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**NCIC** National Centre  
for Infections  
in Cancer

# From recognition to action: organisational and cultural factors influencing nurse-initiated care in suspected sepsis- An interview study.



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# Background and influences of this study

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My PhD thesis investigates how nurses recognise and manage suspected sepsis in metropolitan, regional and remote areas caring for acutely unwell patients.

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I grew up in Sierra Leone, one of poorest countries in the world, heavy burden of infectious disease, high maternal and child death rates

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Influenced by Dr Paul Farmer- ID physician and creator of *Partners in Health* that focuses on healthcare in socioeconomically disadvantaged areas and strengthening public health systems<sup>1</sup>

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Farmer described *structural violence*- social, political and economic systems that systematically cause harm through lack of access to healthcare, education, safety and resources<sup>2</sup>.

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He developed a pragmatic framework called the 5S “*Staff, Stuff, Space, Systems and Support*”

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Dr Paul Farmer, founder of *Partners in Health* laying the first symbolic bricks for a new maternal health centre in Sierra Leone with Health Minister Dr Austin Demby



<https://www.pih.org/article/photos-pih-celebrates-groundbreaking-maternal-center-excellence-sierra-leone>  
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# Theoretical Framework

This research adopts a pragmatist epistemological framework as prioritises the practical application of ideas and how they can work in practice over abstract theorising



# What we already know

Sepsis remains a leading cause of preventable morbidity and mortality

Early recognition and response are critical to outcomes

Nurses are central to early detection of deterioration

Early sepsis is often clinically uncertain and undifferentiated

# Sepsis: an overview

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**Global Issue:** 20% of global deaths due to sepsis, 85% of these in Low- and Middle Income Countries<sup>1</sup>

**High Mortality:** In Australia, >84,000 sepsis hospitalisations and >12,000 die from sepsis annually<sup>2</sup>

**Disability:** 50% of survivors left with disability and/or impaired function<sup>2</sup>

**System Costs:** Australian healthcare system >\$1.5 billion annually<sup>2</sup>

**Inequity:** Indigenous peoples, poverty, elderly and children, distance (rural/remote areas) – higher prevalence<sup>2</sup>

**National Sepsis Care Standard:** supports sepsis improvement programs and protocolised care<sup>3</sup>

**Inconsistency of Care:** not all hospitals in Australia have implemented sepsis care programs<sup>3</sup>

<sup>1</sup>Rudd et al., 2020; <sup>2</sup>Kumar et al., 2023; <sup>3</sup>ACSQHC, 2022

# Why are nurses critical to timely sepsis care?

Largest global group of clinicians<sup>1, 2</sup>

Some settings: only clinician available<sup>3</sup>

Co-ordinator of care: well-placed to identify deterioration<sup>3, 4</sup>

Nurse-initiated sepsis care reduces sepsis-related mortality and healthcare costs<sup>5,6,7</sup>

Well suited to advanced practice roles to lead care<sup>8</sup>

Lead education and implementation in sepsis care<sup>9</sup>

<sup>1</sup>WHO, 2022; <sup>2</sup>WHO, 2020; <sup>3</sup>Bleakley & Cole, 2020; <sup>4</sup>Kleinpell, 2017; <sup>5</sup>Thursky et al., 2018; <sup>6</sup>Torsvik et al., 2016; <sup>7</sup>Jacobs et al., 2018; <sup>8</sup>Stewart et al., 2021; <sup>9</sup>ACSQHC, 2022



# Sepsis and clinical uncertainty



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Early sepsis rarely confirmed  
at point of recognition

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Nurses respond to  
deterioration not a diagnosis

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Recognition and action occur  
in undifferentiated patients

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Decisions made without  
diagnostic certainty

# Problem

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- Lack of research about organisational and cultural influences on nurse-initiated care in response to deterioration<sup>1,2</sup>
- Sepsis can be hard to recognise and manage in contexts of diagnostic uncertainty, complex patient presentations and variable resource availability<sup>3,4</sup>

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<sup>1</sup>Kissel et al., 2025; <sup>2</sup>Draeger et al., 2025; <sup>3</sup>Singer et al., 2016; <sup>4</sup>Macdonald et al., 2017

# Study characteristics



**Objective:** To explore the experiences of nurses working in acute care settings and examine how organisational and cultural factors influence their early recognition and management of suspected sepsis in the deteriorating patient.



**Design:** An exploratory, descriptive study



**Setting:** Nurses working in acute care settings across metropolitan, regional and rural-remote contexts









**Participants:** A purposive sample of registered nurses with experience of assessment and management of patients presenting with deterioration in acute care settings.



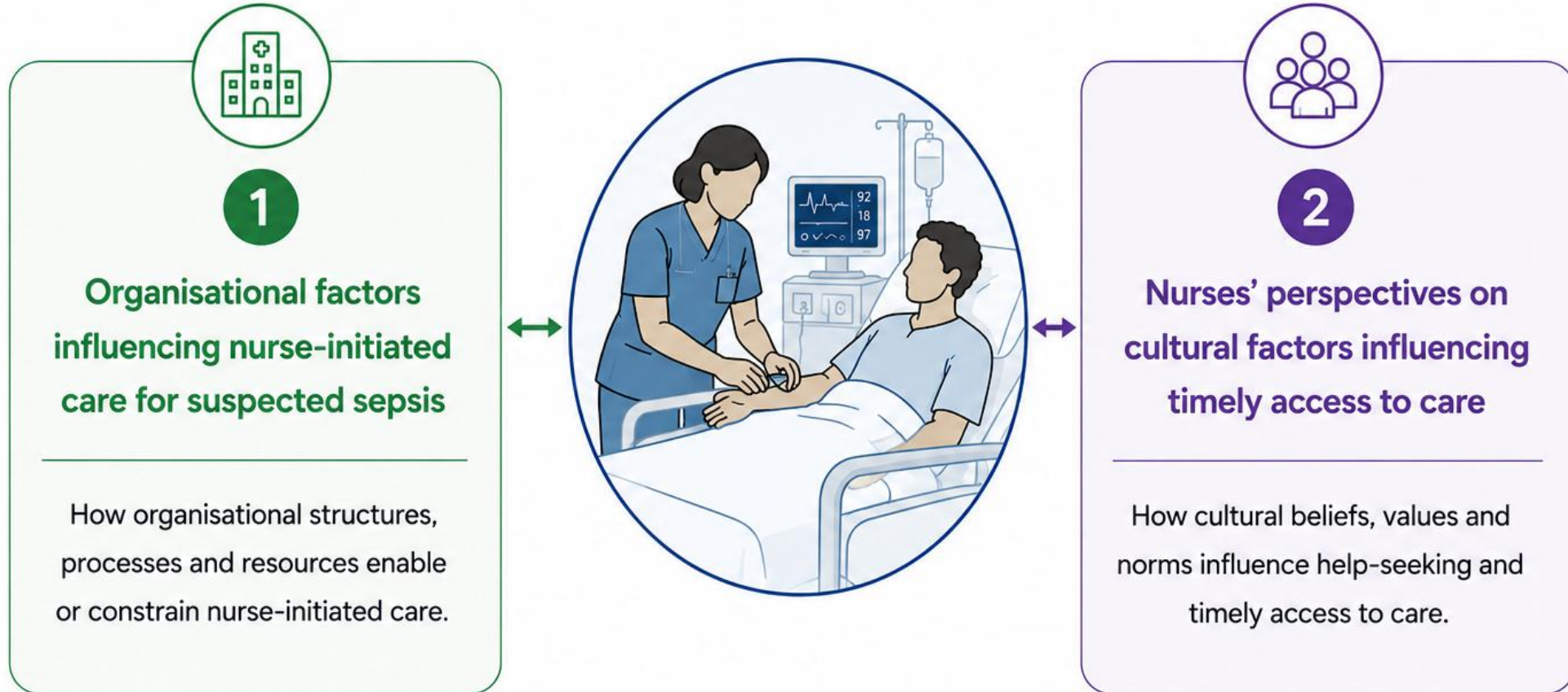
**Methods:** Data were collected through individual, semi-structured interviews and analysed inductively using reflexive thematic analysis.

# Participant Characteristics (n = 15)

Characteristic	Summary
 <b>Overview</b>	<ul style="list-style-type: none"><li>• 15 registered nurses</li><li>• Total interview time: <b>239 hours</b></li><li>• Gender: <b>11 Female, 4 Male</b></li><li>• Experience range: <b>1 – 50 years</b></li></ul>
 <b>Geographic Representation</b>	<ul style="list-style-type: none"><li>• Metro, regional, rural and remote settings</li><li>• Representing VIC, NSW, WA, QLD, NT, SA and ACT</li><li>• Includes remote Aboriginal community-controlled settings</li></ul>
 <b>Clinical Roles Represented</b>	<ul style="list-style-type: none"><li>• Emergency and critical care (including senior and educator roles)</li><li>• Remote area nurses and nurse practitioner candidates</li><li>• Specialist and advanced practice nurses</li><li>• General/ward nurses</li><li>• New graduate nurses</li></ul>
 <b>Years of Experience</b>	<ul style="list-style-type: none"><li>• <b>≤ 5 years:</b> 3 participants</li><li>• <b>6 – 25 years:</b> 8 participants</li><li>• <b>26 – 50 years:</b> 4 participants</li></ul>
 <b>Practice Contexts</b>	<ul style="list-style-type: none"><li>• Acute hospitals and emergency services</li><li>• Multipurpose services</li><li>• Remote clinics and outreach services</li><li>• Telehealth / patient flow coordination services</li></ul>
 <b>Overseas Training</b>	<ul style="list-style-type: none"><li>• 2 participants overseas trained</li><li>• 1 participant NESB background</li></ul>

# Results

## Two primary themes within the context of care



# Organisational factors

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Access to medical support

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Availability of resources- equipment, critical care

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Communication systems

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Managing complex patient presentations

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Access to Sepsis Pathway/deterioration protocols

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Retrieval timing and navigating distance

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Skill mix, recruitment and retention of nurses

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Workload

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Cultural  
factors with  
accessing  
care

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Cultural safety- not feeling safe to  
access care

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Aboriginal health workers

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Navigating language differences

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Gender-sensitive care

# Five Pillars of Nurse-Initiated Sepsis Care

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**Nurses:** skills, knowledge, specialist and advanced practice roles

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**Collaborative Care:** multidisciplinary, patient-centred, psychologically safe

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**Clinical Pathways:** sepsis and deterioration protocols

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**Resources:** equipment, retrieval and critical care, therapies, staffing levels

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**Cultural Safety:** enabling access to care, providing safe care



# Cultural safety, nurses

*“Definitely with sepsis. People will sit at home with a fever for 3 or 4 days with, you know with this horrendous foot wound, we get a lot of meliodosis up here, which is this you know this bug that lives in the dirt and because no one wears shoes up here, we get it during the wet season...and it makes people really, really, really sick, really quickly yeah, but they'll sit at home with, you know, a festering foot wound or a cellulitis, or something that could have been dealt with really easily early on. We don't hear from them until they're, you know, puffing and panting with a temperature of 40 degrees and a blood pressure of 80...There's a lot of chronic disease, everyone's got diabetes, everyone's got COPD; heaps and heaps and heaps of rheumatic heart disease, which is atrocious that we're even seeing it these days, but yeah, that's the clientele we deal with.” (Remote Area CNC and midwife, ED-trained, P10)*

# Clinical pathways, resources, collaborative care

*“The team sort of extends beyond the hospital. It's, you know, the retrieval team; it's the clinic staff in the middle of nowhere on their own who have to drive out to a little out-station, pick this person up, get them to the clinic, get a line in and start antibiotics. The plane picks them up, brings them to Darwin, and then there's the whole resus team in Darwin. It's you know, there's a lot of links in the chain to keep this person going.” (Remote Area CNC, P10).*

# Resources, clinical pathways

*“So if that aeroplane's picking someone up at X, it won't come down to me at Y. I'll be stuck all night with that patient, and probably half the next day. In the daytime there's only 2 aeroplanes for the whole of Central Australia, so if I ring for help and an aeroplane, they may not turn up for 8 to...hours...So the early warning score has lower parameters based on the fact that there are less resources. They want to empower nurses particularly, and Aboriginal health practitioners to ring earlier and that has been great...”(Remote Area NP, P8)*

# Resources, Collaborative Care

- *“But I have had positions where I'd give my right arm to have an experienced doctor. I've lost, we've lost children, and we knew that if we'd had a doctor we perhaps could have saved them, and I think people forget that we lose indigenous children here from avoidable causes” (Remote Area Nurse, P11).*

# Nurses

*I find it's all very doctor-specific what response I get. So some doctors I can just go "Oh, look! I'm a bit worried" and they're like, "What do you want? What do you want? I'll do anything you want anytime, anywhere. Yeah, what else do you want?" and others will listen and make their own assessment and yeah, like, I said, some will say, "Yeah, sure great, but you know you're a nurse, and we don't actually care."  
(ICU Liaison NP candidate, metro).*

# Collaborative care

*“Collaborative care is absolutely the language we should be using...that is a really the best thing about working remote. You have a really collaborative thing...remote has always been, and it's what I call the flattest hierarchy in the world (Remote Area Nurse NP, P8).*

# Cultural safety, resources

*“sepsis is preventable if detected early enough, and I guess, from an indigenous perspective, these are people who don't necessarily feel safe to engage with the health system, and don't have access to good primary healthcare because.. where I am now, people say it's 6 to 8 weeks before you can get into a GP...and so things are left untreated, untreated, untreated and then by the time you get to hospital they're in full blown sepsis.” (ED-trained RN, rural-regional and metro, P1).*

# Implications for nursing practice and next steps

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- Implement and strengthen existing clinical pathways
- Improve staffing and skill mix
- Develop advanced practice nursing roles in sepsis care
- Cultivate psychologically safe cultures
- Improve and maintain culturally safe care practices
- Targeted sepsis education that includes the concept of navigating diagnostic uncertainty in suspected sepsis
- Further research to investigate identified issues

# Conclusion



Importance of examining and interrogating organisational and cultural factors as they impact timely sepsis care.



The 5 Pillars of Nurse-Initiated Sepsis Care encompasses the thematic findings of this study and could be applied in future implementation efforts.



There is potential to strengthen the contribution of nurses to sepsis care.

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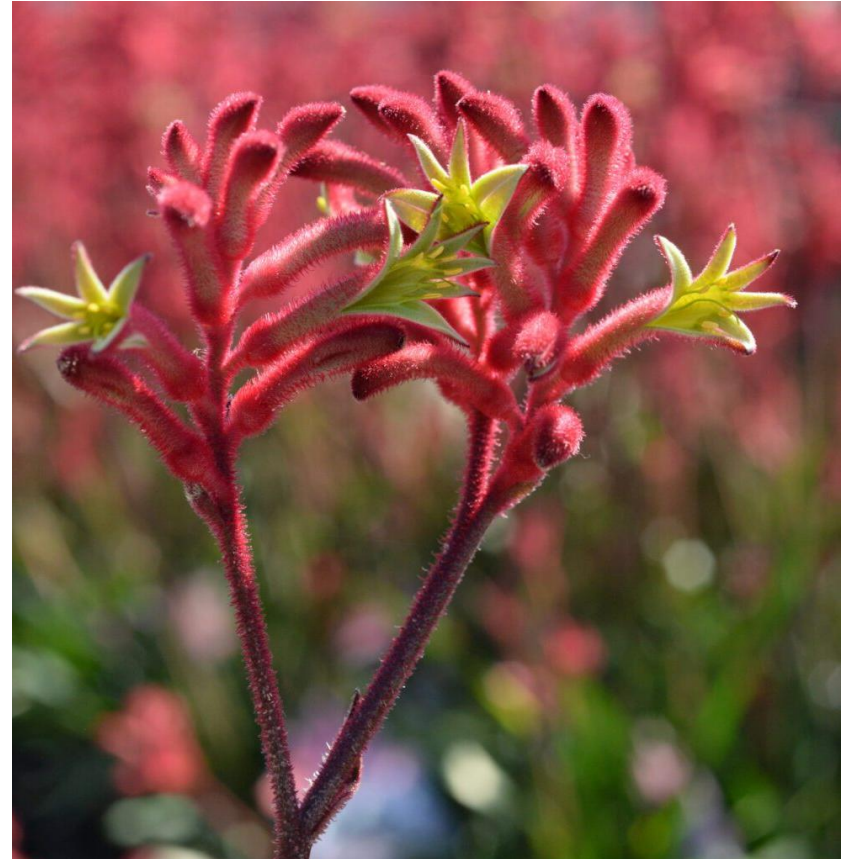
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# THANK YOU

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*“Yeah, but it goes both ways...I've been to every community now, all 15 of them and I've always said to new nurses coming up here, '90% of your battle up here will be gaining the trust of the community, which you can do very quickly; but if you don't have their trust you won't survive' and there have been cases where people have come in like a bull in a China shop, telling people how they should live their lives and stop smoking and stop drinking and eat better. 'They're gonna chop your foot off if you don't...' and they're on the next plane out literally within hours. Yeah, and that's how it should be, because that's the other thing I say to new nurses coming up here. 'You're a guest in this community. It's not your clinic...it's not your community. You're a guest here and treat it like that and you'll get their respect very quickly yeah.’” (Remote Area CNC and Midwife, P10)*



# Discussion questions

- Do you receive targeted training for suspected sepsis presentations?
- What is the biggest barrier you encounter or your biggest frustration when trying to escalate care?
- Does your organisation provide training in cultural safety? What could be improved?