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Wellbeing intervention and support priorities for healthcare workers and their families: A Delphi consensus study

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Abstract

Background

Healthcare systems across the developed world are facing significant challenges, including staffing shortages and poor workforce retention, exacerbated by increased demand for services, suboptimal working conditions, and high rates of psychological distress. To inform strategic investments in workforce retention, we explored the mental health, wellbeing, and family support needs and priorities of Australian hospital-based healthcare workers and their partners.

Methods

A Delphi methodology, consisting of three rounds, was completed by lived experience expert panels of Healthcare Workers (HCWs) and their partners. The first round of semi-structured interviews (n = 33) identified support needs, after which a content analysis was completed to identify and organise key terms. Lists of mental health, wellbeing, and family supports were then created on the basis of these data, revised by a Project Advisory Group and circulated to the lived experience panels in subsequent rounds. In Rounds 2 (n = 93) and 3 (n = 59), the lists of wellbeing, mental health, and family supports were ranked and re-ranked based on the perceived need, desirability and overall value of each support.

Results

Preferred mental health supports included: i) clear referral pathways for mental health support; ii) regular clinical supervision and professional development; and iii) mental health training for leaders and managers. Wellbeing supports preferred by participants included: i) fair compensation for overtime; ii) reduction in double shifts; and iii) flexible work arrangements. Preferred family supports included: i) advanced stable rostering; ii) low-cost family intervention; and iii) support for work/life balance.

Conclusions

Preferred supports across the three domains were practical, focussing on important organisation and system level changes. Reviewing workplace practices to better support work-family balance, fostering a community of practice, and streamlining referral processes for staff requiring intensive mental health support, are critical measures to improve staff retention and maintain the stability of healthcare systems across the developed world.

Clinical trial number:

Not applicable.

Background

Healthcare systems across the developed world are facing marked shortages of healthcare workers (HCWs) due to difficulties in education, employment, deployment, and retention (WHO, 2026; Tran et al., 2024). For example, the Skills Priority List 2023 report highlighted shortages in 82% of Australian health professional occupations in 2023 (Australian Institute of Health and Welfare [AIHW], 2024a). Over this period, the fill rate for health professional vacancies was 44%, with only 1.3 suitable applicants per vacancy (AIHW, 2024a). Internationally, this shortfall is mirrored across the European Union, where a shortage of approximately 1.2 million doctors, nurses and midwives was estimated in 2022 against minimum thresholds for universal health coverage (Organisation for Economic Co-operation and Development [OECD] & European Commission, 2024, p. 31).

The drivers for health workforce shortages are complex and varied. Increased health service utilisation due to aging populations (Scheffler & Arnold., 2019; Dall et al., 2013; WHO, 2024), longer life expectancy with more time in ill health (Garmany & Terzic.,

2024; AIHW, 2024b), and post-pandemic impacts (AIHW, 2024c; OECD & European Commission, 2024; Poon et al., 2022) have increased workforce demand. Global competition for healthcare professionals can also lead to recruitment and retention challenges, increasing reliance on overseas-trained staff to fill vacancies (Tran et al., 2024). Retention of existing healthcare staff has also been a challenge due to high rates of workplace stress (Peter et al., 2024), poor mental health and wellbeing (Lee et al., 2023; McGuinness et al., 2022), and incompatibility between health professionals' work and private life (Peter et al., 2024).

Workforce shortages, if left unaddressed, can create a recursive and circular loop, in which staff shortages increase workload, stress and fatigue for existing staff, thereby leading to increased absenteeism and intention to leave, compounding further resignations and worsening the shortage that began the cycle (Lee et al., 2025; Poon et al., 2022). Inadequate staffing also disrupts continuity of care for patients (Bae, 2022), increases the risk of adverse events such as patient falls (Bae, 2022), severe medication errors (Bae, 2022; O'Brien-Pallas et al., 2010), and mortality (Aiken et al., 2014). Healthcare organisations required to recruit and onboard new staff incur a substantial economic cost (Bae, 2022), with estimates ranging from US$49,790 per nurse in Australia (Duffield et al., 2014) to US$85,498 in the US (Razmpour et al., 2026).

Proactive, multifactorial approaches are needed to address workforce shortages. The OECD (2025) suggests three key approaches: increasing the training of new health professionals; increasing staff retention by improving work conditions; and encouraging innovation related to work organisation and the use of new technologies.

There is an abundance of literature detailing interventions aimed at improving the retention of healthcare staff through improved mental health and wellbeing. A narrative evidence synthesis of existing interventions by Robins-Browne et al. (2022), found that most focussed on individual behaviour and fostering change by building resilience. These interventions were criticised, however, as they overlooked factors that healthcare workers (HCWs) identified as important, such as family and social supports (Robins-Browne et al., 2022). Another systematic review of workplace interventions for HCWs by Cohen et al. (2023), identified a gap in organisation-level initiatives, with only three of the 33 included papers addressing organisation-level interventions, such as peer support networks. Thus, there is an urgent need for tailored interventions that address the needs of HCWs using consumer-informed methodologies (Robins-Browne et al., 2022).

Aims

With a view to improve staff retention, thereby informing the optimal allocation of limited financial resources dedicated to sustaining the healthcare workforce, the principal aim of this study was to explore the support needs and preferences of HCWs and their partners across three domains (i.e. staff mental health, staff wellbeing; and family life and functioning) identified from previous research as important in enhancing workforce longevity (Lee et al., 2023a,b; Sheen et al., 2022). The specific objectives of the study were to:

1. identify the mental health, wellbeing, and family supports perceived as most important by hospital-based healthcare workers and their partners;
2. categorise these supports across the three domains; and
3. establish consensus on their relative priority to inform workforce retention efforts.

Methods

Design

A Delphi design was used, aimed at establishing an informed consensus on the mental health, wellbeing, and family support priorities of hospital-based HCWs and their partners. This approach was chosen as it is an effective priority setting method that includes all perspectives with equal weighting (Jorm, 2015), while also mitigating the risk of group conformity bias that can arise in meetings conducted in person or online (Nasa, 2021). Approval for the study was provided by the Deakin University Human Research Ethics Committee (reference number: 2024/HE000413). This study is reported in accordance with the ACCORD (ACcurate COnsensus Reporting Document; see supplementary file 1 for further details) reporting guideline for consensus methods in biomedicine (Gattrell et al., 2024).

Participants

Between October 2024 and April 2025, lived experience experts participated in three Delphi rounds. These experts comprised of two groups representing healthcare families; one group including hospital-based HCWs and a second including partners. An additional group of lived experience experts, consisting of HCW's children, participated however the findings are reported elsewhere (Chan et al., unpublished manuscript) as the Delphi items required modification to ensure the use of child-appropriate themes and language.

Participants in the lived experience group were recruited through paid social media advertisements and snowball sampling. We aimed to have approximately 15-20 participants per expert group (i.e. HCW and partner group) in line with the guidance provided by Beiderbeck et al. (2021). Eligibility criteria included : 1) at least 18 years of age, 2) resident in Australia; 3) a hospital-based HCW or a partner of a hospital-based HCW; 4) a parent, guardian, or carer of a dependent child (< 18 years) who resided in the same household of a HCW at least one day a week; and 5) able to communicate in conversational English. For this study, hospital-based HCWs were defined as healthcare staff (i.e. doctors, nurses, allied health staff such as social workers and pharmacists, and non-medical staff such as administrative and security personnel) working in an Australian hospital. Partners of HCW were defined as those who were in a relationship (i.e. married, de-facto or other partnership status) with a hospital-based HCW and resident within the same household at least one day a week. Participation was completely anonymous in each round and designed for English speaking participants. As a token of appreciation, participants were reimbursed with a $50 gift voucher.

Procedure

Round 1

Round 1 consisted of 13 individual semi-structured interview questions regarding their family structure, work role, preferred support needs, priorities for supports, and suggested interventions to improve the mental health, well-being, and family functioning of HCWs and their families. The interview questions were developed specifically for this study by qualitative researchers, health service researchers and experts, and lived experience representatives from the authorship team and the Project Advisory Group (PAG). The PAG consisted of senior nursing professionals, a senior physician, healthcare executive managers, a family therapist, clinical, counselling and organisational psychologists and lived experience consumer representatives (i.e., 2 hospital HCWs, 1 HCW partner, and 2 children of HCWs). Questions included, "*What types of support do you think are needed for HCWs and their families to manage a healthy family life and functioning?*" (see supplementary file 2 for further details). Interviews were conducted over the online video conferencing platform Zoom between October 2024 and December 2024. Interviews ranged from 45 minutes to 60 minutes. Interviews were recorded and transcribed verbatim.

Content analysis was conducted on the qualitative data, with NVivo (Lumivero, 2024) used to facilitate systematic coding, organisation, and retrieval of data segments throughout the analytic process. Based on this process, a comprehensive list of preferred supports across the mental health, well-being, and family domains was generated. The list was then refined with the PAG across two meetings, where they reviewed and piloted the list considering the existing literature alongside the draft support items.

Round 2

Participants were asked to rate the items developed in Round 1 via a short online Qualtrics survey (Qualtrics, 2024) from February 2025 to March 2025. Specifically, participants were asked to rank these supports on a 5-point Likert scale, ranging from 1 = "Not at all important" to 5 = "Critical/highest importance". The data from Rounds 2 and 3 were analysed using R Statistical Software(R Core Team, 2025) to calculate the level of agreement on the perceived importance for each item among group members, calculated as the proportion of participants who rated each item as "important" or "critical" (ratings of 4 or 5 on the Likert scale). Corresponding 95% confidence intervals were also calculated to indicate the precision of these estimates.

Three criteria were developed using the bands for level of agreement recommended by Jorm (2015) to assess the results for each statement in Round 2 and determine whether it progressed to Round 3. Specifically:

1. If ≥80% of participants rated a support statement as 4 (i.e. important) or 5 (i.e. critical), it was considered to have reached a high level of agreement on its high importance and was not re-rated in Round 3.
2. If < 50% of participants rated a support statement as 4 or 5 (i.e. no majority agreement) and ≥ 20% rated it as 1 or 2 (i.e. considered to be of low importance), it was rejected.
3. Support statements that did not meet the above criteria were carried forward for further consideration in Round 3.

Round 2 surveys also included three open-ended questions, asking participants to “Please note any additional workplace supports you feel would improve the [mental health/wellbeing/family wellbeing] of hospital-based healthcare workers”. Data obtained from the open-ended questions were reviewed and two new items were subsequently added to the survey for Round 3. Thirty-one inconclusive items were also modified based on feedback to improve clarity.

Round 3

Participants completed a final online survey from March 2025 to April 2025, which included the new and revised support items from Round 2 and the original items carried forward from Round 2. In Round 3, participants were presented with the rates of agreement for each statement carried forward and revised from Round 2. Original statements were presented alongside the revised statements, where applicable. Participants were again asked to rank the supports on a 5-point Likert scale, ranging from 1 = “Not at all important” to 5 = “Critical/highest importance”. If support statements rated in Round 3 met criterion 2 above, they were rejected from the final list. The remaining statements were categorised and ranked according to the level of agreement, using the bands defined by Jorm., (2015): 100% = unanimity, 99-95% = high consensus, 94-80% = consensus, 79-67% = substantial majority agreement, and 66-50% = majority agreement.

Results

Sample Characteristics

A total of 33 participants (15 HCWs, 12 partners, and 6 HCW-partners (i.e. both a HCW and a partner)) completed Round 1 semi-structured interviews. Participation was then extended to a broader cohort for Rounds 2 and 3 to widen representation for the surveys. Ninety-three participants (38 HCWs, 33 partners, 22 HCW-partners) completed the Round 2 survey and 59 completed the Round 3 survey (29 HCWs, 19 partners, 11 HCW-partners).

The majority of participants were female, nurses or midwives, from either New South Wales or Victoria, living in a major city of Australia, married, and with two children. Further demographic details are reported in Table 1.

Table 1

Total	**Round 1**	**Round 2**	**Round 3**
	33 (100%)	**93 (100%)**	**59 (100%)**
Mean Age (SD)	37.45 (5.26)	37.02 (4.90)	37.15 (5.26)
Gender			
Female	23 (70%)	58 (62%)	40 (68%)
Male	10 (30%)	35 (38%)	19 (32%)
HCW and Partner status			
Employed as a HCW	21 (64%)	60 (65%)	40 (68%)
HCW only (no HCW partner)	15 (45%)	38 (41%)	29 (49%)
HCW & a partner of a HCW (Dual Role)	6 (18%)	22 (24%)	11 (19%)
Partner of a HCW	18 (55%)	55 (59%)	30 (51%)
Partner only (non-HCW)	12 (36%)	33 (35%)	19 (32%)
Household Employment*			
Nurse/Midwife	17 (46%)	55 (54%)	34 (53%)
Doctor/Physician	9 (24%)	24 (24%)	13 (20%)
Allied health staff	9 (24%)	18 (18%)	13 (20%)
non-medical staff (please specify)	2 (5%)	5 (5%)	4 (6%)
State**			
NSW	14 (42%)	28 (30%)	19 (32%)
QLD	4 (12%)	16 (17%)	8 (14%)
SA	2 (6%)	6 (6%)	4 (7%)
TAS	1 (3%)	3 (3%)	3 (5%)
VIC	12 (36%)	33 (35%)	24 (41%)
WA	0 (0%)	7 (8%)	1 (2%)
Region**			
Major Cities of Australia	22 (67%)	67 (72%)	39 (66%)
Regional/Rural/Remote Australia	8 (24%)	25 (27%)	19 (32%)
Relationship status			
In a relationship (cohabiting)	0 (0%)	4 (4%)	1 (2%)
In a relationship (not cohabiting)	2 (6%)	2 (2%)	1 (2%)
Married/civil partnership	31 (94%)	82 (88%)	55 (93%)
Separated/divorced	0 (0%)	2 (2%)	1 (2%)
Single	0 (0%)	1 (1%)	0 (0%)

*Note. * Household Profession category: Refers to the healthcare role represented in each household, either the respondent's or their partner's. In dual-HCW households, both professions are recorded separately. ** Sum of values ≠ Total due to Missing response*

Total	Round 1	Round 2	Round 3
	33 (100%)	**93 (100%)**	**59 (100%)**
Undisclosed	0 (0%)	2 (2%)	1 (2%)
No of Children			
1	10 (30%)	29 (31%)	17 (29%)
2	17 (52%)	48 (52%)	33 (56%)
3	6 (18%)	10 (11%)	6 (10%)
4	0 (0%)	6 (6%)	3 (5%)

*Note. * Household Profession category: Refers to the healthcare role represented in each household, either the respondent's or their partner's. In dual-HCW households, both professions are recorded separately. ** Sum of values ≠ Total due to Missing response*

Fifty-four items and three open ended questions were developed from the Round 1 interviews. These were initially rated in Round 2, where group members reached a high level of agreement on 17 items and rejected 6 items. Thirty-three items were carried forward to Round 3. Two new items were developed from the open-ended questions in Round 2 and included in the Round 3 survey. Thus, a total of 33 items were rated in Round 3. Two items were rejected and two duplicate items were removed in the final round, resulting in a final list of 46 items (see Fig. 1 and supplementary file 3 for further details).

Among the 13 mental health support priorities presented, six items reached consensus and seven items reached substantial majority agreement. The top mental health support priorities reaching consensus were: 1) clear referral pathways for HCWs experiencing psychological distress; 2) access to regular clinical supervision and professional development; 3) targeted mental health training for leaders; 4) access to trauma-informed professionals; 5) workplace psychological support services for HCWs and their families and 6) psychoeducation on managing stress, burnout, and compassion fatigue (see Table 2).

Table 2

Mental Health Support Priorities	% rated 4 and higher (95%CI)
Develop a clear referral pathway for HCWs showing signs of distress or more serious psychological conditions.	89.2% (80.7–94.4%)
Support HCWs' access to regular clinical supervision, professional development and training opportunities.	88.1% (76.5–94.7%)
Provide targeted training for leaders, managers and supervisors regarding their roles and responsibilities to support positive mental health amongst staff.	87.1% (78.2–92.9%)
Provide timely access to trauma-informed mental health professionals following critical incidents.	84.9% (75.7–91.2%)
Provide psychological support services through the workplace for HCWs and their families when they are experiencing distress.	81.5% (71.8–88.6%)
Provide education and guidance to improve HCWs' management of stress, burnout and compassion fatigue.	81.0% (68.2–89.7%)
Enhance awareness and understanding of internal psychological support options (e.g. psychologist, counsellors, face-to-face, telehealth) available to HCWs through their workplace (including purpose of service, how to access, eligibility, provider, after hours support, additional sessions if needed, guided navigation assistance).	79.7% (66.8–88.6%)
Provide training to improve HCWs' ability to initiate regular check-ins and support colleagues managing stress, burnout and compassion fatigue.	74.6% (61.3–84.6%)
Conduct regular, ongoing workplace stress risk assessments (e.g. https://www.hse.gov.uk/stress/) and psychological surveillance to identify staff most in need of support.	74.6% (61.3–84.6%)
Provide education and guidance for HCWs and/or their families to support good physical health, given their job demands (e.g. managing sleep with shiftwork, eating well).	71.2% (57.7–81.9%)
Support HCWs' access to formal peer debriefing opportunities with trained peer supporters (e.g. group debriefing sessions, peer supporter-initiated contact following critical incidents).	69.0% (55.3–80.1%)
Provide education and guidance for HCWs and/or their families to support positive mental health (e.g. practising self-compassion, strengthening social connections, problem solving). (Positive mental health includes feeling in control of your life and decisions, being able to manage day-to- day stressors and being able to work well).	67.8% (54.2–79.0%)
Support HCWs' access to informal peer debriefing opportunities (e.g. by arranging shared break times, ad hoc check-ins).	67.2% (53.5–78.6%)

In the wellbeing domain, one of the 23 items reached a high level of consensus, 13 reached consensus, four items had substantial majority agreement, and five had majority agreement. The top wellbeing support priorities focused on fair overtime compensation, flexible and positive shiftwork models, improved shiftwork respite and leave access, enhanced physical work environments (including safety, childcare, and lactation facilities), stronger administrative and communication support, and improving the support for junior staff. See Table 3 for further details.

Table 3

Wellbeing Support Priorities	% rated 4 and higher (95%CI)
Implement fair compensation for overtime work.	96.7% (90.1–99.2%)
Ensure eligible staff are supported to access flexible working arrangements.	93.5% (85.9–97.4%)
Improve HCWs' access to wellbeing and personal leave (e.g. improve workplace culture of accessing leave, encourage and reinforce taking leave flexibly, implement a strict, "no consequences", policy for taking leave)	92.5% (84.6–96.7%)
Work with HCWs to identify ways to reduce or prevent double shifts and unpaid overtime work.	91.5% (80.6–96.8%)
Provide adequate on-site and nearby parking options (or shuttle service to off-site locations where necessary).	91.4% (83.3–95.9%)
Trial a new shiftwork model within each workplace to identify optimal shift times, start and end times and shift schedule.	89.8% (78.5–95.8%)
Create safe work premises, including getting into and leaving work safely every night (i.e. to/from car park or public transport, waiting for public transport, around hospital grounds, well-lit premises).	89.2% (80.7–94.4%)
Support staff autonomy and flexibility to exchange shifts or adjust roster within team when needed to improve work/life balance.	86.4% (74.5–93.6%)
Improve positive daily shift experiences by embedding small moments of respite (e.g. regular brief breaks, access to an outdoor area during breaks, provision of a warm and welcoming staff room with initiatives such as free fruit, a massage chair, mindfulness activities).	86.0% (76.9–92.1%)
Improve workplace communication (e.g. limit generic messages such as irrelevant service-wide updates, streamline information given, personalise messages).	82.8% (73.3–89.6%)
Provide on-site, shiftwork-aligned childcare services.	81.7% (72.1–88.7%)
Provide adequate administrative support for non-clinical tasks.	80.6% (70.9–87.8%)
Provide dedicated, welcoming lactation rooms for staff to breastfeed, express and store their breastmilk.	80.6% (70.9–87.8%)
Review and improve management and supervision of junior workers' job demands and performance (i.e. address concerns such as overscheduling, lack of time off, supporting access to adequate supports).	80.6% (70.9–87.8%)
Improve new staff orientation and experiences (e.g. job shadowing, mentorship programs).	79.7% (66.8–88.6%)
Allocate dedicated time and place for clinical educators to engage in teaching preparation.	72.9% (59.5–83.3%)
Demonstrate appreciation for HCWs within the workplace (e.g. staff appreciation events), including acknowledgement of high performers, so that staff feel valued, encouraged and supported to do their best	71.2% (57.7–

Wellbeing Support Priorities	% rated 4 and higher (95%CI)
work.	81.9%)
Provide "soft skills" training for interested HCWs to enhance their healthcare delivery, patient interactions and management (e.g. communication skills, active listening, basic counselling, expressing support during challenging conversations/situations).	69.0% (55.3–80.1%)
Facilitate HCWs' access to discounted self-care activities (e.g. meditation, yoga) and wellness programs (e.g. subsidised gym memberships, fitness classes, individualised dietary advice, meal planning services).	66.1% (52.5–77.6%)
Facilitate staff access to discounted healthy meal options (green-coded items) at onsite cafes.	64.4% (50.8–76.1%)
Encourage open communication within teams regarding worries, wellbeing, mental health concerns and help-seeking in the workplace by providing a dedicated check-in time for teams.	62.7% (49.1–74.7%)
Create a community support directory/resource hub for the local area (e.g. mental health support services, food banks, emergency accommodation, health professionals who are happy to see other health professionals' children).	55.9% (42.5–68.6%)
Identify strategies, in consultation with the community, to enhance respect for HCWs.	55.9% (42.5–68.6%)

A total of 10 items were included in the final list for family support priorities. The group reached consensus (i.e. ≥80% agreement on high or critical importance) on three items, while two items showed substantial majority agreement (i.e. ≥67% agreement on high or critical importance) and five demonstrated majority agreement (i.e. ≥50% agreement on high or critical importance). The top priorities that reached consensus for family support for healthcare families were 1) providing advanced and stable rosters, 2) access to low cost psychological services for families and 3) supporting clear work-life boundaries for HCWs. See Table 4 for further details.

Table 4

Family Support Priorities	% rated 4 and higher (95%CI)
Provide advanced (> 4 weeks) rosters including semi-consistent, predictable, and stable schedules.	93.2% (82.7–97.8%)
Provide priority access to low-cost psychological and wellbeing support services for families of HCWs to identify and resolve issues together.	88.1% (76.5–94.7%)
Support staff in enforcing clear work/life boundaries (e.g. no staff contact outside rostered hours, including when on leave unless critical, reduce workload and overtime work, ensure all work is completed during shift).	84.7% (72.5–92.4%)
Provide priority access to medical appointments for individual HCWs and children.	79.3% (66.3–88.4%)
Provide specialised financial advice and support to meet the needs of low-income HCWs and their families (e.g. budgeting, tax reliefs, childcare subsidies, relocation expenses).	75.9% (62.5–85.7%)
Provide training and tools to support communication between HCWs, partners and children when the HCW experiences an increase in work-related distress (e.g. expressing feelings, coping with traumatic or distressing work-related experiences, giving support).	64.4% (50.8–76.1%)
Provide education and guidance for healthcare families to improve their understanding and management of the potential impact(s) of healthcare roles on children (e.g. impacts of shiftwork, missing family time, health and safety worries)	59.3% (45.8–71.7%)
Provide education and guidance for parents in healthcare work to improve their understanding of the potential impact(s) of being a parent on their healthcare role and ways to address challenges that may arise (e.g. what to do if your distress increases at work because a patient reminds you of your child).	55.9% (42.5–68.6%)
Develop educational resources that are accessible to healthcare workers' partners and/or their children, on supporting family members to identify at-risk HCWs (e.g. of workplace-related stress, burnout, compassion fatigue, trauma).	53.4% (40.0–66.5%)
Provide information and guidance for HCWs to develop and/or improve existing strategies to better transition between work and home settings (e.g. strategies to decompress, switch between HCW-to-parent or parent-to-HCW roles).	53.4% (40.0–66.5%)

Discussion

Despite extensive evidence demonstrating the wide-ranging impacts of healthcare work on hospital HCWs (Gonnelli & Raffagnino, 2017; Lee et al., 2023a,b; Magnavita et al., 2021), there remains a lack of effective strategies that can create lasting change and address the ongoing impacts on their mental health, wellbeing, and family life. Many existing interventions have lacked the engagement needed for long-term effectiveness, often because they were developed without adequate consultation or input from those with lived experience (Robins-Browne et al., 2022). We sought to address gaps in the literature by identifying, directly from HCWs and their partners, the supports they considered most important based on their current needs and lived experience.

Understanding and addressing HCWs mental health should be seen as a core facet of health workforce capacity (Byrne, Humphries, McMurray & Scotter, 2023). Participants interviewed in Round 1 cited work-related stress, burnout, trauma, and compassion fatigue as key challenges impacting their mental health, corroborating existing research citing mental health burnout as a key occupational risk for HCWs (Almeida-Meza et al., 2025; Pi et al., 2025; Pula et al, 2025; Safe Work Australia, 2026). Preferred mental health supports noted in this study included: clear referral pathways; timely access to well-trained, trauma-informed clinicians; regular clinical supervision and professional development; targeted mental health training for leaders; psychoeducation regarding stress, burnout, trauma and compassion fatigue; and workplace psychological support.

The prioritisation of clear referral pathways noted within this study is interesting given most Australian and international healthcare organisations support staff to access counselling through Employee Assistance Programs (EAPs). The focus on external services noted in this study may be due to the limited number of sessions available through the EAP system, although other studies prompt concerns regarding the EAP service model, with researchers noting inconsistent service quality, lack of autonomy in clinician allocation and concerns about confidentiality (Doran, 2022; Johnston et al., 2025; Lee et al., 2025). These concerns may underlie the poor uptake of EAP services noted in the healthcare workforce, both in Australia (Lee et al., 2025) and internationally (Ruzycki et al., 2024). Ensuring staff are aware of local mental health services in their community is therefore a priority, complementing existing EAP services for those unwilling or unable to access private services. Access to timely support has also improved for some healthcare disciplines in Australia, with the advent of 24/7 support hotlines (e.g. Nurse and Midwife Support, 2022). Extending access to these supports to include other disciplines is important to ensure parity.

Organisations must also address the practical and professional barriers inhibiting HCWs from engaging with mental health supports (Byrne, Humphries, McMurray & Scotter, 2023). Obstacles such as professional stigma (Maben et al., 2022), unprotected time and inability to leave the ward can impeded HCWs efforts to access the supports that they need in a timely manner (David et al, 2022; Maben et al., 2022). Overworked staff may be unwilling to attend sessions focussed on the impacts of their workplace on their mental health after hours due to competing family and childcare commitments, compounding challenges for working parents (Liu et al., 2025; Maple et al., 2024).

Participants also prioritised regular clinical supervision and professional development, as well as workplace psychological support. These priorities appear to be grounded in the need for a 'community of support'. A number of studies suggest the practice of clinical supervision has a positive influence on patient safety and patient care (Snowdon et al., 2016; Snowdon et al., 2017), can reduce burnout amongst healthcare workers (Martin et al., 2021), and when readily available, can greatly enhance coping strategies and help ease the tension or perception of stressors (Gurung, 2006). Lee et al. (2025) also noted that workplace relationships and supervision were important sources of support for HCWs during the COVID-19 pandemic, as colleagues were able to rapidly empathise and relate to the challenges faced by their peers. Collegial support within teams was also seen as a valuable resource in mitigating work-related strain and the mental health impacts of the workplace.

These studies highlight the importance of clinical supervision and workplace support and the potential benefits to organisations considering ways to protect timely access to these supports, so that staff have time to process critical incidents when they occur. While time off the floor may be costly, mental health conditions are one of the costliest forms of workplace illness and are associated with significantly more time off work and higher compensation than physical injuries and diseases (EU-OSHA, 2026; Safe Work Australia, 2026). There are also demonstrated links between poor mental health and presenteeism, absenteeism, and staff turnover in the healthcare workforce (Carrieri et al., 2018). Therefore, regular and ongoing access to clinical supervision is critical.

Benchmarking from allied health disciplines, such as psychology, may be useful when considering models of clinical supervision. In Australia, psychology supervision is a mandatory, board-approved process designed to ensure ethical, safe and competent practice (AHPRA, 2025). The practice is ongoing throughout a psychologist's career, promoting a culture of reflection and support (Australian Psychological Society, 2020; Curtis et al., 2016). Embedding regular clinical supervision as a requirement of registration in other health disciplines may support a shift towards greater reflective practice and improved help-seeking while also building a community of support for health professionals. Extending this requirement to healthcare leadership and managerial roles by supporting access to leadership training and mental health training may also facilitate uptake through improved education and normalisation of clinical supervision (Snowdon et al., 2024). Organisations are encouraged to provide these supports on-site to demonstrate their investment in the process and in improving mental health outcomes for their staff.

With regards to wellbeing, the findings of this study suggest that hospital-based HCWs and their partners prioritise policy- and organisational-level supports over and above individual-level supports. Organisational-level supports target system-level changes, providing key leverage points capable of producing large-scale, sustained improvements for HCWs (Almeida-Meza et al., 2025; Teoh et al., 2022). Preferred supports included: fair compensation for overtime work, underpinned by an organisational culture that encourages staff to access their entitlements; flexible shiftwork models with greater staff autonomy should they

need to swap shifts; enhanced physical work environments to provide welcoming spaces during breaks and safe access to and from the workplace; and increased support for junior staff.

The findings strongly align with Teoh et al. (2022), who conducted a Delphi study considering the research and practice changes needed to improve the mental wellbeing of nurses and midwives in the United Kingdom. Fifty-eight percent of the most highly prioritised recommendations in the study related to organisational-level initiatives, including enforcement of entitlements such as breaks, training to improve managers skills in supporting staff wellbeing and improved shift coordination to reduce the impacts of shiftwork on staff. The authors emphasised the importance of systemic changes to improve mental wellbeing among nurses and midwives, focussing on organisational and policy level change. These recommendations are not surprising given organisational policies and practices determine the physical and psychosocial working conditions of HCWs, with emerging evidence suggesting organisational-level initiatives can reduce burnout (Aust et al., 2023; Teoh et al.,2022) and improve staff retention (Teoh et al., 2022), work-life balance and job satisfaction (Webster & Archibald, 2022).

Comparable patterns have been observed in other workforce groups, such as teachers, who also tend to prioritise organisational supports over individual wellbeing initiatives (Hine et al., 2022). This preference is consistent with research suggesting that individually focused interventions (e.g., practising self-compassion or strengthening social connections) can inadvertently frame distress as a personal deficit and shift responsibility onto the individual to manage, rather than addressing the structural and workplace conditions that contribute to occupational stress (Patrick et al., 2024).

Fair pay for overtime work was highlighted in this study as a key priority to improve healthcare workers' wellbeing. The focus on fair pay for overtime work, as opposed to increased financial remuneration overall, suggests participant concerns regarding a perceived lack of equity or fairness. It is important in terms of job satisfaction, and also possibly therefore any intention to leave the workforce, to ensure that staff have access to appropriate compensation for their time and that the organisation promotes a culture wherein staff are encouraged to access their entitlements. (Bimpong et al., 2020; Mishra et al., 2025).

Shiftwork and rostering were also highlighted as key priorities for our participants. With regard to wellbeing initiatives, participants requested flexible shiftwork arrangements with opportunities for greater autonomy (e.g. the ability to swap a shift if needed). While shiftwork is synonymous with healthcare, current rostering methodologies often rely on historical practices rather than adapting and responding to current workforce needs (Safer Care Victoria, 2026), impacting clinicians health, work and personal lives (Holton et al., 2024). Responding to these challenges, Safer Care Victoria (2026) collaborated with staff from three hospital networks to co-design an employee centered rostering framework and toolkit to facilitate organisational change. McAdams et al. (2026) also reviewed the current evidence base for flexible shiftwork arrangements that could be used based on local conditions, providing guidance for organisations committed to supporting necessary changes for their staff. These works highlight the problematic nature of a 'one size fits all approach' (Holton et al., 2024; McAdams et al., 2026), advocating for local, co-designed solutions that consider fairness, equity, flexibility and shiftwork related fatigue (Holton et al., 2024).

The importance of advanced, stable rostering was also noted under family support initiatives, suggesting shiftwork and rostering challenges have ripple effects across the family system. Participants noted that constantly changing rosters and inflexible shiftwork models created significant instability in their family lives, making it difficult to plan childcare, maintain consistent engagement in children's sports and recreational activities, and attend important occasions or moments in their children's lives, creating significant work-family conflict. These reports are concerning given that high work-family conflict has been associated with reduced job satisfaction (AlAzzam et al., 2017) and increased turnover intention (Blanco-Donoso et al., 2021; Gonnelli & Raffagnino, 2017; Holton et al., 2023; Lee et al., 2025; Pennbrant et al., 2021). Options to address this challenge and support worker autonomy include the ability the select stable shift patterns in 3-month rotations, while offering different opportunities and incentives for those able to adopt flexible schedules; providing onsite childcare, particularly for dual HCW families and single parents required to work overnight shifts; and, having easily accessible rostering information and guidelines so that staff have insight into the decision framework used (Holton et al., 2024).

Other high ranking family support initiatives included priority access to low-cost psychological and wellbeing support services for families of HCWs and support for staff in enforcing clear work-life boundaries. The need for family focussed supports is unsurprising, given the potentially detrimental impacts of healthcare roles on family life (Blanco-Donoso et al., 2021; Sheen et al.,

2022). Supporting HCWs and their families to access low cost services may improve staff retention, as positive family functioning has been found to reduce the odds of stress, anxiety and depression in HCWs by two to threefold (Kim et al., 2021) and protect against poor wellbeing (Lee et al., 2023).

The importance of workplace culture is again highlighted in participants' request to have workplaces 'enforce' healthy work-life boundaries. Work-life balance must be recognised as a critical determinant of staff wellbeing and family life. Teo et al. (2025) recommend adherence to work-time limits and the facilitation of leave to support work-life balance. Leaders can also role model healthy work-life boundaries, which can increase uptake, including by taking personal and recreational leave, and utilising their 'right to disconnect' by limiting workplace contact outside of working hours to urgent clinical matters.

Implications

Individual-focused initiatives supporting the mental health and wellbeing of HCWs have been prioritised within the literature, however the findings from this study suggest that these initiatives should complement, not substitute, structural and policy reform. In resource-constrained environments, directing funding toward the system-level supports identified by lived experience experts may yield greater and more sustainable improvements in workforce retention.

Family-focussed initiatives are also scarce, despite evidence suggesting healthcare roles can have a detrimental impact on family life. By ignoring families, we miss an opportunity to intervene with known vulnerabilities and to augment protective influences.

Strengths and Limitations

This Delphi represents one of the most comprehensive evaluations of HCWs mental health, wellbeing and family support needs to date. The expert panel assembled included a large number of lived experience experts of both genders working across different Australian healthcare services. The mixed methods approach used across the three rounds increased the face validity of the items and the open ended questions included in Round 2 ensure our expert panel had the opportunity to revise and expand on the supports listed.

It is acknowledged however, that the Delphi method prioritises convergence and may therefore reduce nuance and contextual "local wisdom". As workforce pressures and feasible solutions can vary substantially across metropolitan, regional, and remote services, the aggregated priorities presented here may not fully reflect local constraints, resources, or implementation realities. The findings should therefore be considered alongside service-level workforce and wellbeing data to guide locally appropriate action.

Our expert groups also focussed on hospital-based workers in Australia, potentially limiting the generalisability of the findings to other healthcare contexts (e.g., primary care, aged care, disability services), countries and workforce groups. Comparative research is recommended to fully appreciate the support needs of HCWs across contexts.

Conclusion

This study engaged with hospital-based healthcare workers and their partners to identify and prioritise mental health, wellbeing, and family supports. Across all domains, participants prioritised practical organisational and system-level changes over individually focused initiatives. Key priorities included clear referral pathways for staff experiencing distress, access to clinical supervision and professional development, leadership mental health training, fair overtime compensation, reduced double shifts, flexible work arrangements, and stable advance rostering to support work–family balance. These findings provide a useful consumer-informed framework to guide targeted investment in retention strategies that address key structural drivers of workforce strain and align with current international trends, suggesting the challenges faced by HCWs are heavily influenced by their work roles rather than jurisdictional.

Abbreviations

ACCORD: ACcurate COnsensus Reporting Document; AIHW: Australian Institute of Health and Welfare; CI: confidence interval; EAP: Employee Assistance Program; HCW: healthcare worker; MRFF: Medical Research Future Fund; NHMRC: National Health and Medical Research Council; OECD: Organisation for Economic Co-operation and Development; PAG: Project Advisory Group; SD: standard deviation; WHO: World Health Organization.

Declarations

Ethics approval and consent to participate

All methods were performed in accordance with the National Health and Medical Research Council (NHMRC) National Statement on Ethical Conduct in Human Research and approval was granted through the Deakin University Human Ethics Advisory Group – Health (HEAG-H 2024/HE000413). All participants provided informed consent.

Consent for publication

Not applicable

Availability of data and materials

The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request. The data are not publicly available due to privacy and ethical restrictions.

Competing interests

The authors declare that they have no competing interests.

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Authors' contributions

JS, BL, DS, BR, Alison H, P Buntine, P Blencowe, BM, SM, Anastasia H, and AR were involved in the conceptualisation and design of this study. DS provided data analysis support and supervision. BL, CAH, CE and E Chan conducted recruitment and data collection. JS, BL, CAH, CE, and E Chan were responsible for the formal analysis, data curation, and investigation under supervision of DS, E Clancy, BR, Alison H, P Buntine, P Blencowe, BM, SM, Anastasia H, AR. JS and BL prepared the original manuscript draft, which was then reviewed and edited by DS, E Chan, BR, Alison H, P Buntine, P Blencowe, BM, SM, Anastasia H, CAH, CE, AR.

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Figures

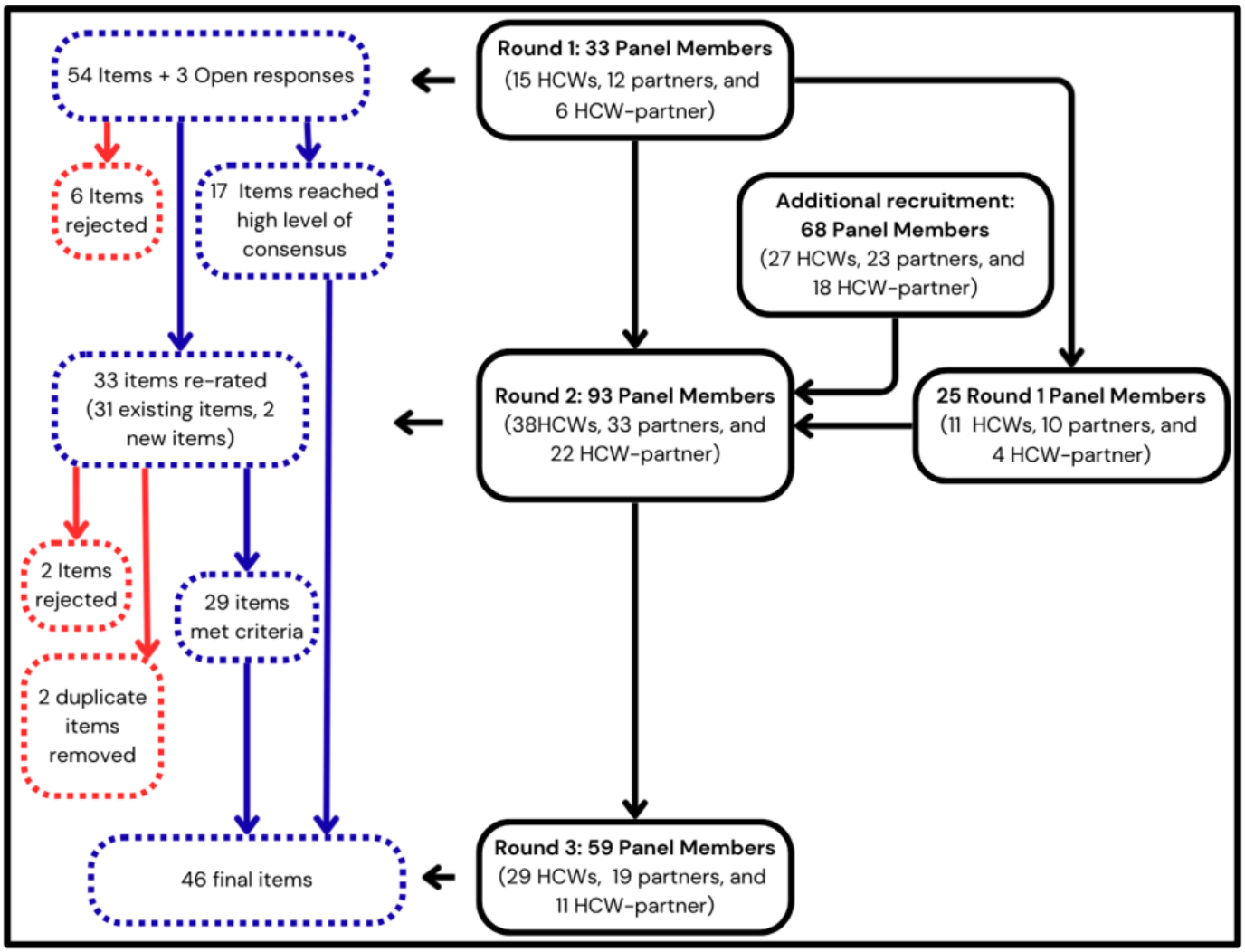


Figure 1

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