Since the re-organization of UK health services into semi-autonomous Trusts in 1991 nurse executive directors (NEDs) have become ubiquitous members of the leadership of healthcare organizations providing professional leadership to nursing and contributing more broadly to the senior leadership of all services.

If the NED contribution to Trust governance and leadership is to have meaning then NEDs need to fulfil these or other objectives effectively. In addition, a continual supply of potential NEDs must be maintained to meet newly created roles and replace those that leave.

This paper describes a systematic review of the literature relating to the characteristics of effective NEDs and seeks to address two questions:

- What are the personal characteristics of effective NEDs?
- How can NED effectiveness be measured?

Research into NED effectiveness is limited especially outside the USA. However, a number of attributes have been associated with effectiveness and in one or more studies.

**Search strategy**

A literature review was conducted to identify studies that described effectiveness of NEDs. Both PubMed and Ovid were searched using a combination of subject terms and key words:
Subject terms: nursing, nursing administration, health, hospital administration, nursing leadership.
Keywords: nursing executive, nursing executive director, NED, nurse administrators

The Proquest and Business Source Premier databases were also searched using the same terms. All the resources of the UK Royal College of Nursing were searched using the same terms.

A Google search using the terms ‘nursing executive effectiveness’, ‘nurse executive effectiveness’, ‘nursing director effectiveness’, etc. did not identify any additional studies.

The following were excluded from the review:

Papers that related to the work of nurses other than NEDs.
Papers that merely described personal experiences in a role.
Papers that were merely offered ‘expert opinion’ or ‘thought leadership’.
Papers that presented new hypotheses but without any empirical data.

More than 500 papers were initially identified using a broad search methodology. Studies conducted outside the UK were examined with care. In the UK, the title ‘director of nursing’ is generally limited to the most senior nurse leader in organizations. However, this is not necessarily the case in the USA (where most of the relevant studies were conducted). Differences in terminology have been noted before: in a recent report, for example, Gleason-Scott et al. (1999) noted that the term ‘nurse director’ was used generically for institution’s chief nurse and mid-management nurses. Where it was clear that reports related to a study solely of mid-management nurses, rather than chief nurses, then these were excluded from the review.

Effectiveness was not defined before the literature search was begun to make sure that papers were not excluded due to the measures and definitions used by any author. A tacit assumption was that the term effectiveness implied that some measurable impact might be associated with the role of director of nursing.

In total 24 studies were identified that investigated aspects of effectiveness of nursing executives.

European papers

Very few studies have been published that examine the work of NEDs in the UK or Europe.

Shortly after the NED role became commonplace, Hennessy, Rowland and Buckton (1993) reported a summary of their experiences in south-west England. They mapped development needs of NEDs but did not measure effectiveness.

In the period since 1993 other studies have been reported. However, these papers are mostly anecdotal. Willcocks (1998) reported his investigation into management effectiveness in one hospital. However, he did not reference the source research or publish any data. His study was not confined to nurses and drew no conclusions that might be considered to shed light on the NED role.

Antrobus and Kitson (2000) interviewed a sample of 24 nurse leaders ‘recognized for their effectiveness in leading nurses’ by a group of peers. They took an ethnographic approach using critical theory to identify emergent themes. They concluded that nurse leaders require a skills repertoire that includes a number of role types:

- powerful influential operator
- strategic thinker – creating meaning and facilitating learning
- developer of nursing knowledge
- reflexive thinker
- process consultant

Although Antrobus and Kitson provide compelling arguments their sample was small and was a study of any type of nurse leader rather than one in an Executive role. Furthermore, a weakness of their study was the absence of a definition of effectiveness. The absence of clear definitions is a feature of other studies. For example, Stanley (2006) has recently published his study of nurse leadership. He also relied on nurses to nominate leaders without describing the basis for nominations. Stanley’s study was of nursing leadership in a single hospital and does not add to a wider understanding of NEDs.

In a similar study in Ireland, Carney (2004) carried out 25 semi-structured interviews. Although Carney reported the impact that organizational structure may have on strategic leadership in nursing very few data and analyses were presented to substantiate conclusions. Carney’s arguments are very difficult to follow and their contribution to an understanding of nursing leadership is diminished as a result. Importantly though, Carney observes that the impact of leadership must be demonstrable.

Cameron and Masterson (2000) have reported the most comprehensive study of NEDs in the UK. Between May 1996 and April 1997 they carried out semi-structured interviews with NEDs as part of a study exploring
the development of new nursing roles. However, as Cameron and Masterson note they quickly realized they ‘had also accessed a valuable source of information on how the Nurse Executive is currently functioning’. As the study was focused on new role development this inevitably coloured their findings.

They sampled 20% of English acute hospital Trusts carrying out 40 interviews in total, 34 with NEDs and six with delegates responsible for professional development. Cameron and Masterson found that not all NEDs were leading strategic change and this often related to organizational structures (in which nurses were not employed within a single nursing directorate). They did not identify characteristics associated with effectiveness but did identify five obstacles:

- organizational structures that impede centralized planning
- lack of funding
- Short-term government initiatives
- imbalance of power between medicine and nursing at individual, organizational and policy levels
- lack of coherent national policies and professional frameworks to assist NEDs in leading healthcare development

Unfortunately they did not comment on mechanisms NEDs had used to overcome these obstacles (and which might be indicators of effectiveness). On the contrary, the authors strongly emphasize a need for formal authority, rather than informal influence.

Cameron and Masterson observations have limited critical focus. In an example of local role development they note poor communication with the NED but do not explore the role of the NED in making sure that effective communication channels are in place (at least with nurses). The Cameron and Masterson study provides a snapshot of one aspect of the work of NEDs in the mid-1990s but was not designed to explore how NEDs might carry out their work most effectively.

Filkins (2003) reports a ‘snapshot’ of NED activity across Europe but this is a preliminary report. Subsequent data are likely to be more revealing.

In summary, the UK and European literature relating to NED effectiveness is extremely limited, mostly anecdotal and lacking any sustained attempt to identify either what NEDs typically do or how they might demonstrate that they do these things effectively. Cameron and Masterson (2000) have carried out the most rigorous investigation but their study is primarily fortuitous observations during another project and consequently lacks focus. Their key recommendation that there should be greater central empowerment of NEDs does not appear to be supported by any data.

North American papers

The first study of NED effectiveness was published by Freund (1985). She surveyed the NED and CEO in each of 250 university hospitals in the USA. The purpose of the study was to address two questions: what made the NED effective; and, what made the NED ineffective? From the results Freund was able to identify seven main characteristics that participants thought contributed to the effectiveness of NEDs. Freund concluded that developing these characteristics, possibly through formal educational programmes, might lead to improved effectiveness. She found that knowledge of nursing, health and general management, human management skills, and having a total organization view, were most commonly reported as important.

The novel nature of Freund’s study means it proved to be seminal work. The characteristics of effectiveness she reported have since been explored by a number of other researchers in similar projects.

In 1988 Moore and her co-workers reported a survey of 500 NEDs and CEOs with a response rate of 58% and 35% respectively. They carried out a study of almost identical design to Freund but surveyed executives in community hospitals. Their results were very similar to Freund’s (Table 1).

Henderson published a full report of her work in 1995. However, the initial dissertation abstract for this research was published in 1988 suggesting that the study was done much earlier than the 1995 publication date suggests and probably before 1988. Henderson surveyed NEDs and their CEOs from 300 randomly selected hospitals in the USA using published tools and an effectiveness tool based on the work of Freund.

Henderson found her sample of NEDs and CEOs reported high levels of NED effectiveness using Freund’s criteria (see Table 2). The self-reported and manager ratings of effectiveness were similar. Henderson used regression analyses to identify the contribution of various demographic factors to perceived effectiveness. Although she did not define these terms, she found that a combination of ‘education’ and ‘experience’ explained about one-third of the individual variation in effectiveness.

Smith (1993) surveyed 106 NEDs in American teaching hospitals. The purpose of the study was to provide a better understanding of the NED role to enable academic institutions to identify potential learning needs and improve curricula.
Smith achieved a 70% usable response rate and so generated a large volume of data. Smith noted in retrospect that the survey design was complex, that NEDs had commented that the tool was too long and too time consuming to complete, and that this had contributed to some inconsistencies in the data.

Smith generated a list of 80 skills for NEDs grouped into three categories: conceptual, human and technical. These skills were not prioritized or associated with any measures of performance, nor were they compared with the skills of other managers or nurses. It is, therefore, not possible to discern whether any of the 80 skills are uniquely or especially important for NEDs.

Murray et al. (1998) reported an exploratory study carried out 5 years earlier. The project involved interviews with five focus groups each of eight to 10 nurse executives (NEs). They followed this with a survey of this group and 93 individuals who the NEDs had identified as having a positive or negative influence on their career using a series of tools. The purpose of the study was to survey perceptions and belief rather than assess NED effectiveness.

The author’s principal conclusion was that quantitative measures of NED performance were needed. The same group subsequently reported a small study of 19–22 nurse managers and attempted to correlate personal attributes with performance (Fosbinder et al. 2000). However, careful review of other reports of this later study (Everson-Bates 1992) reveals that the population investigated was first-line managers.

Byers 2000 reported a survey of healthcare leaders similar to previous studies that aimed to gather opinions on the attributes needed by NEDs. Although this was potentially the largest survey of NEDs with almost 2000 leaders in Florida being approached the response rate was only 16%.

Byers found her results were similar to the previous surveys in the USA with clinical knowledge and human management skills being the highest ranked characteristics. However, she found that flexibility was a more highly ranked attribute than previous investigators. She also identified four characteristics that had not been identified in the previous related studies: quality management, communication, decision making, and project management.

Swim achieved a 70% useable response rate and so generated a large volume of data. Smith noted in retrospect that the survey design was complex, that NEDs had commented that the tool was too long and too time consuming to complete, and that this had contributed to some inconsistencies in the data. Smith generated a list of 80 skills for NEDs grouped into three categories: conceptual, human and technical. These skills were not prioritized or associated with any measures of performance, nor were they compared with the skills of other managers or nurses. It is, therefore, not possible to discern whether any of the 80 skills are uniquely or especially important for NEDs.

Murray et al. (1998) reported an exploratory study carried out 5 years earlier. The project involved interviews with five focus groups each of eight to 10 nurse executives (NEs). They followed this with a survey of this group and 93 individuals who the NEDs had identified as having a positive or negative influence on their career using a series of tools. The purpose of the study was to survey perceptions and belief rather than assess NED effectiveness.

The author’s principal conclusion was that quantitative measures of NED performance were needed. The
of people because they were ‘excellent’ (although excellence was not defined). Her subjects were selected from those nominated most often but the sample was then increased by convenience. In addition, she surveyed three people who reported directly to the NEs.

The leadership style of the NEs was assessed using a tool, the Multifactor Leadership Questionnaire (MLQ), which had been used in other management settings and which had been tested in health care. The purpose of MLQ was primarily to distinguish between transformational and transactional leadership. In Dunham’s work transactional leadership is concerned with accomplishing day-to-day operations, contingent reward and managing by exception, whereas transformational leadership is visionary, inspiring, empowering, charismatic and based in values. In short, transformational leadership is presented as more desirable although she notes that the best leaders display both attributes.

Dunham found that the style of NEs was transformational more than ‘fairly often’ and transactional ‘sometimes’. The only measure of the effectiveness she noted was that most participant hospitals had high nurse retention rates.

Dunham highlighted characteristics of these NEDs who were considered by some others to be excellent (Table 3).

The primary weakness of the study was the lack of a comparator group. This was addressed to a degree by reports of a re-analysis of the data in 1995. In these Dunham-Taylor distinguished four groups of NEs according to differences between self-ratings on MLQ and ratings by their staff. NEs were placed in categories for transformational and transactional leadership according to whether they scored themselves higher or lower than their staff. NEs given a higher rating for transformational leadership and lower rating for transactional leadership by their staff than they did themselves were rated the most effective.

Dunham-Taylor (2000) reported a related and much larger study. She surveyed 396 NEs from a random sample of hospitals across the USA stratified according to organizational type. Only hospitals whose NE agreed to participate were included.

Despite the sampling issues Dunham-Taylor’s (2000) study is important as it a large and relatively recent study of the impact of leadership style amongst NEs. Unfortunately, it is clear from the results that this is far from a typical sample. The mean rating for effectiveness was ‘very effective’ (and it was impossible on a Likert scale to rate effectiveness much higher than this but possible to rate it much lower). In a truly random sample of NEs it might be anticipated that the average effectiveness in the population of NEs would be just that, average. The results here seem to suggest that either the expectations of the NEs in the USA are unnecessarily low or that those who thought they may not be regarded as effective by their managers or staff declined to participate.

An important observation made by Dunham-Taylor was that leadership style may need to be adjusted to suit the local culture and that NEs need to be able to demonstrate their effectiveness or find that managers might even ‘fire the transformational leader as being ineffectual’.

The most recent study of senior nurse leadership in the USA was published in two papers by Upenieks (2002, 2003). She studied a convenience sample of 16 nurses of whom four were NEDs.

Upenieks used content analyses for the qualitative section of the study. She defined and tested themes and then matched transcript statements to these. Themes that did not match existing categories were generated into new categories. The initial analysis was then reviewed by interviewees to check consistency.

Upenieks provided some specific data on the four NEDs. In 2002, she reported that all four NEDs were confident in their role and did not see their power diminished by their (female) gender. In the 2003 paper she reported that NEDs saw themselves as ‘powerful leaders’ and saw their principals traits as having a passion for nursing, having strong values, and being fair, honest, influential and credible.

The pooled results showed that wider group of nurse leaders thought they had considerable formal and informal power. An inductive analysis identified three emergent themes that participants considered important

Table 3

<table>
<thead>
<tr>
<th>Characteristics of NEDs considered ‘excellent’ by their peers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership skill</td>
</tr>
<tr>
<td>Business skills</td>
</tr>
<tr>
<td>Interdisciplinary team player</td>
</tr>
<tr>
<td>Role model</td>
</tr>
<tr>
<td>Strong values system</td>
</tr>
<tr>
<td>Creative, visionary</td>
</tr>
<tr>
<td>Risk takers</td>
</tr>
<tr>
<td>Adaptable</td>
</tr>
<tr>
<td>Charismatic</td>
</tr>
<tr>
<td>Constant communication</td>
</tr>
<tr>
<td>Empowering</td>
</tr>
<tr>
<td>Select excellent staff</td>
</tr>
<tr>
<td>Mentors</td>
</tr>
<tr>
<td>Outcome-oriented</td>
</tr>
<tr>
<td>Constantly grow and learn</td>
</tr>
<tr>
<td>Look the part</td>
</tr>
</tbody>
</table>

contributors to leader effectiveness: having business astuteness, being able to collaborate effectively in multi-disciplinary teams, and having a strong central beliefs and values that included the belief in servant leadership, providing nurses with the right tools and resources to do their jobs, striving for excellence, providing continual professional development opportunities, and having a passion for nursing.

George et al. (2002) have reported a small study in one American managed care organization using a unique approach, appreciative enquiry.

They used focus groups at a number of sites consisting of the NED and other participants picked by the NED. The sessions were transcribed and analysed using a software package designed to manage qualitative data to identify themes according to the four phases of appreciative enquiry: discovery, dream, design and destiny. First in the discovery phase they found the excellent NEDs of the focus groups’ collective past were visible, had an ability to communicate openly and honestly, and promoted teamwork. Then during the dream phase, participants created visions of their future using extraordinary moments from their past and seven major themes emerged: vision, communication, expertise, advocacy, valuing staff, image and team empowerment. Next during the design phase (which was...) they identified six major themes: communication, continuous learning, commitment to the quality health care, partnership, relationship and future orientation. Finally, during the destiny phase six themes emerged: change, support, accountability, active participation, communication and preparation for commitment. The authors concluded the themes that had been identified by the focus groups described excellence in a NED. The nature of this study means it is extremely difficult to generalize the results. As the authors concluded the themes ‘may be idiosyncratic’.

Wells et al. (1999) studied how top management teams perceived NEs’ participation in strategic decision making. They concluded that NEDs might be more effective if they cultivated key relationships.

In a survey of nurse managers and executives Zavodsky and Simms (1996) studied work excitement and argued that work excitement might lead to improved effectiveness, although there were no data to suggest this. They found that the most exciting were: variety of experiences, enhancement of patient wellness, pace, recognition, personal growth and development, and technology. The response rate was poor but not reported and key data (e.g. response rates) and links to outcomes, even through theoretical argument, are missing.

The North American studies have identified many attributes that may contribute to NED effectiveness and their possible importance. A number of attributes have been identified in different studies with different methodologies suggesting they are of some importance. However, there has been little attempt to date to link these with defined measures of outcome or identify which of these might be uniquely important to the NED role in comparison with other executive roles and other nurse leadership roles. It is not certain whether the American findings can be generalized to other healthcare settings.

Recurring themes

Themes in the studies were filtered using the following criteria:

- the themes appeared in studies in both the USA and Europe; or
- the themes appeared in at least three distinct studies; and
- the themes all appeared in one or more studies since 2000.

Using these criteria 10 themes were identified (Table 4). The recurring nature of these themes suggests that they are important to NED effectiveness.

Summary

The literature relating to the work of NEDs is dominated by unsubstantiated ‘expert’ opinion that is outside the scope of this review. In general, the European studies offer little insight into NED effectiveness. Most lack a robust design, are not fully reported, and have study populations that are small, local and include a

<table>
<thead>
<tr>
<th>Factors in NED effectiveness identified in the literature</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Powerful influential operator (a, c, e)</td>
</tr>
<tr>
<td>2. Communication (b, c, d, f)</td>
</tr>
<tr>
<td>3. Knowledge of nursing (a, e, f, g)</td>
</tr>
<tr>
<td>4. Human management skills (d, e, f)</td>
</tr>
<tr>
<td>5. Total organization view, visionary (a, d, e, f)</td>
</tr>
<tr>
<td>6. Quality management (b, f, g)</td>
</tr>
<tr>
<td>7. Business astuteness (d, f, g)</td>
</tr>
<tr>
<td>8. Collaborate effectively in multi-disciplinary teams (c, d, e, g)</td>
</tr>
<tr>
<td>9. Providing nurses with the right tools and resources to do their jobs (d, f, g)</td>
</tr>
<tr>
<td>10. Project management (a, b)</td>
</tr>
</tbody>
</table>

(a) Antrobus & Kitson (2000); (b) Byers (2000); (c) Cameron & Masterson (2000); (d) Dunham & Fisher (1990), Dunham-Taylor (2000); (e) Freund (1985); (f) George et al. (2002); (g) Upenieks (2002, 2003).
range of managers not just NEDs. These are also features of a number of the American studies. It is difficult to draw meaningful conclusions about potential contributors to NED effectiveness from any of these studies.

Cameron and Masterson portray a dependency on formal power in the UK that is not evident in the American studies. Their plea for more professional guidance contrasts most starkly with Upenieks (2002) results. In her study, even senior nurses without executive authority felt that they had substantial informal power.

American research into NED effectiveness has been strongly influenced by Freund’s (1985) study. A number of subsequent studies have looked for and found the characteristics of effective NEDs she originally described (Table 1) as well as identifying others (e.g. Byers 2000). A number of investigators have found good communication skills are important (Dunham & Fisher 1990, Byers 2000, George et al. 2002).

Upenieks (2003) found having business astuteness, being able to collaborate effectively in multi-disciplinary teams and, having a strong central beliefs and values system were important. Dunham also found these were important. She identified a number of characteristics (Table 3) and placed considerable emphasis on a transformational leadership style.

Wells et al. (1999) observed that NEDs rated their performance higher than their colleagues. This has been found in other studies (e.g. Dwore et al. 2000) but has not been a consistent finding. In Dunham-Taylor’s (2000) study, where NEDs had exercised some control over the participation of their CEOs, it was noted that CEOs rated their NEDs higher than NEDs did themselves, whilst direct reports rated them lower. There is a risk that self-selection leads to over-estimation of the mean NED performance as Dunham-Taylor (2000) found. Self-ratings of performance, and ratings by others selected by the subject, should be interpreted with caution.

Few of the studies have made a concerted effort to link NED characteristics to specific measures of their performance. Murray et al. (1998) noted that ‘quantitative measures’ were needed. Dunham-Taylor (2000) has been able to link characteristics to ‘perceived effectiveness’. Unless attention is paid to non-responders this approach has the potential for significant bias as underperforming NEDs might choose not to participate or participate but over-estimate their own effectiveness. The only objective measure of effectiveness she noted was the high nurse retention rate in study hospitals. George et al. (2002) designed a measurement tool based on a small study of their own organization. Fosbinder et al. (2000) have shown that it is possible to correlate personal attributes to a measure of nurse manager performance, although this approach has not yet been applied to NEDs.

Sampling the population of NEDs has been challenging. A lack of willingness to participate has been noted by many authors (e.g. Upenieks 2003) Response rates to survey has varied from extremely poor (e.g. Byers 2000) to acceptable (e.g. Smith 1993). There have no surveys of NEDs reported from the UK.

Numerous investigators have either applied existing tools or developed tools to enable their research. Dunham-Taylor (2000) has shown that perceived effectiveness can be measured in populations of NEDs using a general management tool. Byers (2000) has shown that careful tool design may enable existing knowledge to be tested in new populations whilst at the same time identifying new themes.

In summary, the literature relating to NED effectiveness is limited. A number of methodologies have been used that contribute to an understanding of what might be a suitable and successful design for a study in the UK. A number of characteristics have been associated with NED effectiveness but few have been reported in more than one study where the design has been different. There is some evidence for a number of characteristics that might be associated with perceived NED effectiveness but, as yet, no body of evidence to suggest what might be the most appropriate outcome measures of NED effectiveness and what characteristics might contribute to an improvement in these measures. Further research is needed to address these issues.

References


