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How Triage Nurses Use Discretion: A Literature Review

Abstract: Discretion is quintessential for professional work. This review aims to understand how nurses use discretion when they perform urgency assessments in emergency departments with formalised triage systems—systems that are intended to reduce nurses' use of discretion. Because little research has dealt explicitly with this topic, this review addresses the discretionary aspects of triage by reinterpreting qualitative studies of how triage nurses perform urgency assessments. The review shows (a) how inexhaustive guidelines and a hectic work environment are factors that necessitate nurses' use of discretion and (b) how nurses reason within this discretionary space by relying on their experience and intuition, judging patients according to criteria such as appropriateness and believability, and creating urgency ratings together with their patients. The review also offers a synthesis of the findings' discretionary aspects and suggests a new interactionist dimension of discretion.

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The aim of this review is to understand how nurses use discretion when they perform urgency assessments in emergency departments (EDs) [1] with formalised triage systems. *Discretion* refers to the use of one's own reasoning and is often described as the quintessence of professional work (Freidson, 2001). *Triage* originates from the French *trier*, which means to pick, sort or select. In health care, triage is increasingly associated with the use of formalised guidelines to assess the urgency and priority of patients who present to gatekeeping emergency institutions. Formalised triage systems were developed during the 1990s, first with the Australasian Triage Scale (ATS) and later with the Manchester Triage Scale (MTS), the Canadian Triage and Acuity Scale (CTAS) and the Emergency Severity Index (ESI). These systems provide guidelines for how nurses should categorise and prioritise patients on an urgency scale from 1–5 (although the number of categories may vary).

Triage systems aim to standardise and thereby increase the justness and reliability of nurses' urgency assessments. The introduction of triage systems therefore reduces nurses' opportunities for making discretionary judgments. However, there are limits to standardisation because general rules may underdetermine what should be done in a specific case (Molander & Grimen, 2010). Thus, although triage guidelines may reduce nurses' use of discretion, nurses are nonetheless required to rely on their own judgment when their guidelines provide an insufficient basis for making urgency assessments.

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[1] For simplicity, I use the term "emergency department" to refer to all frontline institutions with an emergency medical function.

Triage nurses' use of discretion has fundamental consequences for patients. They are gatekeepers to the provision of health care and the accuracy of their triage assessments impacts the morbidity and mortality of patients who present to the ED (Arslanian-Engoren, 2000). Moreover, as street-level bureaucrats, their discretionary actions comprise the "agency policy" of the ED they represent (Lipsky, 1980). There is therefore a great need for systematising the knowledge on how triage nurses use discretion when making urgency assessments.

Because little research deals explicitly with discretion in triage, the review addresses this issue by using a meta-ethnographic methodology (Campbell et al., 2011; France et al., 2014; Noblit & Hare, 1988) to reinterpret qualitative studies of how nurses perform urgency assessments in EDs using formalised triage systems. The review is limited to qualitative studies because of the problems with integrating qualitative and quantitative methodologies in a single review (Campbell et al., 2011), and because qualitative studies are best suited to address the question of *how* nurses use discretion. Through a systematic literature search, 14 studies have been identified and synthesised.

In the analysis and discussion sections of this review, the studies' findings are organised and re-interpreted in light of Molander and Grimen's (2010) distinction between the structural and epistemic dimensions of discretion. *Structurally*, discretion refers to a space of autonomous decision-making surrounded by a belt of restrictions (Dworkin, 1978, p. 31). *Epistemically*, it denotes a form of reasoning under conditions of indeterminacy. More specifically, epistemic discretion is a type of reasoning in which one has weak warrants. *Warrants* are rules that allow an inference from a premise to a conclusion in a particular case (Toulmin, 1958), for instance, from a description of what is wrong with a patient to a conclusion about the treatment he or she should receive. Whereas strong warrants provide unequivocal support for jumping from premise to conclusion, weaker warrants are more ambiguous; they only suggest how one should interpret and treat a patient. Thus, the weaker the warrants, the larger the need for discretion.

I proceed by describing how the review was performed and then presenting its findings. In the analysis section, I show (a) how the reviewed literature revealed inexhaustive guidelines and a high workload to be factors that necessitate nurses' use of discretion and (b) how nurses reason within this discretionary space by relying on their experience and intuition, judging patients according to criteria such as appropriateness and believability, and creating urgency ratings together with patients. Finally, I synthesise these findings to provide what meta-ethnographers call "a line-of-argument synthesis" of how triage nurses use discretion.

Method

The review is based on a meta-ethnographic methodology (Campbell et al., 2011; France et al., 2014; Noblit & Hare, 1988). Meta-ethnography allows for an interpretive synthesis of qualitative research in order to "produce new interpretations (e.g., themes, concepts or metaphors) of the research participants' experiences in published primary qualitative studies" (France et al., 2014). It is therefore suitable for synthesising qualitative studies of how nurses perform urgency assessments in order to understand the discretionary aspects of their work.

I have conducted this meta-ethnography in line with Noblit and Hare's (1988, pp. 26–9) seven phases as shown in Table 1.

Table 1
Meta-ethnography's seven phases (Noblit & Hare, 1988)

Phase 1: Identify an intellectual interest that qualitative research might inform
Phase 2: Search for information
Phase 3: Read the studies
Phase 4: Determine how the studies are related
Phase 5: Translate the studies into one another
Phase 6: Synthesise translations
Phase 7: Express/write the synthesis

The review was born out of an interest in how nurses perform urgency assessments in EDs using formally structured and organised triage systems. Since triage is little researched, I conducted broad searches in CINAHL and ISI Web of Science (including MEDLINE) using the search words "triage" and "qualitative". In both searches, the terms had to appear in the titles, abstracts or keywords. I only included studies published after 2000 because triage systems with formal structure and organisation were not introduced before the mid-1990s[2]. The search was performed on 25 April 2015 and returned 888 results in CINAHL and 284 in Web of Science. I then carried out preliminary sorting based on the titles and abstracts to identify all seemingly qualitative studies that dealt with how nurses conduct triage. I also performed hand-searches of key social scientific journals in the field[3]. In total, I identified 56 potentially relevant studies. After skimming, 19 were excluded because they were not qualitative or did not focus on triage. I also decided to exclude 9 studies of telephone triage because they pertained to a qualitatively different type of triage and have already been reviewed elsewhere (Purc-Stephenson & Thrasher, 2010), which left me with 28 studies. These publications were read in full, and their literature lists were searched for additional studies, with the latter producing no relevant findings. Ultimately, 14 studies were found to meet the final criteria of being (1) peer reviewed (2) original research articles that (3) empirically studied (4) nurses' face-to-face urgency assessments in (5) EDs with formalised triage systems using (6) one or more qualitative methods. The main authors of these studies were then contacted and asked if they were aware of any additional articles. This investigation provided no relevant results. All studies qualified a minimum of quality requirements, such as actually representing qualitative research, having clearly stated research questions, and providing clear descriptions of the data collected and the methods used. Beyond this, the quality of a particular study can to some extent be seen in how much it has contributed to the synthesis (Atkins et al., 2008). Table 2 (in appendix) contains an overview of the selected studies. Note that I have given each study a number and that I use these numbers in the analysis section to refer to the selected studies.

Phases 4–7 of Noblit and Hare's framework (i.e., determining how the studies are related, translating them into one another, synthesising the translations and writing the synthesis) were performed as follows. After I selected the final 14 studies, I read

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[2] I performed a control search using the same keywords and found no relevant studies before 2000.

[3] The hand-search was limited to studies published after 2000 in the three social science journals in the health research field with the largest impact factor: Social Science & Medicine, Sociology of Health and Illness and Journal of Health and Social Behavior. The search provided one new study: Hillman (2014).

them in chronological order to familiarize myself with the literature as a whole before importing them into QSR Nvivo 10 and coding them inductively strip for strip. The codes were then sorted into emergent categories of relevance for how nurses use discretion when they perform urgency assessments. Ultimately, the main categories were those of "guidelines", "work environment", "experience and intuition", "evaluative criteria" and "interacting with patients". These are presented in the subsequent analysis section. They also form the basis for the meta-ethnography's "line-of-argument" synthesis, which involves reconstructing a whole from a set of parts (Campbell et al., 2011, p. 10). The whole was *a priori* chosen to be discretion. Although this deductive rationale deviates from the inductive one of traditional meta-ethnographic syntheses, I believe it is still in line with the methodology's key principles as laid out in France et al. (2014). The foundation for the synthesis is presented in the analysis, whereas the synthesis itself is explicated in the discussion.

The review's limitations include being performed by a single researcher. To address this potential bias, I have discussed my analysis with colleagues and continuously reread the studies to corroborate and identify inconsistencies in my interpretations. Another limitation is that the review is restricted to journal articles; it should therefore not be seen as an exhaustive review of how nurses perform triage. Furthermore, it was difficult to explore systematically the effects of various contextual factors on the triage encounter because of poor reporting of contextual information in most studies[4]. The findings of the subsequent analysis should therefore not be read as representative of all EDs. Instead, the analysis depicts a multitude of factors that *may* characterise nurses' discretionary space and reasoning. To show that the findings are case-specific, I have been careful to state the studies in which they appeared. A final limitation is that many of the studies provided little interpretation beyond a basic description, which implied that the literature was less conceptually rich than what is optimal for performing a meta-ethnography (France et al., 2014). However, like Atkins et al. (2008), I also found that even relatively descriptive research may lend itself to a qualitative synthesis.

Analysis

The following section analyses the research literature on how nurses perform urgency assessments in EDs using formalised triage systems. I focus on findings that are salient for understanding nurses' use of discretion. The analysis begins by presenting the factors that create a discretionary space before going on to show how nurses reason under these circumstances. In the subsequent discussion section, these findings will be reconstructed into a "line-of-argument synthesis" about discretion in triage.

Factors creating a discretionary space

Guidelines
The most central aspect of a formalised triage system is the triage guidelines. Their purpose is to provide criteria for classifying patients in clear-cut categories of urgency. When applicable, these criteria provide a strong basis for prioritising patients. There was, however, consensus among nurses in the reviewed literature that guidelines are insufficient for establishing priorities. Nurses' views of guidelines varied from those who state they are "a reference for triage decision making" (4, p. 210) to

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[4] Atkins et al. (2008) describes the same experience and points out that this is one of the main critiques of meta-ethnography. Therefore, the application of the meta-ethnographic framework to reviews of journal articles might need some further methodological development.

those who claim guidelines are "a detrimental influence to expert patient assessment" (5, p. 404).

The most positive view of guidelines was expressed in Johansen and Forberg's (13) study. Here, nurses praised the triage guidelines for providing a higher degree of overview and more assurance and control compared with previous practice, thus making it easier to prioritise patients. However, the nurses in this study did not view triage guidelines as a panacea; they said that they were careful not to rely blindly on the standardised guidelines. Instead, they stressed the importance of being critical and using their nursing experience as a supplement when triaging.

One reason for supplementing the triage guidelines was that they were said to be too simple to match the complexities of patients and their complaints (4, 13). For instance, a nurse in Chung's (4) study complained that "[t]he guidelines provide limited and fixed information that might not be adapted to the real situation when you handle the patient. Sometimes, you cannot find a suitable category to match a patient's case according to the guidelines." (p. 210) In other words, the nurse complained that some patients elude the guideline's distinctions. Similarly, the literature contained several references to "borderline cases" (1, 4, 13, 14), which fell between two categories of urgency and often generated uncertainty and stress for the nurses. The literature portrayed the problem of "borderline cases" as twofold, since patients were "borderline" either when they presented with too little or too much information. Too little information made it difficult for nurses to relate a patient to the guidelines (12). Too much information, on the other hand, made it difficult to use the standardised triage manual because of a potential conflict between the guidelines and nurses' situational knowledge of the patient (13).

Nurses in some studies considered triage guidelines redundant or even obstructive for experienced nurses' practice (4, 5, 13, 14). For instance, the expert nurses in Cone and Murray's (5) study stated that they did not need to follow guidelines to make decisions; on the contrary, they claimed that guidelines could hinder them in their practice. A beginner nurse, on the other hand, was described as having little clinical experience and therefore being more dependent on following specific rules when assessing patients since, in the words of one expert nurse, "she has nothing to build on… nothing to make decisions from… no experience" (5, p. 405). The views in Cone and Murray's (5) study were those of experienced nurses with at least five years of ED experience, whereas Patel et al. (14) found that both beginner and experienced nurses expressed a similar view. The less experienced nurses said they carefully followed the guidelines most of the time, while the most experienced nurses claimed to have "internalised" the guidelines and stated that they use these alongside their own judgment.

Work environment

Most studies reported that the information-gathering work of triage nurses occurs in a hectic work environment (1–4, 9, 12–14). The studies described how EDs often receive a large amount of patients at the same time; to facilitate patient flow and identify the most urgent patients, nurses therefore assessed all patients in as short a time as possible (1). This is necessary to avoid "triage overload" (12), in which the influx of patients exceeds nurses' capacity to triage them. In addition to the number of patients who present, "triage overload" was said to be related to the complexity of patients' complaints; complicated problems, such as patients presenting with mental illness (9), require more time than uncomplicated ones and could therefore lead to access block (12). Several studies also showed triage nurses to be vulnerable to interruptions in their work (1, 2, 4, 8): for instance, when patients approach the triage area demanding immediate attention (1).

Several studies argued that a hectic work environment complicates nurses' decision-making. The need to make prompt decisions could generate uncertainty and

stress (13) and make nurses miss critical cues (2). Similarly, interruptions could distract nurses and cause them to overlook important information (4). In these situations, nurses risked assigning patients too low an urgency level and thereby "undertriaging" them. Conversely, the work environment could also facilitate "overtriage". When the patient volume was high and the waiting time long, nurses sometimes gave patients a higher urgency level to decrease the risk of their condition deteriorating while waiting (4). Furthermore, this tendency to "overtriage" was exaggerated by nurses wanting to avoid legal sanctions for failing to detect acutely ill patients (2, 4). Therefore, in sum, the working conditions of triage made it challenging to perform urgency assessments.

How nurses reason within their discretionary space

The reviewed literature described several strategies and resources used in nurses' discretionary reasoning. We have already seen some examples of this in the last section, such as when nurses detailed how organisational concerns influenced their urgency assessments. Other considerations were even more salient in the literature. The main themes here were "use of experience and intuition," "evaluative criteria" and "interacting with patients."

Use of experience and intuition
In several studies, nurses named the use of previous experience to be one of the most salient resources in their decision-making (3–5, 10, 12, 14). We should note, however, that "previous experience" is conceptualised in different ways in different studies. In some studies, previous experience is described as a repertoire of typical cases that could be utilised in the assessment of patients. This concept is captured in Edwards' (6, 7) notion of "usual presentations", which he has adopted from Tanner et al. (1993). Edwards defines "usual presentations" as nurses' mental representations of how patients typically respond to the problems they encounter, and he suggests that these are constructed through nurses' experiences with a multitude of patients. Edwards claims that these "usual presentations" act as a basis for comparison in the assessment of a particular patient and, as such, enable nurses to detect whether the patient is critically ill. With reference to Polanyi (1958), Edwards labels this recognitional ability "connoisseurship" and argues that it forms the basis of the expert clinician's ability to discriminate between patients.

In other studies, previous experience referred to concrete and sometimes singular events, as evident when nurses explained how recent, impressive experiences sometimes affected their decision-making (4, 12). An example of this is "learning the hard way," which was described as follows by a nurse in Hitchcock et al.'s (12) study:

> You only have to give 1 patient a triage category of 4 who supposedly has a migraine and then you see them having a seizure and a brain bleed for you to never give anyone presenting with a headache a 4 again, a headache is always a 3, sometimes we learn the hard way (pp. 1538–1539).

Another example involved nurses remembering a significant case when assessing a particular patient. Two participants in Chung's (4) study told of how recent experiences had assisted them in revealing critical conditions in patients that seemingly presented with non-significant symptoms. With reference to Cioffi (1998), Chung termed this decision-making device a "representative heuristic," which involves using relevant past experiences as a mental shortcut for making quick judgments.

Closely related to the theme of previous experience, studies also revealed that nurses used "intuition" when assessing patients (1, 2, 4–6, 13, 14). Nurses claimed that their intuition provided crucial guidance for triaging patients; even the guide-

line-friendly nurses in Johansen and Forberg's (12) study stated that it strongly influenced their decision-making. Intuition was often mentioned in tandem with experience, albeit in less concrete terms; nurses referred to it as a "gut feeling" (5, 6, 13, 14), "gut sense of urgency" (2, 5) or "sixth sense" (1, 4). In an attempt to clarify the concept, Andersson et al. (1) defines intuition as "an instinctive method of thinking, acting and using common sense" (p. 142). They also reference King and Appleton (1997), who has suggested that intuition results from having seen and learned from similar cases. In this manner, intuition becomes strikingly similar to the concepts of previous experience and usual presentations. There is some support for this association in the reviewed studies; many nurses believed intuition to be a distinguishing trait of experts in their field, which is developed through extensive experience and knowledge (2, 5).

The conflict between intuition and triage guidelines was a recurring theme in the reviewed literature. The nurses in Johansen and Forberg's (13) study pointed out that intuition sometimes complicates patient assessment by making the situation more complex and difficult to reduce to the standardised process laid out by the guidelines. In other studies, intuition was even said to override the guidelines (1, 2, 4, 14). For instance, the experienced nurses in Patel et al.'s (14) study said that when there is discrepancy between the two, they prefer to "go with their gut feelings" (p. 512) and disregard the guidelines. Similarly, a nurse in Chung's (4) study stated that, "sometimes the data does not reflect the problem of a patient. However, when you feel something wrong about the patient, you give them a higher priority." (p. 210). Consequently, what Chung (4) terms "subjective information" had significant influence on the decision-making of nurses in these studies.

Evaluative criteria
The reviewed literature described several non-guideline-determined criteria used by nurses to evaluate patients' complaints, with the most salient of these being appropriateness and believability. The former was used to judge whether a condition fits the ED's purpose of treating the acutely ill (7, 8, 11). This was central to what Fry (8) describes as triage nurses' "belief system," which provides "meaning for how patients should prepare their arrival, act in the emergency department, interact with and respond to the nurse's efforts" (p. 121). She lists seven of these "beliefs," and the seventh, "do not waste time," is of particular relevance here. Nurses in Fry's study considered patients with "trivial conditions" as violators of this norm. Trivial conditions are those that "the patient could treat him or herself, needed no treatment, were minor or chronic and could be managed by a Medical Centre or GP" (8, p. 124): in other words, conditions that are considered inappropriate for the ED. Patients presenting with trivial conditions were believed to waste resources and put sicker patients at risk. When nurses encountered these patients, Fry observed manifest changes to the assessment process. Nurses shortened the duration of the process and reduced patients' urgency rating. Moreover, they expressed resentment towards these patients. One nurse told Fry, "If I could give a [triage] code 10, I would. They deserve it" (8, p. 124). Fry interprets this statement to indicate that some patients were less deserving of ED services, in this case because they breached the values of appropriateness and efficiency. Hillman (11) makes the same claim, but she also stresses that nurses' judgments are not fixed; instead, "trivial" patients may influence nurses' triage code allocation by providing reasons for their presence in the ED. Nonetheless, these studies both suggest that nurses perform moral evaluations of and respond emotionally to patients in the ED.

The second criterion, believability, was used to judge the trustworthiness of patients' complaints (3, 7, 11, 14). Edwards and Sines (7) considers this criterion particularly salient in emergency medicine. They reference Hughes' (1988) suggestion that emergency nurses' interactions with patients are pervaded by scepticism because of how often they have to deal with people who may be dishonest in their

presentation. This scepticism is documented in the reviewed literature, which is rich with descriptions of how nurses use behavioural cues to judge the reliability of patients' stories. One method was to contrast what patients say with how they walk in and out of the triage area (6, 7). Nurses believed the latter, especially "walking out", to be a purer expression of a patient's problem because it was not performed in front of an "audience" (6). Similarly, patients' behaviour in the waiting room was treated as indicative of their potential pathology or distress. For instance, Edwards and Sines (7) found that nurses used patients' expressed levels of distress to judge how worried the patients were about their injuries. In other words, they believed that "if the patient really was worried, he would choose to present himself in a distressed way" (7, p. 2446). This assumption was also found in Arslanian-Engoren's (3) study, in which a nurse claimed the following:

> if they're drinking Mountain Dew and munching on Doritos and saying their [pain is a] 10 and the chest pain that they've had for, ya know, 2 hours or 2 weeks or 2 months, I mean it's kinda […] hard to take people like that seriously. (p. 53)

The extract demonstrates how the nurse used behavioural signs to assess the seriousness of the patients' complaints. Thus, when patients express a lack of concern for their problem, these nurses also suspected that the problem was of little concern.

Time factors were also used to assess the believability of ED patients (7, 8, 11). Nurses in Edwards and Sines' (7) study were especially sceptical of patients presenting with injuries more than 48 hours old. They believed this behaviour could suggest that the patient was not acutely ill but instead was exploiting the constant availability of the ED. Another and more specific example was what nurses in Fry's (8) study termed a "positive bag sign," which referred to patients who entered the ED with a packed suitcase. The nurses considered these patients to break the norm of "not arriving with expectations" and suspected that they were not acutely ill because they had been able to pack a suitcase before coming to the ED.

Nurses also made inferences about the credibility of the types of people who visited the ED (7, 13). For instance, some nurses used patients' state of dress and hygiene as measures of the extent to which they took an interest in themselves (7). Moreover, in their study of triage in a paediatric ED, Patel et al. (14) found that the nurses were wary of the information given by caregivers because they believed caregivers could lack health knowledge, misperceive their child's symptoms or exaggerate the extent of their child's problem. The nurses therefore employed certain methods to judge the reliability of parents' information, such as rephrasing or rewording questions to check for consistency. Taken together, these procedures suggests that "believability" was a salient concern for triage nurses in the reviewed studies.

Interacting with patients

Most of the reviewed literature takes it for granted that the triage encounter involves an active nurse who gathers information from passive patients; and if anyone influences nurses' urgency assessments, it is their colleagues. However, two studies were critical of this conception (7, 11). Drawing on Atkinson (1995), Edwards and Sines (7) criticise the common assumption that patients are just passive purveyors of information. This assumption has masked how "patients are active in the construction of the presentation and interpretation of their problems" (7, p. 2450). Instead of focusing solely on the professional, they suggest that the triage encounter should be viewed as an interactive process in which "participants create, elicit, interpret and negotiate the meaning of the presenting problem" (7, p. 2450). Accordingly, they claim that triage can be regarded as what Goffman (1959) terms a "performance," in which triage nurses act as an "adjudicating panel" and patients have to "argue the merit" of their case to convince the nurse of their credibility as ED patients. Patients may thus affect how nurses determine their urgency and consequently which urgency

rating they are awarded. Hillman (11) echoes this point in her article about negotiations in triage, in which she argues that nurses reward patients who depict themselves as responsible citizens and who are able to provide good reasons for their seemingly illegitimate presence in the ED. The findings in these studies suggest that urgency ratings are an interactional rather than an individual achievement, and they have, as we soon will see, significant implications for our understanding of both urgency assessments and discretion.

Discussion

Let us now more explicitly address how the individual studies of triage nurses' urgency assessments add up to a whole "lines-of-argument" about triage as a discretionary activity. I will first consider the structural and epistemic aspects of the reviewed literature and then go on to discuss a new dimension of interactionist discretion implicit in the reviewed literature.

The structural dimension

The reviewed literature revealed several aspects of triage nursing that necessitated the use of discretion. For one, triage guidelines underdetermined nurses' urgency assessments. Nurses regarded the guidelines as too simple to match the complexities of patients and their complaints. In theoretical terms, they believed that the guidelines provided weak warrants (i.e., inference rules) for prioritising patients. This was an especially common view among experienced nurses, some of whom asserted that guidelines could be "detrimental" to their decision-making (5). Second, nurses' work environment increased their discretionary space. Under conditions of near or full "triage overload," it was difficult to obtain a sufficient patient history and gather all the relevant clinical information. Thus, whereas insufficient guidelines gave them weak warrants for assessing patients, a high workload rendered them unable to use their warrants to their fullest.

The epistemic dimension

We have also seen examples of how triage nurses reasoned within their discretionary space. First, we saw that nurses in the reviewed literature made use of both previous experience and intuition when they performed urgency assessments. The use of previous experience referred both to concrete and often singular experiences and additionally to a "composite mental picture abstracted from a range of patients with a similar problem" (6, p. 77). Both can be seen as *heuristics* (Kahneman, 2011) that guide nurses' discretionary reasoning, in the sense that they provide experience-based rules-of-thumb for how to interpret and treat patients. Nurses' intuition was also shown to be a central influence on their decision-making. For some, their intuition provided the strongest warrant for judging the urgency of a patient's complaint. These nurses seemed to follow the informal treatment rule, "when in doubt, disregard the guidelines and follow your intuition," a practice that might significantly reduce the reliability of their triage code allocation.

Second, we have seen how nurses used non-guideline-determined criteria to assess patients' complaints. They evaluated patients' *appropriateness* by judging whether their conditions matches the ED's purpose of treating the acutely ill, which is a finding that resonates with the broader literature on how ED personnel interpret and judge patients (Dingwall & Murray, 1983; Dodier & Camus, 1998; Hughes, 1989; Jeffery, 1979; Mannon, 1976; Roth, 1972; Vassy, 2001). Nurses also relied on behavioural cues, time factors and other assumptions to judge the *believability* of patients' complaints. Their reliance on cues such as talking on the phone, drinking

soda, eating snacks and bringing a suitcase to the ED illustrates how their discretionary reasoning was dependent on their common-sense knowledge of typical objects, actors, motives and courses of action. Thus, rather than viewing discretionary triage assessments as solely based on professional knowledge, we should, as Hughes (1977) reminds us, recognise that "[i]nterpretative schemes made available by formal training may be used alongside or tend to merge into those available by commonsense knowledge" (p. 130).

The interactionist dimension

A third aspect of nurses' discretionary reasoning is that patients influence how nurses interpret their urgency and consequently which urgency rating they are awarded. As mentioned, Edwards and Sines (7) argued that the triage encounter should be viewed as an interactive process in which "participants create, elicit, interpret and negotiate the meaning of the presenting problem" (p. 2450). In this view, nurses create urgency ratings together with their patients.

The conceptualisation of triage as an interactive achievement hints at a discretionary dimension not yet described in the theoretical literature, namely an *interactionist* one. As mentioned, the structural dimension of discretion designates a space in which one can choose between different alternatives based on one's professional judgment, whereas the epistemic dimension refers to the forms of reasoning under conditions of indeterminacy. As a supplement, the interactionist dimension stresses how professionals' discretionary reasoning is embedded in and shaped by their interactions with others. When professionals interact with clients and colleagues, it is often the interactions between participants, rather than any single participant, that brings about the professional decisions (Goodwin, 2014).

To improve our understanding of this interactionist dimension of discretion, further empirical and conceptual elaboration is needed. Future research might find inspiration in interactionist literature on topics such as distributed decision-making (Goodwin, 2014; Rapley, 2008), frame analysis (Goffman, 1974) and conversation analysis (Sacks, 1992). Based on such literature, it could be argued that the interactionist aspect is inherent in nurses' discretionary reasoning, in the Meadian sense that they always take others into account when they reason about patients' urgency (see Engesmo & Tjora, 2006). This idea demonstrates one of the ways in which interactionist and epistemic discretion might be interrelated. Whereas the reviewed literature only hints at such connections, future research could explore them more thoroughly.

Conclusion

The aim of this review has been to understand how nurses use discretion when they perform urgency assessments in EDs with formalised triage systems. Drawing on Molander and Grimen's (2010) distinction between structural and epistemic discretion, the review has shown (a) how inexhaustive guidelines and a hectic work environment open up a space for discretion and (b) how nurses reason within this space by relying on their experience and intuition, judging patients according to criteria such as appropriateness and believability, and creating urgency ratings together with their patients. Based on the reviewed literature, a new interactionist dimension of discretion has also been suggested, which stresses how professionals' discretionary reasoning is embedded in and shaped by their interactions with others.

The review has highlighted several issues of relevance for nursing practice, especially regarding the role of discretion in triage itself. Most will agree that some level of discretion is necessary for nurses to be sensitive to the differing needs and circumstances of their patients. The question thus becomes how this perspective may

be reconciled with the goal of triaging patients as equally and as fairly as possible. For instance, given the insight that previous experience and intuition may bias one's decision-making (Kahneman, 2011), it is imperative to discuss whether and how nurses should rely on these heuristics when assessing patients.

Given the small amount of research in the field, the findings of this review only reveal fragments of triage nurses' practice. Future research should aim to provide a more exhaustive analysis of the structural, epistemic and interactionist dimensions of nurses' discretionary work, and it should do so in a context-sensitive manner. In general, the literature's lack of contextual considerations reveals a significant need for more "thick descriptions" (Geertz, 1973) of discretion in triage. Thicker descriptions are essential to provide a more nuanced picture of nurses' work, and they could contribute to a refined understanding of both triage and discretion alike.

References

Andersson, A.-K., Omberg, M., & Svedlund, M. (2006). Triage in the emergency department – a qualitative study of the factors which nurses consider when making decisions. *Nursing in Critical Care*, *11*(3), 136–145. http://doi.org/10.1111/j.1362-1017.2006.00162.x

Arslanian-Engoren, C. (2000). Gender and age bias in triage decisions. *Journal of Emergency Nursing*, *26*(2), 117–124. http://doi.org/10.1016/S0099-1767(00)90053-9

Arslanian-Engoren, C. (2009). Explicating Nurses' Cardiac Triage Decisions. *Journal of Cardiovascular Nursing*, *24*(1), 50–57.

Atkins, S., Lewin, S., Smith, H., Engel, M., Fretheim, A., & Volmink, J. (2008). Conducting a meta-ethnography of qualitative literature: Lessons learnt. *BMC Medical Research Methodology*, *8*(1), 21. http://doi.org/10.1186/1471-2288-8-21

Atkinson, P. (1995). *Medical talk and medical work: the liturgy of the clinic*. London: Sage.

Campbell, R., Pound, P., Morgan, M., Daker-White, G., Britten, N., Pill, R., … Donovan, J. (2011). Evaluating meta-ethnography: systematic analysis and synthesis of qualitative research. *Health Technology Assessment*, *15*(43). http://doi.org/10.3310/hta15430

Chung, J. Y. M. (2005). An exploration of accident and emergency nurse experiences of triage decision making in Hong Kong. *Accident and Emergency Nursing*, *13*(4), 206–213. http://doi.org/10.1016/j.aaen.2005.08.003

Cioffi, J. (1998). Decision making by emergency nurses in triage assessments. *Accident and Emergency Nursing*, *6*(4), 184–191. http://doi.org/10.1016/S0965-2302(98)90077-7

Cone, K. J., & Murray, R. (2002). Characteristics, insights, decision making, and preparation of ED triage nurses. *Journal of Emergency Nursing*, *28*(5), 401–406. http://doi.org/10.1067/men.2002.127513

Dingwall, R., & Murray, T. (1983). Categorization in accident departments: "good" patients, "bad" patients and "children." *Sociology of Health & Illness*, *5*(2), 127–148. http://doi.org/10.1111/1467-9566.ep10491496

Dodier, N., & Camus, A. (1998). Openness and specialisation: dealing with patients in a hospital emergency service. *Sociology of Health & Illness*, *20*(4), 413–444. http://doi.org/10.1111/1467-9566.00109

Dworkin, R. (1978). *Taking rights seriously*. London: Duckworth.

Edwards, B. (2007). Walking in – Initial visualisation and assessment at triage. *Accident and Emergency Nursing*, *15*(2), 73–78. http://doi.org/10.1016/j.aaen.2006.12.008

Edwards, B., & Sines, D. (2008). Passing the audition – the appraisal of client credibility and assessment by nurses at triage. *Journal of Clinical Nursing*, *17*(18), 2444–2451. http://doi.org/10.1111/j.1365-2702.2007.01970.x

Engesmo, J., & Tjora, A. H. (2006). Documenting for whom? A symbolic interactionist analysis of technologically induced changes of nursing handovers. *New Technology, Work and Employment*, *21*(2), 176–189. http://doi.org/10.1111/j.1468-005X.2006.00171.x

FitzGerald, G., Jelinek, G. A., Scott, D., & Gerdtz, M. F. (2010). Emergency department triage revisited. *Emergency Medicine Journal*, *27*(2), 86–92. http://doi.org/10.1136/emj.2009.077081

France, E. F., Ring, N., Thomas, R., Noyes, J., Maxwell, M., & Jepson, R. (2014). A methodological systematic review of what's wrong with meta-ethnography reporting. *BMC Medical Research Methodology*, *14*(1), 119. http://doi.org/10.1186/1471-2288-14-119

Freidson, E. (2001). *Professionalism: The third logic*. Cambridge: Polity Press.

Fry, M. (2012). An ethnography: Understanding emergency nursing practice belief systems. *International Emergency Nursing*, *20*(3), 120–125. http://doi.org/10.1016/j.ienj.2011.09.002

Geertz, C. (1973). Thick description: Toward an interpretative theory of culture. In C. Geertz (Ed.), *The interpretation of cultures. Selected essays* (pp. 3–30). New York: Basic Books.

Gerdtz, M. F., Weiland, T. J., Jelinek, G. A., Mackinlay, C., & Hill, N. (2012). Perspectives of emergency department staff on the triage of mental health-related presentations: Implications for education, policy and practice. *Emergency Medicine Australasia*, *24*(5), 492–500. http://doi.org/10.1111/j.1742-6723.2012.01592.x

Goffman, E. (1959). *The presentation of self in everyday life*. Garden City, N.Y.: Doubleday.

Goffman, E. (1974). *Frame analysis : an essay on the organization of experience*. Cambridge, Mass.: Harvard University Press.

Goodwin, D. (2014). Decision-making and accountability: differences of distribution. *Sociology of Health & Illness*, *36*(1), 44–59. http://doi.org/10.1111/1467-9566.12042

Göransson, K. E., Ehnfors, M., Fonteyn, M. E., & Ehrenberg, A. (2008). Thinking strategies used by Registered Nurses during emergency department triage. *Journal of Advanced Nursing*, *61*(2), 163–172. http://doi.org/10.1111/j.1365-2648.2007.04473.x

Hillman, A. (2014). "Why must I wait?" The performance of legitimacy in a hospital emergency department. *Sociology of Health & Illness*, 485–499. http://doi.org/10.1111/1467-9566.12072

Hitchcock, M., Gillespie, B., Crilly, J., & Chaboyer, W. (2014). Triage: an investigation of the process and potential vulnerabilities. *Journal of Advanced Nursing*, *70*(7), 1532–1541. http://doi.org/10.1111/jan.12304

Hughes, D. (1977). Everyday and medical knowledge in categorizing patients. In R. Dingwall, C. Heath, M. Reid, & M. Stacey (Eds.), *Health Care and Health Knowledge* (pp. 128–140). London: Croom Helm.

Hughes, D. (1988). When nurse knows best: some aspects of nurse/doctor interaction in a casualty department. *Sociology of Health & Illness*, *10*(1), 1–22. http://doi.org/10.1111/1467-9566.ep11340102

Hughes, D. (1989). Paper and people: the work of the casualty reception clerk. *Sociology of Health & Illness*, *11*(4), 382–408. http://doi.org/10.1111/1467-9566.ep11373441

Jeffery, R. (1979). Normal rubbish: deviant patients in casualty departments. *Sociology of Health & Illness*, *1*(1), 90–107. http://doi.org/10.1111/1467-9566.ep11006793

Johansen, M. B., & Forberg, J. L. (2011). Nurses' evaluation of a new formalized triage system in the emergency department - a qualitative study. *Danish Medical Bulletin*, *58*(10), A4311.

Kahneman, D. (2011). *Thinking, fast and slow*. New York: Farrar, Straus and Giroux.

King, L., & Appleton, J. V. (1997). Intuition: a critical review of the research and rhetoric. *Journal of Advanced Nursing*, *26*(1), 194–202. http://doi.org/10.1046/j.1365-2648.1997.1997026194.x

Lipsky, M. (1980). *Street-level bureaucracy: dilemmas of the individual in public services*. New York: Russell Sage Foundation.

Mannon, J. M. (1976). Defining and Treating "Problem Patients" in a Hospital Emergency Room. *Medical Care*, *14*, 1004–1013. http://doi.org/10.2307/3763250

Molander, A., & Grimen, H. (2010). Understanding professional discretion. In L. Svensson & J. Evetts (Eds.), *Sociology of Professions. Continental and Anglo-Saxon Traditions* (pp. 167–187). Göteborg: Daidalos.

Noblit, G. W., & Hare, R. D. (1988). *Meta-ethnography: synthesizing qualitative studies*. Newbury Park, Calif.: Sage Publications.

Patel, V. L., Gutnik, L. A., Karlin, D. R., & Pusic, M. (2007). Calibrating urgency: triage decision-making in a pediatric emergency department. *Advances in Health Sciences Education*, *13*(4), 503–520. http://doi.org/10.1007/s10459-007-9062-6

Polanyi, M. (1958). *Personal knowledge: towards a post-critical philosophy*. Chicago: The University of Chicago.

Purc-Stephenson, R. J., & Thrasher, C. (2010). Nurses' experiences with telephone triage and advice: a meta-ethnography. *Journal of Advanced Nursing*, *66*(3), 482–494. http://doi.org/10.1111/j.1365-2648.2010.05275.x

Rapley, T. (2008). Distributed decision making: the anatomy of decisions-in-action. *Sociology of Health & Illness*, *30*(3), 429–444. http://doi.org/10.1111/j.1467-9566.2007.01064.x

Roth, J. A. (1972). Some contingencies of the moral evaluation and control of clientele: The case of the hospital emergency service. *American Journal of Sociology*, *77*, 839–856. http://doi.org/10.2307/2776925

Sacks, H. (1992). *Lectures on conversation*. Blackwell.

Tanner, C. A., Benner, P., Chesla, C., & Gordon, D. R. (1993). The phenomenology of knowing the patient. *Image: The Journal of Nursing Scholarship*, *25*(4), 273–280. http://doi.org/10.1111/j.1547-5069.1993.tb00259.x

Toulmin, S. (1958). *The uses of argument*. London: Cambridge University Press.

Vassy, C. (2001). Categorisation and micro-rationing: access to care in a French emergency department. *Sociology of Health & Illness*, *23*(5), 615–632. http://doi.org/10.1111/1467-9566.00268

Appendix

Table 2
Overview of selected studies

#	Study	Country	Purpose	Data collection	Sample	Triage system
1	Andersson et al. (2006)	Sweden	To describe triage nurses' work and to view factors that are important for making decisions and prioritization of patients in an ED	Observations of nurses' triage work followed by a short tape-recorded interview	16 female and 3 male nurses with more than 6 months of triage experience working in the ED of a county hospital in northern Sweden	Locally developed guidelines consisting of 3 levels with 6 categories of priority
2	Arslanian-Engoren (2000)	USA	To examine the triage decisions made by ED nurses for persons with symptoms suggestive of myocardial infarction	4 focus group interviews	8 female and 4 male nurses working in 2 urban and 2 suburban EDs located in Ohio and Michigan	Does not specify.
3	Arslanian-Engoren (2009)	USA	To explicate the decision-making processes of ED nurses who triage men and women for myocardial infarction	3 focus group interviews	11 female and 1 male nurse working in a large, tertiary care, university-affiliated ED in the Midwestern United States	Emergency Severity Index (ESI) scale

4	Chung (2005)	China	To understand the triage decision-making experiences of emergency nurses and the contextual influences on triage decision making	Unstructured open interviews	7 female registered nurses with at least 1 year of experience recruited from three different A&Es in Hong Kong	Does not specify, but the analysis shows they have a system with at least 4 categories
5	Cone & Murray (2002)	USA	To describe characteristics, insights, and decision-making of expert emergency nurses practicing in a triage environment	2 focus group interviews	10 nurses with at least 5 years of emergency staff nursing experience recruited from 2 EDs in the Midwestern United States	Locally developed guidelines which are not described in any detail
6	Ewards (2007)	UK	To explore how nurses undertake the process of initial assessment at triage, specifically the process of 'initial visualisation'	Video recordings of triage encounters followed by interviews with nurses	38 video-recordings of 14 nurses' live triage encounters in 2 demographically distinct A&E departments	Does not specify
7	Ewards & Sines (2008)	UK	To analyse how nurses appraise client credibility as part of the initial assessment at triage	Video recordings of triage encounters followed by interviews with nurses	38 video-recordings of 14 nurses' live triage encounters in 2 demographically distinct A&E departments	Does not specify
8	Fry (2012)	Australia	To provide understanding of how belief systems can impact on triage nursing behavioural patterns, actions and decision-making	Non-participant observation	200 hours of observing 7 female and 3 male clinical nurse specialists in 4 metropolitan tertiary Referral Hospital EDs	The Australasian Triage Scale (ATS)

9	Gerdtz et al. (2012)	Australia	To explore ED staff perceptions of the factors that influence accuracy of triage for people with mental health problems	Semi-structured telephone interviews	16 nurses and 20 doctors working either in a metropolitan or a rural/regional ED	The Australasian Triage Scale (ATS)
10	Göransson et al. (2008)	Sweden	To describe and compare thinking strategies and cognitive processing in the emergency department triage process by Registered Nurses with high and low triage accuracy.	Think aloud method: making participants think aloud while discussing patient scenarios	13 female and 3 male ED nurses who had either the highest or lowest triage accuracy scores in a previous study examining triage accuracy	Does not specify.
11	Hillman (2014)	UK	To explore the negotiations that occur during ED patient assessments.	Non-participant observation	250 hours of observation in a large inner city teaching hospital	Does not specify, but describes a system consisting of 5 categories
12	Hitchcock et al.(2014)	Australia	To identify problems and potential vulnerabilities that may affect the triage process	Non-participant observation and formal and informal interviews	170 hours of observing 60 episodes of triage, 31 informal interviews and 14 formal interviews with nurses (and others) in an ED at a regional public teaching hospital	The Australasian Triage Scale (ATS)
13	Johansen & Forberg (2011)	Denmark	To explore how the nurses experience the introduction of a formalized triage system at the ED and its consequences for their	Semi-structured interviews preceded by observations of ED nurses' triage work	15 nurses working in the Hillerød Hospital ED with an average of 9 years emergency work experience (range: 3	Hillerød Acute Process Triage (HAPT): a five-level triage system

			work prac-tice		months-32 years)	
14	Patel et al. (2007)	Canada	To investi-gate the pro-cess of tri-age, the fac-tors that influence tri-age decision-making, and how the guidelines are used in the process	Observa-tions of and semi-struc-tured inter-views with triage nurses	3 months of observing 4 different nurses on 4 different days, as well as in-terviews with 4 female and 5 male nurses, all working in a paediatric ED	The Cana-dian Tri-age and Acuity Scale (CTAS)