# Injured Care Professionals: Redesigning Peer-Support to Fit the Dutch Healthcare Landscape of 2030

# **Author 138**

Track 09: Redesigning Healthcare to Fit with People

#### **ABSTRACT**

The Dutch healthcare system is in transition. Envisioned radical changes, such as the increase in home care, are expected to impact the safety of care professionals and therefore put pressure on the care system and patient safety. This paper explores how peer-support can be re-designed to facilitate safety of the care professional in the Dutch healthcare landscape of 2030. The paper examines how the transition in the healthcare landscape may impact caregiver safety using a tension perspective. This paper predicts an increased necessity for peer support in the future and a demand for peer-support from a broader public than hospital staff only. Using systemsthinking, several opportunities are discussed on a micro-, meso-, and macro-level to 1) enhance the quality of peer support 2) ensure support to the full spectrum of involved actors 3) shift from a reactive- to proactive service and 4) turn local initiatives into a national feedback service.

# Keywords

peer-support, caregiver safety, patient safety, future care provision, systems design

## INTRODUCTION

The Dutch healthcare landscape approaches transitional times. Care systems of primary care, cure (hospitals) and care (homes) merge as response to providing more care in home environment (Royal HaskoningDHV, 2018). These systematic changes impact patient safety and are expected to increase the risk of incidents (Carpenter et al., 2017). However, there is no adequate support for the full spectrum of involved care professionals, who provide preventive, curative, promotional or rehabilitative care services, to cope with events with emotional impact. An example of a such event is a medication error that caused a critical situation and therefore was a near miss. These events can negatively impact the safety, health and well-being of the care professional. Consequently, the impact of these events puts pressure on the care resources and increases the risk of new patient safety incidents (Schouten et al., 2017).

This paper introduces a systematic proposal to redesign the peer-support system for the full

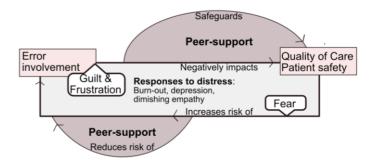


Figure 1. A modification of the Cycle of error, burnout and error (Schwappach & Boluarte, 2009) to include how peer-support after an emotionally stressful event may safeguard care quality and reduce risk of future error involvement.

spectrum of care professionals in the transition of the healthcare landscape to homecare. Several design considerations are proposed to create a proactive and national system for local support while facilitating local and global learning. The key is to change from a system with segmented services, to an integrated, context-relevant system in which all components are tuned to reinforce and therefore fit high-quality care provision.

According to the World Health Organization (2017), patient safety incidents are the third leading cause of death in the United States. Patient safety incidents are unintended and unexpected events in which the patient receiving healthcare was (potentially) harmed (WHO, 2017). Frameworks have been created to assess and enhance patient safety (Frankel et al., 2017), which will be discussed at the results section.

Various stakeholders are involved and affected by a patient safety accident. In Anglo-Saxon literature the patient and family are called the first victim, the care professional the second victim and the organization the third (Schouten et al., 2017). The care professional is a victim as the incident is not intended by the care professional. The recent Dutch study by Schouten et al. (2017) showed that more than 80% of the caregivers were at least once involved in an accident. The personal consequences, which include stress, fear and hyper alertness, may cause the care professional to overtreatment and to be more prone to be involved in future safety incidents (Figure 1). As a response, the movement

'To err is human' (Kohn et al. 2000) advocates for openness, a no-blame culture and support of care providers.

Thus, caring for the care professional is essential to provide safe care to the patient. Some argue for adding care professional safety as a fourth dimension to the triple aim of improving health and the experience of care, while reducing costs (Institute for Healthcare Improvement, 2017); turning it into a quadruple aim (Bodenheimer & Sinsky, 2014). In line with this, hospitals are setting up peer-support programs. In these programs, care professionals, who are trained as peer supporter, assist colleagues who are involved in an emotionally stressful event to enhance their wellbeing and resilience (Shapiro & Galowitz, 2016).

The paper explores how peer-support can be redesigned to facilitate safety of care professionals in the Dutch healthcare landscape of 2030. First, it investigates the possible impact of the changes in the future healthcare landscape in 2030 on the safety of care professionals. By explicitly identifying and acknowledging five tension points the author then describes three possible consequences, being 1) increased risk that patient safety incidents may occur 2) more impact of safety incidents on care professionals and 3) expansion of the notion care provider as it will include a broader public than hospital professionals only. Therefore, an increased necessity for peer support in the future and a demand for peer-support from a broader public may be expected. Last, using a systems-thinking perspective, this paper identifies several design opportunities and implications on a micro-, meso-, and macro-level for transitioning peer support programs for care professionals to fit Dutch healthcare in 2030.

#### **METHODS**

The objective of this work is to explore how peersupport for (future) care professionals can be redesigned by taking a transition design perspective.

Transition design (Irwin et al., 2016) is an emerging service-focused design area that embraces systems thinking to deal with complex, intertwined challenges in today's world. Transition design provides designs with short and long-term horizons and for a variety of scale; from single people to municipalities to regions. Other characteristics include the integration of existing or emerging design solutions and the notion of cosmopolitan localism, which combines place-based innovations with global knowledge sharing.

#### Literature

The Delphi rapport from Royal HaskoningDHV (2018) about the Dutch healthcare landscape in 2030 is used to forecast and anticipate on how the

healthcare evolvements impact safety of care professionals using a tension-perspective. Second, three perspectives to patient safety are explored. Furthermore, some challenges in the current peersupport provision are mentioned. These findings form the base for the discussion.

### **RESULTS**

#### **Dutch healthcare in 2030**

The Dutch healthcare landscape is in transit. The traditional illness-based precision care shifts towards tailored healthcare with a preventive focus (Karadarevic, 2018). Similarly, the roles of the involved stakeholders change, as well as the location of care provision. Based on the research of Royal HaskoningDHV (2018), the author describes five tensions which possibly impact safety of care professionals, being:

## 1) Close, yet distanced relationships

Personalization of on-point care and care paths will grow as people desire personal contact and human attention in care. Therefore, future care providers will become involved partners of the care receiver. On the other hand, people value the 24/7 accessibility of e-health, which reduces and limits personal contact.

# 2) Increased complexity, yet les power

High quality care is linked to lifetime extension, which introduces more health complexity (comorbidity). However, future care receivers are expected to participate by managing their own complex - health and wellbeing. Thus, care professionals will have less say in the final health decision, making them care with their hands on their back.

### 3) More collaboration, yet more isolation

Technology facilitates world-wide collaboration on complex care questions. At the same time care is expected to decentralize. As a result, the physical isolation limits care professionals in their role to signal, for example, when someone dysfunctions (Veer et al., 2015). Carpenter et al. (2017) also mention that current caregivers in home care suffer from isolation.

# 4) Home care: (un)safe?

The centralization of knowledge and arrival of technologies facilitate decentralized care provision. According to Gupta Strategists (2017) 46% of care can be provided at home. Home environments provide more safety in the sense of familiarity and no risk of cross-contamination of diseases. However, the home is a less controlled setting and context-specific variables will impact the care. Carpenter et al. (2017) address four patient safety issues in home care, being the physical, social, functional and emotional. The latter authors also state that people will come home 'quicker, but

sicker' and that home care is fragmented; the holistic picture is jeopardized.

## 5) Data as assistance or confusion?

Due to technological advancements, a caregiver will be assisted by sensor technology and centralized knowledge, changing its role to an interpreter or data scientist (Royal HaskoningDHV, 2018). However, the access to all information may cause uncertainty in decision making.

# Patient safety

Three frameworks that each describe a distinctive perspective on patient safety are: the Framework for Safe, Reliable, and Effective Care (Frankel et al., 2017), the SEIPS model (Carayon et al., 2006) and Patient safety 2.0 (Hollnagel et al., 2015). The models function as an assessment tool for the current operations and a roadmap for future strategy. The SEIPS model indicates that incidents often do not result from human actions, but because of non-optimized or contradicting incomplete. dynamics in the system, which is built around the person, task, technology and tools, environment and organization. It argues that when something went wrong, it is possibly not done wrong by the person itself. While the SEIPS model takes a systematic, holistic approach, the Framework for Safe, Reliable, and Effective Care looks at three individual actors, being the patients and families, caregivers and the organization. The latter framework provides a detailed description of nine components that together define a culture and learning system. The third perspective, patient Safety 2.0, states that a system cannot be simply malfunctioning, as it depends on specific situations. Therefore, Safety 2.0 advocates for a proactive approach by learning why things went well and reinforcing these findings in practice, in which humans are an essential resource for flexibility and resilience. Thus, the three perspectives show the complexity of the system and discuss diverse ways of implementation to reach the shared goal of providing safe care.

# **Caregiver support**

There are several ways to support care professionals in emotionally impactful events to facilitate recovery and good health and wellbeing. Both research and practice prefer peer support programs, with the possibility to request professional support (Laarman et al., 2016). In peer-support programs, care professionals, who are trained as peer supporter, assist colleagues who are involved in an emotionally stressful event to enhance their wellbeing and resilience (Shapiro & Galowitz, 2016). The same authors state that peer-support is "one way forward, away from a culture of invulnerability, isolation, and shame and toward a culture that truly values a sense of shared organizational responsibility for clinician wellbeing and patient safety" (Shapiro & Galowitz, 2016).

However, according to Laarman et al. (2016) the current application has some limitations. First, peersupport policies are fragmented and non-universal as hospital or specific healthcare specializations, such as gynecology (NVOG) and surgery, create their own policies and resources. As a result, there are big differences in output and the parties risk to reinvent the wheel. Second, facilities such as a telephone peer-support line (Stichting van Klacht naar Kracht, n.d.) demand initiative from the care professional, while Laarman et al, (2016) mentions that care professionals in need of support do not seek support themselves. Therefore, it is essential that the support is provided pro-actively. Third, the peer support programs seem to depend on single people who drive the programs. A concern is what happens when these people leave the care facility. Another limitation of the current peer-support programs is that care professionals in need of support risk not receiving the support pro-actively when the emotionally impactful events may be invisible or underestimated by the organization (Shapiro & Galowitz, 2016). Harrison et al. (2014) mentions that doctors involved in adverse events describe ineffective feedback systems as they lack system change or local improvements. Other barriers include worries about confidentiality, stigma and concerns about negative career consequences (Shapiro & Galowitz, 2016).

# **DISCUSSION**

This paper presented the future healthcare from a tension perspective. These tensions are translated to inform three expectations. The first expectation is that future patient safety incidents will make more impact. Care professionals feel more involved, due to the demand for personalization, while at the same time they may struggle with patients who do not choose for cure. Second, it is predicted that there is an increased risk of patient safety incidents as homecare is less controllable. Last, multidisciplinary future care provision requires redefining the notion of care provider. Consequently, it may be necessary to map the care providers and their relations and provide adequate resources to the needs of the individual actors. Thus, it may be expected that future support of care providers increases in importance and needs to be context-specific and therefore accessible for all care providers involved.

#### **Design considerations**

Emotional impactful events, such as patient safety incidents, result from dynamic interactions in the socio-technology system. Amongst others, transition design can contribute to the redesigning peer support on a micro-, meso-, and macro-level to fit the healthcare transition. The goals are 1) enhancing the quality of peer support 2) ensuring support to the full spectrum of involved actors 3)

shifting from a reactive- to proactive service and 4) turning local initiatives into a national service which guides system change and (local) improvements. Moreover, it is important that all design provides confidentiality and security and prevents stigma.

Therefore, the author proposes a set of considerations. On a micro-level, it may be interesting to investigate the value of generative design toolkits in peer support programs. For example, a layering approach can be used to find tacit and latent knowledge. In this approach people are asked to map the emotionally impactful event on a timeline and add their emotions and explanations (Sanders & Stappers, 2012). This tool may support reflection (discovering values and needs) and prepares the person for peer-support conversations to process the event. Possibly, the tool can also assist the communication between the patient and family and the care professional by visually layering the information and creating mutual empathy. A side function of the toolkit can be to gather feedback on the caresystem. What changes in the system are required to prevent similar events?

On a meso-level, a tool for municipalities to map care networks and contextual information is proposed. In case of impactful events, the system should be able to provide support to the full-spectrum of involved people, for example, the general practitioners, home care providers, technology providers for home care and informal caregivers. Furthermore, organizations such as Red Cross can take the role to provide peer supporter training programs, similar to how the Red Cross provides automated external defibrillator (AED) trainings.

An application exists that matches care providers in hospitals involved in an incident with a qualified peer supporter (The Patient Safety Company, n.d.). From a macro-level perspective, this application could be extended to the mapped care networks as proposed on the meso-level. The government can be stimulated to take responsibility for safety of care professionals and patients by providing national, transmural peer-support. Caring for people involved in care activities should become a natural behavior of colleagues, family, friends and relatives. These people will have a key role in identifying and requesting possible need of peer-support. Triggers could be designed to nudge this behavior. Additionally, the nation-wide gathered data can be used to analyze incidents on a systems-level by questioning what factors increase the chance of incidents. Therefore, the platform can be used as a first step to analyze and seek improvements of the care systems on a global level.

#### CONCLUSION

Good health and wellbeing of care professionals is essential for providing good care for patients. An analysis of the transition of the Dutch Healthcare to homecare and modifications in the roles of the stakeholders in care provision may be expected to have three consequences for safety of care professional, being: 1) increased risk for incidence of exposure to patient safety incidents 2) increased impact of safety incidents on care professionals and 3) expansion of the notion care professional to a bigger public. Although research and practice give preference to peer-support programs, several limitations are mentioned. Therefore, the author of this paper uses a systems-thinking perspective to advocate for a redesigned support program for the full spectrum of involved actors in care provision. The author proposes several considerations on a micro-, meso- and macro-level to enhance the quality of peer support, ensure support to the full spectrum of involved actors, shift from a reactive- to proactive service and turn local initiatives into a national service which facilitates system change and (local) improvements.

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