

Waelli (Mathias), Terrier (Lohyd), Minvielle (Étienne), « Personnaliser les parcours de soins... oui, mais comment ?. Contribution du management hôtelier aux organisations de santé », Revue Européenne d'Économie et Management des Services, n° 11, 2021 – 1, p. 147-157

DOI: <u>10.48611/isbn.978-2-406-12052-0.p.0147</u>

La diffusion ou la divulgation de ce document et de son contenu via Internet ou tout autre moyen de communication ne sont pas autorisées hormis dans un cadre privé.

© 2021. Classiques Garnier, Paris. Reproduction et traduction, même partielles, interdites. Tous droits réservés pour tous les pays. Waelli (Mathias), Terrier (Lohyd), Minvielle (Étienne), « Personnaliser les parcours de soins... oui, mais comment ?. Contribution du management hôtelier aux organisations de santé »

RÉSUMÉ – En santé, le nombre croissant de patients en situation de chronicité amène les organisations à concevoir des prises en charge de plus en plus individualisées. Cette personnalisation se traduit surtout par le développement de la médecine de précision qui propose des traitements adaptés aux caractéristiques biologiques de chaque patient. Dans une approche globale, "centrée sur le patient", d'autres aspects nécessitent d'être considérés. Les professionnels de santé sont déjà appelés à tenir compte des différences économiques et sociales pour ajuster leur pratique. Mais de nombreuses autres demandes de service émergent qui sont mal intégrées dans la pratique clinique. Dans d'autres secteurs ces demandes sont intégrées et formalisées depuis longtemps. L'exemple de l'hôtellerie pourrait inspirer les managers de la santé quand il s'agit d'accompagner ces transformations dans la santé.

Mots-clés – Santé, hôtellerie, personnalisation, management

Waelli (Mathias), Terrier (Lohyd), Minvielle (Étienne), « Customizing care pathways... yes but how?. Contribution of hospitality management to healthcare organizations »

ABSTRACT – In healthcare, the growing number of chronic patients is leading organisations to design increasingly individualised care. This personalisation is reflected above all in the development of precision medicine, which offers treatments adapted to the characteristics of each patient. In a global, "patient-centred" approach, other aspects still need to be considered. Health professionals and care givers are already called upon to take into account economic and social differences in order to adjust their practice. But many other service demands are emerging (need for information for daily life, help with housework, pet care...) which are poorly integrated into clinical practice. In other sectors these requests have been integrated and formalised for a long time. Hotel industry and hospitality management could inspire health managers when it comes to accompanying these transformations in health care.

Keywords – Healthcare, hospitality management, personalised medicine, care customization

CUSTOMIZING CARE PATHWAYS... YES BUT HOW?

Contribution of hospitality management to healthcare organizations

Mathias Waelli^a
Lohyd Terrier^b
Étienne Minvielle^c
^aMOS EHESP/EA 7348 and
Institut de Santé Globale
Université de Genève
^bÉcole hôtelière de Lausanne,
HES-SO
University of Applied Sciences
Western Switzerland
^c13-CRG et CNRS
École polytechnique

INTRODUCTION: FROM NON-CLINICAL DEMANDS TO HOSPITALITY MANAGEMENT

In the field of healthcare, recent medical advances and the increasing number of patients affected by chronic conditions has led to redefining organizational processes. An important issue is to provide a "patient centered" delivery system. This means meeting demands expressed by patients along the entire care pathway which extend well beyond the hospital (e.g. ambulatory care, nursing home and home) (Gabutti *et al.*, 2017). Incorporating all patient demands into the healthcare delivery

system is a challenge as it is mainly designed around diseases and other clinical conditions (Essens et al., 2014; Lillrank et al., 2010; Bate and Robert, 2006). Healthcare professionals primarily consider clinical needs based on their medical knowledge. As an exemple, personalized medicine defines clinical needs by integrating the molecular and genetic characteristics of the patient (Hamburg and Collins, 2010; National Research Council, 2011; Mirnezami et al., 2012). However, other "non-clinical demands" exist and must be taken into consideration in the design of healthcare organization (Diellal and Galloui, 2005). For instance, the social characteristics of a patient (social isolation or financial barriers to care access...) can lead to particular demands during management of the patient's care pathway (e.g. transportation, home meal delivery services). In addition, patients also make various demands during the care process according to their preferences – i.e. ideas, expectations and values, which are often ignored in the care delivery system (Bardes, 2012; Kogan et al., 2016). A recent study concerning patient experience in oncology (Waelli et al., 2021) shows that non-clinical demands, poorly taken into account by healthcare organizations, are often seen by patients as equally important as clinical ones. Some of these demands extend well beyond the traditional patient-physician relationship. They may concern all kinds of services such as transportation, pet-sitting, patient overall well-being and comfort and entertainment which are not well integrated in health care organisation, but are well known and supported in other activity sectors. Thus, there is a need for organizational answers to take into account a combination of demands (clinical and non-clinical) expressed by each single patient (Minvielle et al., 2014). From a public service perspective, these answers have to be affordable. Consequently, all clinical and non-clinical demands need to be considered from a customised delivery approach. This is in line with techniques developed in other service sectors: Customer Relationship Management (CRM) aims to define appropriate practices for the customer relationship in order to respond to their demands (Buhalis and Law, 2008; Rust and Miu, 2006; Melian Gonzales and Bulchand-Gidumal), mass customisation (Pine, 1993; Davis, 1987) or personalisation to scale (Lampel and Mintzberg, 1996; Minvielle, 1996) propose specific answers for each customer at an affordable cost. However, the transfer of these techniques to healthcare is not self-evident. There are many organizational obstacles to overcome.

In any case, hospitality management shares commonalities with healthcare delivery systems when it comes to the management of personalised pathways. It could inspire healthcare managers in the elaboration of answers, specific to the healthcare field.

1. THREE STEPS AND SIX KEY FACTORS FOR PERSONALIZATION IN HEALTHCARE

Considering personalisation in healthcare from a managerial perspective leads to focus on the development of mass customization in other activity sectors. "Mass customization" (Davis, 1987; Pine, 1993; Lampel and Mintzberg, 1996) is defined as the organizational configuration of products and services that meet consumers' individual needs at almost the same price as mass production. On this basis, various adjacent theories have been developed in the operations management sector that could constitute a frame of reference in healthcare management research (Feitzinger and Lee, 1997; Vrechopoulos, 2004; Doran et al., 2007; Ro et al., 2007; Avlonitis and Hsuan, 2017). The first lesson from mass customization that may be applied to healthcare management is that standardization and personalization are not antinomic. They can be combined at each step of the production process in order to align categories of specific demands with a variety of more or less standardized answers. We identified (Minvielle et al. 2014) three steps in the process of care: design, service delivery and assessment. Six key factors can be related to the three steps composing our framework for the implementation of care customization (figure 1.).

The first factor (F1 = categorization) is related to the design (Step 1). It aims to provide a better segmentation of patients in order to adapt services to patient profiles. Three factors concern the service delivered (Step 2), and are related to technological and human ressources (F2 = IT use, F3 = developing service skills and F4 = patient self-management). These factors are important issues of PCC approaches as they mostly engage? caregivers and require a reconfiguration of the professional/patient relationship. Finally, two factors are related to assessment (Step 3), i.e., (F5 = patients' experiences and F6 = economic impact). These

factors enable us? to constantly assess whether the service provided meets patients' needs and is financially sustainable.

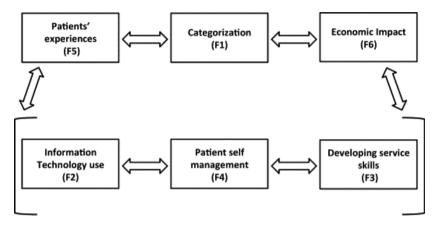


Fig. 1 - A framework for care customization (in Minvielle et al. 2014).

2. CATEGORIZATION OF NON-CLINICAL DEMANDS

Categorization is an important issue of a customized process and is at the core of consumer relationship management methods (CRM) developed in other service industries (Brown, 2000). In the field of healthcare, existing categorizations for the management of care pathways are mostly structured according to the perspective of clinicians. Patients are usually segmented according to their clinical characteristics and their genetic profiles. Other criteria related to psycho-social needs are also taken into account in the management of care pathways as they are linked to a global approach of care. However, they are not systematically formalized as such. In addition, patients also express preferences (Bardes, 2012; Barry and Egman-Levitan, 2012) that are often ignored in care delivery systems. The integration of these psychosocial and service needs in a systematic categorization process is a current issue for healthcare delivery systems. It is particularly true for vulnerable patients whose social situation impacts their clinical conditions.

In order to include all kinds of expressed preferences in the categorization process, we refer to the concept of "demands" rather than "needs" or "unmet needs" that are often related to the clinicians' perspectives. Demands provide a starting point for looking at what patients personally perceive as difficulties and complaints (Sullivan, 2003).

Demands, covering psychosocial as well as service needs, are thus referred to as "non-clinical demands". Non-clinical demands can be classified into five categories determined by the nature of the demand in response to a specific requirement:

- 1. Demands related to lifestyle during the treatment period. These demands can be related to various needs such as for home assistance, or physical exercise as well as pet sitting or entertainment.
- 2. Demands related to alternative medicine requirements and improved well-being, excluding prescriptions provided by healthcare professionals.
- 3. Demands related to the organisational aspect of the treatment pathway. This could be, for example, a need for a better alignment of appointments with patient constraints, a need for a contact person or for a better coordination among stakeholders.
- 4. Demands for administrative and logistic assistance, related to a need for social, financial or legal assistance.
- 5. Demands related to the use of information and communication technologies (TIC) and telemedicine.

As they reflect patient perspectives, some categories may differ depending on the cultural and organisational contexts of care. For instance, in some countries, demands related to alternative medicine are included in the mandate of healthcare professionals, and therefore appear as a "clinical" demand. Thus, categorization processes could be inspired by comparison with other healthcare organizations or even other service sectors but have to be adapted to each local context. The processes must also be updated and modified according to the constant assessment by patients and relatives.

3. ASSESSMENT OF PATIENTS' EXPERIENCES

The possibility to record patients' demands in a continuous manner becomes an important issue to ensure the relevancy of the categorization process. In all service sectors, asking customers for their opinions has become common practice. It enables us to assess how much a product/ service meets customers/patients' demands. It also allows us to evaluate customers' satisfaction and encourages their involvement in the production process (Lee and Cranage, 2011). This feedback may lead to corrective actions and generate improvement in work organization practices. Customer feedback is also used to evaluate the impact of corrective actions. The development of IT (F2) provides an important opportunity to increase interaction with customers and to provide this feedback (e.g., travelers' reviews; these have transfigured the hotel industry). In healthcare, online portals remain poorly developed. Satisfaction surveys are widely used, but it would be more relevant to develop tools that can assess the patient experience, like for instance a system of Patient Reported Experience Measurements (PREMS) (Minvielle et al., 2019).

In the hospitality industry, the question of customer orientation has long been at the center of debates, as evidenced by the importance of concepts such as customer experience (Kandampully et al., 2017) or customer centricity (Shah et al., 2006). Indeed, increasingly educated and demanding guests expect personalized services for every interaction with the hotel. For instance, many hotel companies, such as Marriot and Hilton, have implemented a set of services dedicated to improving the customer experience, both within the hotel and in all interactions before and after the stay (Kandampully et al., 2017). Therefore, it is essential to note that the customer experience results from an effective combination of experiences during the entire customer journey, i.e., all interactions between the customer and the hotel before, during, and after the stay. Following the customer's journey helps identify the critical steps in the relationship between the guest and the hotel. Indeed, in the hospitality sector, the customer experience is not merely a cozy bed or a fine dinner, but rather is made up of a set of elements, consisting of, for example, the website, the telephone reception, or the quality of the relationship with the housekeeping services. In addition, implementing a quality customer experience requires coordinating all of the services – IT, marketing, operations, communication – that will directly or indirectly interact with the guest. Here, an analysis of the customer/hotel interactions enables us to identify both the customer's requests and the opportunities for response offered by the organization.

The identification of guest requests is a crucial aspect in the development of an effective customer approach. This identification is made via various channels and at several stages of the process. For instance, interacting with a receptionist or a chatbot during the booking phase provides information about the guest's particular preferences during the booking phase. Similarly, all the significant interactions and requests made by the guests during their stay should make it possible to draw up profiles of requests and identify those that need to be addressed. It can therefore be observed that the "expected" channels for identifying guest requests (e.g., Tripadvisor, Booking) are not the only ones that can effectively collect guest requests. This identification of requests must also be part of a global approach that allows for better management of available resources, by directing them to the most relevant touch points.

CONCLUSION: THE TRANSFER TO HEALTHCARE

The above-mentioned examples may inspire categorization and evaluation processes in the management of personalized care pathways.

In the hotel industry, a customer experience approach rather than a satisfaction-based approach leads to the collection and analysis of demands from an organizational perspective. Using the principle of the customer journey to implement customized care could help identify critical steps in the patient pathways, by encompassing many locations inside and outside hospital (home, pharmacy, website, parking, reception, etc.) where personalization (or simply a more accurate service) is needed. Focusing on experience also makes the segmentation process more effective. Indeed, the classic segmentation approach is generally defined by the characteristics of the customer/patient (age, gender,

race...) and those of the products/services. These characteristics can be very sophisticated, and provide updated categories in real time. However they are not always sufficient to predict the individual needs in a given situation, also called the "job to be done" (Christensen *et al.*, 2007).

The consequences in terms of data collection is that the empirical object is no longer the patient but the patient in a particular situation that includes components of the organizational context such as frontline workers or technologies. To capture the interactions between the patient and these elements or between these actors, common surveys and focus groups are not sufficient. It would be more fruitful to complete these approaches with in-depth interviews in various situations. The objective would be to understand the situation, not only the patient, and to ask for descriptions and identify sensitive touch points in care pathways. At these touch points, researchers (also managers) should provide in situ observation. These observations would specifically focus on the job that actors (patients, frontline workers...) do to compensate for the service that is needed or being requested but is not available.

Intuitively, one could think that considering the demands in different situations would be more complex and require more organizational ressources than classic segmentation. Actually not at all. In other activity sectors, it appears that demands analyzed in particular situations are more stable because they exist independently from the customer (Christensen *et al.*, 2007).

Implementing tools from hospitality management, such as the "customer journey" may be a very efficient way of assessing the patient pathways from an organizational perspective. However, important challenges have yet to be overcome. The main resistance to the transfer of the tools from hospitality management to healthcare comes from professionals themselves. Although in most/some/particular situations, patient demands comprise an important part of service needs, professional mandates are still very focused on clinical practices. Thus, considering patients' demands in given situations would require extending the consideration of professionals to non-clinical aspects of their activity. This is also in line with Davina Allen's call for the extension of the nursing mandate (Allen, 2014) and would help make sense of the important part of invisible organisational work done by nurses and other professionals in the healthcare field.

REFERENCES

- ALLEN D. (2014), The Invisible Work of Nurses: Hospitals, Organisation and Healthcare, London, Routledge.
- Avlonitis V., Hsuan J. (2017), Exploring modularity in services: cases from tourism. *International Journal of Operations & Production Management*, vol. 37, n° 6, p. 771-790.
- BARDES C. L. (2012), "Defining 'patient-centered medicine", New England Journal of Medicine, vol. 366, n° 9, p. 782-783.
- Barry M. J., Edgman-Levitan S. (2012), "Shared decision making The pinnacle patient-centered care", *New England Journal of Medicine*, vol., 366, n° 9, p. 780-781.
- BATE P., ROBERT G. (2006), "Experience-based design: from redesigning the system around the patient to co-designing services with the patient", *Quality & Safety in Health Care*, vol. 15, n° 5, p. 307-310.
- Brown S. (2000), Customer relationship management: a strategic imperative in the world of e-business, Ontario, Canada, John Wiley and sons.
- Buhalis D., Law R. (2008), "Progress in information technology and tourism management: 20 years on and 10 years after the Internet The state of eTourism research", *Tourism Management*, vol. 29, n° 4, p. 609-623.
- CHRISTENSEN C. M., ANTHONY S. D., BERSTELL G. and NITTERHOUSE D. (2007), "Finding the right job for your product", *MIT Sloan Management Review*, vol. 48, n° 3, p. 38-47.
- DAVIS S. (1987), Future Perfect, 1st edition, Reading, Addison-Wesley.
- DORAN D., HILL A., HWANG K. S., JACOB G., & Operations Research Group (2007), "Supply chain modularization: Cases from the French automobile industry", *International Journal of Production Economics*, vol. 106, no 1, p. 2-11.
- DJELLAL F., GALLOUJ F. (2005), "Mapping innovation dynamics in hospitals", *Research Policy*, vol. 34, n° 6, p. 817-835.
- EISSENS VAN DER LAAN M. R, VAN OFFENBEEK M.A.G., BROEKHUIS H., SLAETS J.P.J. (2014), "A person-centred segmentation study in elderly care: Towards efficient demand-driven care", *Social Science & Medecine*, 113, p. 68-76.
- FEITZINGER E., LEE H. L. (1997), "Mass customization at Hewlett-Packard: the power of postponement", *Harvard Business Review*, 75, p. 116-123.
- GABUTTI I., MASCIA D., CICCHETTI A. (2017), Exploring "patient-centered" hospitals: a systematic review to understand change, *BMC health services research*, vol. 17, n° 1, 364.

- HAMBURG M. A., COLLINS F. S. (2010), "The Path to Personalized Medicine", New England Journal of Medicine, vol. 363, n° 4, p. 301-304.
- KANDAMPULLY J., ZHANG T., JAAKKOLA E. (2017), International Journal of Contemporary Hospitality Management Customer experience management in hospitality: a literature synthesis, new understanding, and research agenda, *International Journal of Contemporary Hospitality Management*, vol. 30, no 1, p. 21-56.
- LEE C. H., CRANAGE D. A. (2011), "Personalisation-privacy paradox: the effects of personalization and privacy assurance on customer responses to travel Web sites", *Tourism Management*, vol. 32, n° 5, p. 987-994.
- LAMPEL J., MINTZBERG H. (1996), "Customizing customization", *Sloan Management Review*, vol. 38, n° 1, p. 21-31.
- LILLRANK P., GROOP P. J, MALMSTRÖM T. J. (2010), "Demand and Supply—Based Operating Modes-A Framework for Analyzing Health Care Service Production", *Milbank Q*, vol. 88, n° 4, p. 595-615.
- MIRNEZAMI R, NICHOLSON J, DARZI A. (2012), "Preparing for Precision Medicine", New England Journal of Medicine, vol. 366, n° 6, p. 489-491.
- MINVIELLE E, WAELLI M., SICOTTE C., KIMBERLY J. R. (2014), "Managing customization in health care: A framework derived from the services sector literature", *Health Policy*, vol. 117, n° 2, p. 216-227.
- MELIÁN-GONZÁLEZ S, BULCHAND-GIDUMAL J. (2016), "A model that connects information technology and hotel performance", *Tourism Management*, 5, p. 30-37.
- MINVIELLE E. (1996), « L'organisation du travail à l'hôpital : Gérer la singularité à grande échelle », *Revue Française de Gestion*, n° 109, p. 114-124.
- NATIONAL RESEARCH COUNCIL (US) Committee on A Framework for Developing a New Taxonomy of Disease. Toward Precision Medicine: Building a Knowledge Network for Biomedical Research and a New Taxonomy of Disease [Internet]. Washington (DC): National Academies Press (US); 2011 [quoted 24 mars 2020]. 142 p. (The National Academies Collection: Reports funded by National Institutes of Health), http://www.ncbi.nlm.nih.gov/books/NBK91503/ (Retrieved, November 2020)
- PINE B. J. (1993), Mass Customisation: The New Frontier in Business Competition, Boston, Harvard Business School Press.
- Ro Y. K., LIKER J. K., FIXSON S. K. (2007), "Modularity as a strategy for supply chain coordination: The case of US auto", *IEEE Transactions on Engineering Management*, vol. 54, no 1, p. 172-189.
- RUST R. T., MIU C. (2006), "What academic research tells us about service", *Communications of the ACM*, vol. 49, n° 7, p. 49-54.
- SHAH D., RUST R. T., PARASURAMAN A., STAELIN R., DAY G. S. (2006), "The Path to Customer Centricity", *Journal of Service Research*, vol. 9, n° 2, p. 113-124.

- SULLIVAN M. (2003), "The new subjective medicine: taking the patient's point of view on health care and health", *Social Science & Medecine*, vol. 56, n° 7, p. 1595-604.
- VRECHOPOULOS A. P. (2004), "Mass customisation challenges in Internet retailing through information management", *International Journal of Information Management*, vol. 24, n° 1, p. 59-71.
- Waelli M., Minvielle E., Acero M.X., Ba K., Lalloué B. (2021), "What matters to patients? a mixed method Study of the importance and consideration of oncology patient demands", *BMC Health Service Resarch*, vol. 21, n° 1, March, 256.