Medical engagement: a crucial underpinning to organizational performance

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Summary

Medical Engagement has long been advocated as a critical component relating to organizational performance. Relatively little data though existed to support this contention. Using the Medical Engagement Scale (MES) This study demonstrates a persuasive linkage between assessed levels of Medical Engagement in secondary care organizations and independently gathered performance measures. Implications of executive leaders in promoting engagement are explored.

Introduction

Engagement has become a popular, much used term supplanting more traditional concepts such as job satisfaction and motivation. As is often the case with words that acquire popular currency, they are frequently mis-used and lose specific meaning. In a political context, engagement seems to be used to describe a debate or process of seeking to persuade others to a particular viewpoint.

Here we are interested in the idea of an engaged employee who does not see their role as very narrowly and specifically defined, providing the minimum required of them, but rather as someone who appreciates and is proud of the organization in which they work and wishes it to be seen as such by others. The engaged employee is then willing to do more than the minimum expectation, to 'go the extra mile' for the reputation of the organization.

The academic literature provides a more differentiated notion of engagement. Freeny and Tiernan[1] provide a helpful overview of the literature on the emergence and development of the concept. Schaufeli and Bakker[2] describe engagement as 'a persistent, positive affective motivational state of fulfilment in employees that is characterized by vigour, dedication and absorption'. The essential hypothesis of the engagement model, and a proposition much endorsed in both public and private sectors, is that higher levels of engagement generate a greater frequency of positive affect such as satisfaction and commitment, and this in turn flows through to enhanced work performance.

There is an accumulating set of research evidence supporting the critical role of staff engagement with Harter *et al.*[3] reporting that employee engagement was associated with a range of business outcomes such as higher levels of performance, customer satisfaction and loyalty, and lower levels of staff turnover. Guthrie[4] suggests that physician engagement (in USA context) is one of the markers of better performing hospitals, while Toto[5] also in the USA argues that engaged clinicians can have a direct day-to-day impact on the financial bottom line of hospitals.

The Institute of Healthcare Improvement in the USA has long advocated physician engagement as the key to organizational performance. Renerstein *et al.*[6] have proposed a checklist by which organizations can assess themselves as to whether they are promoting engagement in their clinical staff.

Very recently, a report by Macleod and Clarke[7] specially commissioned by the UK Cabinet Office has reviewed evidence of engagement across UK work sectors. Among their conclusions is that:

(1) Engagement levels in the UK are relatively low and that this presents a major challenge given the critical nature of innovation in tackling the recession;
(2) Engagement correlates with performance and with innovation, and that while direct causality is not always clear, the consistent nature of the studies of engagement coupled with individual case-studies makes for a 'compelling case'.

Clearly engagement is a multifaceted construct and this inevitable complexity has probably contributed to the current lack of clarity in understanding the links between levels of engagement and performance. In the

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National Health Service (NHS), the need for greater medical engagement and leadership in the planning, commissioning and development of services is now widely recognized. Increasingly, medical engagement is seen as crucial in ensuring that service changes are properly planned and effectively implemented. Hospitals where clinicians are more engaged in strategic planning and decision-making perform[8] better than in hospitals where clinical personnel are not engaged in the change process. When doctors share responsibility for necessary service improvements, then the re-design of services with more effective care pathways is far more likely to be successfully implemented.

Over the past few years the Enhancing Engagement in Medical Leadership project, run jointly by the NHS Institute of Innovation and Improvement and the Academy of Medical Royal Colleges, has developed both the Medical Leadership Competency Framework (now embedded as the basis of the training in management and leadership for medical students and doctors across the initial career phase) and commissioned the development of the Medical Engagement Scale (MES). These two elements address two parallel but interacting concepts; competence defines what someone is capable of doing whereas engagement is concerned with their willingness and motivation to perform. Clearly engagement is not guaranteed by competence alone. The rationale and development of the Medical Engagement Scale (MES) as a reliable and valid psychometric instrument is reported elsewhere (Spurgeon *et al.*).[9] The focus of this paper is to address the specific application and testing of the proposition that levels of medical engagement relate to observed measures of organizational performance.

Method

The MES was developed on the conceptual premise that medical engagement is critical to implementing the radical changes and improvements sought by the NHS and that medical engagement cannot be understood from consideration of the individual employee alone. It is not sufficient for an individual to express a desire to be engaged. The organization must reciprocate by establishing processes that create the conditions whereby individuals will want to participate in as full a way as possible and that opportunities will exist to enable this willingness to happen. The measure of engagement therefore must simultaneously assess both the individual and cultural components of engagement equation and this is reflected in the operational definition of the engagement used in the development process, notably:

> The active and positive contribution of doctors within their normal working roles to maintaining and enhancing the performance of the organisation which itself recognises this commitment in supporting and encouraging high quality care.

The MES has a hierarchical structure and provides an overall index of medical engagement together with an engagement score on three component meta-scales, with each of these three meta-scales itself comprising two reliable subscales as shown below:

Metascale 1: Working in a collaborative culture

Subscale 1: Climate for positive learning
Subscale 2: Good interpersonal relationships

Metascale 2: Having purpose and direction

Subscale 3: Appraisal and rewards effectively aligned
Subscale 4: Participation in decision-making and change

Metascale 3: Feeling valued and empowered

Subscale 5: Development orientation
Subscale 6: Work satisfaction

The scales were found to be reliable (ranging from 0.7 to 0.92) with an original database of over 23,000 NHS staff, and valid in terms of predicting external, independent measures of level of engagement in the pilot organizations.

A normative database for the MES has been developed based on a sample of 30 secondary care trusts, three from each SHA in England, representing a full range of size and type of trust and comprising just over 3500 doctors in all. This normative database enables the extent and type of engagement levels in NHS Trusts to be benchmarked and compared. The norms are extended and updated as more Trusts complete MES. International data are now being collected (Australia, Malta) to enable comparison across systems.

The links between levels of medical engagement on the 10 subscales which comprise the MES and a 'raft' of independently collected (but at the same time period as MES data collection) performance indicators have been analysed. The observed relationships are presented below.

Results – Relationships between medical engagement and organizational performance

Three broad performance areas and their links to scores on the MES are included below as tables of Pearson product moment correlation coefficients. These correlation coefficients identify the strength of association between medical engagement and performance, together with their associated levels of statistical significance (all 1-tailed tests).

Performance area (1): Hospital standardized mortality ratio

Table 1 shows that high levels of medical engagement were associated with improved patient mortality (as represented by the negative association with hospital standardized mortality ratio: HSMR). The five Mental Health Trusts in the normative sample were not included in this data-set.

Consistent and relatively high levels of association are obtained across virtually all the MES scales and subscales.

Table 1 HSMR mortality indicators

	Medical engagement index	Meta 1: Working in a collaborative culture	Meta 2: Having purpose and direction	Meta 3: Being valued and empowered	Sub 1: Climate for positive learning	Sub 2: Good interpersonal relationships	Sub 3: Appraisal and rewards effectively aligned	Sub 4: Participation in decision-making and change	Sub 5: Development orientation	Sub 6: Work satisfaction	*n Trusts*
HSMR mortality indicators, Dr Foster Unit April 2009	−0.50**	−0.56**	−0.37**	−0.50**	−0.46**	−0.64**	−0.33*	−0.36*	−0.45**	−0.50**	*25*

Levels of significance: $^{*}P < 0.05$, $^{**}P < 0.01$, $^{***}P < 0.001$

Performance area (2): Safety of patient care

Table 2 also shows a variable pattern of associations between components of NPSA data, notably negative (appropriately) relationships with reported incidents, both infrastructive and those resulting in severe harm.

Performance area (3): Levels of service provision

Table 3 shows that high levels of medical engagement (virtually all scales) are associated with maintaining levels of service across the board apart from those areas where virtual 100% compliance has been achieved and therefore only attenuated data available.

An inspection of the tables above reveal that there are many statistically significant relationships linking medical engagement to organizational performance. Not only are the correlations significant, they are, as Cohen[10] would suggest, very large and strong absolute correlations with many above 0.5. Assessments of financial performance, quality and achievement of a range of performance targets are all significantly related to levels of medical engagement.

Table 4 illustrates this quantitative data in more concrete terms by showing the difference in performance level achieved on Care Quality Commission ratings by those Trusts in the top 10 and bottom 10 on the MES.

Discussion

For many NHS leaders, promoting medical engagement has been an increasingly advocated priority since it lies at the core of the belief that as more doctors become more directly involved in service change and innovation, then performance and productivity will improve. However, many such arguments have been derived as much from 'common-sense' inference as directly relevant evidence.

The current study provides systematic evidence that medical engagement appears to underpin performance across various types of secondary care trusts. The results reveal statistically significant associations between observed levels of medical engagement and performance across a wide range of established performance indicators. Although correlations do not in themselves demonstrate causality there is a coherent argument to be made that engagement is a crucial underpinning to organizational performance in terms of:

(1) The number of significant correlations obtained from a relatively small sample and the consistent pattern of these correlations;
(2) The absolute size of the correlations suggesting a powerful relationship.

The importance of medical engagement makes common-sense too, since it is difficult to argue how radical change in service delivery via disengaged, disaffected and uncooperative medical staff can be achieved. Many struggling Trusts do appear to have difficulties relating to levels of engagement with medical staff. An examination of those

Table 2 National patient safety agency incidents April–September 2008

	Medical engagement index	Meta 1: Working in a collaborative culture	Meta 2: Having purpose and direction	Meta 3: Being valued and empowered	Sub 1: Climate for positive learning	Sub 2: Good interpersonal relationships	Sub 3: Appraisal and rewards effectively aligned	Sub 4: Participation in decision making and change	Sub 5: Development orientation	Sub 6: Work satisfaction	*n Trusts*
National Patient Safety Agency (based on incidents Apr-Sept submitted to the Reporting & Learning System by Nov 2008)											
Reporting rate per 100 admissions	0.28	0.31	0.17	0.32*	0.16	0.44**	0.29	−0.08	0.41*	0.19	*28*
% incidents due to Infrastructure (incl staffing, facilities, environment)	−0.33	−0.29	−0.16	−0.45*	−0.12	−0.44*	−0.35	0.16	−0.60**	−0.23	*20*
% incidents resulting in Severe harm	−0.34*	−0.22	−0.46**	−0.30	−0.28	−0.12	−0.46**	−0.36*	−0.24	−0.34*	*28*

Levels of significance : $^{*}P < 0.05$, $^{**}P < 0.01$, $^{***}P < 0.001$
Note: Some missing data from Trusts in the sample

Table 3 The Care Quality Commission – NHS Performance Ratings 2008/2009

	Medical engagement index	Meta 1: Working in a collaborative culture	Meta 2: Having purpose and direction	Meta 3: Being valued and empowered	Sub 1: Climate for positive learning	Sub 2: Good interpersonal relationships	Sub 3: Appraisal and rewards effectively aligned	Sub 4: Participation in decision making and change	Sub 5: Development orientation	Sub 6: Work satisfaction	*n Trusts*
The Care Quality Commission - NHS performance ratings 2008/09											
Overall quality score	0.68***	0.63***	0.70***	0.65***	0.68***	0.46**	0.73***	0.49**	0.62	0.62***	*30*
08/09 financial management score	0.47**	0.48**	0.44**	0.46**	0.50**	0.37*	0.52**	0.24	0.47**	0.41**	*30*
Summated 'Overall quality score' and 'financial management score'	0.61***	0.59***	0.60***	0.59***	0.63***	0.45**	0.66***	0.38*	0.58***	0.55***	*30*
08/09 core standards score (as a provider of services)	0.34*	0.37*	0.25	0.36*	0.37*	0.31*	0.31*	0.12	0.41*	0.28	*30*
08/09 existing commitments score (as a provider of services)	0.64***	0.59***	0.67***	0.60***	0.64***	0.45*	0.69***	0.53**	0.61***	0.55**	*25*
08/09 national priorities score (as a provider of services)	0.40*	0.33*	0.41*	0.42*	0.37*	0.22	0.39*	0.34*	0.34*	0.45**	*25*
Summated 'core standard score' and 'existing commitments score' and 'national priorities score'	0.36*	0.31*	0.44**	0.30	0.47**	0.05	0.32*	0.54***	0.16	0.42*	*30*
2008/09 NHS performance ratings core standards data (frequency of '**complied**')[1]	0.28	0.29	0.24	0.27	0.33*	0.20	0.25	0.17	0.24	0.28	*30*
2008/09 NHS performance ratings existing commitments and national priorities indicator scores (frequency of '**achieved**')	0.69***	0.54**	0.75***	0.70***	0.56**	0.44**	0.76***	0.62***	0.66***	0.68***	*25*
Total time in A&E: four hours or less (% level 'achievement')	0.55**	0.55**	0.47*	0.59***	0.52**	0.53**	0.52**	0.33	0.70***	0.46*	*24*
Inpatients waiting longer than the 26-week standard (% level 'underachievement')	−0.57***	−0.59***	−0.41*	−0.64***	−0.52**	−0.62***	−0.44*	−0.30	−0.72***	−0.52*	*25*
	−0.03	0.03	−0.11	0.00	0.08	−0.04	−0.06	−0.16	−0.01	−0.01	*25*

Outpatients waiting longer than the 13-week standard (% level 'underachievement')											
All cancers one month diagnosis (decision to treat) to treatment (% level 'achievement')	0.39*	0.37*	0.29	0.47*8	0.36*	0.33	0.26	0.28	0.47*	0.43*	*24*
All cancers: two-week wait[1] (% level 'achievement')	0.21	0.20	0.17	0.24	0.18	0.20	0.26	0.00	0.27	0.20	*24*
All cancers: two-month urgent referral to treatment (% level 'achievement')	0.54**	0.52**	0.42**	0.61***	0.49**	0.50**	0.35*	0.46*	0.60***	0.57**	*24*

[1]Attenuated range of performance ratings
Levels of significance: $^{*}P < 0.05$, $^{**}P < 0.01$, $^{***}P < 0.001$

Table 4 CQC ratings against top/bottom MES Scores

		CQC - NHS performance ratings 2008/09				
Trust ID (Trust names withheld for confidentiality)	Overall medical engagement scale index (in descending order)	Overall quality score	Financial management score	Core standards score (as a provider of services)	Existing commitment s score (as a provider of services)	National priorities score (as a provider of services)
21	65.8	Good	Excellent	Fully Met	Fully Met	Good
12	65.2	Good	Good	Fully Met	—	Good
15	63.4	Excellent	Good	Fully Met	Fully Met	Excellent
5	62.0	Excellent	Excellent	Fully Met	Fully Met	Excellent
24	60.8	Good	Excellent	Fully Met	—	Good
1	60.4	Excellent	Excellent	Fully Met	Fully Met	Excellent
10	59.9	Good	Excellent	Almost Met	Fully Met	Good
16	59.8	Good	Fair	Fully Met	Almost Met	Excellent
14	59.7	Excellent	Excellent	Fully Met	Fully Met	Excellent
11	58.8	Excellent	Excellent	Fully Met	Fully Met	Excellent
25	56.8	Fair	Fair	Almost Met	Fully Met	Poor
4	56.7	Fair	Fair	Almost Met	Fully Met	Fair
22	55.7	Fair	Fair	Partly Met	Almost Met	Good
23	55.3	Fair	Good	Almost Met	Partly Met	Excellent
29	54.4	Good	Excellent	Fully Met	Fully Met	Good
3	54.3	Fair	Excellent	Fully Met	Fully Met	Poor
26	53.1	Fair	Fair	Almost Met	Almost Met	Fair
8	52.7	Good	Good	Fully Met	Almost Met	Good
18	52.1	Fair	Fair	Fully Met	Partly Met	Good
20	47.0	Poor	Poor	Almost Met	Not Met	Fair

organizations scoring most highly on medical engagement (top 6 organizations) reveal some consistent patterns – notably that there was continuity of leadership at the executive level and there was a stated positive strategy to work at improving engagement with their medical staff. Both factors make commonsense in that engagement is a process that takes time and therefore continuity affords the opportunity for the relationship to build. Additionally engagement does not just happen and it is clear that those organizations that develop it, work at it (Atkinson *et al.*).[11]

The findings suggest that Chief Executives and other executive colleagues should make engaging their medical workforce a priority. Hopefully as more doctors emerge better equipped in these areas through the implementation of the Medical Leadership Competency Framework, the processes of engagement will be easier to facilitate and indeed more normal.

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