

Unpacking the role of dialogic accounting towards the design and implementation of successful Performance Measurement and Management (PMM) systems: a longitudinal study of a hospital

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Abstract

This study examines how dialogic accounting can influence the features of and the processes associated with the design and development of performance measurement and management (PMM) systems and consequently their success. Primary data were collected using two qualitative case studies of PMM systems conducted at a large teaching hospital in Portugal between 2008 and 2024.

The findings highlight the mechanisms through which the adoption of a dialogic accounting approach to the design and development of the hospital's PMM systems significantly contributed to their success. Evidence from the interviews also indicates that characteristics of the hospital such as being a teaching hospital, having a well-defined strategy, top management commitment, etc. had a key influence in these dynamics.

Track 24: Performance Management

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Introduction

Since the 1980s, performance measurement and management (PMM) systems became widely adopted as part of the New Public Management (NPM) reforms (Garengo and Sardi, 2021), given the NPM emphasis on measuring performance as a way of ensuring accountability and on increasing efficiency and effectiveness (Hood, 1995). Notwithstanding the widespread adoption of PMM systems and their recognition as a key instrument for the successful implementation of public sector reforms (Moynihan and Pandey, 2010; Pollitt and Bouckaert, 2017), PMM is still a big challenge for public services (Arnaboldi et al., 2015). The use of PMM systems in the public sector has often resulted in unsatisfactory or even undesired effects (Steccolini et al., 2020) and in itself the effectiveness of performance measurement in the public sector has been strongly criticised (George et al., 2020). The causes of these outcomes have been attributed not only to issues related with the design, poor implementation, and/or incorrect use of PMM systems (Taylor et al., 2022), but also due to the ambiguity and complexity associated with multi-stakeholder organisations (Ojiako et al., 2022) and the volatility of external environments (Garengo and Sardi, 2021).

The complexity, volatility and uncertainty which characterises the current contexts require PMM systems that favour learning and adaptation (Bourne et al., 2018), and decentralised decision-making autonomy, as local professional staff are in a better position to understand the context and provide a rapid response (French et al., 2021). However, although PMM have been subject of significant attention from both research and practice leading to significant developments of PMM theory and practice over the years, PMM systems are still strongly influenced by their roots in the control systems literature (Bititci et al., 2018). As a result, they emphasise control and alignment (Bourne et al., 2018) and the use of information to inform centralised decision making (French et al., 2021), therefore highlighting the need for a PMM paradigm shift.

The dominant PMM system paradigm is in line with mainstream accounting which is monologic in approach as it emphasises the needs of investors and “provides information based only on financial statements that can independently explain the real phenomenon” (Grossi et al., 2021: 78). In doing so, it ignores or undervalues the social situatedness of knowledge and the involvement of multiple stakeholders (Brown, 2009). This contrasts with a dialogic accounting approach, which facilitates a more participatory form of decision-making and accountability through the engagement of multiple perspectives (Brown, 2009). As Grossi et al. (2021: 78) note, “[d]ialogic

accounting drives the adoption of tools that allow citizens to participate in the definition and construction of reality rather than emphasising the ‘discovered reality’”. Dialogic accounting redirects the focus from the design of performance measures as a technical aspect of control-oriented PMM systems centrally developed, towards the use of performance information as an instrument of dialogue and therefore co-created by the key stakeholders and revised through consultation (French and Mollinger-Sahba, 2021).

Although the adoption of more dialogic forms of accounting is aligned with the PMM system paradigm shift discussed above, and there has been some research conceptualising dialogic performance management (e.g. Rajala and Laihonon, 2019) or advocating for a more dialogic approach to performance measurement (e.g. Cooper and Ezzamel, 2016), research has not investigated the impact of dialogic accounting on the design and implementation of PMM systems. This article aims to fill this gap by exploring the role and long-term effects of dialogic accounting towards the success of PMM systems, using two hospital PMM systems as case studies.

Research context and approach

This article uses an exploratory case study approach on two PMM systems conducted at a large public teaching hospital in Portugal, recognised in the country as one of the top performing hospitals. The research adopted a case study approach as it allows investigating “a contemporary phenomenon in-depth and within its real-life context” (Yin, 1999: 18) and it is particularly useful to address “how” and “why” research questions (Yin, 1999).

The hospital always placed significant importance on the quality of care provided. However, in 2000 a change in board members resulted in the implementation of a series of initiatives, including the centralization in one single department (the quality management department) of the hospital’s offices and services dedicated to quality improvement issues, the restructuring of the patient safety incidents reporting system in 2004/2005, and the start of the implementation of a Business Intelligence system in 2010.

The unit of analysis of this article are two PMM systems: i) the patient safety incidents reporting system and the related performance management initiatives, and ii) the Business Intelligence system. The article explores how the adoption of a dialogic accounting approach influenced their features and the processes related with their design, implementation and further improvement, and consequently their success.

Primary data were collected by the author between 2009 and 2024 (ongoing). So far, a total of 57 in-depth semi-structured interviews were conducted with 60 clinical and non-clinical staff members. Interviewees included 26 nurses, nine doctors, four nurse aides, five engineers, two administrative staff, three technicians, eight managers, two social workers and a laboratory technician. All but four interviews were individual interviews. The four interviews with two professionals took place due to logistics such as office sharing. Interviewees were selected following a snowball approach whereby interviewees were asked to indicate other potential interviewees and so on (Parker et al., 2019). All but two interviews were audio-recorded and verbatim transcribed by the interviewer. In the two non-recorded interviews, comprehensive hand-written notes were taken. Ethics approval was obtained from both the case study hospital and the University where the interviewer was based when the interviews took place.

Interview transcripts were inductively analysed following the approach proposed by Gioia et al. (2013) resulting in the conclusion that a successful PMM system results from its ability to ‘secure internal legitimacy’ and be ‘dialogic’, two aggregate dimensions that are informed by the PMM systems and dialogic accounting literatures.

Findings

Features of the PMM systems

Data from the interviews highlights that a core feature of the two PMM systems was that their elements were tailored to both the hospital and its departments, as discussed in the next two sections.

PMM systems tailored to the hospital

In terms of *organisational structure*, the hospital created a quality management department (QMD) centralising all the offices related with quality and risk (clinical and non-clinical) impacting staff and patients. The management of the patient safety incidents reporting system by the QMD enables the department to better identify the need for action and coordinate its implementation as the QMD receives all incident notifications. Similarly, the development of the Business Intelligence system was coordinated by the hospital’s IT department.

Another key feature of the hospital’s tailored PMM systems was that their *design was based on the hospital’s existing resources and competences*. For example, whereas other hospitals acquired

off the shelf Business Intelligence system, the hospital used a research partnership it has with academics from the Computer Science department of a University to develop a tailored Business Intelligence system.

In the hospital, *top management commitment* was perceived by interviewees as a key element of the hospital's PMM systems,

If higher up they don't believe it makes sense, if they don't support the projects [...]

Management has to want it [...] and that's the only way things will flow, I think. (Member of the Quality Management Department)

PMM systems tailored to the departments

Although there was a consensus that PMM systems should be hospital wide rather than just designed at department level, interviewees recognised the need for some features and procedures to be tailored to the departments as it is important to acknowledge their differences. In line with this, the hospital's PMM system was rooted on the idea of *performance as a multi-faceted concept*, which had a key impact on its success. For example, in relation to falls prevention, the recognition of the different nature of falls in the maternity ward led to the refinement of the patient safety incidents reporting system by introducing the reporting of quasi-falls, which ended up benefitting the reporting of falls across the entire hospital,

In the maternity ward we are talking about women who come to deliver babies [...] applying the fall [reporting form] perhaps would not be justified as in [wards such as internal] medicine [...] so the maternity was a door for us to develop the new notification of quasi-falls [...] the lipothymias, the sugar drops, the low blood pressure, the hypotensions, they had a quasi-fall and that was also convenient to report. (Clinician)

Another key element of the hospital's PMM systems was that they recognised the existence and the importance of *professions* and, as a consequence, the need for new procedures to be seen as more efficient and require less work from staff, in order to be accepted by them,

Sometimes [...] it's not [just] motivation to change procedures, it has to be proven that it is more efficient, it makes the professionals work less. (Nurse)

Alongside the features of the hospital's PMM systems, the processes associated with their design and further development also played a significant role in their effective use. Together, these

processes and the features of the PMM systems supported the development of their legitimacy and the adoption of a dialogic accounting approach to PMM, which in turn mutually reinforced each other; leading to further improvements in the PMM systems and making them increasingly more successful.

Processes of the PMM systems design and further development

A key characteristic of the hospital's PMM systems was the scope that was purposively given to staff involvement and active participation in the design and development of the hospital's PMM systems. This is aligned with a dialogic accounting approach and resulted in the legitimacy of the PMM system.

Bottom-up involvement

The hospital's PMM systems incorporated procedures that were rooted on the *recognising of staff skills and knowledge* and the importance of their *involvement*. For example, staff were motivated to give suggestions of PMM systems features to the QMD and the IT department. This contributed to the success of the PMM systems as interviewees highlighted the need for procedures to make sense in practice for staff to be willing to adopt them. As staff are too busy, if procedures do not make sense to them or they do not see their importance, they will not implement them and as a result managers will lose their authority.

Plans to further develop the paper

So far, only 11 interviews were conducted focusing on the design and implementation of the business intelligence system. Although the themes identified so far mirror the ones identified in the patient safety incidents reporting system, additional data collection will take place over the coming months. After these additional interviews are conducted, the findings will be significantly improved. A discussion and conclusion sections will be added to the paper.

References

- Arnaboldi M, Lapsley I and Steccolini I (2015) Performance management in the public sector: The ultimate challenge. *Financial Accountability & Management* 31(1): 1-22.
- Bititci US, Bourne M, Cross JAF, et al. (2018) Towards a theoretical foundation for performance measurement and management. *International Journal of Management Reviews* 20(3): 653-660.

- Bourne M, Franco-Santos M, Micheli P, et al. (2018) Performance measurement and management: a system of systems perspective. *International Journal of Production Research* 56(8): 2788-2799.
- Brown J (2009) Democracy, sustainability and dialogic accounting technologies: Taking pluralism seriously. *Critical Perspectives on Accounting* 20(3): 313-342.
- Cooper DJ and Ezzamel M (2016) A critical analysis of the Balanced Scorecard: Towards a more dialogic approach. In: Haslam J and Sikka P (eds) *Pioneers of Critical Accounting*. London: Palgrave Macmillan, pp.201-230.
- French M, Lowe T, Wilson R, et al. (2021) Managing the complexity of outcomes: a new approach to performance measurement and management. In: Blackman D (ed) *Handbook on performance management in the public sector*. Cheltenham: Edward Elgar Publishing, 111-128.
- French M and Mollinger-Sahba A (2021) Making performance management relevant in complex and inter-institutional contexts: using outcomes as performance attractors. *International Journal of Public Sector Management* 34(3): 377-391.
- Garengo P and Sardi A (2021) Performance measurement and management in the public sector: state of the art and research opportunities. *International Journal of Productivity and Performance Management* 70(7): 1629-1654.
- George B, Baekgaard M, Decramer A, et al. (2020) Institutional isomorphism, negativity bias and performance information use by politicians: A survey experiment. *Public Administration* 98(1): 14-28.
- Gioia DA, Corley KG and Hamilton AL (2013) Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. *Organizational research methods* 16(1): 15-31.
- Grossi G, Biancone PP, Secinaro S, et al. (2021) Dialogic accounting through popular reporting and digital platforms. *Meditari Accountancy Research* 29(7): 75-93.
- Hood C (1995) The “New Public Management” in the 1980s: variations on a theme. *Accounting, Organizations and Society* 20(2): 93-109.
- Moynihan DP and Pandey SK (2010) The big question for performance management: Why do managers use performance information? *Journal of public administration research and theory* 20(4): 849-866.
- Ojiako U, Bititci U, Marshall A, et al. (2022) Ambiguity in performance management systems of complex multi-stakeholder organisations. *Production Planning & Control*. 1-21.
- Parker C, Scott S and Geddes A (2019) *Snowball Sampling*. London.
- Pollitt C and Bouckaert G (2017) *Public management reform: A comparative analysis-into the age of austerity*. Oxford university press.
- Rajala T and Laihonon H (2019) Managerial choices in orchestrating dialogic performance management. *Baltic Journal of Management* 14(1): 141-157.
- Steccolini I, Saliterer I and Guthrie J (2020) The role (s) of accounting and performance measurement systems in contemporary public administration. *Public Administration* 98(1): 3-13.
- Taylor J, McDonnell J and Duong H (2022) Bureaucratic gaming: causes and consequences for policy-making. *International Journal of Public Policy* 16(5-6): 253-269.
- Yin RK (1999) Enhancing the quality of case studies in health services research. *Health Services Research* 34(5 Pt 2): 1209.