.nl/publicaties/arbeidsmarktscenarios-zorg-welzijn/>
- Beerepoot, I., & van de Weerd, I. (2018). Prevent, redesign, adopt or ignore: Improving healthcare using knowledge of workarounds. *Proceedings of the European Conference on Information Systems*. [https://aisel.aisnet.org/ecis2018\\_rp/120](https://aisel.aisnet.org/ecis2018_rp/120)
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications.
- Desveaux, L. (2025). Rethinking healthcare: Why paradox science is core to the future of health and health leadership. *Journal of Healthcare Leadership*, 17, 45–48.  
<https://doi.org/10.2147/jhl.s512053>
- Fitzgerald, F. S. (1936, February). The crack-up. *Esquire*.
- Ford, J. D., Ford, L. W., & D'Amelio, A. (2008). Resistance to Change: The Rest of the Story. *Academy Of Management Review*, 33(2), 362–377.  
<https://doi.org/10.5465/amr.2008.31193235>

- Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. *Organizational Research Methods*, 16(1), 15–31. <https://doi.org/10.1177/1094428112452151>
- Greenhalgh, T., Wherton, J., Papoutsis, C., Lynch, J., Hughes, G., A’Court, C., Hinder, S., Fahy, N., Procter, R., & Shaw, S. (2017). Beyond Adoption: A New Framework for Theorizing and Evaluating Nonadoption, Abandonment, and Challenges to the Scale-Up, Spread, and Sustainability of Health and Care Technologies. *Journal Of Medical Internet Research*, 19(11), e367. <https://doi.org/10.2196/jmir.8775>
- Ingemunniks. (2025, April 16). *Schrikbarende hoeveelheid zorg wordt straks niet meer geleverd*. RegioPlus. <https://regioplus.nl/schrikbarende-hoeveelheid-zorg-wordt-straks-niet-meer-geleverd/>
- Kraus, S., Schiavone, F., Pluzhnikova, A., & Invernizzi, A. C. (2021). Digital Transformation in Healthcare: Analyzing the current state-of-research. *Journal of Business Research*, 123, 557–567. <https://doi.org/10.1016/j.jbusres.2020.10.030>
- Kvale, S., & Brinkmann, S. (2009). *InterViews: Learning the craft of qualitative research interviewing* (2nd ed.). SAGE Publications.
- Lee, A., Lyubovnikova, J., Zheng, Y., & Li, Z. F. (2023). Paradoxical leadership: A meta-analytical review. *Frontiers in Organizational Psychology*, 1, Article 1229543. <https://doi.org/10.3389/forgp.2023.1229543>
- Leonardi, P. M. (2011). When flexible routines meet flexible technologies: affordance, constraint, and the imbrication of human and material agencies. *MIS Quarterly*, 35(1), 147–167. <https://doi.org/10.2307/23043493>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. SAGE Publications.
- Mas, F. D., Massaro, M., Rippa, P., & Secundo, G. (2023). The challenges of digital transformation in healthcare: An interdisciplinary literature review, framework, and

future research agenda. *Technovation*, 123, 102716.

<https://doi.org/10.1016/j.technovation.2023.102716>

May, C., & Finch, T. (2009). Implementing, Embedding, and Integrating Practices: An

Outline of Normalization Process Theory. *Sociology*, 43(3), 535–554.

<https://doi.org/10.1177/0038038509103208>

National Audit Office. (2008, May 16). *The National Programme for IT in the NHS: Progress*

*since 2006*. <https://www.nao.org.uk/reports/the-national-programme-for-it-in-the-nhs-progress-since-2006/>

National Audit Office. (2011, May 18). *The National Programme for IT in the NHS: An*

*update on the delivery of detailed care records systems*.

<https://www.nao.org.uk/reports/the-national-programme-for-it-in-the-nhs-an-update-on-the-delivery-of-detailed-care-records-systems/>

Oreg, S. (2006). Personality, context, and resistance to organizational change. *European*

*Journal of Work and Organizational Psychology*, 15(1), 73–101.

<https://doi.org/10.1080/13594320500451247>

Oreg, S., & Berson, Y. (2019). Leaders' impact on Organizational Change: bridging

theoretical and methodological chasms. *Academy of Management Annals*, 13(1),

272–307. <https://doi.org/10.5465/annals.2016.0138>

Patton, M. Q. (2015). *Qualitative research & evaluation methods* (4th ed.). SAGE

Publications.

Pratt, M. G., Rockmann, K. W., & Kaufmann, J. B. (2006). Constructing Professional

Identity: The role of work and identity learning cycles in the customization of

identity among medical residents. *Academy of Management Journal*, 49(2), 235– 262.

<https://doi.org/10.5465/amj.2006.20786060>

- Rijksoverheid. (2025, September 26). *Het Integraal Zorgakkoord: Samenwerken aan gezonde zorg*. <https://www.rijksoverheid.nl/themas/familie-zorg-en-gezondheid/kwaliteit-van-de-zorg/integraal-zorgakkoord>
- Robertson, A., Bates, D. W., & Sheikh, A. (2011). The rise and fall of England's National Programme for IT. *Journal of the Royal Society of Medicine*, 104(11), 434–435. <https://doi.org/10.1258/jrsm.2011.11k039>
- Smith, W. K., & Lewis, M. W. (2011). Toward a Theory of Paradox: A Dynamic equilibrium Model of Organizing. *Academy of Management Review*, 36(2), 381–403. <https://doi.org/10.5465/amr.2009.0223>
- Sparr, J. L., Van Knippenberg, D., & Kearney, E. (2022). Paradoxical leadership as sensegiving: stimulating change-readiness and change-oriented performance. *Leadership & Organization Development Journal*, 43(2), 225–237. <https://doi.org/10.1108/lodj-04-2021-0161>
- Stoumpos, A. I., Kitsios, F., & Talias, M. A. (2023). Digital transformation in healthcare: technology acceptance and its applications. *International Journal of Environmental Research and Public Health*, 20(4), 3407. <https://doi.org/10.3390/ijerph20043407>
- Ullrich, A., Reißig, M., Niehoff, S., & Beier, G. (2023). Employee involvement and participation in digital transformation: a combined analysis of literature and practitioners' expertise. *Journal of Organizational Change Management*, 36(8), 29–48. <https://doi.org/10.1108/jocm-10-2022-0302>
- Van Aken, J. E., & Berends, H. (2018). *Problem solving in organizations: A methodological handbook for business and management students* (3rd ed.). Cambridge University Press.

- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478.  
<https://doi.org/10.2307/30036540>
- Vial, G. (2019). Understanding Digital Transformation: A review and a research agenda. *The Journal of Strategic Information Systems*, 28(2), 118–144.  
<https://doi.org/10.1016/j.jsis.2019.01.003>
- Volpentesta, T., Spahiu, E., & De Giovanni, P. (2023). A survey on incumbent digital transformation: a paradoxical perspective and research agenda. *European Journal of Innovation Management*, 26(7), 478–501. <https://doi.org/10.1108/ejim-01-2023-0081>
- Waldman, D. A., & Bowen, D. E. (2016). Learning to be a paradox-savvy leader. *Academy of Management Perspectives*, 30(3), 316–327. <https://doi.org/10.5465/amp.2015.0070>
- Walzer, S., Armbruster, C., Mahler, S., Farin-Glattacker, E., & Kunze, C. (2025). Factors Influencing the Implementation and Adoption of Digital Nursing Technologies: Systematic Umbrella Review. *Journal of medical Internet research*, 27, e64616.  
<https://doi.org/10.2196/64616>
- Xie, H., Zhang, P., & Zhu, W. (2025). Perceived acceptance, intention to use and actual use behavior of digital information technologies among nursing professionals in Shanghai: A cross-sectional study. *BMC Nursing*, 24, Article 431.  
<https://doi.org/10.1186/s12912-025-03078-w>
- Zhang, Y., Waldman, D. A., Han, Y., & Li, X. (2015). Paradoxical leader behaviors in people Management: Antecedents and consequences. *Academy of Management Journal*, 58(2), 538–566. <https://doi.org/10.5465/amj.2012.0995>

## **Appendix**

### **Appendix A. Interview Guide**

**Topic:** Paradoxical leadership and technology adoption during digital transformation in healthcare organizations

**Target group:** Dutch healthcare leaders involved in digital transformation initiatives

**Interview type:** Semi-structured interview

**Duration:** Approximately 60 minutes

#### **Introduction**

Thank you for participating in this interview. This interview focuses on experiences with digital transformation in healthcare, with specific attention to technology use, leadership, and how healthcare professionals respond to digital change. Participation is voluntary, answers will be treated confidentially, and any quotes used in the report will be anonymized. There are no right or wrong answers; I am mainly interested in your experiences and perspectives. If there is any question you do not wish to answer, that is completely fine. With your permission, I would like to record the interview for transcription purposes only. The recording will be deleted after transcription.

#### **Background and context**

##### **1. Could you briefly describe your role and how you are involved in digital transformation within your organization?**

Possible probes:

- What is your current role?
- Which digital systems or changes are you involved with?
- Are you mainly involved in implementation, use, or both?

##### **2. Which digital changes or technologies have recently been introduced in your work environment?**

Possible probes:

- What kind of digital systems or processes were involved?
- Were these new systems or adaptations to existing systems?
- How significant were these changes for daily work?

## **Difficulties around technology adoption**

### **3. How did healthcare professionals in your organization respond to recent digital changes in practice?**

Possible probes:

- How would you describe the overall response?
- Did responses differ between employees, teams or professional groups?
- Can you give an example?

### **4. In what ways do difficulties with adopting digital systems become visible in daily work?**

Possible probes:

- What kinds of behaviours or responses did you observe?
- Were there examples of workarounds, delays or selective use?
- How did these difficulties affect daily work?

### **5. What, in your view, makes it difficult for healthcare professionals to adopt and use new digital systems well?**

Possible probes:

- What practical barriers play a role?
- How important are usability, workflow fit, time and support?
- Are there any less visible barriers?

## **Leadership paradoxes in practice**

### **6. How do leaders respond to the challenges surrounding digital transformation?**

Possible probes:

- What leadership behaviours stood out?
- Were leaders mainly supportive, directive or both?
- How did professionals respond to this?

### **7. Have you observed situations in which leaders had to balance competing demands during digital transformation?**

Possible probes:

- What kinds of tensions were present?
- How were these tensions handled?
- What made these situations difficult?

### **8. How were these leadership responses experienced by healthcare professionals?**

Possible probes:

- Were these responses experienced as helpful, confusing or restrictive?
- Did leadership influence how professionals responded to the technology?
- Can you describe a specific situation?

### **Professional role identity threat and psychological safety**

#### **9. To what extent did digital transformation influence how professionals experienced their role, expertise or autonomy?**

Possible probes:

- Did digital change affect professional judgement or decision-making?
- Did professionals feel supported or challenged in their role?
- Can you give an example?

#### **10. Were there situations in which digital systems or digital work processes affected professionals' sense of competence, autonomy or professional status?**

Possible probes:

- What aspects of the professional role were affected?
- How did professionals respond to this?
- Was this the same for everyone?

#### **11. How did the team climate influence how people responded to digital changes?**

Possible probes:

- Was it safe to ask questions or admit uncertainty?
- How were concerns or difficulties discussed?
- Did the team climate influence how leadership was interpreted?

### **Practical implications for leaders and consultants**

#### **12. What should leaders do to better support technology adoption during digital transformation?**

Possible probes:

- What leadership behaviours seem helpful?
- What should leaders avoid?
- What kind of communication or support is important?

#### **13. What should consultants or advisors better understand when supporting digital transformation in healthcare organizations?**

Possible probes:

- What is often underestimated in practice?

- Where do external parties need to pay closer attention?
- What lessons from practice would you want to share?

### **Closing question**

**14. Is there anything important about digital transformation, technology adoption or leadership in healthcare that we have not yet discussed, but that you think should be included?**

Possible probes:

- Are there any other relevant examples or experiences?
- Is there anything leaders or consultants should particularly understand?

### **General probing questions**

- Could you tell me more about that?
- Could you give an example?
- What exactly do you mean by that?
- How did that work in practice?
- How did people respond?

### **Interviewer reminders**

- Start broad, then move into more depth.
- Use open and neutral wording.
- Ask for concrete examples.
- Stay close to participants' experiences and interpretations.
- Use theory in the background but ask questions in accessible language.

## Appendix B. Quote Usage in Chapter 5

**Table B1.**

*Quote usage in Chapter 5*

| Chapter 5 section                                             | Aggregate dimension                                                | 2nd-order theme                                                     | Original Dutch quote                                                                                                         | English translation                                                                                                      | Respondent   |
|---------------------------------------------------------------|--------------------------------------------------------------------|---------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|--------------|
| 5.1 Adoption starts before professionals use the system       | Digital transformation as infrastructural and ecosystem complexity | Systemic digital complexity and interorganizational dependency      | “Nou ja, en als het dan gaat over digitalisering, kom je meteen in allerlei ingewikkelde vraagstukken terecht.”              | “Well, when it comes to digitalization, you immediately run into all kinds of complex issues.”                           | Respondent A |
| 5.1 Adoption starts before professionals use the system       | Digital transformation as infrastructural and ecosystem complexity | Systemic digital complexity and interorganizational dependency      | “Dan heb je ook nog de kans dat er iets niet werkt.”                                                                         | “Then there is also the chance that something does not work.”                                                            | Respondent E |
| 5.2 Adoption happens in the pressure of everyday care         | Embedding digital adoption in everyday care practice               | Implementation preparation, learning support and adoption embedding | “een hele grote verandering is die naast de reguliere zorg uitgevoerd moet worden”                                           | “a very large change that has to be carried out alongside regular care”                                                  | Respondent B |
| 5.2 Adoption happens in the pressure of everyday care         | Embedding digital adoption in everyday care practice               | Workload, staffing pressure and change capacity constraints         | “Hoe weinig vrije, besteedbare tijd zorgprofessionals hebben”                                                                | “How little free, usable time healthcare professionals have”                                                             | Respondent A |
| 5.2 Adoption happens in the pressure of everyday care         | Embedding digital adoption in everyday care practice               | Workflow fit and usability as adoption conditions                   | “Veel klikken, veel plakken”                                                                                                 | “A lot of clicking, a lot of copy-pasting”                                                                               | Respondent B |
| 5.3 Resistance is not the opposite of adoption                | Human and social dynamics of adoption                              | Resistance, avoidance and defensive responses                       | “Weet ik niet, kan ik niet, het gaat toch goed?”                                                                             | “I do not know, I cannot do it, isn't it working fine as it is?”                                                         | Respondent B |
| 5.3 Resistance is not the opposite of adoption                | Human and social dynamics of adoption                              | Resistance, avoidance and defensive responses                       | “De dokters die dicteren zijn inmiddels een uitstervend ras. En de typkamer hebben we niet meer”                             | “The doctors who dictate are now a dying breed. And we no longer have the typing office.”                                | Respondent A |
| 5.3 Resistance is not the opposite of adoption                | Human and social dynamics of adoption                              | Resistance, avoidance and defensive responses                       | “Dan vraag ik me af: wat wordt hier nou echt ter discussie gesteld?”                                                         | “Then I ask myself: what is really being called into question here?”                                                     | Respondent D |
| 5.4 Leadership turns digital change into professional meaning | Leadership-mediated translation, ownership and paradox navigation  | Leadership sensemaking, communication and role modelling            | “Ik vind wel dat we als leidinggevendend daar eigenlijk een voorbeeldfunctie in hebben.”                                     | “I do think that, as leaders, we actually have a role-model function in this.”                                           | Respondent A |
| 5.4 Leadership turns digital change into professional meaning | Leadership-mediated translation, ownership and paradox navigation  | Local translation, ownership and work floor alignment               | “wat jullie daarboven verzinnen is prachtig mooi, maar dat sluit totaal niet aan bij waar de werkvloer überhaupt nog staat.” | “What you come up with up there may be wonderful, but it does not connect at all with where the work floor actually is.” | Respondent F |

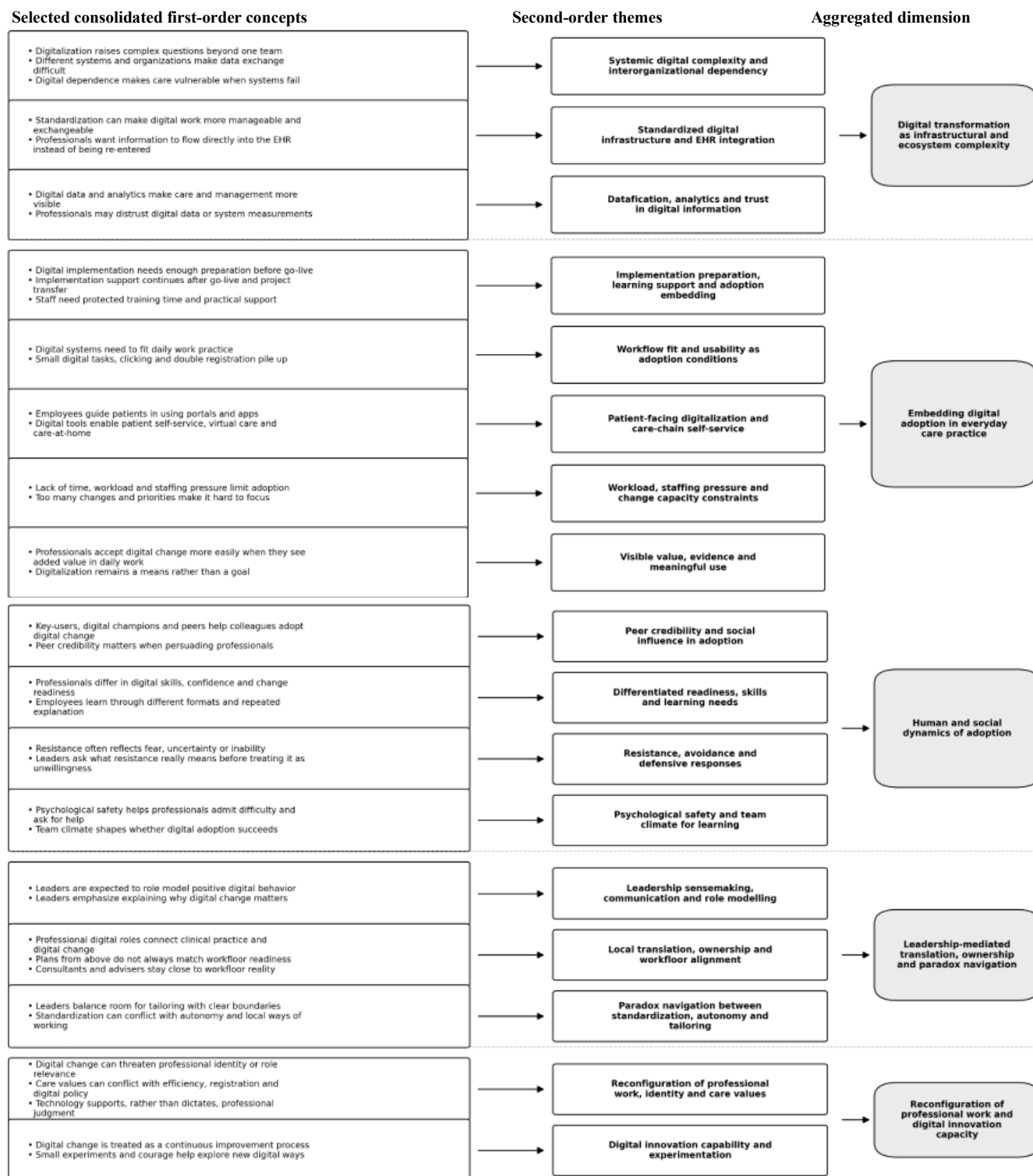
|                                                               |                                                                      |                                                                |                                                                                         |                                                                                                           |              |
|---------------------------------------------------------------|----------------------------------------------------------------------|----------------------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|--------------|
| 5.4 Leadership turns digital change into professional meaning | Leadership-mediated translation, ownership and paradox navigation    | Local translation, ownership and work floor alignment          | “adviseurs, net als MT’s, vaak heel enthousiast zijn over digitalisering als oplossing” | “consultants, just like management teams, are often very enthusiastic about digitalization as a solution” | Respondent B |
| 5.5 Digitalization touches what it means to be a professional | Reconfiguration of professional work and digital innovation capacity | Reconfiguration of professional work, identity and care values | “Ik twijfel. Wat blijft er van mijn vak over?”                                          | “I have doubts. What will be left of my profession?”                                                      | Respondent B |
| 5.5 Digitalization touches what it means to be a professional | Reconfiguration of professional work and digital innovation capacity | Reconfiguration of professional work, identity and care values | “Mensen zijn ooit de zorg ingestapt om zorg te verlenen”                                | “People once entered healthcare to provide care”                                                          | Respondent B |

*Note.* Original interview quotes are presented in Dutch. English translations were prepared by the author and are used in Chapter 5 to maintain consistency with the language of the report. The table links each illustrative quote to the corresponding Chapter 5 section, aggregate dimension and second-order theme from the final codebook.

## Appendix C. Summarized Gioia-Informed Data Structure

Figure C1

Summarized Gioia-Informed Data Structure



*Note.* The figure presents a summarized Gioia-informed data structure based on the final codebook. All aggregate dimensions and second-order themes are included, while selected consolidated first-order codes are shown for readability. Chapter 5 translates these coded dimensions into a practice-oriented narrative structured around five interconnected adoption dynamics. The figure is provided as an SVG to preserve readability when zooming in. The full coding overview is available as an accompanying codebook.

## Appendix D. Care-Cure Day Presentation Slides

### Dilemma

Keuze tussen twee (of meer) handelingsmogelijkheden (of-of)  
 Allebei nadelen of moreel bezwaarlijke consequenties (moet keuze maken)  
 Er gaat altijd iets verloren of er ontstaat een probleem

Dus er moet iets gekozen worden, en het is "kiezen tussen kwaden"?

Moet ik weg bij mijn werk of blijven?

9

M&amp;I/Partners/

### Paradox: schijnbare tegenstrijdige bewering

Tegengestelde werkelijkheden die elk waarde hebben en spanning oproepen  
 Aanvaarding dat beide werkelijkheden tegelijkertijd waar en noodzakelijk zijn  
 Kunst om de spanning te verdragen en tegengestelde krachten productief maken

Voorbeelden van handelingsperspectieven:

Aanvaarden: Vernieuwing en stabiliteit: Spanning accepteren en articuleren

Balanceren: Controle en vertrouwen: Transparant over dynamiek tussen beide krachten

Combineren: Ecologische en economische waarde + toevoegen maatschappelijke waarde

Overstijgen: Exploitatie en exploratie: Introduceren nieuwe logica: Innovatie voeden vanuit exploratie en exploitatie vernieuwen door innovatie

10

M&amp;I/Partners/

### Polarisatie

#### polarisatie

de polarisatie zelfst.naamw. (v.) 1) het verscherpen van tegenstellingen tussen (groepen)  
 mensen <sup>sociologie</sup> Voorbeeld: 'radicalisering en polarisatie'

**Het Denkkader Polarisatie: de dynamiek van wij-zij denken**

Polarisatie is niet goed of fout – het is er, en it's *natural*. Het is mensen eigen. We leven met tegenstellingen; man versus vrouw, gelovig tegen ongelovig, vreemd tegenover eigen, 010 botst met 020, elite versus volk, de lijst is eindeloos ... Maar of het nu gaat om burgeroorlog in Oost-Congo (macroschaal) of om strijd tussen familie van de koude en de warme kant (microschaal); de dynamiek is universeel. Het gaat om: drie basiswetten; vijf rollen, en een zogenoemde 'zesde positie'; en vier gamechangers.

#### 3 BASISWETTEN

Polarisatie is een **gedachteconstructie**. We creëren tegenstellingen in groepen mensen op basis van identiteitskenmerken.

Polarisatie heeft **brandstof** nodig: uitspraken over de identiteit van de tegenpolen.

Polarisatie is een **gevoelsdynamiek**. Feiten, argumenten of een betoog zijn maar beperkt werkzaam om mensen te kunnen bereiken.

11

M&amp;I/Partners/

**Appendix E. Congress “Polarisation and Leadership” Slides Jesse Segers**

Leiders in complexe systemen zijn meesters in het niet-doen. Ze luisteren meer dan dat ze spreken. Ze realiseren zich dat ze met het verleden moeten werken, omdat het een schaduw werpt op het heden en de toekomst. Ze zijn zich ervan bewust dat ze kiezen tussen goed en goed, en hebben vrede met hun machteloosheid en gebrek aan vrijheid, en zijn doordrongen van de liefde om steeds opnieuw te verbinden.



Actielloze actie



**Appendix F. Artificial Intelligence Declaration**

For this research internship report, I used ChatGPT by OpenAI as a limited and supportive feedback tool. I used it to reflect on the structure, coherence, academic tone, clarity and consistency of self-written parts of the report. ChatGPT was not used to collect data, generate interview responses, select or analyse literature, conduct interviews, conduct data analysis, or make research decisions.

Any feedback or formulation suggestions were critically reviewed and only used when they improved clarity, coherence, or academic readability without changing the meaning, interpretation, theoretical or practical nuance of the report. All theoretical and practical argumentation, methodological choices, data collection, analyses, interpretation of the findings, source selection and final academic decisions were made by me, the author.