

Rethinking Healthcare Performance Evaluation Systems towards the People-Centredness Approach: Their Pathways, their Experience, their Evaluation



COMMENTARY

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ABSTRACT

*Patient experience should be the starting point to achieve a high quality of care.
Coherently, healthcare performance evaluation systems, driving the change in line*

with the main strategic goals, should be designed considering the patient perspective. Instead, they are traditionally defined according to the healthcare service provider's point of view. Consequently, they reproduce a "silo-vision" characterized by a clear separation of responsibilities limited to a specific setting of care or to a single organization. This commentary discusses the importance of using patient-reported measures together with indicators based on administrative data to evaluate cross-setting healthcare services within a multidimensional healthcare performance evaluation system. The experience of the Tuscany regional healthcare Performance Measurement System (PMS), implemented more than 10 years ago and in continuous evolution, represents an innovative example of how to measure the quality of the whole care pathway including patient experience. This new approach is based on a systematic, systemic and standardized collection of patient-reported experience measures in several healthcare pathways and evaluating them using a coherent graphical representation. Targets, incentives and other managerial tools are fixed, overcoming organizational boundaries and integrating the patient point of view with the goal of moving the healthcare system towards a patient-centredness approach to care.

IN RECENT YEARS, challenging societal trends and changes have driven the need for transformations in the healthcare systems towards a more person-centred approach, particularly in primary care and in complex clinical pathways (WHO 2016). According to this model, healthcare providers should be in charge of the person as a whole, considering all his/her life-course health experiences (Starfield 2011). In literature, we can find several cases of successful adoption of person-centred care approach into the practice (Kogan 2016). However, data on patient experience are underused for evaluating the performance of healthcare systems and providers. Even if essential for improving the quality of care, usually these data are not connected to other performance measures and not located along the patient-experienced clinical pathway. Indeed, a widespread and systematic pathway approach in managing and evaluating care, able to enhance the value created for patients, is still not well developed into the practice. This commentary contributes to the debate on how to use patient experience data to evaluate cross-setting healthcare services to impact policy making as well as

healthcare professionals' behaviour (Murante et al. 2014a).

The Performance Measurement Systems (PMSs) were introduced in the healthcare sector during the 1980s as a consequence of the reform of public organizations according to the New Public Management theory. The first PMSs in healthcare, inspired by the tools used in the private sector (Hood 1991), were usually focused on financial measures (Naranjo-Gil et al. 2016), lacking in outcome-based measures assessment and, thus, in instruments impacting on quality of care and value created to patients (Ballantine et al. 1998; Naranjo-Gil et al. 2016; Van Peursesem et al. 1995).

To overcome the above critical issues, in the last decades, a great effort from the academic and professional communities led to the introduction of new PMSs (Aidemark 2001; Arah et al. 2006; Nuti et al. 2017a; Van Peursesem et al. 1995), which were able to monitor the relationship between outcomes and costs thanks to a multidimensional structure.

Other relevant milestones reached in those years refer to the concept of value and value creation, intending value not as the mere

sum of volumes of procedures and services, but as the capacity of the system to make the difference for the patients, considering their preferences and needs (Gray and El Turabi 2012; Porter 2010). The main challenge is to adopt this perspective in the performance evaluation systems (Nutti et al. 2016a).

Actually, despite the continuous evolution of the PMSs, they still do not focus on value creation under the patient-centred perspective, because the indicators included are defined mostly according to healthcare service providers' point of view. Indeed, PMSs mirror the interests of the healthcare service providers. The consequence is a "silo-vision" of the performance results and a clear separation of responsibilities within the boundaries of the specific setting of care or the organization involved in the patient pathway. Providers tend to look at the performance of their unit, incurring the risk of shifting the focus away from the patient perspective. This creates strategic inconsistency and behaviour distortions. To direct the healthcare professionals' behaviours towards the achievement of strategic goals (Nutti et al. 2017b), it is crucial to assure the alignment of targets and measures with what is relevant to patients and to their caregivers, and to be able to monitor the value created across the care pathway (Nutti et al. 2017b; Vainieri et al. 2016). Subsequently, the setting-related evaluation should be substituted by a cross-sectoral pathway-based evaluation, where indicators of performance also include measures reported by patients, such as satisfaction and experience (patient-reported experience measures – PREMs), allowing the enhancement of the care quality as per the perspective of patients along their real pathway (Institute of Medicine 2001; Wensing and Elwyn 2002). This evaluation allows assessing the quality of the whole care pathway that a patient truly lives, regardless of the specific setting or provider involved and of the care transitions faced. The introduction of patient experience

measurements in a multidimensional PMS and the link of targets and incentives to the so-measured performance can improve the alignment between the strategic orientation towards a patient-centredness approach and the tools and levers of healthcare management, such as targets for a CEO. Moreover, there is strong evidence showing that collecting, reporting and comparing patient experience data is associated with improving patient experience (Murante et al. 2014b; Fowler and Patterson 2013), and that cross-sectoral measurements impact improvement in quality of care (Szecsenyi et al. 2012). While it is clear that the fragmentation of care is a challenge both for patients and for healthcare services providers (Coleman and Berenson 2004), some initial evidence is available on the contribution of cross-sectoral patient data on the identification and evaluation of quality gaps in the continuum of healthcare service delivery (Noest et al. 2014; Nutti et al. 2010, 2017a). In particular, pathway-related data can help to overcome a silo-vision of healthcare and to promote a personalized medicine approach, also improving the overall quality of care pathway for each patient in terms of outcomes (Nutti et al. 2016a).

To assess and manage the overall healthcare system performance, the experiment carried out in Tuscany (Italy), and shared with other Italian Regions (Network of Italian Regions 2016; Nutti et al. 2016a, 2016b), suggests the introduction of new measurement mechanisms. These mechanisms enable assessing the performance of a network of healthcare service providers involved in the same care pathway, also thanks to effective graphical representations. This new approach is required to shift healthcare professionals' focus to those critical factors that determine value creation from a patient perspective rather than from an organizational one.

On these bases, the PMS used by the Tuscany Regional Health System since 2004, which has always ensured the integration of

indicators from administrative data and from population or patient surveys, has been the object of rethinking in the last years. In the first place, the graphical representation and reporting of indicators has been traditionally presented and synthesized in five-band dartboard graphs, divided in different dimensions as illustrated in Figure 1. The main dimensions represented in the five-band dartboard graphs of the evaluation of maternal care, used as an example, are related to quality of healthcare process, women’s experience and organisational climate.

This type of representation has changed moving the focus from the setting/provider into the patient’s pathway (Figure 2, Murante et al. 2014b).

The evaluation bands are no more concentric but horizontal and framed to represent the different phases of care pathways. This view allows focusing on strengths and weaknesses, which characterize the healthcare service delivery in the different pathway phases.

This new measurement and graphical representation approach was first implemented in the performance evaluation of the maternal care pathway (Murante et al. 2014b), where it is possible to identify three chronological stages (pregnancy, delivery, postpartum), each of which is usually in charge of different settings of care, such as districts and hospitals. Indicators are no longer grouped by topical dimensions but by pathway. Measures on patient experience, collected by means of patient surveys, now coexist together with indicators on appropriateness, efficacy, efficiency, etc., which are based on administrative data (Table 1). This new PMS allows an evaluation under a more comprehensive way of every specific stage of the pathway and considers the patient perspective twice: first, by following his/her journey through the healthcare services and second, by including measures reported by the patient’s voice.

Figure 1. Five-band dartboard graphs with multidimensional performance evaluation indicators on maternal care pathway (example of a Local Health Unit in Tuscany Region)

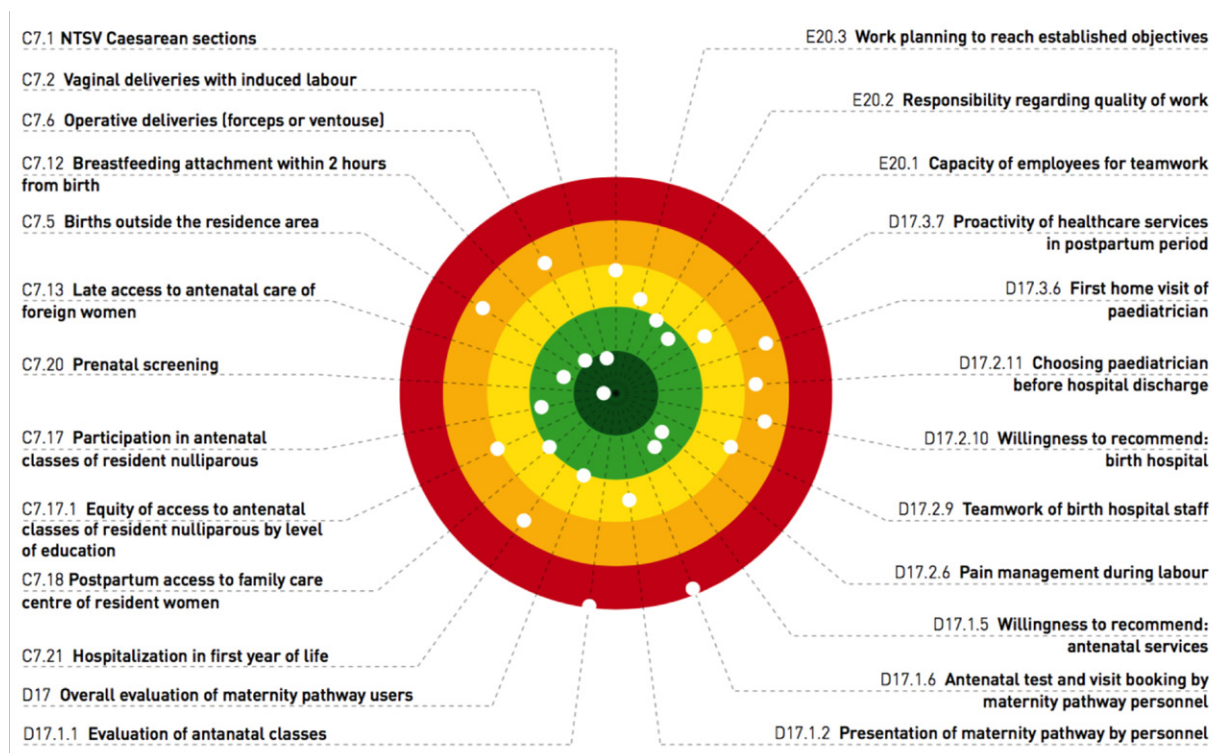
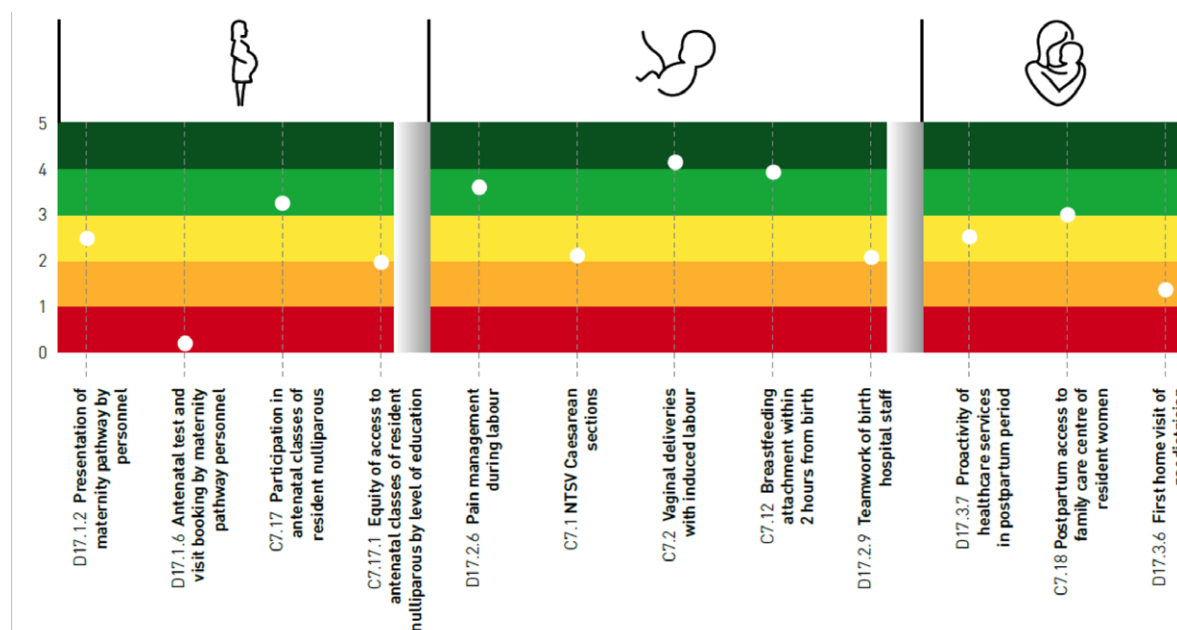


Figure 2. Five-band stave graphs characterizing the multidimensional performance evaluation measurement of the maternal care pathway in its different stages (example of a Local Health Unit in Tuscany Region) (Murante et al. 2014b)



This experiment was also shared with the other 12 Italian Regions that are actually part of a network that voluntarily adopted the healthcare performance evaluation system by re-organizing the PMS from the “single setting” to the “patient pathway” approach. This measurement of healthcare performance was applied to several significant care pathways, such as oncology and chronic diseases (Network of Italian Regions 2016; Nuti et al. 2016a, 2016b).

This tool considers a multi-provider perspective. The five-band stave graphs characterizing the multidimensional performance evaluation measurement of the maternal care pathway has some indicators that can show the name of different health organizations: Local Health Authorities (ASL/AULSS), Hospitals and Teaching Hospitals (AO/AOU). Indeed, usually some indicators, specifically those concerning the delivery stage of the maternal care pathway, are displayed twice to account for the different organizations responsible for specific service provision in the same geographical area. In fact, it may happen that in

some Regions, health services are provided by both local authorities and autonomous hospitals. Adopting the patient perspective, the new PMS shows in the same graph the performance of the different organizations for each pathway phase. This allows each healthcare provider to be aware of the quality of care provided along the whole patient pathway. Through overcoming the institutional boundaries, the new PMS provides a system vision of the care and of the value creation, following the patient pathway, to healthcare organizations.

Information collected along a cross-setting pathway, based on administrative data as well as patient reported measures, can be used at several managerial levels of a healthcare system with specific aims.

For a healthcare system that follows the leverage model guaranteeing universal coverage, it is easier to put in place an accountability system that measures clinical pathways overcoming different providers' boundaries, on one side, and, on the other side, assuring target setting for each provider contributing

to the improvement of population health. In Italy, each Region determines strategies, policy and macro objectives for the health of its population and is responsible as well for the quality of care delivered. Through a comprehensive evaluation system of the

quality of care provided along the entire patient care pathway, Regional policy makers and managers can be aware to what extent the system is responsive as a whole, and how the healthcare organizations are contributing to meet patients' needs.

Table 1. Indicators included for the evaluation of the maternal care pathway in Tuscany Region (2016)

Stage of pathway	Indicators	Source of data
Pregnancy	Prenatal tests and visits booked by healthcare staff	Patient survey
	Late access to antenatal care of foreign women	Administrative
	Underuse of antenatal care of foreign women	Administrative
	Access to family care centre of foreign women for maternal care	Administrative
	Participation in antenatal classes of resident nulliparous	Administrative
	Equity of access to antenatal classes by level of education	Administrative
	Perceived utility of antenatal classes	Patient survey
	Willingness to recommend the family care centre	Patient survey
Delivery	NTSV Caesarean sections	Administrative
	Operative vaginal deliveries	Administrative
	Episiotomy in NTSV deliveries	Administrative
	Teamwork of birth hospital staff	Patient survey
	Skin-to-skin contact after delivery for at least 1 hour	Patient survey
	Exclusive breastfeeding at the birth hospital	Patient survey
	Support from the birth hospital staff	Patient survey
	Congruous information on breastfeeding from the birth hospital staff	Patient survey
	Information at the discharge on the primary care services for breastfeeding support	Patient survey
	Willingness to recommend the birth hospital	Patient survey
First year	Postpartum access to family care centre of resident women	Administrative
	Proactivity of healthcare services in postpartum period	Patient survey
	Support for breastfeeding from family care centre staff	Patient survey
	Support for breastfeeding from family paediatrician	Patient survey
	Support for breastfeeding from family care centre	Patient survey
	Exclusive breastfeeding at three months	Patient survey
	Exclusive breastfeeding at six months	Patient survey
	Vaccination	Administrative
	Hospitalization in the first year	Administrative

The healthcare managers and professionals, on their side, by adopting this new prospective in evaluating the quality of their services provided along the continuum of patient care, can be trained to consider value for patients, and not volumes, as the main goal of their activity.

Therefore, administrative and patient information coming from PMS should be integrated in the planning and control system:

- by defining targets both for CEOs and healthcare unit managers (Nutti et al. 2016a);
- by checking the standards achievement in the accreditation system for healthcare services/pathways (Murante and Nutti 2012).

Additionally, patient survey data can be used:

- to identify strengths and weaknesses in the continuum of care, as experienced by patients, and encouraging partnerships between providers (Noest et al. 2014; Nutti et al. 2010, 2016a);
- to promote and improve professionals' awareness of the weaknesses and strengths of the whole healthcare pathway in which they are involved (Murante et al. 2014a);
- to support healthcare organizations in activating and implementing quality improvement plans based on the analysis of the patient survey results and in general of the PMS indicators.

Conclusion

Rethinking the healthcare performance measurement and evaluation system according to the people-centredness approach to care requires the introduction of new mechanisms and representations to integrate the patient-perspective and to overcome the traditional

measures related to the specific healthcare organization or setting.

Moreover, the classic performance indicators of inputs, processes, outputs and outcomes from administrative flows and reported by clinicians/healthcare workers, should be integrated with indicators based on patients' reported measures. Indeed, in literature, we can find several institutions that have collected PREMs in a systematic and standardized way, but without including them in a multidimensional system to evaluate performance. With the new approach tested in Tuscany, performance results are presented following the patient pathway, and the measures include PREMs. A more comprehensive PMS can better monitor a complex system, such as the healthcare system, by evaluating different dimensions from different viewpoints. It cannot be ruled out that the inclusion of several indicators from the patient perspective can increase the "burden" of the evaluation process. However, this level of complexity must be faced: indicators based on patient reported measures are able to shine a light on a large grey area that the indicators from the administrative flows cannot identify. The "shades of grey," actually relevant in terms of experience and care outcomes for each individual patient, can be the determinant for quality improvement of the overall healthcare system. Collecting and reporting patient experience can also be used to evaluate pilot interventions and to support their implementation at the health system level, and in general to sustain the plan-do-check-act process for the quality improvement of healthcare. Furthermore, the patient perspective is taken into consideration also in the definition of targets, incentives and other managerial tools related to the PMS, which can drive the change towards a patient-centredness approach to care.

Indicators from administrative data and from patient surveys are currently considered complementary, in particular with regard to the outcome measurement. However, a “replacement effect” could take place if the indicators from patients should explain healthcare variability or bad performances more or better than those from administrative data. Further research on this topic will be conducted in order to understand which are the more useful indicators to make health professionals and managers more actionable.

Finally, rethinking healthcare performance evaluation systems towards the people-centredness approach is a way to enhance and promote the transformation of healthcare systems towards a more coordinated, integrated and people-centred care.

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