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1 **Abstract**

2 **Background**

3 In response to increasing waiting times, adverse patient outcomes and patient  
4 dissatisfaction, some emergency departments introduced a Waiting Room Nurse role.  
5 Despite implementation into routine practice, there remains limited formal evaluation of  
6 the role.

7

8 **Aim**

9 To explore the implementation of a Waiting Room Nurse role in Australian emergency  
10 departments and emergency nurses' perceptions.

11

12 **Methods**

13 Survey design. A 40-item survey was developed, piloted and then distributed to members  
14 of a professional College for online completion. Responses for closed-ended and open-  
15 ended items were reported using frequencies or proportions, and quantitative content  
16 analysis, respectively.

17

18 **Results**

19 Respondents (n=197) reported that 51 emergency departments allocated a Waiting  
20 Room Nurse, with varying hours of operation. Five key areas of responsibility were:  
21 patient care, patient safety, escalation of care, triage and communication. Role variations  
22 were identified in experience, preparation and supporting policies. Challenges, including  
23 workload and personal safety issues, were reported.

24

25 **Conclusions**

26 The role was perceived as vital, especially at times of high demand, in ensuring that  
27 patients were safe to wait, detecting deterioration and escalating care as needed.

28 Communication and therapeutic relationships were key to effective performance.

29 Challenges identified had clear implications for the welfare of nurses performing the role.

30

31 **Keywords**

32 emergency departments, emergency nursing, surveys, waiting room

33

34           **1 Introduction**

35           On presentation to an emergency department (ED), patients are rapidly assessed  
36 by a triage nurse and allocated a category based on clinical urgency. Patients are then  
37 assessed and management commenced by a Medical Officer or Nurse Practitioner  
38 based on their allocated category, ensuring the most unwell are treated first [1]. Patients  
39 are allocated to an appropriate treatment cubicle when available, where emergency care  
40 commences [2]. If a cubicle is not required or is unavailable, they are seated in the  
41 waiting room. Some departments have a waiting room nurse (WRN) dedicated to care  
42 for these patients [3].

43

44           *1.1 Background*

45           The WRN role was introduced to address issues relating to increased demands  
46 and long wait times in the ED, including poor patient outcomes and experiences, and  
47 key performance indicators not being met. The presence of a WRN enables patients'  
48 episodes of care to commence in the waiting room [4]. Key responsibilities involve  
49 monitoring, communication and safety (including detecting clinical deterioration),  
50 implementing interventions early, and patient advocacy [5].

51           WRN practice is often underpinned by standing orders or clinical pathways [6, 7].  
52 Standing orders, referred to as nurse-initiated protocols, allow nurses to initiate  
53 interventions and/or diagnostic investigations according to pre-determined protocols [8],  
54 including administration of analgesia [9] and ordering x-rays [10]. In comparison, clinical  
55 pathways ensure a uniform approach to patient management by integrating guidelines  
56 and protocols into a coordinated and sequential plan of care [11].

57           Despite varying degrees of implementation into practice, there remains limited  
58 literature on the WRN role internationally. Of note, there is a dearth of literature  
59 describing current WRN practice in the clinical setting and perceptions of the role. The

60 aim of the research was to explore the implementation of a WRN role in Australian EDs  
61 and emergency nurses' perceptions.

62

## 63 **2 Methods**

### 64 *2.1 Design*

65 This survey design research is the final phase of a larger multiphase exploratory  
66 sequential mixed methods study exploring the nursing role in ED waiting rooms. Mixed  
67 methods allows for multiple research methods to be used in a single study [12]. An  
68 exploratory sequential design allows for exploration of topics about which little is known.  
69 An initial qualitative (exploratory) phase is followed by a quantitative phase to explain  
70 and evaluate results [13]. A key aspect of sequential mixed methods research is that  
71 data from previous phases informs subsequent phases [14]. In this project, findings from  
72 key informant interviews [5] informed data collection and analysis in the observational  
73 phase [15] which subsequently informed data collection for this phase.

74 This paper reports findings from a web-based survey which allowed for  
75 systematic collection of data from a large sample enabling direct comparisons [16].  
76 Advantages of using a web-based survey design include: ease of distribution,  
77 convenience for respondent completion, faster response times, cheap to administer [17]  
78 and elimination of data entry errors [18].

79

### 80 *2.2 Sample/Participants*

81 Purposive sampling was used to identify respondents; Registered Nurses (RNs)  
82 who were members of the College of Emergency Nursing Australasia (CENA), the peak  
83 national emergency nursing professional body [CENA, 19]. CENA members were  
84 deemed broadly representative of all emergency nurses, had relevant professional  
85 knowledge and insights, and were able to reflect on and explore their experiences of the

86 role. Recruitment was undertaken via the CENA secretariat who emailed members  
87 inviting participation.

88

### 89 *2.3 Data collection*

90 A literature search revealed no surveys that would address the research aims. A  
91 survey was designed using four stages described by de Vaus [16] – (i) identify data for  
92 collection, (ii) draft questions, (iii) establish survey validity, and (iv) pilot the survey.

93 First, broad concepts from the literature and findings from previous study phases  
94 were identified [16]. Next, questions were drafted and ordered so concepts could be  
95 measured. An important consideration was how data would be analysed, as this may  
96 affect how questions were constructed [16]. The research team reviewed and refined  
97 drafts of the survey for interpretation, clarity, and functionality. Multi option lists and  
98 greater use of open ended questions were added through these processes to lessen  
99 participant burden [16].

100 The final version of the survey included 40 items across five sections: i)  
101 participant demographics (seven items); ii) WRN role including title; responsibilities;  
102 experience and preparation (10 items), (iii) supporting policies (19 items); (iv)  
103 communication and documentation (two items); and v) general comments (two items).

104 Items were entered into SurveyMonkey© [20], enabling skip logic to ensure  
105 respondents were not asked irrelevant questions. For example, if a respondent indicated  
106 there were no WRN in their department, then a skip logic function directed respondents  
107 to the end of the survey [16, 21]. The range of items a respondent could answer was  
108 between 11 and 40.

109 After approval by CENA, an email containing a brief research information  
110 statement, copy of the Participant Information Form, researcher's contact details and a  
111 link to the survey was sent by the College secretariat to members. The survey period

112 was open for four-weeks in June 2017, with a reminder email sent one week prior to the  
113 survey closing. The survey was for completion in one visit. No incentives were provided.

114

#### 115 *2.4 Validity and reliability*

116 To establish face and content validity, the survey was completed by two  
117 experienced emergency nurses with familiarity of the role and research knowledge.  
118 Feedback was provided on wording and flow of questions to ensure they were  
119 appropriate and clearly written, contributed to meeting the study aim, and flowed logically.  
120 Suggestions were made for skip logic.

121 A pilot study was then implemented to confirm reliability. Six experienced  
122 emergency nurses, not involved in the validity check, with backgrounds in clinical  
123 management and education completed the survey. It was deemed that these nurses  
124 were able to interpret and answer the questions appropriately and were able to provide  
125 feedback. Two of the respondents were not familiar with the role, ensuring that all  
126 aspects of the survey, including skip logic, were tested. Pilot respondents completed the  
127 survey and provided feedback on the questions for clarity, flow and if questions  
128 addressed the aim of the research. Findings from the pilot study found similar responses,  
129 establishing reliability. All nurses involved in survey development were excluded from  
130 the sample.

131

#### 132 *2.5 Ethical Considerations*

133 Following Human Research and Ethics Committee approval from the supporting  
134 university, CENA granted permission to survey their members. Survey responses were  
135 anonymous, with consent implied by respondents' completing the survey.

136

#### 137 *2.6. Data analysis*

138 Data were downloaded from SurveyMonkey© [20] in an Excel© spreadsheet, [22],  
139 cleaned and coded prior to being transferred to an IBM SPSS Statistics [23] V.24 data  
140 file for analysis. Each respondent's dataset was entered as a single observation.  
141 Continuous data were assessed using the Kolmogorov-Smirnov test, significance set at  
142 <0.001 for violating the assumption of normality. Based on the non-normal distribution of  
143 all data variables, nonparametric tests were used for analyses [24]. Frequencies,  
144 percentages, median and interquartile range were used to describe characteristics of  
145 respondents and the WRN including presence of the role, title, experience and/or  
146 preparation of the nurse, medication administration and interventions performed. For  
147 missing values in the dataset from non-applicable items, the frequency of responses is  
148 presented.

149 Open-ended responses were analysed using Hsieh and Shannon's [25]  
150 quantitative content analysis framework. Keywords were initially identified from the  
151 literature and previous study phases. Responses were then reviewed with keywords  
152 identified. The research team independently reviewed the dataset and collectively  
153 agreed on keywords. Additional keywords were identified during analysis.

154 Words or phrases that had similar meaning to keywords were identified to ensure  
155 correct context of the data. An example of this was Item 10, 'Discuss the aim or purpose  
156 of the WRN in your ED' where the keyword 'observation' was identified and counted.  
157 Responses were then re-read to identify similar terms, such as 'reassessment' and  
158 'monitor'. All terms were then counted together and presented as a frequency. De-  
159 identified quotes were used as exemplars and to clarify issues, using the respondent's  
160 unique identifier, a quote from respondent 1 would be reported as ID1.

161

### 162 **3 Results**



163 Survey results are described in the following sections that broadly reflect the  
164 survey structure: respondent demographics, WRN role and characteristics, experience  
165 and preparation; supporting policies; and perceptions and challenges.

166

### 167 *3.1 Respondent demographics*

168 Survey links were available to 1242 CENA members, and 197 surveys were  
169 completed (response rate 15.9%). Respondents were from 86 separate EDs, of which  
170 59.3% (n=51) allocated a WRN. Of the total respondents, 18.3% (n=36) did not identify  
171 their hospital. Respondents had a median of 11 years' emergency nursing experience,  
172 the most common highest educational qualification was Master level, and the majority  
173 worked at triage. Almost half of the respondents were located in New South Wales and  
174 Victoria. Table 1 presents respondents' demographic characteristics.

175

### 176 *3.2 WRN role and characteristics*

177 Most respondents (n=119, 61%) reported that their ED allocated a nurse, other  
178 than the triage nurse, to care for patients in the waiting room. The most common titles  
179 for the role were Clinical Initiative Nurse (CIN) (n=37, 39.4%), WRN (n=31, 32.9%) and  
180 triage assist/assessment (n=26, 27.7%).

181 Five key areas of responsibility were identified from survey responses: patient  
182 care, patient safety, escalation of care, triage responsibilities, and communication.

183

#### 184 *3.2.1. Patient care*

185 A key WRN responsibility was to expedite care (n=44); "to ensure that all patients  
186 in the waiting room are cared for throughout their journey" (ID162), and to assist with  
187 meeting patients' "immediate needs where possible" (ID41) including basic care needs  
188 such as assisting with toileting (ID38). The WRN was therefore responsible for  
189 commencing early management of a patient's presenting condition (n=136); by providing

190 “meaningful treatment within the time allocated by the [patients’] triage category” (ID30),  
191 commencing “treatment according to pathways prior to medical review” (ID180), and  
192 “ultimately [facilitated] decreasing wait times” (ID85).

193 Patient assessment and monitoring was a common patient care (n=91) activity.  
194 Assessments varied, as the focus “depended on the reason for presenting” (ID42) and  
195 “what the nurse thinks is appropriate to get a better understanding of the patients’  
196 presentation” (ID38). Primary assessment was the most frequently reported assessment  
197 undertaken (n=50) (Table 2).

198 Patient reassessment was a key process during the waiting period, with the WRN  
199 responsible for “early reassessment of patients waiting post-triage” (ID33). There were  
200 a variety of timeframes and indicators for reassessing patients but these commonly  
201 reflected the patients’ allocated triage category; as one respondent noted, “100% of  
202 patients are reassessed according to their triage category, while waiting to see a doctor  
203 or be allocated a cubicle” (ID136) (Table 2).

204 A range of medications administered and interventions performed by the WRN  
205 were identified. Medications were either administered orally, topically or inhaled, with  
206 Paracetamol being the most common medication administered, and inhaled adrenaline  
207 the least common (Table 3). A wide variety of interventions performed were also reported,  
208 with basic first aid/minor injury management the most common and writing referrals and  
209 plaster checks/splitting the least. Diagnostic activities performed included blood glucose  
210 monitoring and electrocardiograms (Table 4).

211 The most common factor preventing medications and interventions being  
212 administered or performed in the waiting room related to patient safety (n=65); potential  
213 for patient deterioration and adverse effects. Other factors included privacy concerns  
214 (n=11), lack of space (n=8), unsuitable skill mix/experience of WRN (n=6), need for a  
215 medical order (n=1) and infection control (n=2).

216

### 217 3.2.2 Patient Safety

218 Patient safety (n=55) was highlighted as a key responsibility, particularly ensuring  
219 that patients were safe to wait or remain waiting in the waiting room. As respondents  
220 stated, “patient safety is by far the most important reason for a WRN” (ID7). Thus, the  
221 WRN “provided a safety net to those in the waiting room” (ID34) by “ensuring patients  
222 were safe to wait [in the waiting room]” (ID112).

223 Patient reassessment, as noted earlier, was a vital aspect of patient safety. The  
224 WRN “monitored waiting room patients for signs of deterioration” (ID192), and, if  
225 detected, responded to “escalate care as appropriate” (ID38). The WRN was therefore  
226 an “advocate for patients in the waiting room” (ID61) ensuring they received appropriate  
227 and timely management.

228 A subset to patient safety was flow of patients from the waiting room into the  
229 department treatment areas (n=23). The WRN assisted with patient flow by allocating  
230 and “taking patients through to available cubicles” (ID103), reducing wait times and  
231 improving patient safety.

232

### 233 3.2.3 Escalation of care

234 If patient deterioration was detected, a number of pathways were reported for the  
235 WRN to escalate care. Commonly this was for the WRN or triage nurse to re-triage (n=35)  
236 the patient, and in some cases notify the nurse in charge (ID22) or collaborate with senior  
237 staff to prioritise care needs and move the “patient to the most appropriate clinical space”  
238 (ID195) for further assessment and management. Other escalation pathways varied  
239 based on the structure and processes within each department, focusing on notifying a  
240 specific staff member: triage nurse (n=49); nurse in charge/coordinator (n=57); senior  
241 medical officer/treating doctor (n=27); team leader (n=9); Clinical Nurse  
242 Consultant/Clinical Nurse Specialist (n=4); or activation of a response team e.g. Medical  
243 Emergency Team or Critical Response Team (n=5).

244

### 245 3.2.4 Triage responsibilities

246 Approximately two-thirds of respondents indicated that the WRN was permitted  
247 to assist with the triage process (n=73, 61.3%), although variability was noted. Triage  
248 assistance was permitted when the triage nurse's workload was excessive (n=62), to  
249 cover the triage nurse for breaks (n=41) and triage ambulance arrivals (n=12). As well  
250 as assisting with the triage process (ID48), the WRN collaborated (n=43) with the triage  
251 nurse through support (ID109), and "liaised with [the] triage nurse" (ID61) to identify and  
252 prioritise patient care needs (ID41, ID196).

253 Conversely, in some departments, the WRN was not permitted to triage. Reasons  
254 included non-triage prepared nurses performing the role in some departments (n=9),  
255 potential for "role confusion" (ID143) and loss of "clear role delineation" (ID70) between  
256 the triage role and WRN. Another concern was if the WRN performed triage, they could  
257 become distracted, not prioritising waiting room patient care needs (ID65), resulting in  
258 increased waiting times, delays in interventions commencing and potential for care to be  
259 missed. As noted, "the WRN is not permitted to triage patients even if they are qualified,  
260 as [if they do] patients in the waiting room are not being assessed and re-assessed, [and]  
261 meaningful treatment is not occurring" (ID30).

262

### 263 3.2.5 Communication

264 Communication was a key WRN responsibility (n=46); providing "communication  
265 and support to visitors and patients in the waiting room" (ID108), and keeping "patients  
266 informed of their progress, wait times [and] cause of delays in treatment" (ID41). Effective  
267 communication skills were required to develop therapeutic relationships with patients  
268 and families which contributed to the WRN "providing comfort and reassurance" (ID197),  
269 de-escalating anxious patients and families (ID36, ID43) and "alleviating stress" (ID120).  
270 A crucial feature of patient communication was "to make sure patients felt cared for even

271 though they are in the waiting room” (ID25). Respondents felt the development of an  
272 effective nurse-patient relationship improved the patient experience, improving  
273 consumer relations (ID71), patient satisfaction (ID165) and decreasing complaints (ID71).

274 Documentation was central to effective communication and was acknowledged  
275 by respondents as vital for safe, effective patient care. As noted, “contemporaneous  
276 documentation is important to ensure continuity of patient care” (ID40). One respondent  
277 acknowledged however that documentation “was not done very well” (ID23).

278

### 279 *3.3 Experience and preparation*

280 Experience and preparation required prior to commencing in the role varied  
281 (Table 5). In terms of emergency nursing experience, two years was the median. Of 64  
282 responses for this item, approximately one-third (n=21, 32.8%) identified no minimum  
283 duration of time required prior to commencing in the role, but rather a minimum set of  
284 skills and knowledge, which took varied time for each nurse to develop. One respondent  
285 reported, “not specified in years rather in skill, experience and communication abilities”  
286 (ID157).

287 Two-thirds of respondents indicated that triage-preparation was not a role  
288 requirement. The majority of respondents also indicated that postgraduate qualifications  
289 were not a prerequisite. Of the four respondents who identified postgraduate  
290 qualifications as necessary, all agreed that a Graduate Certificate was the minimum.

291 Approximately half of the respondents identified that additional preparation was  
292 required prior to commencing the role. Preparation was wide-ranging including in-house  
293 courses, workbooks/packages, and preceptorship, either as stand-alone activities or in  
294 combination. Two day courses (n=6) were most common, with one day (n=5) and three  
295 day courses (n=1) also completed. The CIN workbook (n=7) was most frequently utilised,  
296 followed by workbooks relating to: pathology (n=6), triage (n=5), x-ray (n=4),  
297 medication/analgesia administration (n=3), patient assessment (n=3), cannulation (n=3)

298 and communication (n=1). An orientation (n=9) or preceptorship/supernumerary period  
299 (n=14) were also included as preparation in some departments.

300 Some respondents felt that no additional preparation was required, instead  
301 reporting that experienced emergency nurses possessed sufficient skills and knowledge  
302 to work in the role. One respondent stated that the “level of expertise gained as an  
303 emergency nurse, and prior nursing experience should be taken into account” (ID76).

304

### 305 *3.4 Supporting policies*

306 Variation in policies underpinning practice was evident. The main policies  
307 identified were standing orders and clinical pathways. There were mixed views on  
308 whether current policies adequately supported the WRN; 13 respondents agreed while  
309 24 disagreed, suggesting a broadening of the range of medications and skills was  
310 needed. Standing orders were identified (n=106) as guiding practice, with nurse initiated  
311 analgesia the most common (Table 6). Clinical pathways were identified (n=39), for  
312 clinical states ranging from pain management to sepsis and shortness of breath, with  
313 chest pain the most common (Table 6).

314 Other than standing orders and clinical pathways, variations in policy were also  
315 noted (Table 7), ranging from medication administration to management of particular  
316 health concerns and the use of ‘My Card’ (used in one department for patients to record  
317 medications administered, investigations ordered and reasons for waiting).

318 Suggested policies to further support the role included broadening of the range  
319 of medications that could be administered, support for specific skills such as plastering  
320 and wound closure, and to cover the paediatric population (Table 7). Respondents  
321 working in departments that did not have nurse initiated pathology (n=3) and nurse  
322 initiated x-ray (n=6) policies acknowledged these would also be beneficial.

323

### 324 *3.5 Challenges and perceptions*

325 Multiple challenges associated with the role were identified, including workload,  
326 resources, hours of operation, workplace reallocation, skill mix, personal safety, unclear  
327 expectations and supporting policies. The most recurrent concern was the high nurse-  
328 patient ratios/workload (n=23) when departments became busy. As noted by one  
329 respondent, “only one nurse is available for the role with up to 30 patients in the waiting  
330 room at a time” (ID22). This had implications for patient safety as “large volumes of  
331 patients make it difficult at times to re-assess [patients]” (ID25) and made it “very difficult  
332 to keep track of who needs assessing/reassessing and when” (ID109).

333 Access to appropriate resources (n=18) included difficulty accessing medical  
334 staff to write orders and prescribe medications, and lack of appropriate space to assess  
335 patients and perform interventions. Lack of available beds resulted in high acuity patients  
336 (n=3) remaining in the waiting room (ID129), posing a risk to patient safety and increasing  
337 workload.

338 Limited hours of operation for the role were reported (n=7). Respondents stated  
339 “shifts are only 10am-8pm, so there are busy times when there is no WRN” (ID159), and  
340 this “leaves the triage nurse alone in the waiting room to attend to triage as well as  
341 reviews and CIN protocols” (ID36) potentially affecting patient care. As also noted,  
342 “restrictions on staffing in peak times is detrimental to the care that can be given to  
343 patients” (ID22). Other staffing issues included reallocation (n=7), with the WRN “pulled  
344 to other areas when the department was busy” (ID42). When under-staffed the role was  
345 given low priority and was “often the last thought” (ID117) with allocations, potentially  
346 being “left vacant” in these circumstances (ID84).

347 A final staffing issue was skill mix of staff performing the role (n=7). In some  
348 departments, where the WRN was “mostly a junior role ... and the department is busy,  
349 [the junior WRN] can be a liability as things are missed or not assessed properly due to  
350 inexperience, or treatment is unable to be commenced early as [WRN] is incompetent at  
351 interventions” (ID197). One respondent felt that the shift ran more smoothly if the WRN

352 was triage prepared (ID160). Enrolled nurses performing the role (n=1) was another  
353 limitation as initiation of standing orders or clinical pathways was not within their scope  
354 of practice.

355 Personal safety of the WRN was also identified as a challenge (n=6), as reflected  
356 by one respondent, “the waiting room can be an unsafe area” (ID193), particularly if there  
357 were aggressive or violent people present. The nurse is “very exposed” (ID85) and  
358 particularly at “risk of assault from mental health and substance abuse clients” (ID122).  
359 Long wait times (n=8) also influence nurse safety, as patients and families become  
360 anxious and agitated (ID36, ID110), and develop “hostility” (ID109) towards staff.

361 Finally, unclear expectations (n=4) and limited supporting policies (n=3) were  
362 identified as challenges. Unclear expectations were generally associated with medical  
363 staff who, for example, “order a whole lot of stuff that can't be done in the waiting room”  
364 (ID174), while “lack of protocols and restriction on ordering pathology and imaging limits  
365 the role and benefits for patients” (ID22).

366 Consideration must also be given to negative aspects of the role identified by  
367 respondents. The effect of the often relentless and busy nature of the waiting room (ID85),  
368 made the role “very stressful and lonely” (ID163), and “may be confronting” (ID16), with  
369 potential exposure to continual negative experiences such as “constantly being given  
370 complaints regarding wait times” (ID85). These factors can result in the role being  
371 “generally the least satisfying role in the whole department” (ID164), with “some RNs  
372 refusing to do it” (ID80). Another contributing factor to the role being unpopular was that,  
373 as noted above, the position was not clearly defined (ID53) with a vague role description  
374 (ID187), requiring as one respondent suggested, “a nationally agreed scope of practice  
375 similar to that of triage” (ID53).

376 Overall, respondents' perceptions of the role were positive; an essential role that  
377 all EDs should have (n=19) as “a mandated role” (ID123), and be “utilised by more EDs  
378 in order to improve patient safety and their [patient] journey” (ID51), especially during



379 busy periods (n=4). The role was viewed as “vital and allows for superior care to waiting  
380 room patients as well as avoiding any deterioration that may otherwise be missed” (ID25).  
381 The WRN was identified as being particularly important when demand on emergency  
382 services increased, potentially resulting in unwell patients waiting for an extended period.  
383 As reported, the WRN is a “process to protect the patient, protect the triage nurse and  
384 ensure waiting times to definitive care are minimised” (ID80), although funding and  
385 staffing affect the ability of departments to implement the role (ID3). The WRN role could  
386 also play an important part in professional development, especially triage preparation,  
387 as it “is a great role for nurses coming to triage” (ID117).

388

#### 389 **4 Discussion**

390 This survey of emergency nurses working in 86 separate EDS across all  
391 Australian States and Territories generated some commonalities and clear variations in  
392 perceptions of WRN responsibilities. Key findings were that patient safety is potentially  
393 the most important responsibility of the role; ensuring patients are safe to wait, a safe  
394 environment is provided, and safe care is initiated. These safety aspects are explored  
395 below in the context of expediting care, assessing and reassessing for clinical  
396 deterioration, establishing therapeutic relationships and effectively communicating with  
397 those in the waiting room. Variations in practice were also evident for experience,  
398 preparation and supporting policies. Despite the role being perceived as positive, a  
399 number of challenges were identified, primarily related to workload and resources, and  
400 potential for the role to have a negative impact on nurses.

401 Expediting patient care was identified as a key aspect. By commencing  
402 interventions, diagnostics and management early, delays to treatment could be  
403 minimised. This is important as increased waiting times have a detrimental impact on

404 patient outcomes, including a 40% increase in mortality [26], as well as influencing  
405 patient satisfaction and perceptions of care [27, 28].

406           Assessment and reassessment was viewed as a core WRN responsibility, as a  
407 patient's clinical condition can deteriorate while waiting, resulting in adverse outcomes  
408 [29]. Through close monitoring the WRN can ensure patients are safe to wait, or detect  
409 deterioration early and escalate care needs accordingly. Reassessment facilitates early  
410 interventions, for example administration of analgesia, and monitor for adverse  
411 outcomes and effectiveness, ensuring safe, quality care [30]. Reassessment also  
412 enables inequitable access to care for self-presenting patients allocated to the waiting  
413 room compared to patients presenting via ambulance [30].

414           In high-risk patient areas such as the waiting room, effective communication is  
415 fundamental to the provision of safe, quality care [31], while failed communication leads  
416 to poor ED patient outcomes [32]. A crucial aspect of effective communication is  
417 therapeutic nurse-patient relationships. The waiting room is a challenging environment  
418 for the WRN to have meaningful engagement with patients and families who are often  
419 stressed and distressed due to illness and waiting [33, 34]. Compounding this is the noisy,  
420 chaotic nature of this environment [35], the unpredictable workload, and multiple  
421 interruptions experienced by emergency nurses during care provision [36]. Despite these  
422 challenges, it is possible for the WRN to develop therapeutic relationships and effective  
423 communication which can develop from simple interactions, over short periods by asking  
424 straightforward questions and actively listening to responses or questions [37].

425           Patients and families often find emergency processes difficult to follow and the  
426 waiting room frightening and unsafe [33], with a perception that care is not provided as  
427 needed [38]. The presence and availability of the WRN contributes to the perception of  
428 a safe environment where patients are being cared for [34]. Providing updates on any  
429 delays also contributes to providing a safe environment, as patients and families often

430 have limited insight into potential reasons for delays [27], contributing to increased stress  
431 and poor perception of care.

432 Disparities in experience and preparation for the role were clear, reflecting wider,  
433 limited literature [5]. Supporting policies varied broadly with both standing orders and  
434 clinical pathways underpinning practice, similar to other findings [6].

435 Challenges identified with the role need to be considered by clinicians, managers,  
436 policy makers and educators. Exposure to high levels of occupational stressors,  
437 including increased workloads, skill mix and exposure to violence and aggression,  
438 culminated in the role being stressful and unsatisfying according to survey respondents.  
439 Exposure to frequent and ongoing stressors can affect emergency nurses both physically  
440 and emotionally, resulting in increased risk of injury, poor job satisfaction and increased  
441 absenteeism and attrition [39]. Quality of care delivered to patients can be negatively  
442 impacted as concentration, decision-making skills, communication and ability to  
443 establish therapeutic relationships may be affected [39, 40].

444

#### 445 *4.1 Strengths and limitations*

446 These findings need to be considered within the context of the strengths and  
447 limitations of the study methods. Use of an exploratory sequential mixed method design  
448 ensured that findings from previous phases of the larger study informed survey  
449 development. Use of a clear structured approach in developing the survey, including  
450 establishing content and face validity [16], and subsequent reliability testing through a  
451 pilot study [41] were also strengths.

452 A potential limitation was response bias, as the survey was self-reporting and  
453 responses may have been influenced by the format, construct or interpretation of  
454 questions. A risk of sampling error is noted; although the sample was a sizeable portion  
455 (15.9%) of CENA members and was perceived to be homogeneous, findings may not be  
456 representative of all Australian emergency nurses [16]. As the sample is from a single

457 country and public health system, findings may only be applicable to Australian EDs and  
458 not generalisable to other practice settings.

459

## 460 **5 Conclusion**

461 Clear variations in practice with the WRN in Australian EDs were identified,  
462 relating to education, preparation, responsibilities and triage. Despite these differences,  
463 respondents viewed the role as important for ensuring patient safety, including detecting  
464 deterioration and escalating care. Communication and development of therapeutic  
465 relationships were key to the role. Several challenges were identified that have  
466 implications for the welfare of nurses performing the role, including personal safety and  
467 burnout.

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