The community nurse in Australia. Who are they? A rapid systematic review

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Abstract
Aim: This study aimed to profile the community nurse in Australia.
Background: The need for nurses in the community health care sector is increasing in response to shorter hospital stays, an aging population and chronic disease. The increase in demand has not been followed by appropriate workforce planning, leading to structural issues and lack of qualified nursing workforce in the community sector.
Evaluation: MEDLINE and ProQuest Public Health and grey literature were searched for records published between 2010 and 2020 relative to the profile of the community nurse in Australia. Twenty-five records (21 publications, 2 databases and 2 reports) were included in the review. Abstracted data followed the principles of workforce planning and included demographics, qualifications and roles.
Key Issues: Inconsistent definitions, self-reported data and a focus on practice nurses have contributed to data irregularities. Little is known about the specific aspects of community nursing work.
Conclusion: A lack of concrete data has overshadowed a community nursing workforce crisis with implications for patients’ health and safety across the lifespan.
Implications for Nursing Management: There is urgent need for nurse managers globally to refocus nursing recruitment to the community sector to maintain quality and ensure sustainability of the nursing workforce.

KEYWORDS
community health, nursing, primary health care, public health, workforce

1 | INTRODUCTION

The primary and community (P&C) health care system provides prevention, treatment and rehabilitative services outside the hospital system. In Australia, as globally, populations are living longer, often with chronic disease (Australian Bureau of Statistics [ABS], 2018; Kyu et al., 2018), and lengths of hospital stays have decreased (Australian Institute of Health and Welfare [AIHW], 2017). Hospital in the Home programmes have exponentially increased (Montalto et al., 2020) as recovery from surgery or illness has moved from the acute sector to...
the community, it is necessary that workforce planning encompasses the community nursing sector to ensure sustainability and retention of skilled nursing staff in this setting.

2 | BACKGROUND

Multiple terms, definitions, governance and funding mechanisms of P&C-based services exist around the globe that have contributed to confusion and debate around what is primary and/or community health (Awofeso, 2004; Goodman et al., 2014; Muldoon et al., 2006; Phillips & Bazemore, 2010). This ambiguity extends to P&C nurse roles as titles are often used interchangeably (Drennan, 2019), and in Australia, health workforce data rely on self-reports at annual registration (AIHW, 2018).

P&C nurses fall into two main groups: the practice nurse, generally accepted to refer to nurses employed by privately run general practice (GP) (Jolly, 2007) and publicly funded community nurses attached to a health centre or clinic. The roles of P&C nurses are diverse as they are responsible for a population of 26 million from birth through to aged care in metropolitan, rural and remote regions (defined simply as outside Australia’s major cities), across eight states and territories (ABS, 2021a; Royal Flying Doctor Service, n.d. [see map for detail]). The health system is complex, with the Federal Government funding primary health care and the states/territories responsible for targeted community health services (Productivity Commission, 2019; Swerissen et al., 2018) based on population health, geographical and socio-economic indicators. Aboriginal health services tend to be run by state/territory governments in metropolitan regions and the local community in rural and remote regions (Fitts et al., 2021).

Nurses employed within both groups include nurse practitioners (NPs), endorsed independent practitioners with master-level qualifications; registered nurses (RNs) who may be degree qualified (from 1985 to 1993 depending upon state/territory) or be certificated (hospital trained) (Jolly, 2007; The Department of Health, 2013); certificated or diploma educated (since 2014) enrolled nurses (ENs) (Blay & Smith, 2020; Jolly, 2007); and increasingly, unregulated nurse assistants who may receive little or no training (Blay & Roche, 2020).

In light of the increasing need for P&C nurses as highlighted, it is imperative that nurse managers have a comprehensive understanding of the current workforce. As little is known about the community nurse workforce, a rapid systematic review was planned to profile the nurse working in the P&C health care sector in Australia and to ascertain future workforce needs. This review was guided by the fundamental principles of workforce planning that advocate the exploration of demographics, qualifications, activities and skills (De Bruecker et al., 2015) to answer the question who is the community nurse in Australia? Rapid reviews are vital in terms of response time for policymakers. Findings relative to employment data, role and career perceptions are important antecedents for nurse recruitment and therefore of benefit to nurse managers in the many countries with community nursing workforce shortages.

3 | METHODS

Rapid reviews are a method of systematically searching literature to inform policy in a more timely manner than can be achieved with the typical systematic review (Alliance for Health Policy and Systems Research, & World Health Organisation, 2017; Haby et al., 2016). Methods are many and remain under debate (Tricco et al., 2015), but include limiting databases, publication dates or language, excluding grey literature or a quality assessment, data abstraction by a single reviewer with verification by a second reviewer (Alliance for Health Policy and Systems Research, & World Health Organisation, 2017; Haby et al., 2016). We limited databases and grey literature searching to two websites were retained from the grey literature.

Two databases (MEDLINE and ProQuest Public Health) and Google’s search engine using the MeSH terms Community ‘AND’ Nurse OR ‘Workforce ‘AND’ Australia were used to locate empirical research, workforce data and reports, and grey literature that described the community nurse in Australia. Searches conducted by the first author between March and July 2020 were limited to peer-reviewed journals, published in the English language between 2010 and 2020 (for decadal trend(s)) and availability of full text. Grey literature, accepted as print and electronic data, theses, and government, academic and business records that are not controlled by commercial publishers, helps to provide a more balanced review (Adams et al., 2016; Paez, 2017; Woods et al., 2020). Hand-searching and Really Simple Syndication (RSS) feeds were used to alert newly published manuscripts from selected journals. Opinion pieces, editorials and research where Australian data could not be extracted were excluded (see Figure 1).

The database search yielded 4801 published articles, whereas the yield from the grey literature was extensive (n = 8,940,000); therefore, only the first five pages of results (n = 50) were reviewed. After the removal of duplicates and following the screening of titles and abstracts, 32 published articles were retained for full-text review and two websites were retained from the grey literature.
Record verification was conducted by a second author (P. M.-P.) with expertise in community nursing, and any differences of opinion were resolved by discussion and consensus. Following the method as outlined here, 21 published articles, 2 national datasets (comprising multiple tables) (AIHW, 2013b, 2015) and 2 workforce reports (Australian Primary Health Care Nurses Association [APNA], 2017, 2020) accessed from the respective websites were included in this review. The final review contained 25 records relative to the P&C health nurse (refer to Figure 1).

3.1 | Data abstraction and synthesis

Data on study design, aims and outcomes in terms of demographics, qualifications, work experience, activities and skills were extracted from the national databases, workforce reports and literature and entered into Microsoft Excel for integration. Descriptive statistics were applied for reporting purposes and percentage difference calculated for trend data. No assumptions were made for missing data. A risk of bias assessment of included studies was not undertaken due to their descriptive nature, and any elimination may have compromised the description of the current workforce profile.

4 | RESULTS

The 21 journal publications reported findings relative to 18 research studies focussing on P&C nurses within metropolitan, rural and remote Australia. The national workforce datasets were constructed from self-reported data at nurse registration and annual renewal, and the APNA website reported findings from membership surveys (APNA, 2017, 2020). The majority 47.6% (n = 10) of publications described findings relative to the GP nurse, four publications respectively focussed on the community nurse (Aggar et al., 2018; Duiveman & Bonner, 2012; Happell et al., 2013; Terry et al., 2015) or P&C health workforce (Ashley, Brown, et al., 2018; Ashley, Halcomb, et al., 2018; Friesen & Comino, 2017; Oliver-Baxter et al., 2017), and the remainder the
remote area nurse (Lenthall et al., 2011; Zhao et al., 2017) or child and family health nurse (Borrow et al., 2011). Surveys were the preferred data collection method (n = 9), followed by interviews and/or focus groups (n = 8), secondary analyses of state and national datasets (n = 4) and a self-reported activity log (diary) (n = 1) (refer to Table 1).

4.1 P&C workforce

As shown in Table 2, there was a 5.4% increase in the employment of P&C nurses from 2012 to 2015. (Midwives were included in 2015 data, but as they could not be extrapolated and the ratio of RNs to registered midwives was 9.2:1, the term ‘nurses’ has been used hereafter [AIHW, 2015].) The increase in the P&C workforce is led by a 17.3% increase in nurses working in GPs, ‘locum’ or ‘other private practice’ (not defined) and to a lesser extent (10.3%) in Aboriginal health services. A concurrent decline (4.7%) occurred in community nurses (AIHW, 2015). Heywood and Laurence (2018a, 2018b) reported a 64% increase in practice nurses over 8 years, and workforce surveys indicated that 69% of respondents worked in GP (APNA, 2020) despite practice nurse leaders describing recruitment and retention difficulties (McKenna et al., 2015). Further analyses were unable to be conducted as turnover data, vacancy rates, population and full-time equivalent nursing data were not available.

Data relative to the clinical speciality in which P&C nurses primarily worked are conflicting. Of employed nurses nationally (n = 307,104), fewer worked in community nursing (4.0%, n = 12,380) and a greater number worked in GP nursing (4.2%, n = 12,821) compared with stated employment area (AIHW, 2015) (refer to Table 2). Community nursing specialties included child and family health (n = 5444, 1.8%), Aboriginal health (n = 1500), ‘health promotion’ (n = 1195, 0.4%) (AIHW, 2015), rural and remote health (n = 911) (Heywood & Laurence, 2018b; Lenthall et al., 2011; Terry et al., 2015; Zhao et al., 2017), mining (n = 51), tourist facilities (n = 19) (Lenthall et al., 2011), research (Oliver-Baxter et al., 2017), corrective services, aged care and school health (APNA, 2020), although national data were not always available.

4.2 Nurse demographics

Literature supports national data in that P&C nurses are overwhelmingly female (89.3%), RNs (87.3%) and with a mean age of 44.4 years who work part-time (mean 30.9 h/week) (AIHW, 2015). GP nurses are younger (mean 46.6 years) than community (mean 48.2 years) and child and family health nurses (mean 49.9 years) following the employment of graduate nurses in the practice environment (Aggar et al., 2017; Heywood & Laurence, 2018a; Thomas et al., 2018).

Data on NPs or ENs are limited. Data from 2012 indicated that 8.6% (n = 4414) of P&C nurses were enrolled; most worked in GP (4.6%, n = 2399), 3.2% (n = 1630) worked in community health and the remainder (0.7%, n = 385) worked in child and family health or health promotion (AIHW, 2013a). Similarly, 9% of APNA respondents were ENs and 2% were NPs (APNA, 2020).

4.3 Qualifications and skills

The majority (55–80%) of P&C nurses were trained in the hospital system (Terry et al., 2015; Thomas et al., 2018) and had on average 17 years of nursing experience and 5 years of P&C experience (AIHW, 2015; APNA, 2020; Ashley, Brown, et al., 2018; Borrow et al., 2011; Thomas et al., 2018). Nurses educated to bachelor’s degree level ranged from 20% to 70% (Aggar et al., 2018; APNA, 2020; Parker et al., 2011; Thomas et al., 2018), 2–43% were working towards or had attained postgraduate qualifications (Aggar et al., 2018; APNA, 2020; Friesen & Comino, 2017; Lenthall et al., 2011; Parker et al., 2011), and less than 15% were qualified to manage chronic diseases, including asthma, diabetes and mental health issues (APNA, 2020) (refer to Table 1).

4.4 Nursing activities

Activities performed by P&C nurses as identified in the published literature were categorized into six recognized nursing workforce categories, namely: administration (general and administrative activities); direct care (activities directly related to patient care); indirect care (activities indirectly related to patient care); communication (communication with other health professionals, patients and/or carers); documentation (update or complete nursing or unit-related documentation by any medium); or other (activities not previously identified) (Blay et al., 2017; Blay & Roche, 2020).

As shown in Table 3, nursing activities (n = 63) were diverse. The majority of identified activities were direct care (n = 39), followed by administration (n = 6), communication (n = 5), indirect care (n = 5), other (n = 5) and documentation (n = 3). Wound care was the nursing activity most frequently identified (APNA, 2020; Ashley, Brown, et al., 2018; Halcomb & Ashley, 2019; McInnes et al., 2019; Terry et al., 2015; Thomas et al., 2018), followed by immunization (APNA, 2020; Halcomb & Ashley, 2019; McInnes et al., 2019; Thomas et al., 2018), mental health management (Borrow et al., 2011; Halcomb & Ashley, 2019; Happell et al., 2013; Thomas et al., 2018), home visits (APNA, 2020; Borrow et al., 2011; Duiveman & Bonner, 2012; Halcomb & Ashley, 2019) and health services communication (Borrow et al., 2011; Halcomb & Ashley, 2019; Happell et al., 2013; Terry et al., 2015). The majority of listed direct care activities are associated with the practice environment indicating the research focus on this population.

5 DISCUSSION

This review endeavoured to profile the community nurse in Australia. It could be argued that due to the focus on the GP nurse, the
| Citation | Aim | Design and method | Sample, region and workplace | Demographics | Qualifications, skills and roles |
|----------|-----|-------------------|-------------------------------|--------------|---------------------------------|
| Aggar et al. (2017) | To assess graduate nurse competency in a general practice transition to practice programme | Longitudinal exploratory mixed methods Survey at three monthly intervals and semistructured interviews | Graduate nurses in two metropolitan practices: Commencement \( n = 6 \) Completion \( n = 4 \) Programme preceptors \( n = 7 \) | Community graduates: Female gender 83% \( n = 10 \) Mean age 33 years (SD 11.7) Previous nursing experience 33% \( n = 4 \) Community preceptors: Female gender 100% \( n = 18 \) Mean age 49 years (SD 8.6) Experience mean 24 years (SD 11.4) | Graduates: Bachelor’s degree 75% \( n = 9 \) Graduate certificate 17% \( n = 2 \) Master’s degree 8% \( n = 1 \) Preceptors: Bachelor’s degree 28% \( n = 5 \) Graduate certificate/diploma 86% \( n = 12 \) | Skill development—practice dependent Competency assessment as per national standards Career opportunities limited |
| Aggar et al. (2018) | To compare competencies and experiences between graduates in a community, subacute and acute sector programme | Cohort study Survey at 6 and 12 months | Graduate nurses \( n = 12 \) Community preceptors \( n = 18 \) | | |
| Ashley, Brown, et al. (2018) and Ashley, Halcomb, et al. (2018) | To describe experiences of nurses who moved from the acute to primary or community sector | Sequential mixed methods Electronic survey Semistructured phone \( n = 12 \) or face-to-face \( n = 1 \) interviews | Nurse survey \( n = 111 \): Metropolitan 61%, \( n = 67 \) Rural 24%, \( n = 26 \) Remote 15.5%, \( n = 17 \) General practice 65% Interviewees: General practice \( n = 6 \) Schools \( n = 3 \) Community health, remote area, sexual health and refugee nursing \( n = 1 \), respectively | Survey: Female gender 96% Registered nurse 80% Mean age 45.4 years (SD 10.45) Experience: mean 18.9 years Primary or community: mean 3.4 years | Orientation period 81% Supernumerary period 49.5% Access to preceptor/mentor 35% Education-related leave and financial support—practice dependent Role ambiguity Role autonomy—practice dependent |
| Borrow et al. (2011) | To describe the community-based child and family health nurse in Western Australia | Qualitative Content analysis from 2-week self-reported diary of work activities Focus groups \( n = 3 \) | Nurse diarists \( n = 51 \) Interviewees \( n = 24 \) from metropolitan and regional centres | Mean age 48.2 years (SD 7.9) Majority (>50%) had extensive nursing experience and 5 years child and family health nursing experience Part-time 64.4% | Postgraduate child and family health (57%) Midwifery qualification <61% |
| Duiveman and Bonner (2012) | To explore community nurses’ experiences of negotiating client’s care contracts | Qualitative descriptive: thematic analysis Focus groups \( n = 2 \) | Two community health centres in New South Wales | Registered nurses \( n = 14 \) Female gender 86% | (Continues) |
| Citation                  | Aim                                                                 | Design and method                        | Sample, region and workplace                                                                 | Demographics                                                                 | Qualifications, skills and roles                                      |
|--------------------------|----------------------------------------------------------------------|------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| Friesen and Comino (2017)| To explore facilitators and barriers to research engagement by primary and community health staff | Exploratory Research culture in context tool distributed by email or hard copy | Multidisciplinary primary and community health staff within a New South Wales health district | Survey \((n = 109)\)  
Female gender 87\% (all respondents)  
Nurses 66\% \((n = 71)\)  
Child and family health 64\% \((n = 69)\)  
Primary and community health nurses 25\% \((n = 27)\) | Graduate certificate (nursing)  
17.6\% \((n = 19)\)  
Tertiary-level postgraduate qualifications 27\% \((n = 29)\) (all respondents) |
| Halcomb and Ashley (2019) and Halcomb and Bird (2020) | To explore general practice nurses’ roles, satisfaction and turnover intent | Mixed methods Cross-sectional nationwide electronic survey \((n = 1166)\) | General practice 81.4\% \((n = 950)\)  
Other primary and community health settings 18.5\% \((n = 216)\)  
Metropolitan 56\%, \((n = 536)\)  
Rural 38\% \((n = 360)\)  
Remote 5\% \((n = 53)\)  
Nursing experience >20 years 69\% \((n = 657)\)  
Primary and community health experience 6+ years 58\% \((n = 553)\) | Female gender 98% \((n = 771)\)  
Registered nurse 98% \((n = 930)\)  
Enrolled nurse 9% \((n = 89)\)  
Nurse practitioner 2% \((n = 17)\)  
Based on completed surveys \((n = 786)\)  
Mean age 49.9 years (SD 10.1)  
Part-time 56.8% \((n = 441)\) | Satisfied with professional development opportunities 55\%  
Intent to remain in general practice nursing 77\%  
Satisfied with role 82\%  
General practice role focussed on direct care 74\% \((n = 684)\)  
Regularly practised to full skill and knowledge 29\% \((n = 274)\)  
Majority able to practice skills |
| Happell et al. (2013)    | To identify activities performed by community mental health nurses   | Descriptive Quantitative analysis of 39 nursing activities grouped into four categories (clinical care, clinical organisation, practice administration and [service] integration) | Nursing dataset \((n = 48,322)\) from community and ambulatory units \((n = 252)\) in metropolitan, regional and rural Queensland over a 12-month period | Nursing activities:  
Clinical care 58\%  
Clinical organisation 33\%  
Administration 5\%  
Integration 3\% | |
| Heywood and Laurence (2018a, 2018b) | To describe, compare and estimate the future supply of the general practice nursing workforce | Descriptive Secondary analysis of self-reported national workforce data Simulation model | General practice nurses \((n = 12,746)\)  
Metropolitan 62.5\% \((n = 7966)\)  
Regional 35\% \((n = 4469)\)  
Remote 1.5\% \((n = 194)\) locations (2015 data) | Female gender 97%  
Registered nurse 80%  
Age 45 years or older 60\%  
Nursing experience: mean 18.6 years  
Part-time work 65\% | Intent to resign within 10 years 48% \((n = 6093)\) |
| Citation                  | Aim                                                                 | Design and method                                                      | Sample, region and workplace                                      | Demographics                                      | Qualifications, skills and roles                                      |
|--------------------------|----------------------------------------------------------------------|----------------------------------------------------------------------|-------------------------------------------------------------------|---------------------------------------------------|---------------------------------------------------------------------|
| Lenthall et al. (2011)   | To describe the remote area nursing workforce                        | Descriptive                                                          | Identified remote area nurse, primary and community health positions ($n=469$) | Female gender 89% Mean age 44 years (median 46) Mean hours 47.6 per week Employers: state/territory or Aboriginal communities | Bachelor's level 55% Postgraduate rural–remote nursing 5% Significant decline in midwifery and child health qualifications Clinics: Single nurse 15% 2–5 nurses 69% 6–13 nurses 16% |
|                          |                                                                     | Secondary analysis and comparison of population and remote area nursing data and surveys from 1995 to 2008 | Survey respondents: ($n=349$; 34.6% response rate) from seven states/territories | Workplace: clinics, community health, mining and tourist facilities |                                                                     |
|                          |                                                                     |                                                                    |                                                                    |                                                   |                                                                     |
| McInnes et al. (2019)    | Explore nurse and mentor experiences of a graduate general practice programme | Longitudinal qualitative Thematic analysis of semistructured telephone interviews prior, during and on completion of programme | Nurse graduates: Commencement ($n=8$) Completion ($n=4$) Nurse mentors ($n=9$) | 12-month programme incorporating two general practices | Career opportunities limited Able to practice university-acquired skills Expectation that graduates possess specialist skills |
| McKenna et al. (2015)    | Exploration of facilitators and barriers to advanced practice in general practice environments | Descriptive Modified Delphi: thematic analysis from multidisciplinary semistructured telephone ($n=17$) or face-to-face interviews ($n=5$) | General practice nurses ($n=4$) Nursing academics ($n=3$) Primary and community health decision makers* ($n=5$) Stakeholders ($n=11$) from across Australia* |                                                   | Nurse education focusses on acute sector Time and financial constraints limit education No clear career pathway Recruitment and retention of skilled nurses problematic Salary less compared with acute sector Practice and culture Role can be isolating with little peer support Perception that role focusses on chronic disease and aged care Scope of practice limited by management and time constraints Role ambiguity |
| Oliver-Baxter et al. (2017) | To explore primary and community health higher degree research workforce | Descriptive Multidisciplinary cross-sectional: electronic survey of former higher degree research students | Survey respondents ($n=37$) Nursing background 16% ($n=6$) Workplace: University-based (74%) Metropolitan regions (58%) | Respondents in clinical practice ($n=2$) Nursing respondents currently working in P&C research 67% ($n=4$) | Research career pathway unclear 78% ($n=29$) |

(Continues)
| Citation          | Aim                                                                 | Design and method                        | Sample, region and workplace                  | Demographics                                                                 | Qualifications, skills and roles                                                                 |
|-------------------|----------------------------------------------------------------------|------------------------------------------|-----------------------------------------------|-----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| Parker et al. (2011) | To explore the educational background of general practice nurses | Quantitative: electronic mail            | Survey respondents ($n = 58$, 74% response rate) | Female gender 96.5% Registered nurses 84% ($n = 49$)                          | Education perceived an important mechanism to raise status                               |
|                   |                                                                      | distributed survey in response to general practice network advertising | Registered and enrolled nurses working in general practice environments | Mean age 46 years (range 22–60) Mean 4.6 years in P&C environment Mean hours 28.2 per week (range 8–66) | Hospital-based training 55% ($n = 32$) Bachelor's degree 29% ($n = 17$) Postgraduate P&C qualifications 17% ($n = 10$) Preference for P&C short coursesStaffing, time and financial constraints barriers to further education |
| Terry et al. (2015)  | To explore any work, health and safety issues experienced by community nurses | Phenomenological Thematic analysis from semistructured telephone ($n = 10$) or face-to-face interviews ($n = 4$) with Tasmanian rural and remote community nurses | Registered nurses ($n = 15$) working in 13 state-funded community centres | Female gender 87% ($n = 13$) Age range 40–60 years Community nursing experience mean 8.8 years (range 1–31) | Community model ranged from single nurse to small teams working in clinics and/or homesLimited support mechanisms Work, health and safety issues: Fears for personal safety Manual handling Travel (roads, wildlife and weather) Home environment (cleanliness, passive smoking, uneven surfaces and pets) |
| Thomas et al. (2018) | To explore nurse and preceptor experiences of a graduate general practice programme | Qualitative: thematic analysis of semistructured interviews | Graduate nurses ($n = 4$, 67%) Preceptors ($n = 5$, 55.5%) | Graduates: Mean age 26 years (SD 8) Preceptors: Mean age 54 years (SD 13) Nursing experience mean 10 years (SD 7) | Limited financial support for education Acute sector perceived P&C experience to be of limited value P&C sector value acute experience Perception P&C environment more suitable for older nurses Good environment for skill development and unique skills, e.g., immunization Person-centred care, but autonomy is limited Career opportunities limited Preceptors: hospital-based training 80% Bachelor's degree 20% ($n = 1$) |
| Citation                  | Aim                                                                 | Design and method                                                                 | Sample, region and workplace                      | Demographics                                                                 | Qualifications, skills and roles                                      |
|--------------------------|----------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------------------------------|------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| Walters et al. (2012)    | To explore the possibility of telemonitoring by general practice nurses to supporting chronic disease | Mixed methods Survey of nurse participants trained in health mentoring (intervention) for a randomized controlled trial | General practice nurses \((n = 5)\) trained in health mentoring, Tasmania | Female gender 80\% \((n = 4)\) Age range 36–60 years Median hours 24 per week \((IQR 6)\) Primary and community experience median 4 years \((IQR 1)\) | Self-management support training \((n = 1)\) Challenging work in a supportive environment Patient partnership important although carer involvement limited Performed health assessments 60\% \((n = 3)\) Confidence in capacity to devise a patient action plan 40\% \((n = 2)\) |
| Zhao et al. (2017)        | To explore remote area practitioner workforce changes, turnover and costs between 2004 and 2015\(^a\) | Retrospective cross-sectional Secondary analysis of government payroll, personnel and financial activity | Remote area nurses, midwives, Aboriginal health practitioners and administrative staff from 54 remote area clinics in the Northern Territory | Remote area nurses increased from 120 to 135 (headcount) over 12 years Female gender 77\% Non-Aboriginal 14\% Significant increase in nurses aged >50 years Agency employees 15–20\% |

**Tables and websites**

| Databases and websites                        | Aim                                                                 | Design and method                                                                 | Sample, region and workplace                      | Demographics                                                                 | Qualifications, skills and roles                                      |
|-----------------------------------------------|----------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------------------------------|------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| Australian Institute of Health and Welfare   | To profile the nursing and midwifery workforce                       | Microsoft Excel data tables: self-reported survey data collated at nurse registration and renewal | 2015: registered, enrolled nurses and midwives in Australia \((n = 360,008)\) Practice nursing \((n = 18,290)\) Community nursing \((n = 22,310)\) | Major work setting: Community health service \((n = 22,310)\) General practice \((n = 11,040)\) Locum or other practice \((n = 7250)\) Aboriginal health service \((n = 1500)\) | Bachelor's degree 70\% Working towards or holding a postgraduate qualification 43\% Immunization accredited 48\% <15\% qualified to manage chronic diseases, including asthma, diabetes and mental health issues |
| Australian Primary Health Care Nurses Association | Annual membership survey                                             | Brief reports                                                                     | Survey respondents 2019 \((n = 1678)\)           | General practice 69\% Aboriginal health\(^a\) Aged care\(^a\) School health\(^a\) Corrective services\(^a\) | Bachelor's degree 70\% Working towards or holding a postgraduate qualification 43\% Immunization accredited 48\% <15\% qualified to manage chronic diseases, including asthma, diabetes and mental health issues |

\(^a\)No further details provided.  
\(^b\)Longitudinal study; latest data reported.
The community nurse role remains largely undefined. The lack of research into the community nurse is surprising considering the importance placed by state/territory governments on targeting services to population needs and the incremental rise in Hospital in the Home programmes.

Findings highlight the need for consistent terminology and definitional specificity at a global and national level, to ensure accuracy with data reporting and for comprehensive nursing workforce planning (Drennan, 2019; Weller-Newton et al., 2020). In this instance, national data relied heavily on self-reported data (AIHW, 2018) whereas other data crucial for workforce planning such as full-time equivalents and turnover rates were not available affecting result reporting. Despite these statistical artefacts, the study has highlighted that the community nursing sector is facing a severe nursing workforce crisis relative to increased demand from an aging population, chronic disease and shorter hospitalizations. The trends identified an increase in the number of nurses in GP with a parallel decline in nursing staff working in the community. Although the rise in practice nurses is encouraging, it could be argued that with emphasis on recovery at home (Montalto et al., 2020), the need for community nurses is paramount, and patient care will be compromised if the negative trend continues (Parliament of Australia, 2002). The low numbers, older age and (part-time) employment patterns of P&C nurses, particularly in child and family health, are alarming. To attain full-time equivalence, a higher headcount (of part-time employees) is needed, and considering that almost 50% of P&C nurses are intending to resign (Heywood & Laurence, 2018a, 2018b) or likely retire within the next decade, workforce shortages are set to escalate. Moreover, if it is considered that Australia in 2017 had over 309,000 births (ABS, 2019) and that approximately 6% of the population are aged under 5 (ABS, 2021b), it is probable that many infants and children are not being assessed by a child and family health nurse. The future health and developmental checks of babies and children are at risk.

Variances were found between studies and nurses’ qualifications. Specifically, the APNA survey indicated that the majority of nurses were tertiary educated, whereas other studies showed that less than one third of P&C nurses had tertiary-level qualifications (Friesen & Comino, 2017; Parker et al., 2011; Thomas et al., 2018). Further research is needed, but it is possible that nurses with professional memberships are more keen to further their education or vice versa.

An astounding finding considering the rising incidence of chronic disease, and because mental health support was the third most frequently listed direct care activity, is that few nurses were accredited to manage these common reasons for GP visits (Finley et al., 2018; Kimble et al., 2020). Some have argued that postgraduate courses are limited (Mckenna et al., 2015; Parliament of Australia, 2002) and that minimal attention is paid to P&C health in the undergraduate curriculum (Keleher et al., 2010; Murray-Parahi et al., 2020). However, it is almost 30 years since nursing education transitioned to the tertiary sector, and although P&C nurses acknowledged the importance of education for professional status, they also have a preference for short courses (Parker et al., 2011). This no doubt has limited capacity for P&C curriculum reform.

To ensure a sustainable workforce in line with population needs and changing models of care from hospital to the home, newly graduated and mid-level clinicians must be recruited. Little clarity is provided around the P&C role, scope of practice or a career pathway—factors that are known to influence nurse recruitment
### TABLE 3  Identified nurse activities and reported frequency (n)

| Citation(s) | Categories (n) | Activities (n) |
|-------------|----------------|---------------|
| APNA (2020) | Administration (1) | Arranging transport (1) |
| Borrow et al. (2011) | | Data processing and computer work (1) |
| Halcomb and Ashley (2019) | | Organizing health promotion (1) |
| Happell et al. (2013) | | Photocopying, faxing and scanning (1) |
| | | Reception duties (1) |
| | | Scheduling appointments, visits, recalls and reminders (3) |
| Borrow et al. (2011) | Communication | Case conferencing (1) |
| Halcomb and Ashley (2019) | | Health professional (3) |
| Happell et al. (2013) | | Health services and facilities (4) |
| Terry et al. (2015) | | Telephone calls (1) |
| | | Telehealth consultations (1) |
| APNA (2020) | Direct care | Assisting with activities of daily living (1) |
| Ashley, Brown, et al. (2018) | | Assisting with surgical procedures (2) |
| Borrow et al. (2011) | | Arthritis management (1) |
| Duiveman and Bonner (2012) | | Basic nursing care (1) |
| Halcomb and Ashley (2019) | | Case or care management (1) |
| Happell et al. (2013) | | Child and family support (2) |
| McInnes et al. (2019) | | Complex and chronic disease management (1) |
| Thomas et al. (2018) | | Ear syringing (2) |
| Terry et al. (2015) | | End-of-life care (1) |
| | | Health assessment (2) |
| | | • Aged-related (1) |
| | | • Antenatal and postnatal (2) |
| | | • Child health (3) |
| | | • Cardiac or respiratory (1) |
| | | • Diabetes (1) |
| | | • Domestic violence (1) |
| | | • Mental health and cognition (1) |
| | | • Men’s health (1) |
| | | • Smoking, nutrition, alcohol, physical activity and other risk factors (1) |
| | | • Home visits (4) |
| | | Immunization (5) |
| | | • Medication prompts and administration including insulin and intravenous medications (3) |
| | | • Mental health management or support (4) |
| | | • Patient education, health promotion and disease prevention (1) |
| | | • Mothercraft or breastfeeding (1) |
| | | • Child health and immunization (2) |
| | | • Chronic disease (1) |
| | | • Community nurse role (1) |
| | | • Drug, alcohol and smoking (2) |
| | | • Goals for self-care or service provision (1) |
| | | • Mental health (1) |
| | | • Wound management (1) |
| | | • Plaster application and removal (1) |
| | | Suturing (1) |
| | | Triage (2) |
| | | Venepuncture and cannulation (2) |
| | | Vital signs, blood sugar levels, ECG, peak flow and spirometry (2) |
| | | Wart treatment (1) |
| | | Wound care (6) |

(Continues)
The APNA (2017) emphasizes, in line with global recommendations (WHO, 2017), that the P&C role is to promote health and prevent illness, yet with the exception of nurses in rural and remote locations (Roden et al., 2015), these activities are seldom realized (Ball et al., 2014; Sworn & Booth, 2020). Indeed, many of the nursing activities identified in this review are fundamental, could be performed by others and are associated with the practice environment. With a need for skilled nurses comparative with demand (WHO, 2017, 2020) nurse leaders and professional bodies can help address workforce shortages and perceived career limitations by encouraging education, upskilling and the NP role. An area for concern is the potential for vacant community nurse positions to be filled by an unregulated workforce, with negative consequences for skilled nurses’ workload and patient safety. Employing more ENs would enable RNs to focus on preventative health care and help bridge the gap between fundamental care and expectations around scope of practice (Murray-Parahi et al., 2017).

Although Australia’s community workforce figures are deeply concerning, they are not unique. International research has demonstrated that the majority of nurses in high-income countries work within the hospital sector (Drennan & Ross, 2019) and that globally, P&C nurses are in short supply (Buerhaus et al., 2015; WHO, 2020). Until such time that nursing research comprehensively explores and quantifies the activities undertaken by the P&C nurse, the existing confusion around role expectations (Ashley, Brown, et al., 2018; Ashley, Halcomb, et al., 2018) will continue, and current nursing workforce shortages will only worsen.

### 5.1 Limitations

As a rapid review, only two databases were searched, data were cross-sectional and reported data were often generic restricting comparisons. Caution should be taken when interpreting results, as changes in classification categories used in the different sources can impact workforce data. This review has identified that data on the P&C workforce are scant. Despite these limitations and resultant knowledge gaps, the review has provided a basis for our understanding of the P&C workforce and has highlighted a looming crisis in the community nursing sector.

### 6 | CONCLUSION

This review has highlighted a workforce crisis in the state and territory community nursing sector. Importantly, it has determined that definitional ambiguity has impacted self-reported data and national workforce statistics. The need for rigorous research exploring the community nurse role is of paramount importance for workforce sustainability and to ensure the health and safety of the Australian population from birth through to older age.

### 7 | IMPLICATIONS FOR NURSING MANAGEMENT

With changing population demographics, and models of care shifting from hospital to the home, nurse managers need to refocus nurse recruitment to the community sector. Profiling and developing the community nurse role to reduce negative role perceptions and expand scope of practice is a step towards the promotion of a sustainable community workforce, consistent with WHO recommendations.

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ETHICS STATEMENT
As a rapid systematic review, ethical approval was not required.

CONFLICT OF INTERESTS
No conflicts of interest.

DATA AVAILABILITY STATEMENT
The data that support the findings of this study are available at https://researchdirect.westernsydney.edu.au/. These data were derived from the following resources available in the public domain: AIHW (2013a, 2013b, 2015, 2017, 2018) and APNA (2017, 2020).

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