PART II

DO

CHAPTER 3

Applying value-based principles to redesign a patient-centered health system

"The whole is more than the sum of its parts."

~ ARISTOTLE

HOW FRAGMENTATION DESTROYS VALUE AND TRUST

When Hanna was ten years old, she was terrified of needles.

Just as any teen girl would be, or even any adult, at the idea of daily self-injections to stay alive. Hanna is one of over one million people under the age of twenty who live with type 1 diabetes. Overall, diabetes is one of the most prevalent diseases in the Western world, with a staggering 463 million people living with this chronic illness. That's one in ten adults aged twenty to seventy-nine years.[78]

Hanna wasn't allowed to share candy and sweets with her friends, and also had to be mindful of intensive sports. Frequent visits to the hospital ER were a common part of her life way into her adulthood. Because she struggled to balance nutrition, physical

activity and treatments, she would often either be hypoglycemic (not enough blood sugar) or hyperglycemic (too much). Both of which came with severe episodes of fatigue upon recovery, keeping her away from school or the workplace for days and weeks.

Today, Hanna, an entrepreneur and patient expert, is very active in helping fellow patients to become proactive in managing their health, illness and life. I met Hanna during a panel discussion on collaboration in health care.[200] "*Where have you been all my life*?" we both said, always on the hunt for likeminded people. We, a patient and a doctor, reflected on how we can contribute to making health care a better and more connected place. That event triggered a series of common projects, including our joint article on the experience of the patient journey and the doctor-patient relationship.[79]

So, let's have a look at a few aspects of Hanna's story that beautifully exemplify the essentials of what we mean when we talk about value-based health care.

- "*I was ashamed of my own illness; I didn't want to handle it*," she told me. People's self-esteem – children's and adults' alike – suffers when they are tagged "different" and excluded from everyday leisure and workplace activities. Just like many actors in the health care ecosystem, it is about managing that constant tension between short-term incentives and long-term consequences. For the patient, it means feeling good in the moment versus investing in your future life. **Understanding patients' needs and feelings is the first step to creating value.**

- *"I've not always been that self-educated patient I am today, but was rather 'an enfant terrible' during my teen years,"* says Hanna as she reflects on her thirty-five-year "career", as she puts it. It would take one last emergency landing in the ER, at age twenty-eight, for her to think, *"Soon I'll be dead if nothing changes."* She spent a considerable amount of time reflecting on what it means to her to become an empowered patient, which occurred *"only once I took my life into my own hands and figured out other ways to make me feel better, such as nutrition, sports, hydration and stress management, that suited my lifestyle and my illness."* **Self-empowered patients, and choosing options "beyond the pill" are an untapped potential on the way to value.**

- *"All these roller-coaster years with yo-yo blood sugars left me exhausted,"* she recounts, as she reflects on her struggles to navigate the indiscernible web of doctors, nurses, specialists, hospitals and community stations. A fragmented system and a silo mentality weighed heavily on her trust in doctors and nurses. *"However, the ones who struck me as my bright stars all had one very simple commonality: they listened to me. They were empathetic and took me, my concerns and my goals seriously and did not only see me as 'diabetes' but as a young woman with my own rights."* **Better care coordination and empathetic providers, who co-create treatment goals together with the patient, are the backbone of value creation.**

- What touched me most listening to Hanna was a deep feeling of loneliness that resulted from her various calamities. Not only concerns about her body, but also worries about

her state of mind, which is part of a holistic cycle of care. "*Nobody spoke to me about mental health ever before*," she concluded after her life-changing last visit to the ER. "*But I am so thrilled to see that there are solutions out there to help me and others!*" Today, several decades later and still living with diabetes, Hanna has made peace with her own struggles and feels supported by her care team. Notably, it was a patient nurse who didn't "*scoff over my fear of needles, but actually made a plan to work on helping me to overcome that fear and finally self-inject the insulin that I am so vitally dependent on*." **A holistic approach to health along the health continuum, from prevention to acute and chronic care, is what VBHC is all about.**

I have been asking myself: "Can't we do better?" Even in the best health care systems in the world, and despite having the best trained doctors and best innovative treatments, a young patient living with diabetes is still left in such despair that she actually thinks she may die before the age of thirty.

PATIENT CENTRICITY IS THE TOLLGATE TO VALUE

This is where value starts – with addressing people's personal needs. Not only in health care, but universally in any part of our lives. Asking, and listening to, what value means to the customer is the essential starting point in any industry. It is about personal choices that people want to make for themselves and the experience they envision when buying a product or a service.

"People don't want to buy a drill. People want to buy a hole in the wall."

~THEODORE LEVITT

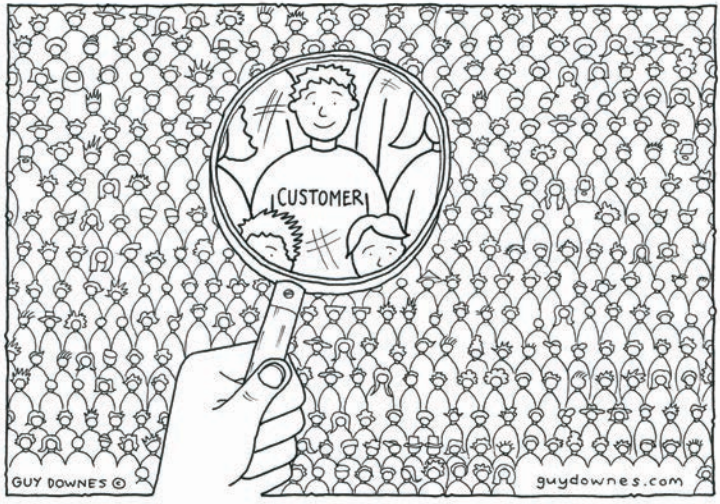
It is all about the job that needs to get done. Not the tool. This is what Professor Levitt at Harvard Business School was alluding to fifty years ago when he said that the customer's need and primary interest is the hole in the wall, not the drill.[80] To this day, it illustrates perfectly what we mean by customer-centricity. Consumers aren't interested in the tool they buy, but in the results they get from using it and the value that the outcomes represent for them. People go the movies not because they can't see the film at home, but because of the experience – and the ability to share that experience with others. People go to a restaurant not necessarily because they need food, but because they long for the experience of sharing and celebrating the occasion with others. Much of that feeling of experience is about connections with others.

In health care, however, the concept of customer-centricity and the importance of the consumer experience have been late to the show. In our context, the customer is the patient.

There is much that health care can learn from other industries when it comes to value, the customer experience, and learning how to listen to the consumer. This concept has been widely explored in various sectors, leading to successful renewals in the travel, hospitality, retail and tech industries. As Bertini and Koenigsberg state, *"smart companies stop selling products and start delivering value."*[59] In the twenty-first century, the new competitive edge in any industry lies in the ability to stop selling the "means" to an end (products, services and procedures) and to start

delivering the "ends" to customers (results and outcomes that matter to consumers), they conclude. In their review of recent business successes, they demonstrate that this sequence of thinking and strategizing – consumer first, solutions second – actually generates value for all actors in any given industry. So, no different in health care.

Figure 3.1. Customer focus is the starting point to value generation.



However, isn't it ironic that we have to refer to the consumer goods and business world to help us refocus on who our ultimate customer is in health care – the patient? I have always found this astonishing. In fact, it leaves me with a bit of an odd aftertaste when considering: how can we eventually reconcile business interests, profitability and value generation in an industry where health is not a commodity? How come we as an industry have so terribly lost focus on the patient? How is it that we now need to make a concerted effort to create meaningful conversations with the patient? As we have seen in previous chapters, the frustration

about this quandary is shared across the ecosystem, and we've gained an understanding of what created this dilemma.

Let's now look at how we can insert value-based principles into the health care ecosystem.

Delivering value to patients is the number one goal in health care.

What does value actually mean to patients?

Well, we have seen it in Hanna's story. Tailoring the treatment and a care plan so that it makes sense to her and involves her as an equal partner. Achieving the results that make her feel better today and preventing complications in the future. Working in a team that helps her live a healthier life personally and professionally, despite an underlying chronic illness.

Value to patients is all about the end-to-end experience.

It is about the patient journey and about what happens *before* and *after*. What happens at home? What happens on the way to the hospital or a doctor's appointment? What happens during a conversation with a nurse, during treatment, during surgery? What benefit does the patient derive from that new pill they're taking in the morning? Are they feeling better? Or does the patient stop the new treatment because it makes them feel dizzy? To highlight the crucial aspect of the end-to-end experience, I recall a recent conversation I had with my friend, asking for news about her

father, who is what we would call a cancer survivor, having successfully battled colon cancer years ago. Although he is now free from cancer, my friend tells me, *"Verena, his quality of life is really miserable because of permanent incontinence. He has completely stopped going outdoors for a walk or joining us at restaurants. He has become so lonely."* His reduced mobility not only negatively impacts his wellbeing and social connections but, lately, also his trust in health care. This story exemplifies the importance of quality of life to patients and reminds us as doctors, drug developers and manufacturers to not focus solely on survival rates. Delivering value to patients means delivering optimal outcomes for them to enjoy both quality *and* quantity of life.

Improving outcomes for patients means that the patient must be part of the solution. Only once we truly understand what matters to patients will we be able to tailor care to their personal needs and co-create the right care plans.

The future of health care will lie with those who compete, cooperate and win on value. Value delivered to the customer. Other industries have long understood this concept of consumer focus, societal determinants and avoiding waste as an enabler for value. It is time that health care catches that train. There is no reason for it not to. There really is no other good alternative, either. Spinning the logic of customer-centricity beyond the patient and provider environment, value-based principles are taking root across the entire ecosystem. These include value-based pricing, value-based reimbursement and value-based procurement, to cite only a few (I also refer you back to figure 2.3). There is no shortage of literature and case studies available in the realm of both public health and the private life sciences sector.[81-83] There is no limit to the

imagination when it comes to patient-centered value strategies, which are good for patients and the businesses in health care alike.

"If the health care industry were to fully embrace a continuous customer-only, demand-side approach, it could literally transform health care delivery and health outcomes," summarizes Dr Zeev Neuwirth in his landmark book, *Reframing Healthcare*. The book outlines how health care leaders can become disruptors that move the needle toward better systems of health. It was a great source of inspiration for me to write *It Takes Five to Tango*.[3]

Putting the focus right back onto the ultimate customer, the patient, is intuitively the right thing to do in an industry that builds its whole reason for being around the health and wellbeing of people.

But, as we shall see, it is also the right thing to do to unlock the deep value generation for all other related stakeholders in the ecosystem: providers, payers, pharma and policymakers.

So, you may be thinking, "That sounds all good and obvious. But how do we get there? How can we possibly abandon a billing culture based on a fee-for-service model and replace it with something else?"

VBHC: THIS WON'T WORK!

Many of you living and working in the daily realities of hospitals, pharma, payers and policy may say, "This is a nice, rosy picture. It

sounds great, but, in my reality, this will never work!" The problem is so big, the obstacles seem so high, and the complexity looks so vast, that indeed it may feel overwhelming and intimidating to believe that change is even feasible. Powerplays and positional bargaining have brought us to a place where we do not believe that change is even possible. As we have seen in chapter two, the frustrations have grown so big that they make us sick – physically, emotionally and intellectually.

The good news is that change is indeed possible. By swapping our incentive systems from *rules on volume* to *principles of value*, it can be done. The initial trick to that transformation is to fundamentally change the narrative and start with the ingoing question: how can I drive quality up and improve outcomes that matter to patients? As we shall see from examples throughout this chapter, by making this question our new square one starting point, equitable value for all actors can be achieved.

Finding the right treatment for the right patient at the right time is the essence of value-based health care.

VBHC was first introduced to a broader health care audience by Michael Porter in 2006, and further refined in subsequent publications, presentations and real-life projects across the world.[84,85] Drawing on his earlier focus on business strategy in general, he writes, "*Business is caught in a vicious circle. A big part of the problem lies with companies themselves, which remain trapped in an outdated, narrow approach to value creation. Focused on optimizing short-term financial performance, they overlook the greatest*

unmet needs in the market as well as broader influences on their long-term success. Why else would companies ignore the wellbeing of their customers, the depletion of natural resources vital to their businesses, the viability of suppliers, and the economic distress of the communities in which they produce and sell?"[86]

Translating these principles to health care, he established the now commonly accepted formula of VBHC: focusing on patient health outcomes and what is important in people's lives at efficient cost. This will ultimately generate real value. Not only to patients, but to all actors in the ecosystem. It allows us to carve out wasteful care, products and services that are unnecessary to the patient and that undermine value creation. Importantly, this principle is valid along the entire care delivery chain: for pharma and academia developing new care, providers delivering that care, payers paying for that care, policy regulating that care, and finally patients receiving that care.

You may ask: what has happened in the last twenty years since this was first established and why hasn't it been adopted more broadly?

In my personal experience of three decades at the forefront of health care, I came to notice several reasons for the poor adoption of VBHC. They are of technical, behavioral and cultural dimensions. Let's have a look, step by step, and see what potential can unfold once we see the opportunities for broad adoption at the end.

To start with, let's clarify some basic understandings.

Figure 3.2. The Matterhorn: simple from afar, complex on closer look.

Value-based health care is both very simple and very complex.

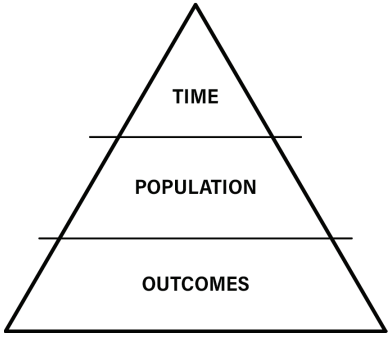
I was recently asked to describe VBHC in one word, and I was spontaneously thinking of the Matterhorn. It is one of the most "simple" and clearly visible mountain peaks that I know of. However, on closer inspection, getting up there is incredibly complicated and hard. And it takes teamwork.

Translated to VBHC, technically speaking, it is quite simple because it is built on three straightforward principles, as shown in figure 3.3:

1. Defining *outcomes* that matter to patients;
2. Regrouping those patients with similar medical conditions and who share the same needs into one *population* for which we want to measure these outcomes; and

3. Determining a well-defined *timeframe* in which these outcomes will be measured.

Figure 3.3. The pyramid of VBHC principles.



In order to define value, we need data. Data on outcomes, and data on cost. Data from individual patient charts, and data from populations of patients sharing the same needs. For this, we need to design technical IT infrastructure that we did not have in our legacy analog systems. Doing VBHC at scale through paper, fax and pen? Impossible. Further, we need to align on: which health outcomes to measure, and which patients to regroup into one population. This entails a complex multi-stakeholder process. It demands patients, physicians, and pharmacists, as well as provider administrators such as hospitals, insurers and other payers, to work hand-in-glove and to find enough common ground to agree on those definitions. The policymaker will also need to consider the respective laws and regulations that enable this essential switch in the payer system from services and products to outcomes and value. The beauty is that by working together on these common definitions whilst keeping the North on the patient, it naturally changes the dialogue – from a focus on cost to a focus on patients. Integrated ways of working lead to better human connections,

which leads to the restoration of trust. Therefore, we can conclude that the purpose of VBHC is to remove obstacles and encourage certain behaviors. The empathetic focus on patient outcomes then creates an environment of trust.

As much as these principles are simple in theory, their implementation is highly complex. And they take time. Since it means pulling levers on multiple levels, by multiple stakeholders, it cannot be accomplished in one go or by one actor.

The encouraging news is that in several places, despite this complexity, these simple principles are already becoming a reality and shifting the needle toward better outcomes and better financials, too.

Let's look at a series of examples in the following section.

IT IS WORKING AND HERE IS HOW

We have seen that meeting patients' needs lies at the center of any sustainable value-based system of care. Hence the question: how can we consistently turn the patient journey into a satisfactory experience? In an increasingly value-centered world, personal choices around lifestyle and health management are only a fingertip away. Supporting people to better understand these choices is a centerpiece on the journey to bringing VBHC to fruition. Yet, given the complexity and fragmentation of the care delivery

chain, both enhanced *patient empowerment* and a better level of *care coordination* are relevant components in a value-centered system of care. Additionally, acknowledging that health outcomes overall are influenced twice as much by *social determinants* than by clinical components, it is crucial to take a holistic look at the patient journey along the *health continuum*.

The following series of real-life examples from various geographies have actually shown that this fundamental transformation from volume to value is feasible. What they all have in common is that they highlight how, by putting the patient back at the center of the value chain, the transformation from a convoluted and fragmented care system to an integrated and coordinated care system is not only the right thing to do, but also leads to economic gains and system efficiencies.

Eventually, the North Star will be when all actors are rewarded based on how healthy a population is.

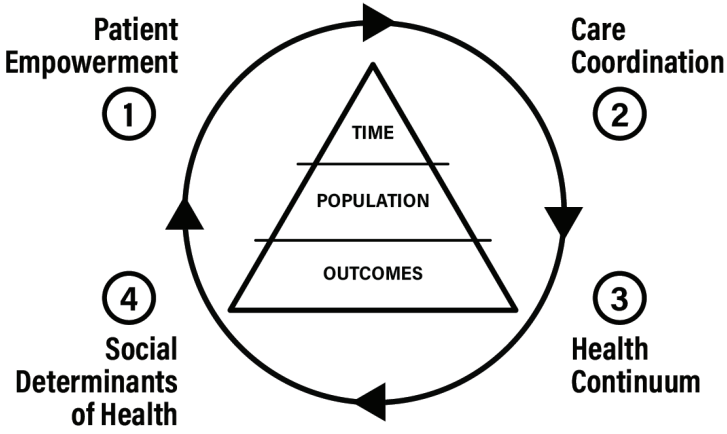
Sounds too good to be true? Let me show you that this is actually working and has become a reality in many parts of the world already.

The following paragraphs are structured around four patient-centric dimensions that continuously allow us to move the needle from fee-for-service to value-based health care (figure 3.4):

1. **Patient empowerment** (from reactive to proactive)
2. **Care coordination** (from redundancy to synergy)

3. **Health continuum** (from fixing to preventing)
4. **Social determinants of health** (from clinical to societal)

Figure 3.4. Four patient-centric dimensions to implement the three core VBHC principles.



Patient empowerment (from reactive to proactive)

As highlighted by Hanna, an empowered patient and investments in health literacy beyond clinical care only represent an untapped potential to re-gain efficiencies. She asks, *"If my doctor only looks at billing the minutes of our conversation, how can we carve out quality time to talk about what's really important to me and what I really need*?"

Not enough time spent with patients, and therefore only fifty-five percent of recommended preventive measures effectively being delivered to patients, was among the motivators for the team at Oak Street Health (OSH) to completely shift their business model away from rewarding services in an FFS model to paying for how healthy their population is in a VBHC model.[87,88] *"From day one,*

our goal was simple: to keep patients happy, healthy, and out of the hospital," says Griffin Myers, OSH's Chief Medical Officer.[89] OSH brings comprehensive primary care services to underserved elderly communities in the American Midwest. Patients are managed within multi-disciplinary teams that are co-located in the same facility, and key performance parameters – such as visit and medication adherence and health outcomes – are jointly followed using a dashboard system. This not only provides transparency and fosters communication and trust, but also represents their common basis for incentives and payments.

What does this look like practically?

Very specifically, the team at OSH not only includes clinical components in their patient care plans, but, importantly, also social aspects.

They also invest in the education of their patients to empower them to fully understand their diagnosis and treatments, and how they can contribute to their own health management.

This means a fair portion of responsibility falls to the patient. In this model, depending on their socioeconomic status, patients are covered for transportation costs as the correlation between missed appointments and medication adherence had been shown to have a negative impact on patient outcomes. However, paying for transportation comes with an expectation to adhere to visit schedules, and OSH goes as far as publicly reporting both provider and patient

compliance to the jointly agreed-upon care plans. In order to further tailor care plans, the education and intensity of visit schedules is stratified according to four distinct patient populations, depending on their level of sickness and immobility: well, average, sick and very sick (figure 3.5).

Figure 3.5. OSH patient population risk stratification.

	PATIENT	TIER	%PATIENTS	FOCUS
4	Very sick	Critical	4%	Speciality, avoid readmission, caregiver
3	Sick	Serious	25%	Family coordination, avoid readmission
2	Average	Fair	41%	Secondary prevention
1	Well	Good	30%	Preventive care, primary prevention

Source: Adapted from Porter et al, HBR case (2017)[88]

This patient stratification allows OSH not only to tailor treatments, but also to specify patients' educational needs and ability for self-management.

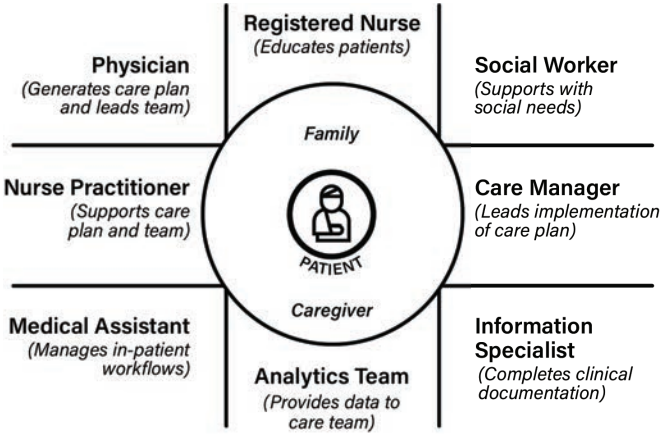
Furthermore, what this example showcases is the degree of cross-functional team coordination. Within the multi-stakeholder team, the individual assignment for each patient is done in close cooperation between physicians, nurses, caregivers, social workers, and the patient and their family (figure 3.6). Visit cadence and care plans are adapted accordingly. For specific and highly prevalent conditions in this population, such as hypertension, the multi-disciplinary team determines the range of target blood pressure

levels in a given timeframe for each of the four strata of patients. Depending on how well these pre-defined, evidence-based results are met, rewards for all participants are structured accordingly.

Overall, this highly integrated modus operandi – a multi-disciplinary team with the patient at the center – has led to a staggering forty-one percent reduction in the rate of hospitalization.

As a result, patients were able to stay home more and longer, which in turn had a positive impact on cost efficiencies. Cost savings were subsequently redeployed in other areas, such as educational efforts and being able to take on more patients within the provider network.

Figure 3.6. Based on the OSH care model, the empowered patient at the center.



Care coordination (from redundancy to synergy)

Cross-functional care coordination is a common pillar across all

successful VBHC projects. In eleven OECD countries surveyed in 2016, between twenty-nine percent and fifty-one percent of people said they experienced problems of care coordination in a health service.[90]

However, new care models are emerging in several regions and countries. Two examples, which are outpacing many others in terms of perfection of care coordination, are in the therapeutic areas of diabetes and rheumatoid arthritis (RA).

The first one I'd like to mention and that has deeply impressed me is the Dutch-certified Diabeter multi-stakeholder consortium.[91] It has been created to focus on the specific needs and tailored care of children, adolescents and adults suffering from type 1 diabetes. As outlined in Hanna's story, this is a life-threatening disease that is usually diagnosed at an infant age, leaving families helpless in light of the complexity and urgency of needs. The only way to survive this is for patients and families to learn how to self-inject insulin on a daily basis. As recounted by Hanna, troubles adapting, problems at school and mental stress, coupled with frequent ER visits, are the norm. A greater level of coordination is required to prevent this from happening.

Hanna's vision of the empowered patient within a coordinated team means the patient is sitting at the center of a proverbial round table. In her case, this table would include an endocrinologist, a diabetes educator, a nurse, a podologist, an ophthalmologist, a personal trainer and a mental coach. The composition will vary depending on each patient's individual needs. All these professionals around the table need to be informed of, and aligned with, the patient's goals. As Hanna reflects,

"Ultimately, they need to be in the right spirit of co-creating these goals with me. I actually need to trust that these are the right goals for me, and believe it is worth my time and effort working on them."

This is precisely what both the Diabeter and the Oak Street Health multi-disciplinary networks deliver. Within integrated patient units (IPUs), they regroup providers, families, social workers and other relevant specialists.[92,93] IPUs act as a team that takes care of the patient collectively, rather than a parallel set of specialists acting in isolation, creating redundancy and ultimately driving cost. Within these IPUs, definitions and goals for outcomes are collectively assigned, measured and monitored in a transparent manner by using a central dashboard system. Importantly, the patient can remotely contribute by entering their health data, such as blood glucose level, insulin dosing or other pre-defined parameters of wellbeing, into a common digital platform. As a consequence, children covered within this network are far less likely to be admitted to the ER than they used to be.

Consequently, one can directly depict and analyze per patient what the cost reductions are on a full cycle of care.

Translating value to patients into value for the system: In 2018, the Diabeter model led to an overall saving of €9.6 million, as well as a fifty percent reduction in per-patient cost (from €7,350 to

€3,270) on an annual basis. The similar care coordination project ParkinsonNet yielded an overall €46.5 million and a reduction of €4,080 to €3,550 per patient.[94,95] The main clinical correlation of these cost savings is clinically meaningful delays of disease progression, complications and disabilities.

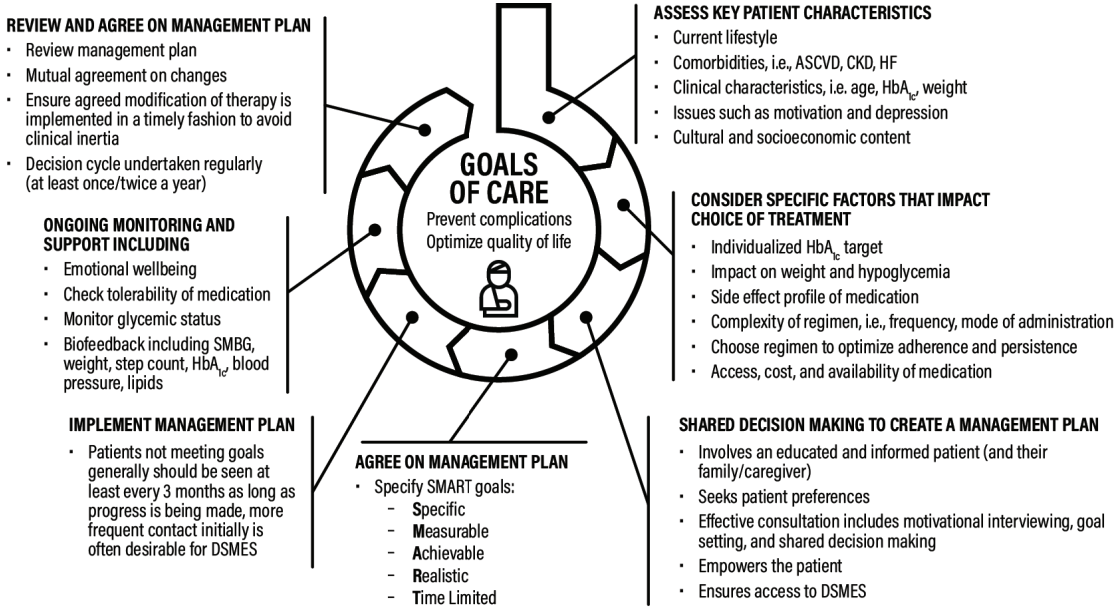
To exemplify the multi-stakeholder reach beyond patient and provider, in 2019 Diabeter signed a ten-year value-based contract with a Dutch insurer focusing on both short-term and long-term patient outcome goals (for example, short-term blood glucose levels and long-term organ damage linked to diabetes). All actors in this consortium are rewarded based on whether pre-defined outcomes are met and adapted to comply with a bonus-malus-system.[89]

In the context of type 2 diabetes, which is acquired and occurs later in life, the American Diabetes Association is leading the way to create a common platform of standards for adult patients that every care team is encouraged to follow.[96] Importantly, figure 3.7 showcases that these guidelines are not to be understood as fixed algorithms by which every patient has to follow the exact same procedures. Quite the contrary.

The whole sense of value-based care lies in the individualization of care and uses a standardized sets of guiding questions and principles.

Another example of care organization is the 'Joint Value' network of primary care and specialist providers that aims to optimize the health continuum of patients suffering from inflammatory joint

Figure 3.7. Diabetes Care Coordination Model from the American Diabetes Association.



ASCVD = Atherosclerotic Cardiovascular Disease
CKD = Chronic Kidney Disease
HF = Heart Failure
DSMES = Diabetes Self-Management Education and Support
SMBG = Self-Monitored Blood Glucose

Source: 2021 by the American Diabetes Association. [96]

disease, or rheumatoid arthritis (RA).[97] This medical condition is characterized by severe episodes of painful joint inflammation, slowly destroying bones and joints, leaving patients at a high risk of serious disabilities in the long run. In this integrated practice network, specialists, GPs and hospitals provide both episodic and preventive care in a highly coordinated fashion. Their mission is to provide the right care for patients living with RA at the right place and at the right time. With this in mind, they cover the whole patient journey within three dimensions: early access, personalized outcomes and life-long monitoring.

Notably, this is a good example of how the work of the ICHOM (International Consortium for Health Outcomes Measurement) is implemented in real life.[98,99] Based on the initial publication by Michael Porter and colleagues, these measurements provide standard sets to uniformly code outcome measures and therefore allow fully interoperable measurements between providers. With a particular focus on chronic diseases and the prevention of complications, it is a rich open source for anyone who aims to establish value-based principles in their environment. If you are interested, I highly encourage you to become familiar with these sets of broadly validated outcome definitions.

Although the Netherlands and the United States are somewhat spearheading efforts around value-based health care, there are many other projects and countries following suit.

Health continuum (from fixing to preventing)

The two examples in this section come from Scandinavia and South America.

In light of the three megatrends of the future – aging, chronic illnesses and mental health – the individual health continuum is coming into focus. In an increasingly value-based world, health care is not only about a patient's illness. It is also about preventing complications in the first place, protecting a person's health and enabling optimal quality of life. In other words, it is about life as a whole.

As we have seen earlier, our legacy FFS systems did not have a built-in incentive to reward healthy living. Although the paradigm shift to prevention has long been recognized as essential to improve overall health, there was little investment into preventive care and initiatives to keep people in a home environment all their lives, whether healthy or sick (figure 3.8). There simply was no business model demonstrating a positive return-on-investment for the notion of "not fixing something." VBHC holds the potential to reverse that trend. Shifting our systems from a "fix and repair" to a "prevent and maintain" mindset will allow us to consider health as one continuity. Acknowledging that there is no real binary endpoint in a person's life, other than birth and death, everything else being interconnected along the journey of life, health and illnesses.

Protecting healthy living, rather than receiving health care, is the true silver lining in a VBHC world.

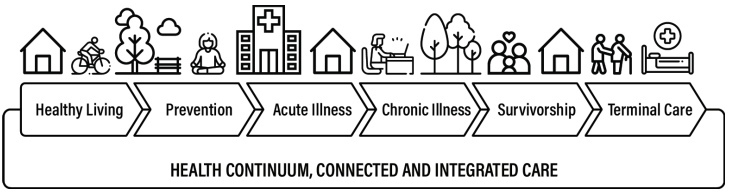
This is what the Nordic Health 2030 Movement is doing differently.[100] By virtue of proactively allocating an equal five percent GDP spending on both preventive care and therapeutic care, this

program is setting a precedent. Within a ten-year plan, they are taking a holistic view along the full health continuum to include prevention, behavioral and lifestyle changes as well as acute and chronic care. Co-created by more than thirty stakeholders, this public-private consortium aims to reorient and rebalance health care expenditure toward the early part of the health continuum. What the countries involved in this movement accomplish is innovation in health care on three levels: seeking synergies across multiple countries; building bridges across the public and private sectors; and proactively involving the policymaker. It beautifully exemplifies how a parallel top-down *and* a bottom-up approach can go hand-in-hand.

Framed by a governmental-endorsed 2030 strategy, projects by providers, payers and patients are emerging from the grassroots.

This is a beautiful example of how the seemingly inconceivable task of transforming a health care system from FFS to VBHC is undertaken in reality. It also demonstrates that this is not done in one go, but that it requires resilience and a long-term vision. What makes this project unique, in my eyes, is the visionary setting of re-allocating funds along the health continuum over time. Recalibrating the priorities from *therapeutic* care to *preventive* care requires multiple stakeholders to cooperate. By overcoming the silo mentality and positional bargaining, they set forth a path to amplify value with all stakeholders, potentially reaping the benefits for patients and society more broadly.

Figure 3.8. The health continuum.



At the latter end of that health continuum, the Programa Contigo is an impressive success story of how VBHC principles can effectively help the most vulnerable: terminally ill patients and their families. "*Dying is not a medical event, but a human experience,*" is the mantra of the Colombia-based Keralty team, which established this program following a desperate experience by one of the founders, Dr Gabriela Sarmento.[101] Gabriela's father passed away in great pain and suffering, without much help and support for him and his family from the ecosystem around him. Realizing that this is generally the fate of eight in ten people, she decided to train as a doctor and become a palliative care specialist.

"*We cannot avoid dying,*" Gabriela says. "*But the end of life doesn't have to be miserable.*" Concerned about the quality of life during the latter part of the health continuum, and acknowledging that a disproportionate amount of money is spent during the last six months of a patient's terminal illness, the team at Keralty established a substantial new approach.

Contigo means "together". Within their people-centered care model, they meet patients in their homes and seek to address their physical, emotional, social and spiritual needs.

In only four years, sixteen mobile interdisciplinary teams have served over 3,600 patients. Patient satisfaction, symptom relief and wellbeing parameters have all scored highly in this relatively short period, with seventy-eight percent reporting full pain control, seventy-six percent feeling well and, overall, ninety-eight percent feeling comfortable. Because end-of-life support can be a traumatic experience, Keralty helps families create a more caregiving environment for their dying loved ones. With this support network in place, the team has achieved an overall satisfaction rate of ninety-eight percent, with sixty percent of patients able to stay home.

In addition to generating value to patients and their families, Programa Contigo has reduced health care expenditure for terminally ill patients by thirty percent, or $4 million.

The team at Keralty is driven by purpose and passion. Their motivation is to reduce patient suffering, bring back patient dignity and increase patient wellbeing. Focus on the patient and their outcomes, and the rest will follow: integrated teams, value to society and economic gains.

Social determinants of health (from clinical to societal)

Health is so much more than absence of illness. Many things in life interfere with our health.

If we truly aim to capture a person's health holistically, we need to expand our views beyond the clinical care component. Treating acute and chronic illness is important, but responding to people's needs outside of the exam room – from an emotional, socioeconomic and mental health point of view – is equally important.

Taking into account a patient's family and lifestyle choices, as well as workplace realities, can have a significant impact on the effectiveness of treatment options. Research shows that social determinants of health (SDOH) are five times more impactful on health outcomes than health care with traditional medicines and procedures.

What does that mean?

The analysis in figure 3.9 demonstrates the top five categories of factors that have been universally recognized as main influencers on our health.

Figure 3.9. SDOH impact compared to health care spending.

SDOH	HEALTH IMPACT	SPEND
Behavior	38%	$260 million
Socioeconomic	23%	$1,562 million
Biology	21%	$15 million
Medical	11%	$3,337 million
Environment	7%	$400 million

Source: Adapted from www.goinvo.com including global data sources.[102]

Looking more closely at the table in figure 3.9, what is most striking is the discrepancy between the drivers of health impact versus the amount of money spent on each.[102] Eighty-nine percent of the factors that influence our health are *not* related to pills and other medical interventions. Rather, they're related to the way we live and work, what our intrinsic biology and our extrinsic environment dictate, and, finally, where we were born, how we were raised and the type of education we received.

We substantially overspend in areas with the smallest impact and dramatically underspend in areas with the biggest impact.

More precisely, in this example, we are investing over $3 trillion on products, services and procedures that account for a minority (eleven percent) of health impacts. This is ten times more money than we invest in behavioral aspects, which account for thirty-eight percent of the impacts on our health, and twice as much as we spend on socioeconomic aspects, which account for twenty-three percent. To put it simply, we are ready to spend (waste?) $100 on medical interventions to fix illnesses, but this money and these interventions have only limited impact on our overall health. In contrast, we only spend one dollar on lifestyle and behavioral changes to prevent illness and other health complications in the first place. This example shows where and how we invest our health care dollar, and how much this has outgrown any proportionality and common sense.

In an ideal world, the numbers in the right-hand column of figure 3.9 should be correlating better with those in the left-hand column. This is what a strategy like the Nordic Health 2030 Movement aims to do. Efforts need to focus on rebalancing the medical and socioeconomic factors in order to foster better health prevention and more effectively tailor health care. Employers, pharmaceutical companies, educators and health professionals need to be involved.

Efforts and investments should be redirected to socioeconomic levers of health, including workplace set-ups and behaviors;

educational programs influencing behavioral changes relating to smoking habits, nutrition, movement, exercise and sleep patterns; and tailored initiatives supporting populations at biological or hereditary risk. Let's have a look at the example of a thirty-year-old: someone with less than an upper secondary education level can expect to live for five and a half *fewer* years than someone with a university degree or equivalent. The difference is even more pronounced in men than women, with an average gap of 6.9 years for men compared to four years for women, as assessed in 2019 across twenty-six OECD countries.[10]

Health is mostly managed outside of health care. It requires effective trans-sector dialogue and cooperation.

The OECD's *Promoting Health, Preventing Disease, the Economic Case* shows how much of the socioeconomic inequalities could be preventable.[103] For this to occur effectively, the authors stipulate that intersectoral policy strategies are required, reaching beyond the departments of health. Many critical social determinants of health lie outside of health systems, in areas like transport safety, environmental and urban planning, business regulation, education and fiscal policy. As to how to promote good health and disease prevention in a more cost-effective way, the authors suggest "*regular face-to-face dialogue between policymakers and so-called 'knowledge brokers', who act as intermediaries familiar with both the research and policymaking environments*." As much as this is an important step for trans-sector dialogue on a governmental level, I find it also highly relevant to the five decision makers in health

care. What about regular forum meetings between the five main actors – with or without a knowledge broker – to nurture this cross-sector dialogue from and within health care?

FOCUS ON THE PATIENT AND THE REST WILL FOLLOW

It is really encouraging to see how VBHC projects lead to improved patient outcomes and enhanced satisfaction across the ecosystem, and also how VBHC triggers significant economic gains. As such, implementing VBHC is one of the major levers required to restore the imbalance between innovation and affordability. As we have seen, VBHC provides exactly what we have been missing in an FFS world: transparency, ownership and accountability along a full cycle of care.[92] A recent comparative analysis of four health systems is demonstrating that VBHC, using the so-called time-driven activity-based costing (TDABC) method, enables transparent cost assessments. *"With this approach, the actual costs of delivering care to a patient with a certain condition are measured from the bottom up, by looking into what happens to a patient in the course of a treatment and what specific costs of all processes are associated with it."*[104]

Start small, identify a test project, run a pilot study – you choose. Know that many small projects can move the needle, as seen in the Dutch set of VBHC projects.

One of the leading groups of practitioners supporting real-world

implementation of value-based principles is the VBHC Center Europe, working closely with ICHOM and scholars at Harvard Business School. Chairman Dr Fred van Eenennaam describes the essence and simplicity of VBHC beautifully: *"Let the teams focus on outcomes and cost will follow."* During one of the group meetings, he presented the example of *"the resilience of the Dutch health care system."* If you're interested in implementing outcomes-based reward models, I invite you to watch his brief yet powerful video presentation.[95] He outlined that in the Netherlands alone, if no change occurs, health care expenditure is forecast to grow from €90 billion in 2020 to €175 billion in 2040. However, by introducing VBHC, the Netherlands was able to start bending that curve. Over the course of 2019, 173 known smaller VBHC pilot projects incurred substantial savings as a whole of at least €1 billion. Of note, the majority of these projects were grassroots initiatives, taken by local providers and payer networks. It is predicted that the ongoing transformation toward VBHC continues to shave off economic gains to the tune of €25 billion. As such, even a multitude of smaller projects showcases the power to break the trend of overspending and, as such, can restore the balance between innovation and affordability locally.

As we are witnessing the radical shift of power from the provider (doctor) to the consumer (patient), moving forward, patients will be the ones choosing providers, payers and medicines based on what and who will deliver the most value to them.

In summary, customer-centricity, outcomes-focus and value-based principles also work in health care. But it takes time. If you're interested in learning more, you may find some helpful guiding questions in the supplementary materials on page 235 as you seek to determine whether VBHC may work in your environment. Note that the magic unfolds once VBHC starts catalyzing teamwork around the collective North Star: aiming for results that matter to patients. The possible consequences are massive, both economically and culturally. What has changed – since the early days of Michael Porter bringing the concept to health care – is that we now hold the technology tools to process the massive amount of health data needed to measure a full cycle of care, as you shall see in the following chapter.

TOP TAKEAWAYS FROM CHAPTER THREE

- ☑ Individual leaders who find other likeminded, risk-taking leaders can trigger a significant movement that improves the patient experience and economic gains. VBHC works in conjunction with bottom-up initiatives and top-down leadership support, spanning across the five main actors in health care: patients, providers, pharma, payers and policymakers.

- ☑ The focus on both societal and clinical health outcomes across the whole health continuum, integrated care coordination, and the fundamental switch of incentives from volume to value, carry massive potential to address the imbalance of innovation and affordability.

- ☑ Patient centricity and patient empowerment are the keys to unlock resilient systems of health. VBHC is the theoretical framework, and digital provides the tools to make this happen operationally, as you will see in the following chapter.