

# Measuring Staff Nurse Decisional Involvement

## *The Decisional Involvement Scale*

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Key organizations and new legislation are promoting staff nurse involvement in decisions about nursing practice and patient care as a long-term strategy to improve the culture of the work environment. The authors discuss the Decisional Involvement Scale (DIS), a multipurpose measure that can be used as a diagnostic tool, an organizational development strategy, and an evaluative instrument. In addition, support to substantiate the DIS as a valid and reliable measure is summarized.

Once again, the cyclic problem of nurse recruitment and retention in hospitals is spawning national concern. As in the past, many organizations are turning to short-term strategies such as sign-on bonuses to attenuate the growing crisis. However, several key organizations<sup>1-3</sup> are encouraging long-term improvements in the culture of the nursing practice environment. Many are implementing features that have made magnet hospitals successful<sup>4,6</sup> in order to influence recruitment and retention, and safety and quality patient care. Such strategies are aimed at “reinventing”<sup>7</sup> the nurse practice environment and how care is delivered to patients. These long-term approaches also address the key recommendations from the Institute of Medicine’s *Crossing the Quality Chasm*,<sup>8</sup> to design

new delivery systems based on professional standards and evidence-based practice.

The association between nurses having a strong voice in governing work and patient care environments and nurse workforce issues has also been recognized by the federal government through passage of the *Nurse Reinvestment Act* (NRA) (NRA, PL 107-205, 2002). This act is a means to address multiple problems contributing to the nursing shortage, including dissatisfaction with the nursing practice environment. Beginning in 2003, this law calls for the appropriation of funds to promote nurse recruitment and retention, proposing incentives for hospitals to “improve the retention of nurses and enhance patient care...by [among other strategies] promoting nurse involvement in the organizational and clinical decision making processes of the healthcare facility” (PL 107-205).

It is clear that momentum for change is building, causing nurses and hospitals to focus on building nursing practice environments that provide staff nurses a strong voice in matters of nursing practice and patient care. To enhance nurse decisional involvement, measures are needed to identify opportunities for change and to monitor attainment of targeted goals. We propose the Decisional Involvement Scale (DIS)<sup>9,11</sup> as an easy to use tool to meet this need.

This article describes the DIS, a multipurpose measure of the distribution of responsibility for decisional involvement among staff nurses and management/administration. In addition, we summarize findings from ongoing psychometric assessments of the DIS to substantiate the use of this measure as a valid and reliable tool to diagnose desired changes and to evaluate progress toward the integration of staff nurses into organizational and clinical decision-making processes in hospitals.

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## ***Decisional Involvement in Nursing Practice***

Research shows that the way that nurses are organized affects the quality of the working environment and nurse, patient, and organizational outcomes—in particular, nurse satisfaction and retention. For instance, organizational attributes that are features of professional nursing practice models such as participative management and decentralized administration have been associated with greater nurse satisfaction.<sup>12-16</sup> Work environments characterized by these features have also been associated with greater RN intent to stay.<sup>16-19</sup> These features have also been associated with lower levels of job strain and burnout.<sup>12-15,17,20</sup> Finally, enhanced decisional involvement is associated with fewer psychosomatic and physical complaints, and documented physical disorders.<sup>20,22,23</sup> This body of research presents compelling evidence that organizational forms that enhance staff RN involvement in decisions about patient care and in nursing practice have the potential to promote recruitment and retention.

Staff nurse decisional involvement has also been associated with positive patient outcomes, including higher nurse-perceived quality of patient care<sup>4,12,16,23,24</sup>; lower patient mortality and fewer complications<sup>25,26</sup>; shorter mean length of stay<sup>27</sup>; less use of ICU days<sup>27</sup>; and fewer patient and family complaints.<sup>4</sup> Finally, Cronenwett and colleagues found that actual DIS scores at the unit level were significantly and highly correlated with staff RN perceptions of the quality of care delivered on a nursing unit.<sup>28</sup>

While there are other measures designed to gauge related concepts such as shared governance, nurse autonomy, and nurse control over practice, the DIS is unique because it serves multiple purposes. The DIS identifies the types of decisions made by nurses at the unit level, the extent of involvement in such decisions, and the dissonance between what nurses wish to decide and what they are actually deciding. The DIS was developed to assess the degree of staff nurse actual and desired decisional involvement, and it may be used as both an organizational development tool and an evaluative measure.

### ***The Decisional Involvement Scale***

Decisional involvement is defined as the pattern of distribution of authority for decisions and activities that govern nursing practice policy and the practice environment. Decisional involvement is operationalized through the Decisional Involvement Scale (DIS)

(formally the Distribution of Authority Scale).<sup>9</sup> The DIS, consisting of 21 items, measures actual and/or preferred decisional involvement for staff RNs and managers on a nursing unit. Sample items include determining the unit schedule, selecting unit leadership, and selecting staff for hire. The DIS uses a five-point scale to indicate the degree to which decisions are the responsibility of staff nurses and administration/management on the nursing unit. Exploratory and confirmatory factor analyses (contact corresponding author for information) showed that the DIS measures nurse involvement in decisions and activities related to six constructs: unit staffing, quality of professional practice, professional recruitment, unit governance and leadership, quality of support staff practice, and collaboration/liaison activities. The DIS is presented in Figure 1.

Two forms of the DIS are available. One form assesses perceived *actual* levels of decisional involvement, asking respondents to indicate the group that they perceive actually has primary authority for the activity or decision on their nursing unit. This form can be used as a pre-measurement and post-measurement tool while organizational change is implemented. The second form asks respondents to report *preferred* levels of decisional involvement, which is beneficial as an early assessment when a group is developing shared leadership initiatives. For measurement of preferred decisional involvement, respondents indicate the group that they would prefer had the primary responsibility for the activity or decision. The same five response categories are used to assess both actual and preferred levels of decisional involvement.

A unique feature of the DIS is the ability to gauge the potential for decisional dissonance (Havens and Vasey, forthcoming paper; contact corresponding author for information), defined as a gap between actual and preferred degree of decisional involvement. Decisional dissonance may be a key unexplored variable when considering satisfaction and work environment initiatives; for instance, some staff may be asked to be more involved in decisions than they wish (decisional saturation), while others may not be as involved as they desire (decisional deprivation).<sup>29</sup> See Figure 1 to view actual and preferred DIS items.

Finally, managers and administrators may complete the DIS to assess the degree of concordance between staff and management perceptions and preferences regarding unit decisional activities. Using the DIS in this manner may identify strategic opportunities for organizational development.

In summary, the DIS is a multi-use tool that can be beneficial to those planning change in the orga-

For the following questions, please circle one number in Section A and one in Section B. In Section A, circle the number that best reflects the group that usually has the authority to make decisions or carry out the activity described. In Section B, circle the number that best reflects the group that you believe should have the authority to make decisions or carry out the activity described. Use the following scale to respond to questions:

- 5 = Staff nurses only
- 4 = Primarily staff nurses - some administration/management
- 3 = Equally shared by administration/management and staff nurses
- 2 = Primarily administration/management - some staff nurse input
- 1 = Administration/management only

	A Group that makes decisions					B Group that you believe should make decisions				
	1	2	3	4	5	1	2	3	4	5
1. Scheduling	1	2	3	4	5	1	2	3	4	5
2. Unit coverage	1	2	3	4	5	1	2	3	4	5
3. Development of practice standards	1	2	3	4	5	1	2	3	4	5
4. Definition of scope of practice	1	2	3	4	5	1	2	3	4	5
5. Monitoring of RN practice standards	1	2	3	4	5	1	2	3	4	5
6. Evaluation of staff nurse practice	1	2	3	4	5	1	2	3	4	5
7. Recruitment of RNs to practice on the unit	1	2	3	4	5	1	2	3	4	5
8. Interview of RNs for hire on the unit	1	2	3	4	5	1	2	3	4	5
9. Selection of RNs for hire on the unit	1	2	3	4	5	1	2	3	4	5
10. Recommendation of disciplinary action for RNs	1	2	3	4	5	1	2	3	4	5
11. Selection of unit leader (e.g., head nurse)	1	2	3	4	5	1	2	3	4	5
12. Review of unit leader's performance	1	2	3	4	5	1	2	3	4	5
13. Recommendation for promotion of staff RNs	1	2	3	4	5	1	2	3	4	5
14. Determination of unit budgetary needs	1	2	3	4	5	1	2	3	4	5
15. Determination of equipment/supply needs	1	2	3	4	5	1	2	3	4	5
16. Development of standards for RN support staff	1	2	3	4	5	1	2	3	4	5
17. Specification of number/type of support staff	1	2	3	4	5	1	2	3	4	5
18. Monitoring of standards for RN support staff	1	2	3	4	5	1	2	3	4	5
19. Liaison with other departments re: patient care	1	2	3	4	5	1	2	3	4	5
20. Relations with physicians re: patient care	1	2	3	4	5	1	2	3	4	5
21. Conflict resolution among RN staff on unit	1	2	3	4	5	1	2	3	4	5

Figure 1. Decisional Involvement Scale.

nization of nursing in hospitals in several ways: (1) to measure perceived actual levels of involvement, (2) to assess preferred levels of involvement, (3) to measure decisional dissonance (the difference between perceptions of actual and preferred), (4) to identify concordance between staff and management perceptions regarding actual and preferred levels of involvement, (5) to target areas for change, and (6) to monitor the impact of strategies implemented to enhance staff nurse decisional involvement.

### Scoring

For each of the 21 items, respondents indicate which nursing group (staff nurses or administration/management) that they perceive has the primary responsibility for the decision or activity (actual decisional involvement) or that they would prefer have the responsibility for the decision or activity (preferred decisional involvement) on the unit on which they work. Response choices are as follows: administration/management only = 1, primarily administration/management with some staff nurse input = 2, equally shared by administration/management and staff nurses = 3, primarily staff nurses with some administration/management input = 4, and staff nurses only = 5. Items can be considered individually, by the six subscales, or by total DIS scale. A high score suggests a high degree of staff RN involvement, a low score suggests a low degree of staff RN involvement, and a midrange score suggests a state of sharing of decision-making between administration/management and staff RNs. When both the actual and preferred forms are used, determining the absolute difference between actual and preferred scores identifies the degree of discordance between actual and preferred levels of decisional involvement: decisional dissonance.

### *Validity and Reliability of the Decisional Involvement Scale*

Validity and reliability are essential characteristics of any measure. In this section, we summarize the evidence from the ongoing psychometric assessment of the DIS that substantiates its use as a valid and reliable tool.

#### Validity

Validity refers to the “determination of whether or not a device or method ...measures what it purports to measure.”<sup>30</sup> One check on validity is the method used to develop a measure (content validity). Development of the DIS was guided by a theoretical

framework that was grounded in the literature on professional nursing practice and the sociology of the professions. This body of literature proposes models of collaborative relationships between administrators and professionals and emphasizes managing *with* professionals versus managing *of* professionals.<sup>31-34</sup> Secondly, three nurse content specialists in the field of nurse decisional involvement each independently assessed content validity as high (each produced a content validity index of 1.0),<sup>9</sup> which is highly suggestive that the items measure staff nurse decisional involvement.<sup>30</sup> Finally, the DIS was administered to contrasted groups of staff nurses, “known” through means other than this measure to be low and high on decisional involvement. The findings revealed that the DIS discriminated as hypothesized. Nurses on a professional practice unit with a mature shared governance model where nurses were known to be highly involved in decisions about unit governance scored significantly higher for all DIS items than nurses from two comparison units that did not have professional practice models in place.<sup>35</sup>

#### Reliability

Reliability is the second important measure of the quality of a measure. While reliability can be evaluated in a number of ways, the psychometric analyses carried out on the DIS rely on measures of internal consistency. Internal consistency is concerned with the degree to which items that measure the same concept “hang together.” A high degree of internal consistency implies that a scale is highly reliable, with all of the items strongly related to the scale concept, and little measurement error.

Reliability of the DIS has been assessed through determination of Cronbach’s alpha following numerous administrations to staff RNs and nurse managers.<sup>11</sup> Consistently, the instrument has demonstrated total scale alphas ranging from .91 to .95, which indicates a highly reliable measure. Subscale alphas have consistently ranged from .68 (the one subscale related to collaboration/communication) to .85 (the remaining five subscales).

### *Discussion*

As in past nursing shortages, many are encouraging implementation of increased nurse decisional involvement into the organization of nursing to enhance the culture of the nurse practice environment, satisfaction with work, and the quality of patient care, to ameliorate the crisis. Citing nursing’s constant surveillance of patients and the need for ef-



ficient operations of healthcare organizations, for decades nursing and organizational experts have advocated that professional nurses be more involved in decisions that have an impact on patient care, working conditions, and organizational policy. Increasing nurse decisional involvement also responds to the recommendations made 20 years ago by three “blue ribbon” panels to address the same work environment issues confronted by practicing nurses today. The recommendations from these three classic studies encourage increasing nursing involvement in decision-making to strengthen patient, professional, and organizational well-being.<sup>36-38</sup> Similarly, the literature presents compelling evidence that organizing nursing practice to increase staff nurse involvement in decisions about the content and content of practice—a mutable feature of the practice environment—produces positive outcomes for both patients and staff.<sup>4,5,12,25</sup>

The DIS is a multi-use instrument that has potential to be used as a diagnostic tool and an evaluative measure during organizational development. In addition, we have presented findings from our ongoing psychometric assessment of the DIS to substantiate the DIS as a reliable and valid measure. We invite readers to make use of this tool. For those who do use the DIS, we ask that you assist us in the ongoing psychometric assessment and improvement of the instrument. We ask that you please notify the corresponding author about how the instrument is being used and that you share observations and suggestions about its use.

For several decades, we have known that staff nurse decisional involvement may be a long-term strategy to address cyclical nurse workforce shortages and improve the quality of patient care. The DIS is proposed as an organizational development tool to help attain this goal.

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