

Reflections

The SoL Journal
on Knowledge, Learning, and Change



FEATURE ARTICLE

Breathing Life into a Dying System

Katrin Kaeufer, Claus Otto
Scharmer & Ursula Versteegen

Commentary

Dr. Gert Schmidt

ON THE WEB

Response to Pascale Commentary (5.2)

Shawn Patterson

Emerging Knowledge Forum

**Connecting Lean Manufacturing
and Organizational Learning**
Jamie Flinchbaugh

**Leveraging Global Culture
in Our Journey Toward Global
Leadership Development**
M.J. Jamal and Nora Hughes

**Organizational Culture Change
after a Merger**
Rosemarie Livigni

**The Rise and Fall
of Collective Reflection**
Cathrine Pedersen, Karina Aase,
and Odd Einar Olsen

VOLUME 5, NUMBER 3

Reflections

The SoL Journal
on Knowledge, Learning, and Change

Published by The Society for Organizational Learning
▶ reflections.solonline.org

Breathing Life into a Dying System

Recreating Healthcare from Within

By Katrin Kaeufer, Claus Otto Scharmer & Ursula Versteegen



Katrin Kaeufer

Often lost in the debate about healthcare reform are the individual patients and caregivers who make up the system. However, by engaging in an open dialogue with the community, a restive group of physicians in rural Germany is reinventing the local healthcare system from the ground up. They also are discovering a powerful opportunity for per-

sonal and systemic change: the doctor-patient relationship. The authors – active participants in this initiative and long-time contributors to the SoL community – describe the promising changes unfolding in their region and offer a framework that applies to other systems in need of renewal.

— Paul M. Cohen, Senior Editor



Claus Otto Scharmer

Healthcare systems around the developed world are in crisis. Surging expenses, aging populations, and growing needs have pushed many systems to the brink. Across Europe, especially, where national health systems trace their roots to Bismarck, Beveridge, and other social reformers of the 19th and early 20th century, citizens have begun to question the future of the systems that have historically seen to their health and well-being. Analysts in Germany have warned that their “system will collapse under its own weight” without massive reform. “The piecemeal reforms enacted to date are hardly adequate to the task,” they add.¹

Against this backdrop of increasing desperation, a promising new approach is taking shape in Lahn-Dill, a region of 280,000 inhabitants north of Frankfurt. Led by a grassroots community of innovators, including medical professionals, the project has begun to change fundamentally the local healthcare system.



Ursula Versteegen

Roots of Change

In the fall of 1994, hospital researchers in the town of Giessen surveyed local physicians for their views of the practice of medicine and its prospects for the future. The questions struck a deep note for one respondent, Dr. Gert Schmidt. Three weeks after taking the survey, he obtained the results. Many doctors were near despair about their jobs, with little hope that things might change. Sixty percent of the physicians surveyed felt “inwardly resigned” to the stress of their jobs. Forty-nine percent said they had at least once thought about suicide.

That day Schmidt left his office and ran into a patient who told him, “You are so stressed. You don’t have enough time for me.” When Schmidt arrived home, his frustration was compounded when his 10-year-old daughter told him, “Daddy, I don’t ever see you.”



He began talking to colleagues about how things might change. In particular, doctors viewed the existing emergency care system as a source of waste and frustration – and, as one put it, a place “where you begin to sense the region as a whole.” From these conversations emerged a network of physicians, patients, and government and other officials committed to large-scale change in the health-care system, starting with a new emergency care system for the region.

“The most striking development that I have seen is that the patient complaints from this region dropped virtually to zero,” says Dr. Peter Eckert, the head of the regional supervisory board. “That is in stark contrast to other regions, where we have many, many complaints and lawsuits.” While quality indicators like complaint rates have improved, many costs have fallen. For instance, ambulance usage has declined slightly (while increasing in comparable

regions) and local hospitals now require just half the number of nighttime emergency physicians deployed under the old system.

As significant, important qualitative shifts are occurring. “My relationship to patients has become more like a partnership, more a thinking-together,” said one physician. “I am more able to elicit and reformulate the thinking of patients – to help them to see what they think and to become aware of what they really want.” Another said, “In my case, I have rediscovered the joy of work. That wasn’t the case earlier. I had lost it.”

None of this says that the innovators in Lahn-Dill have found “the answer.” Indeed, when one of us visited recently with several of them, their assessment of the overall system was still dire. While encouraged by their progress locally, many felt they were trying to “fix a dying system.” One said, “Maybe what’s needed right now is not to keep this system alive artificially, but to perform a controlled, urgent shutdown.” Whatever the path forward, we believe that their process has uncovered a cornerstone for basic innovation: re-inventing the doctor-patient relationship. This key relationship, which has eroded steadily as healthcare systems have come under growing stress, represents a lever for future change, both for quality care and for maintaining the vigor of the medical profession.

The Lahn-Dill Initiative: A Seven-Year Journey

The emergency medical system in the county of Lahn-Dill includes hospital emergency rooms, ambulance services, and local physicians. (For more on the German system, see the sidebar titled “System at a Glance.”) In an emergency, patients could call:

- a local physician, most of whom are required to provide after-hours coverage (usually through a group of cooperating physicians);
- the hospital emergency room; or
- a universal number – 112 – to reach a centralized ambulance dispatch center.

Dr. Schmidt believed that coordinating these three options across the region would save money and time, provide better patient care, and make life easier for the doctors. Today, through the efforts of Dr. Schmidt and his neighbors and colleagues, the region has a new, joint emergency care center called ANR (*Arzt-Notruf*, or “physician emergency call”). It features a second phone number, 19292, that allows patients to consult a physician after hours or on a weekend. This was inspired by research showing that 70 percent of emergency callers were simply seeking medical advice – for instance, whether a child’s high fever warranted a visit to the emergency room. Previously, an ambulance would be summoned in response to most such calls. Furthermore, one doctor noted, “When patients were in a panic they might call several numbers. Sometimes when I would show up the ambulance was already there.” Physicians, working side by side with paramedics in a joint center, now take these 19292 calls and handle the problem over the phone or send another doctor, rather than an ambulance, to see patients.

The breakthrough came when the practitioners began to speak about their own experiences, or those of loved ones, with the emergency system.

Eighty-five percent of patients say they are satisfied with their access to emergency care, according to an independent survey. Most people in the region now select the appropriate option, calling 112 for true emergencies and 19292 for less-urgent needs. By reducing unnecessary ambulance trips and emergency visits, the system has saved 2.7 million euros per year – four times the cost of running the program.

But realizing these achievements was anything but easy. The journey began with extensive and often frustrating negotiations among the key players – local hospitals, physicians, ambulance services, and insurance companies, each with its own interests, constraints, and turf allegiances. The breakthrough came when the practitioners began to speak about their own experiences, or those of loved ones, with the emergency system. The group soon realized a shared will and vision for more integrated, coherent patient service. That accord helped all parties stay connected and conclude their negotiations.

System at a Glance

For more than a century, Germany’s healthcare system has provided quality healthcare to every citizen. It does so with a multipayer model that steers a path between the government-financed systems in most of Europe and the market-based system of the U.S. Most care is financed by statutory “sickness funds,” to which employers and employees contribute equally. It is a “solidarity system,” in which everyone pays a percentage of income, regardless of age or health status. This solidarity system also covers healthcare costs of the elderly, disabled, or unemployed. Private insurance companies provide supplemental coverage, but only

10 percent of Germans, generally in high-income groups, have such coverage.

Everyone has a choice of providers and a full range of services. Reimbursement rates and most regulations are set nationally but administered locally. It is a largely self-governing, decentralized system. But it also is highly complex and fragmented. Furthermore, with healthcare costs growing far faster than the workforce that funds it, the system is going broke. If current trends continue, the gap between revenues and expenses is expected to reach 62 billion euros by 2030.²

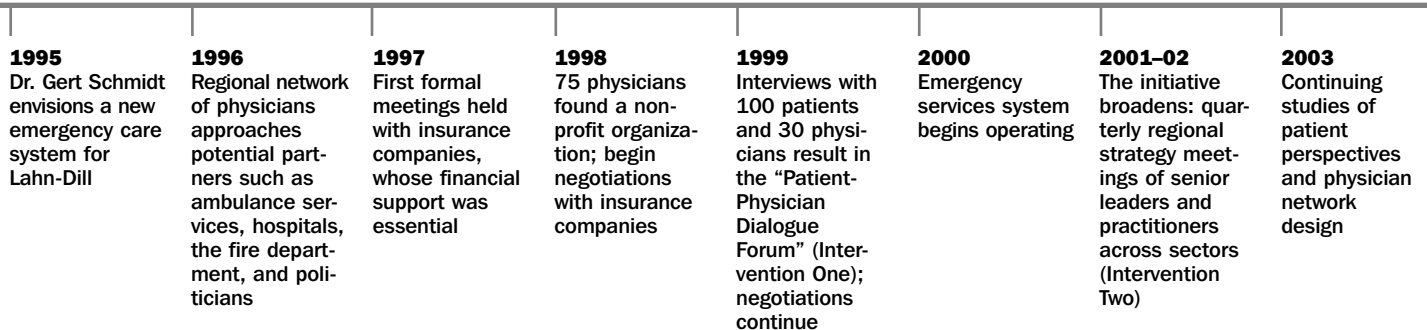


The authors began working with the physician network a year into the group’s efforts, in 1997. It took another three years to build a new system³ (see Figure 1). Through facilitated dialogue, the practitioners themselves resolved the financial and logistical difficulties of the new emergency care system. In the process, participants also created more collaborative working relationships, particularly among physicians from diverse settings (for instance, hospitals, private practice, and specialty clinics) who previously had had little connection.

In addition to the joint emergency care center, the physicians subsequently created several other initiatives, including;

- agreements for medical groups to share specialized diagnostic equipment;
- a new format for transferring information between hospitals and outside physicians, and a jointly run office to coordinate care for patients moving between the two settings;
- quality-improvement groups of physicians and other healthcare providers to discuss management of specific conditions, such as diabetes and heart disease; and

Figure 1: Milestones of Change



- *Buergerforum*, or “citizen forum”
 - a citizen/patient-directed platform to educate patients and support further reforms.

Patient-Physician Dialogue

In 1999, when negotiations between the network and the insurance companies stalled, the authors met with the core team and together developed plans for a patient-physician forum. Our goal was to help the system to see itself – to enable people from many points of view to “sense” collectively how they together had created a system that failed to meet their aspirations. We hoped that this process would deepen people’s commitment to change and open a quality of collective listening and acting that could produce fundamental innovation. We focused on what doctors considered the weakest link in a broken system: their relationships with patients. “The core axis around which the whole system revolves is the relationship between patient and physician,” says Dr. Schmidt. “Without an intact patient-physician relationship, no health system can work.” Studies confirm that the quality of the relationship between caregiver and patient is the single most important determinant of effective medical intervention.⁴

We interviewed 100 patients and 30 physicians to get multiple perspectives on this relationship. The interviews revealed four levels of patient-physician relationship (see Figure 2).

All four levels of care are necessary, and each is appropriate to different circumstances. Routine procedures and the completion of medical forms operate at levels I and II. However, responding to people’s concerns in urgent circumstances is also about psychology – for example, helping elderly people feel safe – and therefore includes elements of levels III and IV. Any new infrastructure must allow all levels to be present as needed.

At a follow-up session in which we presented these findings, we asked patients and physicians to discuss in small groups the different levels of patient-physician interaction. We asked them to label their own experiences with a red dot (to represent the current reality) and to show with a green dot where they’d like to focus their attention going forward (their desired future) as displayed in Figure 3.

Figure 2: Levels of Patient-Physician Relationship

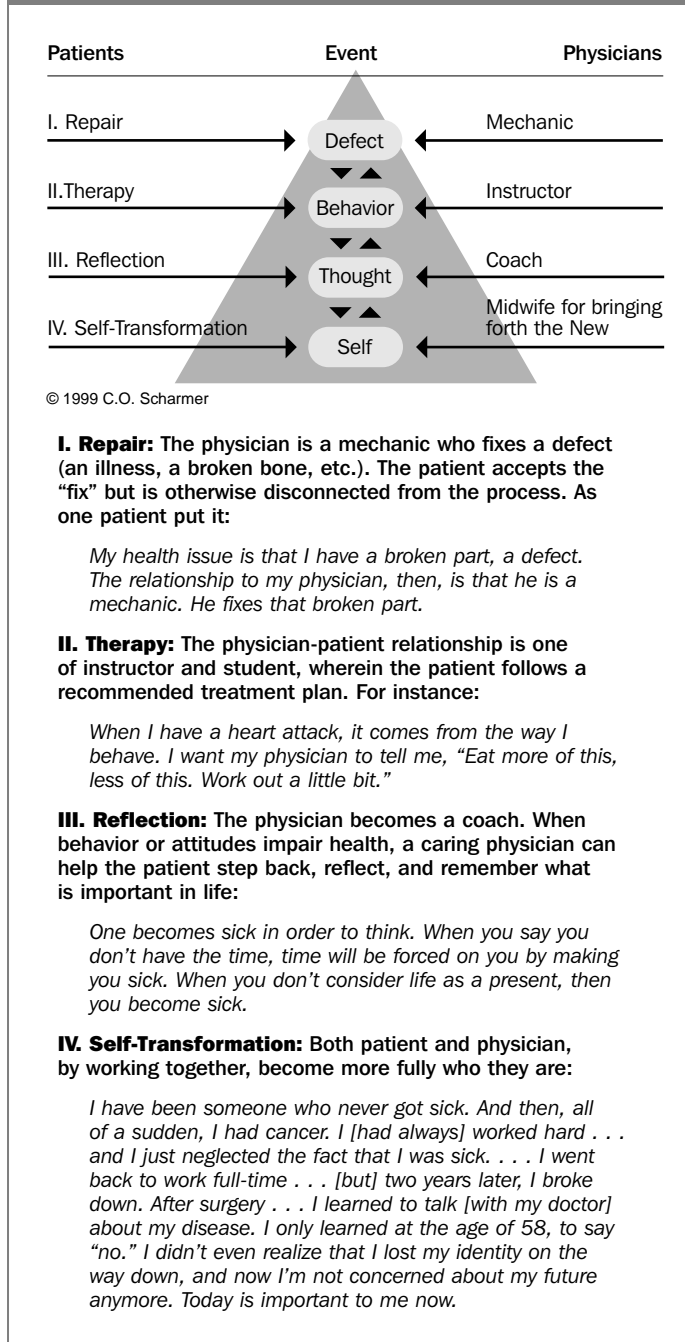
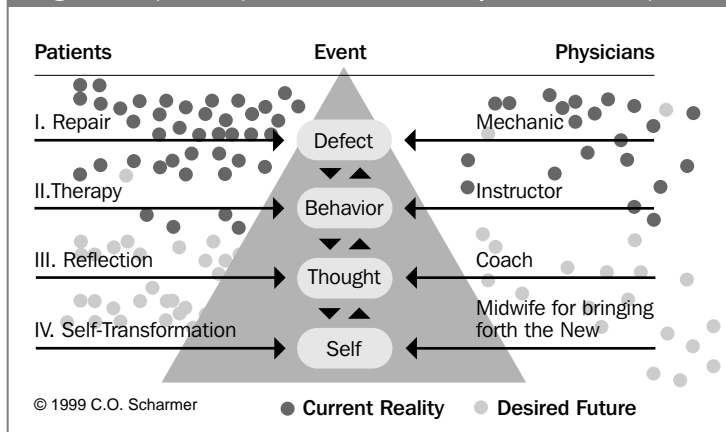


Figure 3: Reported Experience of the Patient-Physician Relationship



Their belief that the system is external and imposed gave way to a new realization – that patient and physician interactions drive the behavior of this system. This was a turning point.

Both the patients and the physicians arrived at the same assessment: the current reality was at levels I and II, and they wanted to relate to one another at levels III and IV. We reminded them, “You are the system,” and asked, “Why do you enact a system, or properties of a system, that nobody wants?”

During the silence that followed, we could sense people’s perception shifting. Their belief that the system is something external and imposed gave way to a new realization – that patient and physician interactions drive the behavior of the system. This was a turning point. Once such a shift occurs, it becomes a source of energy that drives change processes later on. We were nearing the goal of this intervention: helping the system see itself.

After that, the conversation took a much more reflective turn, and people freely shared their experiences and thoughts about what prevented them from operating differently. The mayor of the town stood and equated problems in the local administration with those of the physicians. He said:

All we do is focus all our resources on reacting, on operating on levels I and II, which is reacting against the issues of the past, and we are unable to structure politics in a way that we tap into the resources of levels III and IV.

When he sat down, a woman spoke up:

I am a teacher here in the town, and the key issue we have in our schools today is that we focus all our energy and resources on operating on levels I and II, pouring into people dead bodies of knowledge that they can’t use once they graduate. And we are unable to create learning environments of levels III and IV, which help people to tap into their own sources of knowledge creation. True learning means to light a flame, not to fill a barrel.

Next, a farmer lamented the “mechanical model” of industrial agriculture in which farmers are “unable to relate to nature and farming in a way that involves these deeper levels, or that relates to nature and the earth as a living system.” Another turning point came when a patient said, “I don’t want the system to kill the best physicians we have.” The physicians, many of whom viewed their patients as unreasonably demanding, began to open up after hearing this patient speak.

Afterward, participants formed several action groups, including a nonprofit patient advocacy organization that could help take the system to levels III and IV where appropriate.

A Second Intervention

In 2000, a year after this patient-physician forum, contracts were signed and the new emergency care system began operating. Incorporating many insights of the forum participants, it has shown that structured attentiveness to each level of interaction allows for better use of time and resources. For instance, rather than treating every 112 call as an emergency, physicians now can provide comfort, counseling, or a home visit as needed. At the same time, the system reduces the burden on physicians by directing calls to a single center rather than to 100 individual practitioners.

In the fall of 2001, after one year of operation, we were invited to do a qualitative analysis of the system. We interviewed 35 patients, physicians, nurses, and insurance company representatives. (For an example of the stories we gathered, see the sidebar titled “A Deeper Level of Care.”) From that process emerged a group of patients, doctors, and insurers ready to further the change effort. At its first quarterly meeting, we presented a summary of what we heard in our interviews. The table below summarizes responses to the questions, “Where do you see the problem today,” “Why,” and “What can be done?”

Clearly, different levels of response require different organizing principles. In its current form, our healthcare system follows principles located primarily on levels I and II of the patient-physician relationship; the organizing principles for levels III and IV are still emerging. However, we do see a change in perception among both patients and physicians.

Our interviews with patients, for instance, suggest that health and personal responsibility are closely tied. As patients become more responsible for themselves – for example, by gathering health information from the Internet and other sources – they are challenging the dependencies built into the traditional system. And physicians as well as patients are creating their own infrastructures for reflection, or what we call *Aufwachorte* – a “place for awakening.”

	Patient	Doctor	Insurance system
Problem	“I’m a piece of wood.”	“I’m here on a hamster wheel and fighting single-handedly.”	“Costs are getting out of control.”
Diagnosis/ Why?	“It’s a file cabinet system.” They have a system which they want to stick people into. And if you have some other problem, or the medicine doesn’t work, the system still presses you into these drawers.... Here’s where you go in, and tough luck if you don’t fit.”	“There is pressure from above, from politicians and insurance companies, and I’m eaten up from below, by the patients.” “To liberate ourselves intellectually, we sometimes proceed such that up front we write the diagnosis, the case history, get our facts and figures down, and then we have time to focus on the patient. We first satisfy the system. Once we’ve done our paperwork duties, then we can start being doctors.”	“There is a flood of practical constraints, demographic developments, an illness panorama, new technologies . . .”
Therapy/ What Can Be Done?	From clinical reaction to personal encounter: “The doctor was a human being. In that moment he was at my side no longer as a doctor, but as a friend . . .”	Redefining the physician’s work: “We have to return to the original intent of medicine – to heal.”	Quality and efficiency for everyone: “We want to ensure quality for our customers.” “Whether a person has money or not, everyone receives care.”

That starts when people improve the quality of their listening and connection. We see small but tangible signs of this across the region. For example:

- Some physicians now schedule chronic patients and acute patients in separate blocks of time, so as to focus their attention on patients' conditions and provide small-group consultation and education.
- Other physicians hold facilitated meetings with their office staff to examine ways to improve the patient experience (for example, reducing waiting times).
- Doctors in the emergency care center log the patient's problem after each call, note how they responded and what they learned from it, and share that learning with colleagues.
- Women in one rural area have created a "regional kitchen" to teach diabetics and their caregivers more healthful eating habits and lifestyles.

A Deeper Level of Care

We asked a group of doctors and patients for examples of new relationships developing in the healthcare system. They pointed us to an administrator who helps vulnerable patients complete paperwork, interact with physicians, and navigate the system. Here is her story:

An elderly woman patient was here this morning asking for a patient living will, but I told her we don't just hand this form out because it involves a far-reaching decision. The woman rolled her eyes and said she would just go to the courthouse or town hall to get the form. She said, "I just want to sign my name and be done with it." I told her the form requires serious consideration. You might write on the form, "I don't want any life prolonging measures when I am terminally ill," which might be interpreted as "I don't want any infusions," which could mean that you would die miserably of thirst. Or this statement could also mean you would not be fed artificially, which would be legitimate while dying.

These are the kinds of examples I give patients, and when I've managed to get their attention they are all ears. They then understand the magnitude of what they are signing. But we have to fight the attitude of "I just want to fill out the form." The local courthouse and the town hall have stopped handing out these forms, because they have realized the importance of the issue.

In this case, when the woman says simply, "I want the form," she is acting on Level I: she wants the problem fixed. But the administrator refuses to play the role of a mechanic: she wants to instruct and coach. She initiates a shared thinking process, a process of reflection that takes their relationship toward Level III. By the time the client leaves the office, she has begun to understand

the importance of her decision and can think about what she really wants. She has awakened.

This administrator then told us another story, and we understood better why she felt such commitment to her work.

I had to fulfill the role of guardian for my mother. She had had a stroke and was on a respirator. I remember watching three doctors, standing at her bedside . . .

My mother lay there. She couldn't remember anything, even though she was still aware. She was like a babbling child, and she kept asking the same questions. At the beginning the neurologist and the senior physician stood there and talked to each other about her, over her head. But when I showed them my mother's living will, they read it and realized what it meant and my mother then assumed a personality for them. Although she still wasn't clear about what was going on, they respected her because she had appointed someone as her guardian and had given this situation so much thought. All of a sudden she was there as a person and I was greeted with a huge amount of respect. And there was relief on the doctors' side.

This really impressed me – this about-face within 15 minutes once the form had been read, the senior physician's joining in, and the respect that they then showed her.

After the patient's wishes were understood, she became a participant in the decision-making process. She and the physicians moved to a deeper, Level IV interaction, which now included the patient herself.

New Tools for Connection

The redesign of the local emergency health-care delivery system has not brought level III or IV care to every doctor-patient encounter – nor was it intended to. Rather, the intent was to create a shared understanding of the regional healthcare system and thus give doctors and patients new ways to think and act. In building the new system, physicians have seen that their relationships with patients provide a starting point for reinventing the healthcare system, a means of assessment, and moments of meaningful connection.

Physicians and patients now have the formal structures and shared experience to work differently together. The coordination of care and, more broadly, the communication among physicians across Lahn-Dill have improved. But probably the most subtle change is in how the self connects to the whole system, and what impact the individual can have on that system. Though still overloaded, physicians feel less isolated, more engaged, and more effective. Dr. Schmidt describes the impact of the initiative to date:

The experience of shaping something gives you power. You also learn to see the meaning of your work in the context of the whole region, and that, too, is empowering. Through better knowledge about how the system in the region works, and through getting to know a lot of people, you end up having different access to making things work. Today, we are in a different position to make things work because we are seeing the whole more clearly, and because the whole network of personal communication relationships flows more smoothly.

This is where we are today, in late 2003. We have gone well beyond restructuring the emergency care system. We have begun to change relationships and raise awareness of what is possible. We are discussing the kinds of infrastructures needed for the different levels of physician-patient interaction, and how to make provision for them. The financing, structure, and delivery of healthcare remain as enormous challenges. But we know how to name an underlying, largely overlooked problem, and we have new understandings and aspirations. These are big first steps in this work in progress.



Endnotes

- 1 Jürgen Wettke, "Health Care Reforms in Europe," *Health Europe*, McKinsey & Company, September (2003): 5.
- 2 Alin Adomeit, Georg Nederegger, Rainer Salfeld, and Jürgen Wettke, "Reforming the German Health Care System: No Room for Compromise," *Health Europe*, McKinsey & Company, September (2003).
- 3 Our work included open-ended interviews with 130 physicians and patients and a community action research project (Senge and Scharmer, 2001) that included facilitated dialogue and strategy discussions. These sessions were largely based on the "presencing of the whole" approach to leading change (Scharmer 2004, forthcoming; Senge, et al., forthcoming).
- 4 Prof. Manfred Spitzer, cited in R. Kahl, "Die wundervolle Welt des Lernens," *Süddeutsche Zeitung* no. 258, p. 11.

References

- Fletcher, J., and K. Kaeufer. "Shared Leadership: Paradox and Possibility." In *Shared Leadership: Reframing the Hows and Whys of Leadership*, Craig L. Pearce and Jay A. Conger, eds., 21–47. (Thousand Oaks, CA: Sage Publications, 2003).
- Scharmer, C.O. *Theory U: Learning from Future as It Emerges*. (Forthcoming).
- Senge, P., and C.O. Scharmer. "Community Action Research." In *Handbook of Action Research*, Peter Reason and Hilary Bradbury, eds., 238–249. (Thousand Oaks, CA: Sage Publications. 2001).
- Senge, P., C.O. Scharmer, J. Jaworski, and B.S. Flowers. *Presence: Human Purpose, and the Field of the Future*. (Forthcoming).
- Versteegen, U., C.O. Scharmer, and K. Kaeufer. "Praxis Pentagon of Organizational Learning." *Reflections 2*, no. 3 (2001): 36–44.

ABOUT THE AUTHORS

Dr. Katrin Kaeufer is a founding member of SoL and a research affiliate at the MIT Sloan School. She has earned the German innovation award (Stiftung für Industrieforschung) and the 2003 Beckhard Memorial Prize for the co-authored paper "The Comparative Advantage of X-Teams."
kaeufer@mit.edu

Dr. Claus Otto Scharmer is co-founder and lecturer of the MIT Leadership Lab for Corporate Social Innovation and a visiting professor at the Center for Innovation and Knowledge Research, Helsinki. He is author of *Theory U: Learning From the Future as It Emerges* and co-author of *Presence: Human Purpose, and the Field of the Future*.
scharmer@mit.edu

Dr. Ursula Versteegen is a co-founder of SoL Germany. She is an independent researcher and consultant working on learning-based approaches to knowledge creation, process innovation, and human network development. She has worked extensively with healthcare, agriculture, corporate and nonprofit organizations.
ursula.versteegen@t-online.de

Commentary

By Dr. Gert Schmidt

The article by Katrin Kaeufer, Claus Otto Scharmer, and Ursula Versteegen can only suggest the powerlessness and frustration that physicians in Lahn-Dill felt just a few years ago. The size and complexity of the system seemed overwhelming. Our 10 hospitals, 400 physician practices, and 8,000 healthcare employees treated 25,000 patients a day. Together we generated 2 billion data points a year in the form of office visits, test results, diagnoses, and prescriptions. Most healthcare providers and administrators responded in one of two ways to this scale and complexity: we either gave up or imposed a set of fixed rules that made it possible to steer the system from outside.

However, the Patient-Physician Dialogue Forum opened my eyes to another way of seeing the system – from within. Suddenly I could reduce the system to its essence. Patient A has health problem B and wants to regain C, his experience of health. It's a mathematical formula: $A-B=C$. This is not an impossible equation to solve. When you talk with Patient A, and apply diagnostic tools, you can identify health problem B. With the help of the patient, you then can co-create C, a healthy outcome. You reduce the behavior of complex systems to the relationship of three variables. In thinking further about point B in the equation, I realized that the answers to a patient's particular health issue usually reside within the region. Health is defined through our genes, our biography, social context, and the structure and processes of the health system in which we operate. We cannot change our genes, but everything else – especially the structures and processes of the system – is enacted locally.

When I started to see the system in these terms, I realized that the relationship between patient and physician was the key to the system. It is in the doctor's office or at the patient's bedside that individuals can have the greatest impact, where we can begin to treat the *patient*, not just the disease. As a result of the dialogue forum, others in the system, including even insurance companies, have come to accept this view as well. This breakthrough, as the authors suggest, was not the result of an imposed solution but rather of a shared insight developed from multiple perspectives.

These conversations were a remarkable awakening. They generated a lot of inner energy, among physicians, that is still present. We learned to think systemically, to boil questions down to the point where our next action becomes evident. The difference in our thinking is evident when we visit colleagues in other regions. Physicians elsewhere see themselves as cogs in the system. They worry, for instance, that "the insurance companies won't let us" behave differently. But in Lahn-Dill we no longer worry about what other parties may or may not think; we ask them directly. And in every instance, we do what we can locally. We focus our attention where we can make the biggest difference.

The authors note that all of this work is just a first step. As we gathered feedback from all sides, one thing became obvious: the only sustainable way to take our system to its next level is to focus on regional self-governance. This insight has given us the courage to act. We now are working with key leaders from across Middle Hessen, the larger region surrounding Lahn-Dill,

to produce a common vision for the future of the system. We are now planning a regional public-private healthcare company that will bring together citizens, physicians, sickness fund administrators and others needed to solve the problems we encounter in daily practice. All of this has led physicians, even in remote areas, to say that they no longer feel they are alone. In short, our view of the system has changed. That has given us something we didn't have a few years ago: hope for the future.

Dr. Gert Schmidt is a co-founder of SoL Germany and a physician, specializing in internal medicine, in a large group practice. In 1997 he founded ANR, a 130-member physician network that he now heads, in Lahn-Dill, Germany.

anoruf@aol.com

Reflections

The SoL Journal

on Knowledge, Learning, and Change

Volume 5, Number 3

Editorial Team

Editors-in-Chief

Karen Ayas and Peter M. Senge

Senior Editor

Paul M. Cohen

Publisher

C. Sherry Immediato

Individual Subscription Options

Receive *Reflections* as a SoL Connections member:

- USD\$125 U.S.
- USD\$135 International

One year *Reflections* subscription:

- USD\$75 U.S.
- USD\$85 International

To order online and for a full description of subscription options, see <http://reflections.solonline.org>

For institutional subscriptions, contact David Mahaffey (see below).

Reflections: The SoL Journal is published 10 times per year (July through June) in electronic format and once per year as a hard copy compilation by the Society for Organizational Learning, Cambridge, Massachusetts 02139, USA. Inquiries regarding subscriptions and address changes, back issues, reprints, and permission requests should be directed to:

David Mahaffey,
Publications Management Intern
Reflections: The SoL Journal
955 Massachusetts Ave, Suite 201
Cambridge, MA 02139 USA

(1)617.300.9515 (phone)
(1)617.354.2093 (fax)
E-mail: reflections@solonline.org
<http://reflections.solonline.org>

ISSN 1524-1734
EISSN 1536-0148

© 2003 by the Society for Organizational Learning.
SoL is a registered trademark of the Society for Organizational Learning.

Design & Production: DG Communications (NonprofitDesign.com)
Design Concept: OHO (OHOCreative.com)