

# Physician engagement: a concept analysis

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**Abstract:** The term “physician engagement” is used quite frequently, yet it remains poorly defined and measured. The aim of this study is to clarify the term “physician engagement.” This study used an eight step-method for conducting concept analyses created by Walker and Avant. MEDLINE, EMBASE, and the Cochrane Central Register of Controlled Trials were searched on February 14, 2019. No limitations were put on the searches with regard to year or language. Results identify that the term “physician engagement” is regular participation of physicians in (1) deciding how their work is done, (2) making suggestions for improvement, (3) goal setting, (4) planning, and (5) monitoring of their performance in activities targeted at the micro (patient), meso (organization), and/or macro (health system) levels. The antecedents of “physician engagement” include accountability, communication, incentives, interpersonal relations, and opportunity. The results include improved outcomes such as data quality, efficiency, innovation, job satisfaction, patient satisfaction, and performance. Defining physician engagement enables physicians and health care administrators to better appreciate and more accurately measure engagement and understand how to better engage physicians.

**Keywords:** physician, medical, engagement, concept analysis

## Introduction

Physician engagement is often identified as being crucial to high-performing health care organizations<sup>1,2</sup> with improved patient care outcomes and cost reduction.<sup>1,3,4</sup> However, due to the wide use of the term, it remains a quite nebulous concept<sup>5,6</sup> resulting in little consensus on appropriate measurement and minimal empirical evidence demonstrating the association between the engagement of physicians and improved outcomes. Although far less prominent in the literature are the terms “medical engagement” and “doctor engagement,” with the latter most prominent in Europe. Regardless, all terms refer to physicians/medical doctors.

Traditionally, physicians worked independently and were not considered hospital employees, with a focus on patient care and clinical decision-making.<sup>7</sup> Physicians have long emphasized their critical role as patient advocates and held themselves accountable for effective care. To be effective patient advocates, doctors believed that it was important for them to have clinical self-government to determine the best care required, while the focus of health care executives and administrators was financial management.<sup>7</sup>

More recent demands on health service organizations to reform and improve their performance around patient experiences and cost-of-care reductions have led to a recognition that physicians can contribute in an important way in addressing these demands.<sup>8</sup>

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It is essential to align physicians with organizational and system aims and activities, engaging physicians in both setting the course for system change and ensuring optimal execution of the desired system changes. (p. 2)<sup>8</sup>

New expectations have physicians taking on additional roles and activities perceived as “organizational imperatives” rather than “direct patient care”, creating a strong dichotomy between hospital leadership and frontline physicians, or an “us versus them” environment.<sup>8</sup>

Thus, abundant of time and resources are spent discussing and trying to “engage” physicians.<sup>5</sup> Non engagement of clinicians has been a long-standing, international, and complex problem.<sup>9</sup> A literature review on health care professional views on engagement in quality improvement identified that health care professionals are reluctant to engage, mainly because they perceive that initiatives will be ineffective, will be a waste of scarce personal and organizational resources, and are concerned about harmful effects that may result from quality initiatives.<sup>9</sup>

Although some scholars in the field may have a clear understanding of the term “physician engagement,” it has become evident from discussions with Canadian health care administrators and physician leaders and review of the literature, this concept is still poorly understood and measured. This conceptual “fuzziness” likely contributes to the lack of evidence in this area, making comparisons across settings challenging. Previous work in this area examining the evidence on physician engagement suggests that most of the articles published on this topic are non evidence-based and considered opinion pieces.<sup>10</sup>

## Methods

Walker and Avant’s (2011) eight step-method for conducting concept analyses see Table 1, is used to examine the term “physician engagement.” This method is used quite often in health care when little is known about a topic<sup>11–13</sup> and to help clarify ambiguous concepts,<sup>14</sup> thus enabling researchers to conduct more thorough systematic and meta-analyses. Concept analyses help to explain the meaning of the concepts in current use in order to further develop the concept.<sup>15</sup> Conceptual analyses use literature reviews as instruments, whereas literature reviews can simply be used as a review.<sup>15</sup>

### Step 1: selecting a concept

A concept is an abstract idea that denotes elements of human phenomena.<sup>16</sup> This study selected “physician

**Table 1** Walker and Avant’s steps for conducting a concept analysis

| Steps | Description                              |
|-------|------------------------------------------|
| 1     | Select a concept                         |
| 2     | Determine purpose of analysis            |
| 3     | Identify all uses of the concept         |
| 4     | Determine defining attributes            |
| 5     | Construct a model case                   |
| 6     | Construct a borderline and contrary case |
| 7     | Identify antecedents and consequences    |
| 8     | Define empirical referents               |

engagement” as a concept. Despite the fact that physician engagement is beneficial to organizations, there appears to be widespread and ambiguous use of the term.<sup>6</sup> The lack of conceptual clarity around the term “physician engagement” makes it challenging to measure and improve. This lack of conceptual and definitional clarity impedes progress in enhancing physician involvement in shared decision-making; commitment to the achievement of strategic goals; quality improvement initiatives; implementation of change programs; use of resources; and the development and utilization of evidence-based guidelines.<sup>5</sup>

### Step 2: determining the purpose of analysis

This analysis seeks to explore how the term “physician engagement” is used in the literature, and theoretically define its components. It will help extricate the defining attributes and improve modeling of the concept while developing a “physician engagement” construct. This will hopefully help to clarify a universal construct such that the same understanding is given to the concept and develop an operational definition.<sup>14</sup>

### Step 3: identifying uses of the concept Data sources and search

EMBASE, the Cochrane Central Register of Controlled Trials, and, MEDLINE were searched on February 14, 2019. The search terms used were “physician engagement,” “medical engagement,” and “doctor engagement.” No limitations were put on the searches with regard to year or language. Targeted searches were also conducted to identify relevant articles (eg, after identifying an author doing extensive work in this area). Dictionaries and thesauri were also searched in addition to grey literature. Websites reviewed included Agency for Healthcare Research and Quality, the National Institutes of Health, the Canadian Medical

Association, Institute for Healthcare Improvement National Institutes of Health, the Canadian Medical Association, and GreyNet International.

### Data items and abstraction process

An Excel form was created containing all author names and article titles. The PI (TP) selected the first 20 cases identified in the Excel form. Two reviewers of the research team (LP and LN) independently performed a practice test on the 20 selected articles. Reviewers screened for the terms “physician engagement,” “medical engagement,” and/or “doctor engagement.” The same reviewers independently extracted the following data: definitions, instruments, how the term was being used. Discrepancies were discussed, and a resolution agreed upon. Differences were resolved by discussion. Data were entered in an Excel form. Data were reviewed to ensure there were no discrepancies. The remaining full-text articles (n=155) were screened independently by the two reviewers. Four members of the team reviewed the final data for all 175 articles and agreed upon themes.

Part of the data abstraction involved identifying whether any study authors offered a clear definition of the term “engagement.” Narrative synthesis was completed.<sup>17</sup> A table was first created in excel. Data were extracted on definitions provided, context, antecedents and outcomes of engagement, and, finally, instruments identified for measuring engagement. The table was then examined to identify themes or groupings. Finally, concepts were mapped to identify patterns. Since this is neither a meta-analysis nor systematic review, study quality is not evaluated.<sup>18</sup>

## Results

### Study selection process

There were 439 records identified in total. After removing duplicates and articles unrelated to engagement, there were 175 articles remaining for analysis.

### Defining engagement

The term “engagement” is defined by Merriam-Webster Collegiate Dictionary as follows:

- (i) an arrangement to meet or be present at a specified time and place, or a job or period of employment especially as a performer; (ii) something that engages; (iii) the act of engaging (the state of being engaged), or emotional involvement or commitment, or betrothal (formal engagement to be married); (iv) the state of being in gear; and (v) a hostile encounter between military forces.<sup>19</sup>

In the political context, engagement describes a process of trying to influence others to a certain view.<sup>20</sup> Skillman et al (2017) define engagement as active support for a project.<sup>21</sup>

Given that “physician engagement” is a psychological concept, one might expect that work to date has drawn on the rich research history of the related concept of “work engagement” developed in the organizational behavior and work psychology literature.<sup>6</sup> This, however, is not the case. “Work engagement” is a positive, fulfilling work-related state of mind, encompassing vigor, dedication, and absorption. Individuals engaged in their work demonstrate high energy levels, perseverance, pride, enthusiasm, and full engrossment in their work.<sup>22</sup>

The term “physician engagement” is often not defined at all. Instead, it is used commonly as an action verb, to participate in an activity.<sup>20</sup> McLeod and Clarke, acknowledging a universal definition does not exist, propose that engagement is measurable; however, they recognize that the lack of a consensus on a single tool accounts for some of the variability in the concept.<sup>23</sup> Of the 175, only 18 articles provided definitions of “engagement.”<sup>1,2,5,6,10,20,21,24–34</sup> There does not appear to be a single, widely accepted definition, see Table 2.

The term “physician engagement” is most commonly used in North America. In Europe, however, the term “medical engagement” appears to be more predominant. Spurgeon et al (2011) define “medical engagement” as the positive and active contribution of physicians for sustaining and improving their organization’s performance.<sup>20</sup> Spurgeon describes engagement as a commitment to high-quality care. This proposition by Spurgeon that there is a commitment to high-quality care supports work by Perreira, Berta, Ginsburg, Barnsley, and Herbert that commitment is targeted and can extend beyond simply commitment to the organization itself.<sup>35</sup> For example, one may not be committed to their organization; however, they may be committed to their patients, their co workers or even their supervisor.

The concept of medical engagement is complex.<sup>32</sup> Spurgeon describes engagement as intra individual, a commitment level, or motivational state that can be applied to a diverse group of activities or contexts.<sup>34</sup> Spurgeon describes engagement as intra individual, a commitment level, or motivational state that can be applied to a diverse group of activities or contexts.<sup>34</sup> Spurgeon states that medical engagement is closely associated to unidirectional concepts such as work engagement, burnout, and job satisfaction.<sup>36</sup> Spurgeon suggests that medical engagement is more about

**Table 2** Examples of varying definitions of physician engagement

| Description                                                                                                                                                                                                                                      | Reference |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| Appropriate and effective use of hospital services                                                                                                                                                                                               | 5         |
| Active support for a project                                                                                                                                                                                                                     | 21        |
| The association and partnership physicians feel toward a health care organization                                                                                                                                                                | 10        |
| Doctors displaying active interest or a positive role of involvement within the program                                                                                                                                                          | 32        |
| The extent to which the physician actively participates in and facilitates the work of the team                                                                                                                                                  | 121       |
| Degree to which an employee is satisfied in their work, motivated to perform well, able to suggest and implement ideas for improvement, and their willingness to act as an advocate for their organization by recommending it as a place to work | 24        |
| Physicians who reflect on the importance of reducing health disparities in their practices and have developed specific strategies to achieve this                                                                                                | 26        |
| Doctors act within their normal roles to maintain and enhance the performance of the organization which itself recognizes this commitment in supporting and encouraging high-quality care                                                        | 29        |
| The experience physicians have as being actively interested in the quality of their workplace, and motivation to take an active leadership role in helping to improve that workplace                                                             | 56        |
| Elements of engagement include alignment, action and accountability                                                                                                                                                                              | 82        |
| An energetic state of involvement with activities that are personally fulfilling and enhance one's sense of professional efficacy                                                                                                                | 154       |
| It is more than just an intellectual property, but is about establishing relationships that nurture a sense of meaning and purpose                                                                                                               | 155       |
| Two-way involvement at a level which influences decision making - involvement at the beginning and as an integral part of the decision-making process, rather than as an add-on or afterthought once the decisions are in place                  | 59        |

reciprocity and how physicians respond to actions by the organization.<sup>36</sup>

A quick review of Table 2 will show that many of the definitions used to describe engagement use these pre existing, well-established constructs (see Table 3). From a research perspective, for accurate measurement, it is critical to clearly distinguish between constructs that have been proven to be distinct, well-validated, reliable instruments such as satisfaction, organizational support, empowerment, work engagement, perceptions of performance, and organizational citizenship behaviors (see Table 3). The relationships amongst these constructs have been shown in health care to be far more complex than unidirectional.<sup>35,37–39</sup>

#### Step 4: determining the defining attributes of “physician engagement”

Characteristics often associated with a concept are referred to as defining attributes present in both theoretical and operational definitions. Based on the data abstracted in this review, the main defining attribute of physician engagement appears to be physician “involvement” in an activity. A few examples include the use of a physician portal/online platform,<sup>40</sup> time spent looking at technology rather than the patient,<sup>41</sup> reflecting on actions,<sup>42</sup> learning activities,<sup>43,44</sup> or communicating with patients and other providers.<sup>45</sup>

However, involvement is more than simply partaking in an activity (ie, showing up for an activity or performing

**Table 3** Examples of pre existing well-established constructs

| Construct                            | Definition                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Perceived organizational support     | The degree to which an organization values employee contributions and cares about their well-being <sup>156</sup>                                                                                                                                                                                                                           |
| Organizational commitment            | The positive affect and affiliation that workers develop for their organizations <sup>157</sup>                                                                                                                                                                                                                                             |
| Job satisfaction                     | A worker's positive feelings toward their job <sup>158</sup>                                                                                                                                                                                                                                                                                |
| Work engagement                      | Positive, fulfilling work-related state of mind that is characterized by vigor, dedication, and absorption <sup>22</sup>                                                                                                                                                                                                                    |
| Psychological empowerment            | Feeling capable of shaping one's work context and work role; comprised of meaning associated with work tasks, feelings of competence and belief in one's abilities to perform work activities, self-determination concerning control and choice over work behaviors, and observable positive impacts of one's work behaviors <sup>159</sup> |
| Individual work performance          | Individual work performance includes effectiveness and productivity <sup>160</sup>                                                                                                                                                                                                                                                          |
| Organizational citizenship behaviors | Extra-role behaviors that can be directed toward individuals or the organization; can include organizational praise, helping colleagues, or making suggestions to improve performance that may disrupt social relationships by challenging the status quo <sup>161</sup>                                                                    |

a task), but rather being “involved” which is defined as “regular participation of employees in (1) deciding how their work is done, (2) making suggestions for improvement, (3) goal setting, (4) planning, and (5) monitoring of their performance.”<sup>46</sup> The underlying assumption is that those who are involved in the process best understand it and are inspired to make improvements.<sup>46</sup>

Furthermore, the literature suggests that involvement in activities appears to be targeted at one of the three levels: micro (patient), meso (organization), and/or macro (health system). See Figure 1. This distinction can help determine the most effective motivators to improve desired outcomes at each level.

### Micro (physician–patient) level

Physician engagement at the micro level refers to involvement in activities at the individual, physician–patient level, initiatives that impact day-to-day, direct patient care. This involves work with the patient as well as with other allied health care professionals. Examples include direct patient care and patient safety,<sup>3,47–49</sup> huddles,<sup>50</sup> interprofessional collaboration,<sup>51</sup> and teamwork.<sup>3,48</sup> This can also involve communication and interaction with patients and families<sup>52–54</sup> as well as involvement of patients and families in decision-making.<sup>55</sup>

### Meso (organization) level

Physician engagement at the meso level refers to involvement in activities at an organizational level, activities that impact organizational processes. Examples include active interest and involvement of physicians in enhancing, sustaining, supporting, and encouraging high-quality care and organizational performance,<sup>10,20</sup> taking on active leadership roles, helping to improve the workplace<sup>10,56</sup> involvement in strategic planning,<sup>57</sup> participation in decision-making,<sup>10,58,59</sup>

and involvement in resource allocation and controlling costs.<sup>60,61</sup>

### Macro (systemic) level

Physician engagement at the macro level refers to involvement in activities at the health system level, activities that extend beyond a single organization. Examples include improved population health and lower costs<sup>62</sup> and health system efficiency as a whole,<sup>62–65</sup> acting as a facilitator of system transformation<sup>58</sup> and health advocacy<sup>66,67</sup> such as woman’s health system change,<sup>68</sup> their role in community issues such as gun violence prevention,<sup>69</sup> and decision-making on tobacco treatments whether for tobacco<sup>70</sup> or prostate cancer screening.<sup>71</sup>

## Steps 5 and 6: what “physician engagement” is and what it is not

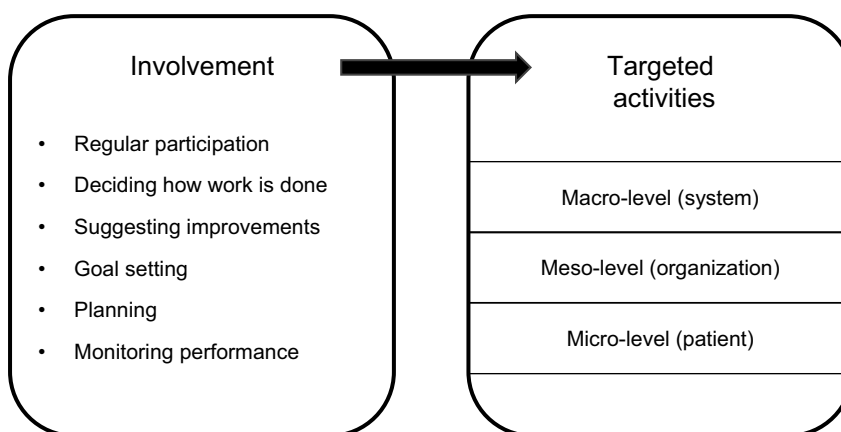
The following two sections, steps 5 and 6, help to further illustrate what physician engagement is, and what it is not.

### Step 5: constructing a model case

A model case is described to help illustrate all the defining attributes of a concept.

#### Model case

Physician engagement, as discussed in the literature, is really about involvement in activities targeted at one of the three levels: micro (patient), meso (organization), and/or macro (health system). Let us use a commonly described example, physician engagement in leadership at the organizational (meso) level. An engaged physician would be one that regularly participates in leadership activities and attends leadership meetings as well as (1) decides by what means work is completed, (2) suggests



**Figure 1** Attributes of physician engagement.

improvements, (3) assisting is setting goals, (4) planning, and (5) performance monitoring.<sup>46</sup>

### Step 6: constructing borderline and contrary cases

Borderline cases contain most, but not all of the defining attributes of a concept, whereas, contrary cases have none of the defining attributes of a concept.<sup>14</sup> In this section, it is important to understand what “physician engagement” is not. The concepts identified in Table 3 have been used interchangeably to define “physician engagement.” However, these constructs have been established to be distinct, well-defined, validated, reliable concepts. As such, it is important to clearly articulate the desired measure. For example, if interested in a physician’s positive psychological state characterized by their dedication, how absorbed they are in their work, and how excited they are to come to work, then one should measure “work engagement.” The same should be done for other concepts such as psychological empowerment, job satisfaction, organizational support, and commitment.

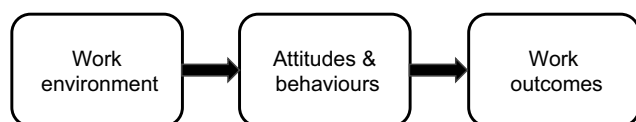
### Step 7: identifying antecedents and consequences

“Work psychology” involves the study of human behaviors in the workplace.<sup>72</sup> The theoretical foundation for work in this is the Theory of Reasoned Action (TRA).<sup>73</sup> TRA suggests that work outcomes are directly related to behavioral intentions, which are preceded by work attitudes, which in turn are impacted by one’s observations of their work environment<sup>74</sup> and interactions with leadership and coworkers.<sup>72</sup> A simplified version of this is presented in Figure 2. Thus, “antecedents” would be characteristics in the work environment that impact physician engagement, which in turn impacts work outcomes, in other words, the consequences of physician engagement.

#### Antecedents

The major overarching antecedent of physician engagement appears to be organizational culture. Organizational culture is defined as follows:

the values and behaviours that contribute the unique social and psychological environment of an



**Figure 2** Relationships between work environment, behaviors, and outcomes.

organization. This includes an organization’s expectations, experiences, philosophy, and values that hold it together. It is based on shared attitudes, beliefs, customs, written and unwritten rules that have been developed over time. It is shown in

1. The way the organization conducts its business, treats its employee, customers, and the wider community
2. The extent to which freedom is allowed in decision making, developing new ideas, and personal expression,
3. How power and information flow through its hierarchy, and
4. How committed employees are toward collective objectives.<sup>75</sup>

From a leadership perspective, it is important to understand physician culture,<sup>76</sup> workforce diversity, and cultural challenges,<sup>77</sup> norms,<sup>78</sup> and values.<sup>25</sup> The four key cultural attributes that act as antecedents to physician engagement are accountability, communication, incentives, opportunity, and interpersonal skills.

#### Accountability

Accountability has appeared repeatedly in the literature as an antecedent of physician engagement.<sup>5,71,79–83</sup> Examples include responsibility for clinical and health outcomes,<sup>62</sup> patient outcomes, service utilization and system performance,<sup>64</sup> quality, cost and care,<sup>60</sup> clinical improvement projects,<sup>84</sup> and government and institutional policies to involve doctors in clinical leadership roles.<sup>30</sup>

#### Communication

Communication is another antecedent that has appeared repeatedly in the literature.<sup>3,5,10,57,61,67,71,81–83,85–100</sup> Specifically, two-way communication between physicians and administration,<sup>24,58</sup> as well as amongst physicians.<sup>45</sup> Part of communication includes transparency<sup>101</sup> and feedback.<sup>2,82</sup> Feedback should be non judgmental and objective.<sup>102</sup> This includes sharing of data<sup>99</sup> that is valid and reliable.<sup>2,57,61,79,103,104</sup> Feedback should be provided on performance,<sup>85,95,105,106</sup> care processes<sup>86</sup>, and outcomes.<sup>107</sup> Specific examples identified in the literature include feedback on screening rates, outcome data, and patient experience data.<sup>91,108</sup> Data feedback can be used to support changes in behavior<sup>109</sup> to improve outcomes and decrease mortality rates.<sup>110</sup> Aggregate and individual performance data can also be used to reduce clinical costs.<sup>106</sup>

## Incentives

Incentives are other antecedents discussed in the literature to encourage physician engagement.<sup>60</sup> Regardless of whether incentives are financial<sup>21,79,111</sup> or non financial,<sup>112</sup> they need to be made known.<sup>113</sup> Financial incentives may include compensation for time<sup>2,93</sup> or structured incentives, whereby funding is linked to quality and performance goals and shift the basis of payment from volume to value.<sup>114</sup> Incentives can also be tied to patient satisfaction.<sup>108</sup> Shared savings are also identified as a good incentive as it helps to align goals.<sup>62</sup> Type of payment model can also act as an incentive. Salaries or stipends are linked with increased alignment; however, capitation research (payment by the number of patients treated) suggests that the effect is disrupted when monetary incentives stress individual productivity.<sup>78</sup> Pride, competitiveness, and status are considered non financial, implicit incentives. Call-list participation and admitting privileges are examples of explicit incentives or penalties.<sup>106</sup> Using technology to make work easier can also act as an incentive, ie, mobile health technology strategy.<sup>115</sup>

## Interpersonal relationships

Good working relations are required between physicians and administrations, with the alignment of goals<sup>24,52,116,117</sup> values,<sup>4,30,82,117,118</sup> and beliefs.<sup>119</sup> There needs to be trust<sup>3,10,30,98,119</sup> and respect, whereby opinions, ideas, and beliefs are valued,<sup>4,81,83</sup> taken into account<sup>21</sup> and physicians feel supported.<sup>71,120</sup> There needs to be team leadership,<sup>86</sup> team building<sup>94</sup>, and teamwork.<sup>3,4,27,48,89,121</sup> It is important to identify champions,<sup>21,67,84,89,93,97,103,109,119,122–124</sup> build relationships,<sup>53,125</sup> and develop strategic partnerships,<sup>126</sup> whether intergroup<sup>90</sup> or peer.<sup>125</sup>

## Opportunity

Opportunity appears to be a key antecedent to physician engagement, ensuring there is an opportunity to partake and be involved in decision-making<sup>10,53,59,67,70,71,81,83,84,127</sup> and opportunities to assess and suggest possible improvements,<sup>86</sup> improvement projects<sup>128</sup>, and leadership.<sup>57,83,125,129</sup> Repeated often in the literature are opportunities for education, training, and support.<sup>56,61,67,79,81,97,102,103,107,120,123,124,128,130–135</sup> This includes training on how to use data effectively.<sup>136</sup> In addition to providing opportunity, organizations need to allot protected time<sup>2,101,105,129,137,138</sup> and consideration to the time of day the opportunities are offered<sup>67</sup> were also

deemed important as was opportunities to participate in vocational training of junior doctors<sup>27</sup> and involvement in the goals of interprofessional education<sup>139</sup> and determining the status of physicians within the system.<sup>30</sup>

Findings in this review appear to align with work by the Institute for Healthcare Improvement (IHI). The IHI developed a framework to engage physicians in a shared quality agenda. This framework consisted of six elements: (1) discovering common purpose – link hospital quality agenda to physician quality agenda; (2) reframing values and beliefs – make the system a responsibility; (3) segment engagement plan – identify roles and plan to prepare physicians for that role; (4) use “engaging” improvement methods – identified by physicians themselves; (5) provide courage – provide backup and follow through; and (6) adopt an engaging style.<sup>140</sup> This framework was based on work from Virginia Mason Medical Center, McLeod Regional Medical Center, Hackensack University Medical Center, Immanuel St. Joseph’s – Mayo Health System, and Tallahassee Memorial Hospital, in addition to several other multispecialty group practices, independent medical staffs, and the British National Health Service.<sup>140</sup>

## Consequences

Considering the lack of empirical research in this area and the wide range of the use of the term, it is not surprising that the actual outcomes described in the literature are sparse with little detail. Outcomes of physician engagement tend to fall under one of the six broad categories. First, the improvement of data quality.<sup>136</sup> Second health system efficiency<sup>21,63,141</sup> that leads to cost reduction,<sup>1,3,57,78,82,91,106,109,129,135,141,142</sup> and improved service provision.<sup>28</sup> Third is innovation<sup>23</sup> and fourth is job satisfaction. There is a debate in the literature regarding whether job satisfaction increases the likelihood of physician engagement<sup>3,97,143</sup> or whether physician engagement drives job satisfaction.<sup>81,83,115,120</sup> Once again suggesting this construct may not be unidirectional. Fifth is improved patient satisfaction and experience.<sup>91,98</sup> Finally, physician engagement is associated with improved performance, both organizational<sup>1</sup> and system performance,<sup>30,64,117,144</sup> specifically decreased error,<sup>131,145</sup> improved quality,<sup>3,28,49,76,146–148</sup> better care,<sup>52,82,98,149</sup> improved adverse medical reporting,<sup>113</sup> improved access to specialists (ie, decreased wait times),<sup>150</sup> health outcomes,<sup>40,62</sup> clinical and decision outcomes,<sup>55,85,151</sup> use of guidelines,<sup>54,71,134</sup>

screening,<sup>104,152</sup> enrollment of patients,<sup>153</sup> and implementation of protocols.<sup>124</sup>

A proposed definition and model of physician engagement

To date, not a single health system has determined how to define, measure, and improve medical engagement.<sup>31</sup>

The definition of physician engagement is regular participation of physicians in (1) deciding how their work is done, (2) making suggestions for improvement, (3) goal setting, (4) planning, and (5) monitoring of their own performance in activities targeted at the micro (patient), meso (organization), and/or macro (health system) levels.

The proposed physician engagement conceptual model is depicted in Figure 3. This figure suggests that a work environment that includes a culture of accountability, communication, incentives, good interpersonal relationships, and opportunity would enhance “physician engagement” and result in improved outcomes.

Step 8: defining empirical referents

Empirical referents are used to further develop an instrument. It uses evidence to help determine how a concept potentially could be measured.<sup>14</sup> In other words, categories that by their presence, demonstrate the occurrence of the concept of physician engagement.

Alexander developed a measure of physician engagement, specifically to address racial and ethnic health care disparities based on the Awareness, Reflection, Empowerment and Action model.<sup>42</sup> In other words, physicians being (1) aware of an issue; (2) reflecting on one’s role in solving it; (3) empowerment, recognizing that one has the power to make change; and lastly (4) action taken to solve the problem.

Spurgeon created the Medical Engagement Survey, which is broken down into (1) a collaborative workplace

culture with learning opportunity and excellent interpersonal relationships; (2) clear direction and purpose, alignment of appraisal and rewards, participation in decision-making; and (3) empowerment and feeling valued, growth opportunity and job satisfaction.<sup>20</sup> This example once again highlights the intertwining of the term engagement with other well-established distinct, constructs such as empowerment and satisfaction, perhaps contributing to the ambiguity of the term.

Based on what has been revealed by this review, the following could be used to develop an instrument. First, two things need to be established:

- 1. What activity/task is being measured?
- 2. What is considered “regular” for this specific activity/task, as this may vary depending on the activity/task.

Then, for the specific activity/task, determine if the physician is involved in the following:

- (i) deciding how their work is done
- (ii) making suggestions for improvement
- (iii) goal setting
- (iv) planning
- (v) monitoring of their performance

Implications

This paper helps to shed light upon the diverse use of the term “physician engagement,” while delineating the concept from other well-established constructs. One cannot assume that discussions about physician engagement are premised upon a consistent and well-understood definition. With this lack of clarity about the term, it is not surprising that the IHI identified few health care institutions have

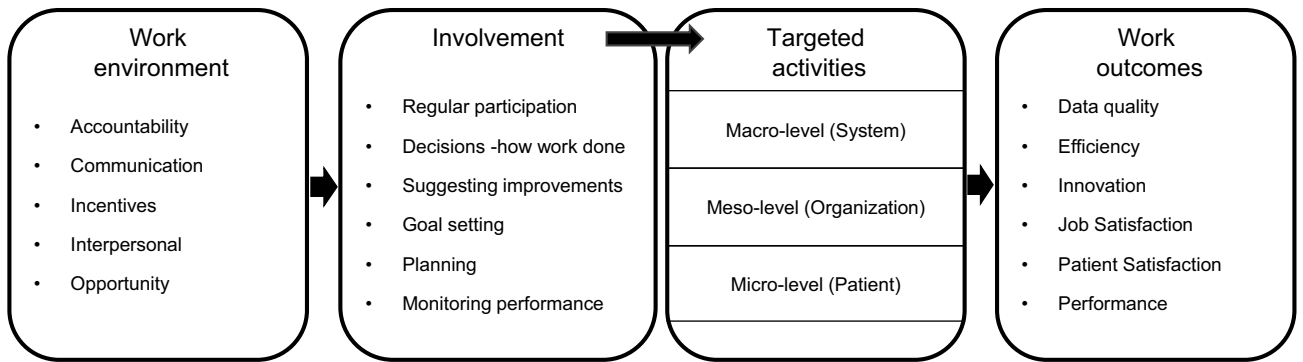


Figure 3 “Physician engagement” conceptual model.

improved physician engagement.<sup>140</sup> Based on recent discussions with health care administrators and physician leaders across Canada,<sup>6</sup> and the literature reviewed to date, clearly defining physician engagement, measuring it, and identifying areas for improvement continue to be a struggle for many health care organizations.

The first step is more of an educational initiative; however, it is a critical one. In short, everyone needs to have a similar baseline understanding to ensure that “physician engagement” as a concept has the same meaning for all. Secondly, a standardized tool needs to be developed to quantify the concept. Key indicators of physician engagement, although preliminary, are identified in this paper. Researchers and administrators and physician leadership can use this as a starting point to collect baseline data on the level of physician engagement.

As more rigorous empirical research is conducted, the most cost-effective strategies to enhance physician engagement can be identified and shared amongst sites. This would also allow for the linking of physician engagement to specific work outcomes.

Linking physician engagement to work performance measures will help to better comprehend how organizations may enhance engagement and is critical for hospital administrators and physician leadership in developing and utilizing the suitable skills to improve engagement levels.<sup>34</sup> This paper is intended to initiate a broader dialogue within hospitals and beyond. To improve health care overall, it is critical to have physician engagement at all three levels: the patient, organization, and system.

## Limitations

This is neither a meta-analysis nor systematic review, hence study quality is not evaluated.

## Conclusion

Evaluation and synthesis of the literature on physician engagement has led to a clear definition and model of physician engagement, which can be used to develop an instrument to quantify this concept and accurately assess and compare the level of physician engagement across sites and health systems. This concept analysis is the first step in further advancing science in this area. Improving our comprehension of key antecedents of engagement may help health care administrators determine where best to focus resources.

## Disclosure

The authors report no conflicts of interest in this work.

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