Title: Competing Values Framework: a useful tool to define the Predominant Culture in a Maternity Setting in Australia

Abstract

Objective: To identify the predominant culture of an organisation which could then assess readiness for change.

Design: An exploratory design using the Competing Values Framework (CVF) as a self-administered survey tool.

Setting: The Maternity Unit in one Australian metropolitan tertiary referral hospital.

Subjects: All 120 clinicians (100 midwives and 20 obstetricians) employed in the maternity service were invited to participate; 26% responded.

Main Outcome Measure: The identification of the predominant culture of an organisation to assess readiness for change prior to the implementation of a new policy.

Results: The predominant culture of this maternity unit, as described by those who responded to the survey, was one of hierarchy with a focus on rules and regulations and less focus on innovation, flexibility and teamwork. These results suggest that this unit did not have readiness to change.

Conclusion: There is value in undertaking preparatory work to gain a better understanding of the characteristics of an organisation prior to designing and implementing change. This understanding can influence additional preliminary work that may be required to increase
the readiness for change and therefore increase the opportunity for successful change. The CVF is a useful tool to identify the predominant culture and characteristics of an organisation that could influence the success of change.

**Key words:** organisation, culture assessment, change readiness, competing values

### Background and Context for the study

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This paper describes the process that one maternity service undertook to gain a better understanding of the predominant culture and characteristics of the organisation prior to the implementation of a mandatory government policy.
The effectiveness of implementing innovations in healthcare was the focus of an important systematic review in 2004. The review confirmed that prior to implementation of innovations in health care settings there was often little consideration of the characteristics of the organisation that may determine their readiness to change. Failure to recognise or understand the organisational characteristics has been described as the root cause of the mediocre success of programs designed for quality improvement in diverse disciplines.

The literature warns of the consequences of not assessing the powerful influence of organisational cultural on efforts to bring about change. The focus of change processes is often on the practical and material change requirements. The less visible and tacit characteristics of the people who will be involved in the change are often overlooked. These characteristics include participants’ self-efficacy, the congruence between values and attitudes of the individual and the organisation, the personal and organisational valence, the leadership style and support and the perception of the value of the proposed change.

The impetus for assessing the readiness for change in one maternity service was the mandatory implementation of a government policy that would require significant adjustments in order to meet the key deliverables? In this paper we will use this policy as an example to demonstrate why examination of the organisation may be beneficial as preparatory work.
In 2010, the government of New South Wales (NSW), Australian, issued a public health policy, “Maternity – Towards Normal Birth”\(^{19}\). The policy required all NSW public maternity services to implement strategies to reduce a range of potentially unnecessary interventions in birth. Target measures were to be achieved over a five-year period, with each health service accountable for outcomes. For a majority of the services this was the first time such targets had been set and it was recognised that this would require a significant reorganisation of systems to achieve improvements. For example, the target for women having a vaginal birth after a previous caesarean section (CS) operation was set at greater than 60% and in 2010 the State average was 12% (range 2.9 – 26%)\(^{20}\). At the research site the success rate of vaginal birth after CS in 2010 was 12%. Therefore, a five-fold improvement in current practices would need to occur to achieve the target outcomes.

In addition, outcome data in Australia demonstrates variations in intervention rates in childbirth that cannot be explained by either the demographics or clinical history of the women\(^{21,22}\). This literature suggests that the context and cultural characteristics of organisations may influence intervention in birth, rather than the clinical variables of the woman or her baby. Possible explanations for variations that have been cited in the literature are the effectiveness of collaboration between care providers and aspects of team work\(^{23-30}\). The evidence suggests there is a direct link between teamwork and patient outcomes including mortality rates\(^{31}\). Where there is effective interprofessional collaboration, based on
mutual trust and respect with shared decision making and engagement at all levels, the
definition is improved quality and safety of care is improved. In accepting this to be the case, gaining a better understanding of the characteristics of the organisation and using this information to facilitate the development of strategies for change may have a positive impact on the success rate overall and including the mandated government policy. The policy requires a reduction in the overall intervention rates which could be achieved through work focused on workplace culture, rather than exclusively on the development of practices and procedures.

**Study Location**

The research site for this study was an Australian, tertiary level, maternity service in a major city. The service cares for around 2,500 women and babies per year; employs 120 obstetric and midwifery clinicians and is a major teaching hospital, affiliated with two universities.

**Study Design and Methods**

An exploratory design using a self-administered, staff survey was used. Ethical approval for the study was provided by the New South Wales Health Human Research Ethics Committee (0911-313M), as part of a larger study investigating a change management process in the maternity service.

**Competing Values Framework (CVF)**
The tool selected to assess the culture of the organisation and its readiness for change was the CVF. This is a validated instrument that has been described in the literature in over 1000 studies, across disciplines, to describe the typology of organisational culture. The results of a systematic review of the instruments available for cultural assessment specifically suitable for healthcare services was used to select the most appropriate instrument for use in this study; the Competing Values Framework. This instrument had the strength of examining the values and beliefs of the participants that informed their opinions about their working environment. CVF was also cited as the most frequently used to measure organisational culture in health services research.

**Description of the CVF**

The CVF was developed empirically in the early 1980s based on Jung’s model of psychological archetypes and research on indicators for organisational effectiveness. The framework has a typological design that identifies four types of cultures that exist within an organisation: Clan, Adhocracy, Hierarchy and Market with each describing the values, basic assumptions and attributes that are recognised within a team or organisation. Each of the culture types are described as follows by Cameron *et al* (Table 1) with the competing values in opposite quadrants of the table and hence the origin of the name of the framework.
The predominant culture is determined by the participants' rating of six specific dimensions of the organisation: the dominant characteristics, organisational leadership, management of employees, organisational glue, strategic emphasis and the criteria of success. There are four descriptors for each of the six dimensions and the participant provides a score in rank order of preference. The options are listed as A, B, C and D and the responses provide an indication of the culture type: A=Clan, B=Adhocracy, C=Market and D=Hierarchy for each dimension as described in Table 2 for the dimension of “Dominant Organisational Characteristics.”
Although not explicitly described in words, the responses to the dimensions assess characteristics of the organisation that include congruence of values between the individual and the organisation, the perception of individual value of participants' in the organisation and their self-efficacy (or how effective the individual believes they can be).

The participant is invited to divide 100 points between each option in rank order providing the highest score to the descriptor that best fits their impression of the organisation as it is today. After completing the scores relevant to “now”, the participant is invited to score how they would “prefer” the organisation to be in five years if there was to be successful change.

A summative calculation of the scores is performed using the Organisational Cultural Assessment Instrument (OCAI) \(^{18}\). The results are then graphically represented in a table divided into four quadrants, one for each culture type. The final graph provides a visual representation of the results which is intuitively appealing and has greater explanatory value than written descriptors. The predominant culture can be identified at a glance. Specific

<table>
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<th>Description</th>
<th>Score (10)</th>
<th>Score (40)</th>
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<tr>
<td>A.</td>
<td>The Maternity Service is a very personal place. It is like an extended family. People seem to share a lot of themselves</td>
<td>10</td>
<td>40</td>
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<tr>
<td>B.</td>
<td>The Maternity Service is a very dynamic and entrepreneurial place. People are willing to stick their necks out and take risks</td>
<td>20</td>
<td>30</td>
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<tr>
<td>C.</td>
<td>The Maternity Service is very results-orientated. A major concern is with getting the job done. People are very competitive and achievement-orientated.</td>
<td>40</td>
<td>20</td>
</tr>
<tr>
<td>D.</td>
<td>The Maternity Service is very a controlled and structured place. Formal procedures generally govern what people do.</td>
<td>30</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>100</td>
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attention should be given to where the difference between the scores for now and the preferred is greater than ten points $^{18}$. The design of the tool facilitates an overall assessment of the predominant culture, as well as assessment of the individual dimensions. This information is valuable if the organisation wishes to scrutinise potential areas for change that will result in an overall cultural shift. Identification of the current culture type and the preferred type is also essential for change management. Where there is significant divergence in the desired predominant culture types there can be variation in perceptions in espoused values, aspirations and direction $^{18}$. The energy, motivation and engagement by members of the organisation can be affected by this incongruence and risks the organisation’s ability to achieve the desired change $^{18}$. The degree of incongruence provides an indication of the readiness of the organisation to undergo change. In addition, there is an indication of which dimensions of the organisation may require the most attention for the change to be implemented successfully.

**Administration of the CVF Tool**

The tool was tested at a local university prior to implementation at the study site and minor amendments made. The university students and academic staff recommended that the scores should be out of 10 rather than 100 for greater ease of division for nominating a score. Communication with the authors of the Competing Values Framework provided reassurance that changing the scoring in the proposed manner may alter the variance in
scores but would not make a difference to the reliability of the sum scores. The authors were supportive of customising the format for the users’ preference.

For the purpose of the research some of the language in the descriptors was changed to better fit the context of a maternity service. For example, “the organisation” was changed to “the Maternity Service”. The amendments were not considered to change the meaning of the questions but rather described in language that would have greater face validity for the participants.

Clinicians were informed of the proposed survey at strategic opportunities such as education sessions and scheduled multidisciplinary forums. As all clinicians (100 midwives and 20 obstetricians) were to be invited to complete the tool, one hundred and twenty CVF tools were printed on distinguishable purple paper. The majority of clinicians received this in person from the researcher. Some forms were provided to the midwifery managers in each of the clinical areas to reach clinicians working on evening shifts and weekends. Survey boxes were placed in all clinical areas and clinicians were invited to post the completed form which was conducted over a four-week period.

The front page of the tool described the purpose of the survey and instructions for completion. In addition to the survey, demographic information about the participant was collected that indicated the discipline (midwifery or obstetric), age, predominant area of
practice (antenatal, birth, postnatal) and length of time employed in the service. The survey was anonymous.

Results

Of the 120 surveys distributed 31 were returned (25.8%). Four of the 20 Obstetricians (20%) responded and 27 of the midwives (27%). The largest group of participants were clinical midwives (71%). The majority of the participants had been working within the organisation for 1-5 years (42%) and were aged between 40-50 years (Table 4).

Table 3 Demographic Characteristics of Participants

The survey respondents described the predominant culture of their organisation as one of Hierarchy with a focus on Market (Figure 1). They identified that the prevalence of teamwork and collaboration was low and of even less prevalence was a culture that encouraged innovation and flexibility. Respondents expressed their preference for a culture that was different to the current one, with a preference for a Clan culture and an increase in Adhocracy with less control, regulation and less focus on outputs.
Combining the two results onto the same plot provides a clear indication of the incongruence between the participant’s assessment of the culture now and what would be preferred.

The results of the six dimensions are expressed in Figure 2 as a combined result of the “now” and “preferred” cultures. Each demonstrates incongruence between the predominant cultures “now” to what is preferred. In each dimension there is a preference for an increase in both Clan and Adhocracy cultures with a decrease in both Hierarchy and Market. For a majority of the dimensions there is a difference of greater than ten points.
Figure 2 CVF Results for six Dimensions, Now and Preferred

Discussion

The response rate to the survey was 26% and the results must be considered in this context.

The predominant culture, as expressed by the results, is the impression of the small percentage of respondents which may limit the inferences that can be drawn. Coincidently,
in the same year another survey was generated by the state government also exploring workplace characteristics and attributes. The research site had a response rate of 18% with a confidence interval of 3% which the authors describe as being a representative sample of the facility population. The low response rates may, however, suggest more about the organisation by the silence and non-engagement in the process and is in itself noteworthy.

The majority of respondents were those aged 40-50 years (42%) and those who had worked for the organisation for 1-5 years (45%). Midwives were more likely to respond with 27% of the potential cohort returning a survey as opposed to 20% of the obstetricians.

The results demonstrated that the majority of the respondents perceived the predominant culture of the organisation to be a hierarchical type with a focus on rules, regulations and control. The Adhocracy culture scored the lowest value of all four culture types. There are opposing values between the two cultures of Hierarchy and Adhocracy which would result in less opportunity for innovation, flexibility or implementation of new ideas in the organisation.

Considering the requirement for this organisation to implement significant changes to meet the mandated policy it is important to recognise that the respondents do not perceive there to be an environment that is ready to accept innovation.

Market culture scored the second highest and Clan third. The suggestion here is that the maternity service has a focus on meeting performance indicators and target measures, with less focus on collaborative engagements with members of the team who are participating in
the performance. The overall result indicates that at present the characteristics of this
maternity unit are not consistent with that of a high performing organisation\(^\text{39}\). That is, an
organisation that requires interprofessional collaboration and team work in order to meet
performance indicators. As mentioned previously, the inferences that could be drawn from a
low response rate is limited, however, those who did respond have stated that there is lack
of team work and engagement and if this is prevalent across the service then this may
indicate a lack of motivation to be involved in activities including this survey.

The results of the hypothetical scoring for the future culture indicated that respondents would
prefer an organisation with characteristics that were opposite to that of today. The graph
depicts almost a mirror image of the results in the opposite quadrants. Respondents would
prefer the organisation to have a collaborative, cohesive team where innovation is
encouraged in an environment of flexibility and risk taking. There are greater than ten points
difference in each of the quadrant scores between the now and preferred cultures, which
according to this framework design, warrants attention. The results demonstrate that there is
a need for cultural change within the maternity service if the planned implementation of the
government policy is to be successful and sustained.

The results also show greater than 10 points difference for each of the six dimensions with a
predominance of cultures in the lower quadrants and a preference for the opposite cultures
in the future. In each of the dimensions respondents had a desire for the Clan culture which
may indicate the perception of their value to, and within, the organisation. Some of the
descriptors for this culture are feelings of teamwork and trust, an orientation towards
collaboration and cohesion; a sense of commitment and loyalty where work is done together.
If this is the workplace respondents would prefer, then by deduction, this is not how the
current environment is viewed.
The second preferred culture was Adhocracy with a dynamic and creative workplace where
individuality and flexibility is encouraged and a preference to be leaders in innovation. These
characteristics were not recognised in their workplace today. The majority of the dimensions
have greater than ten points difference between respondents’ assessments of the current
culture and their preferred culture.
The overall results of this study indicate a lack of readiness to change but a strong
preference from respondents for the culture to be different. Acknowledging this
incongruence and harnessing the desire to be different may influence a change in the
culture to one where change is valued. According to Jones et al. in a workplace that is
perceived to have strong human relations values (Clan) or open systems values that
encourage flexibility (Adhocracy), there are more positive views towards change and a
greater willingness to be engaged in change processes. These authors (2005) further
describe such an organisation having “reshaping capabilities” that are dynamic and
responsive to external need or internal desire. Reshaping capabilities include attributes such
as individual responsiveness, engagement, a commitment to personal and professional development and a willingness to perform. These attributes can positively affect workers’ overall competence and thereby increase efficacy in change processes. There is therefore a direct correlation between the reshaping capabilities and the rate of successful change. When reshaping capabilities are low and change is required, such as in the case of the implementation of government policy, organisational tension can develop which can jeopardise the change process. Respondents in this study suggest they do not have a strong sense of trust, cohesion or collaboration in their team. In addition the findings show that respondents believe that there is an under appreciation of their individuality and potential for creative participation in an environment focused on performance. Tension may result from such unmet needs and the inability to meet personal potential can lead to disengagement and reduced efficacy. Tensions have also been historically evident in maternity care between obstetricians and midwives where professional boundaries have become territorial and fiercely contested. In Foucauldian terms, the scientific knowledge of childbirth was traditionally held by obstetricians and hence professional power was held by them to the exclusion of other disciplines and in particular midwifery. Reforms in maternity care in recent times, however, have resulted in changes in the roles and responsibilities for maternity carers. These changes have been most evident with the development of midwifery-led models of care with
midwives regaining the responsibility for women of normal risk and collaborating with obstetricians where risk is identified. Despite sound evidence for the effectiveness of midwifery-led models of care, the translation into practice and the transition to collaborative models of care continues to be challenged by the inability, or reluctance, to relinquish, or modify, former roles and responsibilities.

Appreciating the existence of historical tensions between healthcare teams and the difficulties with translation of evidence into practice, gaining an understanding the predominant culture of an organisation and its readiness for change is critical. Such knowledge will enable decision makers to design appropriate strategies so that change can be effectively implemented. For this midwifery service the follow up plan is for an action research project where the clinicians will be invited to contribute to the development of strategies to implement the government policy. Respondents have nominated that they would prefer to be included in teamwork, they would prefer to have the opportunity to be creative and to develop new ideas and that they would like some direction but not to be overly controlled. The cyclical nature of action research methodology may be the key to the successful implementation of this government policy.

It is not possible to determine whether behaviours or organisational characteristics require change if there has been no measurement of the current situation. The CVF provides a way of measuring a baseline; the information can then be used to design interventions to
influence the desired changes. The CVF tool would then be used to reassess the predominant and preferred culture over time. It is not possible to report on changing culture in the research site here as the processes leading towards changing the culture are continuing. What this paper offers is a way forward for maternity clinicians facing one of the most common challenges in practice.

**Conclusion**

In healthcare systems where interprofessional collaboration is not evident and where tensions continue between professional boundaries of responsibility there is a threat to the delivery of safe and effective care. In order to change what may be an historical legacy of hierarchical structures there first needs to be recognition of the situation; an intention to change the status quo and then purposeful strategies to support change towards interprofessional collaboration.

The CVF is a valuable tool to assess the predominant culture of an organisation as part of preparatory work prior to the implementation of change to increase the opportunity for success.

**Limitations**

The response rate to this process was lower than anticipated and the results may not be an indication of the overall assessment of the predominant culture.

**Acknowledgements**
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References


