
**RESPONDING TO FAMILIES WITH COMPLEX NEEDS: A NATIONAL SURVEY OF CHILD AND FAMILY HEALTH NURSES**

Chris ROSSITER, Research Assistant, Centre for Midwifery, Child and Family Health, University of Technology Sydney. 
BA(Hons).
*Corresponding author*: PO Box 123 Broadway, NSW 2007, Australia. 
Christine.rossiter@uts.edu.au

Virginia SCHMIED, Professor, School of Nursing and Midwifery, Western Sydney University. 
RM, RN, PhD

Lynn KEMP, Professor, School of Nursing and Midwifery, Western Sydney University 
RN, BHSc, PhD

Cathrine FOWLER, Professor, Centre for Midwifery, Child and Family Health, University of Technology Sydney. 
RN, RM, PhD

Sue KRUSKE, Regional Manager, Maternal Child Health, Institute of Urban Indigenous Health and Adjunct Professor, School of Nursing, Midwifery and Social Work, University of Queensland. 
RM, RN, Bach Hlth Sc(Hons), PhD

Caroline SE HOMER, Professor, Centre for Midwifery, Child and Family Health, University of Technology Sydney. 
RM, MN, MMedSc(ClinEpi), PhD

**Acknowledgements**

We thank other members of the CHoRUS team: Professor Lesley Barclay (The University of Sydney), Professor Ian Wilson (University of Wollongong), Dr Michael Fasher (Adjunct
Professor, The University of Sydney and Western Sydney University), Dr Kim Psaila (Western Sydney University), Mrs Amiee Hesson (Doctoral Student, Western Sydney University). Our research partners are listed below. We are very grateful to Jane Cioffi for assistance with the design of the survey and Kim Psaila for establishing the online survey, support with recruitment, data entry and cleaning.

We sincerely thank all the child and family health nurses who participated in this survey.

Conflict of Interest

No conflict of interest has been declared by the authors.

Funding Statement

This study was funded by the Australian Research Council as a linkage grant (LP100100693). Research partners were Western Australian Department of Health; Northern Territory Department of Health and Families; Queensland Department of Health; Victorian Department of Education and Early Childhood Development; New South Wales Department of Families and Community Services; Maternal Child and Family Health Nurses of Australia; Australian College of Midwives; The Royal Australian College of General Practitioners; Australian Practice Nurse Association and Australian General Practice Network (AGPN) (then the Australian Medicare Local Alliance).
ABSTRACT

Aims

To explore the extent to which Australian child and family health nurses work with families with complex needs and how their practice responds to the needs of these families.

Background

Many families with young children face challenges to their parenting capacity, potentially placing their children at risk of poorer developmental outcomes. Nurses increasingly work with families with mental health problems, trauma histories and/or substance dependence. Universal child health services must respond effectively to these challenges, to address health inequalities and to promote the best outcomes for all children and families.

Design

The descriptive study used cross-sectional data from the first national survey of child and family health nurses in Australia, conducted during 2011.

Methods

Survey data reported how often, where and how child and family health nurses worked with families with complex needs and their confidence in nursing tasks.

Findings

Many, but not all, of the 679 respondents saw families with complex needs in their regular weekly caseload. Child and family health nurses with diverse and complex caseloads reported using varied approaches to support their clients. They often undertook additional professional development and leadership roles compared with
nurses who reported less complex caseloads. Most respondents reported high levels of professional confidence.

Conclusion

For health services providing universal support and early intervention for families at risk, the findings underscore the importance of appropriate education, training and support for child and family health professionals. The findings can inform the organisation and delivery of services for families in Australia and internationally.

KEYWORDS: Child and family health nurses; complex needs; maternal health; child health; disadvantaged families; universal services; early intervention; infants; Australia
SUMMARY STATEMENT

Why is this research or review needed?

- Increasing numbers of families have circumstances that place them at risk of adverse outcomes for themselves and their young children.
- Universal health services, including child and family health nursing services, must be equipped to respond effectively to the needs of these families.
- Little is known about the practice of child and family health nurses in Australia and their role in supporting families with complex needs.

What are the key findings?

- Many, but not all, child and family health nurses frequently work with families with complex needs.
- Child and family health nurses who frequently work with families with complex needs report that they often use a variety of strategies to support their clients including antenatal contact, health promotion activities and drop-in sessions in diverse locations such as playgroups and parks.
- Nurses with diverse and complex caseloads undertake a range of additional professional development and leadership roles as part of a multi-faceted child and family health nursing role.

How should the findings be used to influence policy/practice/research/education?

- To identify families with complex needs and to offer effective support and advice, all child and family health nurses require an appropriate level of education and skills.
• Study findings point to the advanced education and skills required by child and family health nurses who work regularly with families with complex needs.

• Findings suggest ways publicly-funded child and family services can be organised to facilitate nurses' capacity to respond to the needs of all families.

• This study can inform further research on child and family health nursing practice and on current and future caseloads to better understand how health services contribute to better outcomes for children and families with complex needs.
INTRODUCTION

In high-income countries, nurses working with young children and their families encounter increasingly complex health and social circumstances. These families require substantial support and specific skills to address their needs (Borrow et al. 2011, Rossiter et al. 2011, Schmied et al. 2014). In Australia, nurses working in the dedicated specialty of child and family health (CFH) provide a universal health service for young children and families comprising health promotion, developmental monitoring and referral and parenting support (Australian Health Ministers' Advisory Council 2011, Fraser et al. 2014). CFH nurses are registered nurses with additional postgraduate CFH qualifications, who work with infants, children up to the age of five and their parents. Their role is similar to health visitors in the United Kingdom (UK) (Cowley et al. 2007) and to child health nurses in Sweden (Magnusson et al. 2012). In most Australian states and territories, CFH nursing services endeavour to contact all families shortly after the birth; some services make initial contact antenatally with families with additional needs (Kemp et al. 2011, Schmied et al. 2014). CFH nurses therefore encounter families with diverse circumstances, some of which present personal challenges for family members and professional challenges for the nurse (Shepherd 2011, Rollans et al. 2013, Fraser et al. 2014).

In 2011, a large national study of CFH nurses in Australia examined their role – including where and how CFH nurses work and with whom – and reported the varied activities CFH nurses undertake in working with diverse families across Australia (Schmied et al. 2014). Drawing on these data, the aim of this paper is to explore the extent to which Australian CFH nurses work with families with complex needs and how their practice responds to the needs of these families.
While CFH is not a dedicated nursing specialty in many countries, the issues that Australian CFH nurses regularly encounter are common globally. Nurses and other health professionals who work regularly or exclusively with parents and young children experience similar challenges among their clients. Although their clinical activities may differ, many elements of nursing practice and the implications for education and professional support echo those of their Australian colleagues.

**Background**

Recognition of the critical impact of the early years on a child’s development (Center on the Developing Child at Harvard University 2010) highlights the need to support families in the antenatal and postnatal period. In many high-income countries, this support must address the impact of significant changes in health and social conditions. For instance, trends towards later child-bearing for many women, as well as later retirement for those becoming grandparents, result in fewer new parents having access to extended family support than in the past (Qu and Weston 2013). Refugee and immigrant families have diverse histories and needs and may be particularly disadvantaged in their access to CFH services (Ou et al. 2010, Riggs et al. 2012). Increasing numbers of mothers (and fathers) identified as experiencing depression and other perinatal mood disorders (beyondblue 2011) also require specific support. Another issue for some children is the need for intervention by child protection authorities due to actual or perceived risks of child abuse and neglect. Living in a family with domestic violence, drug and alcohol dependence, mental illness, poverty or other risk factors for poor physical, social and emotional health compromises a child’s current and future physical and mental health and life outcomes (O’Connor et al. 2002, Robinson et al. 2011). These social changes in many countries have resulted in increased numbers of families with complex needs (ARACY 2013).
Given the strong link between developmental vulnerability amongst children and several risk factors such as poor parental mental health and family violence, Oberklaid and colleagues (2013) argue for a framework of ‘progressive’ or ‘proportionate universalism’. This entails a system of universal health and education services for all families with infants and young children that is supplemented by additional support targeted to those facing particular disadvantage, to identify and intervene early in childhood problems, directing ‘the more intensive and expensive interventions to those most likely to benefit’ (Oberklaid et al. 2013). Progressive universalism is challenging to put into practice in a context of tight resources and concerns about child protection (Hogg et al. 2012, Cowley et al. 2012). This calls for a diverse skill mix with professionals such as health visitors or CFH nurses to deliver universal prevention services, supplemented by support from selective specialised prevention programs.

In Australia, recent government policy has aimed to promote greater health service provision through a platform of universal services for all young children and their families. Nurses working in universal CFH nursing services are critical in identifying and providing early intervention for young children and their families with complex needs (Australian Institute of Health and Welfare 2012, Rollans et al. 2013, Harvey et al. 2015). There is increasing international recognition of this role in universal service delivery, concurrent with the implementation of early intervention home visiting programs that enable nurses to start visiting families during the antenatal period (Kemp et al. 2011). In their practice, CFH nurses need to incorporate a delicate balance between providing support to individual families with diverse needs and heightened expectations and adopting an expanded, multi-faceted, population-based approach embracing community development, health promotion, capacity building and interprofessional partnership (Borrow et al. 2011).
The national survey of CFH nurses in Australia reported elsewhere (Schmied et al. 2014) describes the typical caseload of CFH nurses. This includes frequent contact with infants and their families (95.5% of respondents see newborns at least weekly) and children up to the age of three (>80% see them frequently). Over two-thirds have frequent contact with parents and carers about their own needs. The most common CFH activities are universal initial contacts with families with newborns, scheduled subsequent visits and telephone support (over 80% report these activities frequently). Many provide new parents’ groups and non-scheduled contact with families in CFH centres (drop-in clinics). One quarter provide contact in locations other than a centre e.g. in parks or playgroups (Schmied et al. 2014). However, some families do not access this often-crucial support (Cowley et al. 2012, Brinkman et al. 2012). This may be due to limited programs or staff to carry the required caseloads (Schmied 2014); limited recognition by health professionals of individual families’ need for additional support; or families’ reluctance due to past experiences of contact with government and community services (Roche et al. 2005). Furthermore, the Australia-wide study identified the fragmented nature of the CFH service system and the many barriers to service delivery including workforce numbers and capacity and professional territorialism (Schmied et al. 2015).

THE STUDY

Aims

The study aimed to explore the extent to which Australian CFH nurses work with families with complex needs and how their practice responds to the needs of these families. It specifically addressed five questions:

1. How often do CFH nurses work with families with complex needs?
2. Do all CFH nurses have similar contact with families with complex needs?
3. How do the CFH nurses who frequently work with families with complex needs adapt their practice to provide support?
4. How confident are CFH nurses in working with families with complex needs?
5. What other professional activities do they undertake?

**Design**

This study was part of a national mixed-methods research project to investigate the implementation of a national approach to universal CFH services. This paper reports quantitative data from a national survey of CFH nurses.

**Definitions**

Child and family health nurses are registered nurses with postgraduate qualifications in CFH, working in publicly-funded health services, freely available to families in the community. They work principally with infants and children up to the age of five and their families and in some cases pregnant women. This term incorporates different terminology used in different jurisdictions in Australia.

In this paper, ‘families’ refer to one or more parents with at least one child aged 0 to 5 years.

The term ‘families with complex needs’ refers to either individual parents, their child/ren or the family system more broadly with one or more psychosocial characteristics, such as mental illness or substance dependence, that make them vulnerable to poorer outcomes (NSW Health 2009). We recognise that all families have individual strengths and
qualities that may ameliorate the impact of some circumstances; having these characteristics therefore does not necessarily disadvantage a family.

**Participants**

The survey was circulated to CFH nurses across Australia through the national professional association of CFH nurses and at a national CFH nursing conference (700 delegates). There were no exclusions, i.e. all CFH nurses were invited to respond, including nurses employed as clinicians, CFH nursing managers or educators of CFH nurses.

The survey took place between May - October 2011. Potential respondents were invited to complete the survey either on-line, using Qualtrics software, or using questionnaires distributed at the conference. The professional association forwarded reminders about the online survey in July and September 2011. A convenience sample of 1098 nurses responded from an unknown number who received an invitation to participate in the survey. This represents 23.6% of the 4357 Australian Registered Nurses working in the area of ‘family, maternal and child health’ in 2011 (Australian Institute of Health and Welfare 2012).

**Survey instrument**

The survey questionnaire addressed respondents’ professional roles, their clientele, frequency and types of support provided, as well as items on education, experience, confidence and professional leadership. Initial findings on the role of CFH nurses are reported elsewhere (Schmied et al. 2014). The current paper draws on data about respondents’ client-base and aspects of their practice.
Study measures

In exploring ‘complex needs’, the analysis largely focuses on respondents’ identification of families with a range of characteristics which may render them vulnerable to poor health outcomes. The 14 family characteristics itemised in the survey were developed from the literature, questions used in routine psychosocial assessment and depression screening in Australia (NSW Health 2009, Matthey et al. 2004, Austin et al. 2013) and the expert opinion of the research team. These characteristics included: young parents; Indigenous families; refugees; new immigrants; families who need interpreters; adults with physical / intellectual disabilities; children with physical / intellectual disabilities; adults with mental health problems; children with mental health problems; families with alcohol and other drug (AOD) problems; homeless families; children in out-of-home care; and families involved with child protection. A final characteristic – ‘families with complex social and emotional needs’ – was intended to identify individual families who experience multiple issues on a range of dimensions.

The survey used a simple self-reported six-point measure of frequency of seeing different clients and undertaking tasks (Box 1). Working ‘frequently’ with families with certain characteristics is defined as seeing them ‘weekly or more often’.

*Complexity of caseload is simplified as the number of family characteristics CFH nurses see frequently* (at least weekly). For the analysis, we refer to respondents who frequently work with families with three or more characteristics as having complex caseloads.

Data analysis
Hard copy surveys were entered into Qualtrics. Data were then transferred to MS Excel for cleaning and to SPSS version 21 for analysis. Descriptive data from the survey are presented using frequencies or percentages. Variables on frequency of activities and confidence are summarised using means and compared using Student’s t-tests, where applicable. Bivariate correlations between variables are examined using Spearman’s rho correlation coefficients (ρ). The sample size for each t or ρ score calculation is given as a subscript.

**Ethics**

The study was approved by research ethics committees of Western Sydney University. The questionnaire opened with information about the study and assurances of confidentiality. Commencing the questionnaire was accepted as informed consent.

**Validity and reliability**

The survey instrument was designed specifically for the study, drawing on several key sources: relevant literature; relevant competency standards; a review of policy documents available in all Australian states and territories (Schmied et al. 2011); consultations with key stakeholders; and items from a UK survey of health visitors (Cowley et al. 2007). The survey was evaluated for content validity and pilot tested (Schmied et al. 2014).

**RESULTS**

**The Sample**
Overall, 1098 CFH nurses from all eight Australian states and territories responded. The sample for the current paper is the 679 respondents (61.9% of the total) who worked principally in ‘universal (primary care) services in the community’, rather than other tiers of CFH nursing services or in management, education or policy roles. Their characteristics are summarised in Table 1. They were predominantly female, middle-aged, English-speaking and located in urban or regional centres. Nearly all had a specific qualification in CFH and over half worked part-time. Table 1 shows that the sample is comparable to known characteristics of all Australian nurses working primarily in family, maternal and child health (Australian Institute of Health and Welfare 2012).

**How often do CFH nurses work with families with complex needs?**

The survey asked respondents how often they worked with families with a variety of characteristics, using a six-point timescale (Box 1).

The questionnaire listed 14 psychosocial characteristics. The analysis in this paper uses the six characteristics most commonly reported by respondents. Table 2 indicates how often respondents reported contact with families with these six characteristics.

Amongst the six common family characteristics, most CFH nurses regularly had contact with young parents; over half saw these families at least weekly (response 5 or 6). For simplicity, we refer to this as seeing such families ‘frequently’. Nearly half reported weekly contact with families with ‘complex emotional and social needs’. One quarter reported rarely or never working with parents with AOD problems; over half reported that they rarely or never see refugee families.
Respondents' location was related to working frequently with families with different characteristics. For example, frequent contact with young parents was less common in major urban areas (36.9% of respondents) but more common in smaller urban (60%) or remote areas (50%). Conversely, more than half (56.3%) of respondents who frequently saw refugee families worked in major urban centres, although they represented only 45.2% of the sample.

Families with complex needs often require additional services. Respondents were therefore asked to indicate the availability of publicly-provided health services (e.g. allied health and specialist services) in their local community, using a scale from ‘not available’ through to ‘available at all times’. We analysed the correlation between the frequency of seeing families with various characteristics and availability of health services using Spearman’s rho ($\rho$). Respondents reported access to some services appropriate to their clients’ needs. For instance, respondents with frequent contact with parents with AOD problems reported better availability of adult mental health services ($\rho_{606}=0.127$), children’s services ($\rho_{606}=0.140$) and AOD services ($\rho_{606}=0.115$). Frequent contact with refugees was significantly correlated with more accessible multicultural/bilingual health services ($\rho_{606}=0.218$). These correlations, although not strong, were all statistically significant at the .05 level.

We also explored whether respondents’ caseload was related to their level of experience. There was some correlation between length of time working as a CFH nurse and frequency of working with parents with AOD problems ($\rho_{559}=0.130$, $p=0.002$) and with families involved with child protection ($\rho_{559}=0.096$, $p=0.023$). There was no apparent correlation between respondents’ CFH nursing experience and the frequency of working with families with other characteristics. Respondents’ age was correlated negatively with
frequency of working with both adults with mental health problems ($\rho_{513}=-0.147$, $p=0.001$) and ‘complex social and emotional needs’ ($\rho_{513}=-0.105$, $p=0.017$).

**Do all CFH nurses have similar contact with families with complex needs?**

We were interested to ascertain whether all CFH nurses worked with families with multiple complex needs. After identifying respondents’ frequency of working with families with the six characteristics (Table 2), we counted the number of characteristics each respondent worked with frequently. This delineated a smaller group of CFH nurses with complex caseloads: 195 respondents that frequently worked with families with at least three of the six characteristics (28.7% of respondents). Of these, 122 frequently worked with families with four or more characteristics. Conversely, 268 respondents (39.5%) did not report frequently working with families with any of the six characteristics. This suggests a distinction between those who regularly worked with families with a range of complex needs and those whose caseload was typically less complex.

We examined the characteristics of respondents with complex caseloads. The number of characteristics seen frequently did not appear significantly correlated to respondents’ age, their experience as CFH nurses or their highest qualification. However, respondents in full-time positions were more likely to work frequently with these families frequently, a mean of 1.9 characteristics (SD 1.9) compared with 1.5 (SD 1.7) for respondents working part time ($t_{640}=2.270$, $p=0.024$).

**How do CFH nurses with complex caseloads adapt their practice to provide support?**

In addition to identifying which respondents worked with families with complex needs, the study explored what services they delivered and where.
As a universal service, CFH nurses are required to provide developmental surveillance of children from 0 to 5 years of age, undertake a range of health promotion activities such as education about infant feeding and parental guidance and support. This screening support and education is typically provided in CFH centres or clinics, or in families’ homes (Schmied et al. 2014). All Australian parents are offered a home visit shortly after the birth of their child. Some CFH nurses now use alternate locations (play groups in community centres; parks; preschools) and methods (group-based, web-based) to meet their clients’ needs.

In the study CFH nurses with complex caseloads reported using a variety of locations and methods to engage and support their clients. We calculated a mean frequency score, between 1 and 6, for each of the clinical activities listed in the survey, using the frequencies in Box 1. Those with complex caseloads (frequently working with 3+ family characteristics) reported undertaking these activities more often than other respondents (Table 3). With one exception (online parent support), CFH nurses with complex caseloads had a higher mean frequency for all clinical activities, with a statistically significant difference for eight of the 14 activities.

Respondents with complex caseloads provided standard modes of support (such as scheduled universal and subsequent contact, breastfeeding clinics) more often. However, differences were particularly marked in provision of more alternate activities, including antenatal support, health promotion and non-scheduled contact for developmental or maternal assessment in venues other than the CFH centre (e.g. in playgroups or parks).

Given the association between hours of work and complexity of caseload, it is possible that the results in Table 3 were due to the fact more frequent provision of different activities was more feasible for full-time nurses. However, even among respondents who
worked full-time, there was a similar – albeit less marked – difference between the two
groups on most activities (Table 4).

How confident are CFH nurses in working with families with complex needs?

Respondents rated their confidence in performing several CFH nursing tasks on a five-
point scale from 1 (‘never confident’) to 5 (‘always confident’). Respondents reported
relatively high levels of confidence overall. Around 95% of the sample felt ‘mostly’ or
‘always confident’ in providing guidance on breastfeeding and assessing maternal
mental health using the Edinburgh Postnatal Depression Scale (EPDS). The lowest level
was for confidence around the four year old child health check (80.5% ‘mostly’ or ‘always
confident’).

We calculated a mean confidence score (between 1 and 5) for each task and compared
those with more and less complex caseloads, using the same definition of complexity
(frequently seeing families with three or more characteristics) (Table 5). Although the CFH
nurses with complex caseloads had a higher mean confidence rating for all activities, the
difference was rarely statistically significant.

What other professional activities do CFH nurses undertake?

Respondents indicated how often they engaged in non-clinical professional activities
such as research and advocacy, using the same timescale (Box 1). We calculated a
mean frequency (between 1 and 6) for each activity and compared groups according to
complexity of caseload.
CFH nurses with complex caseloads reported undertaking other professional roles more frequently than other respondents (Table 6). The difference in mean frequency was statistically significant for quality improvement, advocacy, community development and educating others. This suggests that a substantial group of CFH nurses undertake not only a complex clinical role, but also participate in activities reflecting clinical leadership and professional development.

**DISCUSSION**

This study used data from the first Australia-wide survey of the role of CFH nurses, describing their work with families with complex needs. It examined how they vary their practice and how confident they feel as practitioners, in a context of increasingly prevalent challenges facing families with young children.

The study identified that many, but not all, CFH nurses frequently worked with families who are potentially vulnerable on one or more psychosocial indicators (characteristics). Overall, 39.5% did not frequently work with any of the six specified family characteristics or did not recognise them in their caseload. However, a substantial group of respondents identified that they frequently worked with families with several characteristics and reported using a variety of standard and alternative means to support their clients; they undertake a range of additional professional development and leadership roles; and they are confident in undertaking a diverse and challenging CFH nursing role.

Australian state and territory policies emphasise the role of CFH nurses in providing universal and targeted services such as sustained nurse home visiting (Schmied et al. 2011, Australian Health Ministers' Advisory Council 2011). It is thus surprising that
nearly two-fifths of this sample stated that they were not frequently working with families with complex needs. Certainly some nurses may have little contact with refugees, given the geographical concentration of these families and their limited access to CFH nursing services (Ou et al. 2010). However, two-fifths report limited contact with ‘parents with mental health problems’ despite the fact that approximately 16% of women with an infant under 12 months of age experience at least one episode of depressive symptoms (Schmied et al. 2013) as do similar proportions of fathers (Giallo et al. 2012). This suggests that some nurses may be either reluctant to define postnatal depression or other mood disorders as mental health problems, or unable to identify these widespread issues amongst their clients. A recent Australian study identified several barriers to CFH nurses working effectively with women experiencing postnatal depression including the need for education in identifying PND, access to referral services and support for nurses (Rush 2012). Shepherd (2011) also reported that nurses experience a tension between their role in caring for babies and supporting women’s emotional health and wellbeing.

The identification of a distinct group of CFH nurses who frequently work with families with complex needs highlights a possible dichotomy between this group and the CFH nurses who report less complex caseloads. The former group report active involvement in a wide range of clinical and non-clinical practices. Previous studies of the role of CFH nurses and health visitors in the UK report that knowledge and experience are essential to assess women appropriately, combining use of screening tools such as the EPDS, with practice expertise to make clinical judgements (Belle and Willis 2013, Rollans et al. 2013, Rush 2012, Kardamanidis et al. 2009). The correlation between years working as a CFH nurse and more frequent contact with parents with AOD problems and/or child protection issues also suggests that more sensitive identification of these problems may come with experience.
Studies also report the importance of access to support services and treatment options for women experiencing postnatal depression and other complex psychosocial needs, including recent refugees or immigrants (Riggs et al. 2012, Myors et al. 2013, Rush 2012). Importantly, CFH nurses who worked frequently with families with these characteristics reported better availability of publicly-funded specialist support. This suggests that some nurses working in locations with higher numbers of families with complex needs have better access to support services. They may also be more skilled at negotiating access to scarce resources and in working in collaboration with other professionals and services. CFH nurses report working more often with other services such as allied health professionals to support families with complex needs than they did with other universal or primary care service providers such as midwives or general practitioners (Psaila et al. 2014).

The association between frequent contact with families with complex needs and frequent use of varied approaches to service provision such as non-scheduled contact in the centre and elsewhere (Table 3) suggests that nurses with complex caseloads use diverse methods to contact and support these families, in addition to the standard scheduled centre-based interactions. The data cannot directly indicate that they provide these alternate forms of support specifically to the families with complex needs. However, it does suggest that nurses who report complex caseloads are more flexible in assisting their clients and may seek effective and acceptable ways to support them. Over the past decade CFH nurses in Australia have increasingly offered services in the home – both routinely for all first contact visits (Kruske et al. 2006) and as a part of ongoing service provision for families with complex needs (Kemp et al. 2011, Sawyer et al. 2013) who may otherwise not access services. However, resources to provide routine or sustained
home visiting are limited (Cowley et al. 2012, Kemp et al. 2013) and nurses engage in other ways to meet with families either individually or in groups.

The results have implications for the education of CFH nurses, especially those who report a less diverse client base, who may be less confident or less adaptable in their practice. Kruske and Grant (2012) identified inconsistency in postgraduate nursing education (level of qualification and content) between different Australian states and universities. They recommend setting a minimum standard of education for CFH nurses and that course curricula reflect advanced knowledge and skills needed to work with families with complex needs. Similarly, Kemp and colleagues identified the necessary competencies for CFH nurses working with women in the antenatal period (2005).

Education for CFH and other nurses must address the range of potential needs amongst clients and the necessary resources to identify and work sensitively with families in many varied circumstances. Given the maturity of the cohort of nurses working in this specialty (Table 1), access to on-going professional development is also vital to support CFH nurses’ capacity to work effectively with families with complex needs. CFH nurses would then be better placed to practise in a context of proportionate universalism (Oberklaid et al. 2013) – providing all families with advice, support and reassurance about their children’s development, but equipped to identify, refer and respond to the additional needs of some families arising from their specific circumstances or adverse experiences.

**Limitations**

This paper has focused on CFH nurses’ work with families with specific psychosocial characteristics of potential disadvantage, as a *de facto* means of identifying families with
complex needs, based on the literature and government policies. Respondents made their own interpretation of the terms ‘families with complex emotional and social needs’ or ‘mental health problems’, as these characteristics were not defined in the questionnaire. Thus, the respondents who report frequent contact with specific characteristics may actually reflect diversity of interpretation. Clearly not all the families with these characteristics experience problems, although their presence may alert the nurse to the possible need for additional support. A further limitation is that this paper does not address indicators of client need other than the six key characteristics. Typically fewer CFH nurses reported frequent contact with families with the other eight characteristics listed in the survey.

The six-point frequency variable (Box 1) may also lack some sensitivity in examining respondents’ practice and the extent of their involvement with families with complex needs. It indicates how often respondents report seeing families of different types, rather than how often the families with complex needs make contact with the CFH nurse to receive support.

The results focus on responses from two groups of CFH nurses – those who frequently see families with at least three specific characteristics and those who frequently see less than three (including those who report have no frequent contact with families with complex needs) – possibly an arbitrary distinction. While the analysis identified many differences between these groups, including several of statistical significance, most correlations were low and these differences may not be important in practice.

All respondents were self-selected and the analysis relies on their reports of their activities and clientele rather than other measures of workload.
The survey captured nearly one quarter of the total Australian CFH workforce (23.6%) and appeared representative on several dimensions (Table 1). However, a substantial proportion were from Victoria (N=455, being 38.9% of Victorian CFH nurses) (Australian Institute of Health and Welfare 2012). All other Australian states and territories were consequently under-represented in the sample. This over-representation may have slightly distorted the findings, as Victoria has a greater population density and Victorian CFH nurses typically have higher levels of qualification than those in other Australian states (Kruske and Grant 2012). Other study data show that CFH nurses in Victoria are more likely than those in other states to work part-time, to see families with older children (1 – 5 years) and refugee and immigrant families. They report more frequent use of most CFH activities, both prescribed (e.g. universal initial contact, new parents’ groups) and alternate (e.g. telephone and online support, community-based health promotion and education) (Schmied et al. 2014).

CONCLUSION

The growing complexity and diversity of the caseloads of nurses working with children and families in Australia and other countries raises important considerations for their practice, arising from greater incidence of mental health problems, substance dependence and families affected by war and other trauma. These families have varied and often complicated needs, requiring skilled and innovative responses from health professionals.

To support these families effectively, nurses require ongoing education to increase their knowledge and understanding of the diversity of families’ needs and ways to address them. Nurses themselves also need support and resources. The diverse settings and
activities reported by respondents with complex caseloads suggest that their work may be time-consuming and resource-intensive, involving input beyond the scope of a typical consultation. Nurses may also require clinical supervision and opportunities to debrief if they work frequently or predominantly with many families with complex needs, as well as mentoring by more experienced nurses, familiar with the diverse supports required.
Table 1: Demographic characteristics of sample, compared with all registered nurses working in family, maternal and child health in Australia (where available)

<table>
<thead>
<tr>
<th>Item</th>
<th>Sample – working in universal services</th>
<th>All CFH nurses in Australia*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age: mean (range) in years</td>
<td>50.3 (23 – 71)</td>
<td>48.7</td>
</tr>
<tr>
<td>Gender: % female</td>
<td>99.4%</td>
<td>99.2%</td>
</tr>
<tr>
<td>Indigenous Australian</td>
<td>1.2%</td>
<td>NA</td>
</tr>
<tr>
<td>English as first language</td>
<td>97.9%</td>
<td>NA</td>
</tr>
<tr>
<td>Location (different definitions used on two sources)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Major urban area (population 100,000+)</td>
<td>45.2%</td>
<td>70.0% (major city)</td>
</tr>
<tr>
<td>- Other urban or regional area (10,000 – 100,000)</td>
<td>34.7%</td>
<td>-</td>
</tr>
<tr>
<td>- Moderate rural area (5,000 – 10,000)</td>
<td>9.9%</td>
<td>-</td>
</tr>
<tr>
<td>- Small rural area (1,000 – 5,000)</td>
<td>5.9%</td>
<td>-</td>
</tr>
<tr>
<td>- Remote (&lt;1,000)</td>
<td>4.3%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Years working as CFH nurse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- &lt; 5</td>
<td>24.0%</td>
<td>NA</td>
</tr>
<tr>
<td>- 5-10</td>
<td>23.9%</td>
<td></td>
</tr>
<tr>
<td>Employment status</td>
<td>Full-time</td>
<td>Part-time</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------</td>
<td>-----------</td>
</tr>
<tr>
<td></td>
<td>29.6%</td>
<td>64.9%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Highest educational qualification</th>
<th>Post-registration certificate</th>
<th>Diploma or degree</th>
<th>Postgraduate certificate</th>
<th>Postgraduate diploma</th>
<th>Masters’ degree</th>
<th>PhD</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10.4%</td>
<td>15.8%</td>
<td>15.8%</td>
<td>39.8%</td>
<td>14.5%</td>
<td>0.2%</td>
<td>3.5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specific CFH qualification</th>
<th>96.8%</th>
<th>NA</th>
</tr>
</thead>
</table>

N=100%  
679  
4357

*Australian Institute of Health and Welfare, *Nursing and Midwifery Workforce 2011*, additional material. This sample includes CFH nurses working in management, education or other tiers of CFH services.

NA = not available in this data source
Table 2: Frequency of contact with specific family characteristics, CFH nurses working in universal services, percentages, n=559

<table>
<thead>
<tr>
<th>Family type</th>
<th>All the time %</th>
<th>Frequently %</th>
<th>Often %</th>
<th>Sometimes %</th>
<th>Rarely %</th>
<th>Never %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Families with complex emotional and social needs</td>
<td>21.3</td>
<td>28.6</td>
<td>24.0</td>
<td>18.6</td>
<td>4.7</td>
<td>2.9</td>
</tr>
<tr>
<td>Young parents</td>
<td>20.0</td>
<td>33.5</td>
<td>18.2</td>
<td>15.6</td>
<td>8.9</td>
<td>3.8</td>
</tr>
<tr>
<td>Adults with mental health problems</td>
<td>8.9</td>
<td>27.4</td>
<td>30.1</td>
<td>23.1</td>
<td>6.6</td>
<td>3.9</td>
</tr>
<tr>
<td>Families involved with child protection</td>
<td>6.1</td>
<td>14.3</td>
<td>23.3</td>
<td>32.9</td>
<td>20.2</td>
<td>3.2</td>
</tr>
<tr>
<td>Refugee families</td>
<td>5.5</td>
<td>11.6</td>
<td>11.4</td>
<td>15.6</td>
<td>25.0</td>
<td>30.8</td>
</tr>
<tr>
<td>Parents with alcohol and other drug (AOD) problems</td>
<td>3.9</td>
<td>15.0</td>
<td>22.5</td>
<td>33.1</td>
<td>22.0</td>
<td>3.4</td>
</tr>
</tbody>
</table>

NB Rows add up to 100%. Not all respondents completed this question.
### Table 3: Mean frequency of undertaking CFH activities, by complexity of caseload.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Respondents who frequently see &lt;3 family characteristics</th>
<th>Respondents who frequently see 3+ family characteristics</th>
<th>t-score</th>
<th>Significance of difference in means (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antenatal contact</td>
<td>1.66 (1.01)</td>
<td>2.12 (1.43)</td>
<td>3.65</td>
<td>&lt;.001**</td>
</tr>
<tr>
<td>Antenatal parent education</td>
<td>1.19 (0.58)</td>
<td>1.50 (1.11)</td>
<td>3.41</td>
<td>&lt;.001**</td>
</tr>
<tr>
<td>Initial universal contact</td>
<td>5.25 (1.34)</td>
<td>5.43 (1.23)</td>
<td>1.49</td>
<td>.137</td>
</tr>
<tr>
<td>Scheduled subsequent contact</td>
<td>5.32 (1.30)</td>
<td>5.69 (0.85)</td>
<td>3.95</td>
<td>&lt;.001**</td>
</tr>
<tr>
<td>Non-scheduled contact in centre</td>
<td>4.60 (1.50)</td>
<td>5.26 (1.15)</td>
<td>5.50</td>
<td>&lt;.001**</td>
</tr>
<tr>
<td>Non-scheduled contact elsewhere</td>
<td>2.47 (1.67)</td>
<td>3.28 (1.89)</td>
<td>4.62</td>
<td>&lt;.001**</td>
</tr>
<tr>
<td>Breast feeding clinic</td>
<td>1.97 (1.63)</td>
<td>2.29 (1.82)</td>
<td>2.00</td>
<td>.046*</td>
</tr>
<tr>
<td>Online parent support</td>
<td>1.67 (1.43)</td>
<td>1.64 (1.40)</td>
<td>-0.19</td>
<td>.852</td>
</tr>
<tr>
<td>Postnatal groups</td>
<td>3.94 (1.75)</td>
<td>4.07 (1.73)</td>
<td>0.72</td>
<td>.440</td>
</tr>
<tr>
<td>Community-based health promotion</td>
<td>2.22 (1.50)</td>
<td>2.63 (1.58)</td>
<td>2.71</td>
<td>.007**</td>
</tr>
<tr>
<td>Groups specifically for fathers</td>
<td>1.30 (0.77)</td>
<td>1.32 (0.75)</td>
<td>0.31</td>
<td>.757</td>
</tr>
<tr>
<td>Therapeutic parenting program</td>
<td>1.48 (1.15)</td>
<td>1.60 (1.19)</td>
<td>1.12</td>
<td>.264</td>
</tr>
<tr>
<td>Structured parenting program</td>
<td>1.48 (1.01)</td>
<td>1.63 (1.19)</td>
<td>1.44</td>
<td>.152</td>
</tr>
<tr>
<td>Telephone support</td>
<td>5.08 (1.26)</td>
<td>5.36 (1.17)</td>
<td>2.63</td>
<td>.009**</td>
</tr>
<tr>
<td>N</td>
<td>307 – 364</td>
<td>156 – 195</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Number of people answering each item varied, within the range indicated.

**Table 4: Mean frequency of undertaking CFH activities, by complexity of caseload. Respondents working FULL-TIME**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Mean frequency (standard deviation)</th>
<th>t-score</th>
<th>Significance of difference in means (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Respondents who frequently see &lt;3 family characteristics</td>
<td>Respondents who frequently see 3+ family characteristics</td>
<td></td>
</tr>
<tr>
<td>Antenatal contact</td>
<td>1.68 (1.02)</td>
<td>2.39 (1.53)</td>
<td>3.12</td>
</tr>
<tr>
<td>Antenatal parent education</td>
<td>1.21 (0.69)</td>
<td>1.77 (1.41)</td>
<td>2.91</td>
</tr>
<tr>
<td>Initial universal contact</td>
<td>5.46 (1.19)</td>
<td>5.54 (1.09)</td>
<td>0.45</td>
</tr>
<tr>
<td>Scheduled subsequent contact</td>
<td>5.33 (1.29)</td>
<td>5.74 (0.89)</td>
<td>2.28</td>
</tr>
<tr>
<td>Non-scheduled contact in centre</td>
<td>4.75 (1.54)</td>
<td>5.51 (0.78)</td>
<td>3.93</td>
</tr>
<tr>
<td>Non-scheduled contact elsewhere</td>
<td>3.05 (1.82)</td>
<td>3.72 (1.83)</td>
<td>2.22</td>
</tr>
<tr>
<td>Breast feeding clinic</td>
<td>2.34 (1.90)</td>
<td>2.51 (1.85)</td>
<td>0.55</td>
</tr>
<tr>
<td>Online parent support</td>
<td>1.85 (1.56)</td>
<td>1.56 (1.31)</td>
<td>-1.22</td>
</tr>
<tr>
<td>Postnatal groups</td>
<td>4.01 (1.80)</td>
<td>3.72 (1.83)</td>
<td>-0.95</td>
</tr>
<tr>
<td>Community-based health promotion</td>
<td>2.19 (1.53)</td>
<td>2.74 (1.54)</td>
<td>2.00</td>
</tr>
<tr>
<td>Groups specifically for fathers</td>
<td>1.29 (0.79)</td>
<td>1.26 (0.54)</td>
<td>-0.24</td>
</tr>
<tr>
<td>Therapeutic parenting program</td>
<td>1.33 (1.00)</td>
<td>1.75 (1.38)</td>
<td>2.11</td>
</tr>
<tr>
<td>Structured parenting program</td>
<td>1.49 (0.98)</td>
<td>1.79 (1.37)</td>
<td>1.49</td>
</tr>
<tr>
<td>Activity</td>
<td>Respondents who frequently see &lt;3 family characteristics</td>
<td>Respondents who frequently see 3+ family characteristics</td>
<td>t-score</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>----------------------------------------------------------</td>
<td>----------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>Supporting breastfeeding for mothers with unwell / special care babies</td>
<td>4.01 (0.87)</td>
<td>4.18 (0.84)</td>
<td>2.13</td>
</tr>
<tr>
<td>Providing guidance on breastfeeding by observation</td>
<td>4.38 (0.64)</td>
<td>4.45 (0.62)</td>
<td>1.24</td>
</tr>
<tr>
<td>Providing guidance on infant feeding / nutrition eg bottle feeding and education on diet</td>
<td>4.57 (0.56)</td>
<td>4.65 (0.51)</td>
<td>1.87</td>
</tr>
<tr>
<td>Assessing maternal mental health (not including using EPDS)</td>
<td>4.09 (0.78)</td>
<td>4.19 (0.74)</td>
<td>1.42</td>
</tr>
<tr>
<td>Using EPDS to screen for maternal mental health</td>
<td>4.45 (0.72)</td>
<td>4.49 (0.79)</td>
<td>0.553</td>
</tr>
<tr>
<td>Undertaking screening for domestic / family violence</td>
<td>4.02 (0.88)</td>
<td>4.13 (0.89)</td>
<td>1.23</td>
</tr>
<tr>
<td>Providing guidance for behaviour management for 2 to 5 year olds</td>
<td>4.16 (0.72)</td>
<td>4.27 (0.69)</td>
<td>1.73</td>
</tr>
</tbody>
</table>

*p<.05  **p<.01

*Φ Number of people answering each item varied, within the range indicated.

Table 5: Mean confidence level, by complexity of caseload.
Completing the 4 year old child health check (as per Federal Government initiative) | 4.01 (1.19) | 4.13 (1.28) | 0.93 | .353

| **N** | 308 - 364 | 163 - 195 |

*p<.05  **p<.01

Φ Number of people answering each item varied, within the range indicated.

Table 6: Mean frequency of undertaking non-clinical CFH activities, by complexity of caseload.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Mean frequency (standard deviation)</th>
<th>t-score</th>
<th>Significance of difference in means (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondents who frequently see &lt;3 family characteristics</td>
<td>Respondents who frequently see 3+ family characteristics</td>
<td>t-score</td>
<td>Significance of difference in means (2-tailed)</td>
</tr>
<tr>
<td>Quality improvement</td>
<td>3.64 (1.31)</td>
<td>3.91 (1.39)</td>
<td>2.28</td>
</tr>
<tr>
<td>Educating others</td>
<td>3.26 (1.26)</td>
<td>3.64 (1.30)</td>
<td>3.32</td>
</tr>
<tr>
<td>Policy development</td>
<td>2.35 (1.13)</td>
<td>2.49 (1.13)</td>
<td>1.41</td>
</tr>
<tr>
<td>Clinical supervision</td>
<td>2.56 (1.40)</td>
<td>2.75 (1.32)</td>
<td>1.59</td>
</tr>
<tr>
<td>Research</td>
<td>2.07 (1.11)</td>
<td>2.25 (1.21)</td>
<td>1.74</td>
</tr>
<tr>
<td>Advocacy</td>
<td>3.37 (1.42)</td>
<td>3.78 (1.53)</td>
<td>3.18</td>
</tr>
<tr>
<td>Community development</td>
<td>2.77 (1.32)</td>
<td>3.22 (1.41)</td>
<td>3.75</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>195</td>
<td>364</td>
<td><strong>N</strong></td>
</tr>
<tr>
<td>Frequency</td>
<td>Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
<td>--------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 = Never</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 = Rarely (once every 6 months)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 = Sometimes (every 2 – 3 months)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 = Often (approximately twice monthly)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 = Frequently (at least weekly)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 = All the time (several times per week)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
REFERENCES


BRINKMAN, S. A., GIALAMAS, A., RAHMAN, A., MITTINTY, M., GREGORY, T., SILBURN, S.,
GOLDFELD, S., ZUBRICK, S., CARR, V., JANUS, M., HERTZMAN, C. & LYNCH, J.
2012. Jurisdictional, socioeconomic and gender inequalities in child health and
development: analysis of a national census of 5-year-olds in Australia. BMJ Open,
2.

CENTER ON THE DEVELOPING CHILD AT HARVARD UNIVERSITY 2010. The foundations of
devolving health are built in early childhood.

national review of activities and service organisation. Public Health, 121, 869-
879.

COWLEY, S., KEMP, L., DAY, C. & APPLETON, J. 2012. Research and the organisation of
complex provision: conceptualising health visiting services and early year

FRASER, S., GRANT, J. & MANNIX, T. 2014. The role and experience of child and family
health nurses in developed countries: a review of the literature. Neonatal,
Paediatric and Child Health Nursing, 17, 2-10.

GIALLO, R., D'ESPOSITO, F., COOKLIN, A., MENSAH, F., LUCAS, N., WADE, C. &
NICHOLSON, J. 2012. Psychosocial risk factors associated with fathers' mental
health in the postnatal period: results from a population-based study. Social
Psychiatry and Psychiatric Epidemiology, 48, 563-573.

HARVEY, S., SCHMIED, V., NICHOLLS, D. & DAHLEN, H. 2015. Hope amidst judgement:
the meaning mothers accessing opioid treatment programmes ascribe to
interactions with health services in the perinatal period. Journal of Family Studies,
21.


SCHMIED, V., HOMER, C., FOWLER, C., PSAILA, K., BARCLAY, L., WILSON, I., KEMP, L.,
FASHER, M. & KRUSKE, S. 2015. Implementing a national approach to universal
child and family health services in Australia: professionals’ views of the challenges
and opportunities. *Health & Social Care in the Community*, 23, 159-70.

SCHMIED, V., FOWLER, C., ROSSITER, C., HOMER, C., KRUSKE, S. & THE CHORUS TEAM
2014. Nature and frequency of services provided by child and family health nurses

SCHMIED, V., JOHNSON, M., NAIDOO, N., AUSTIN, M.-P., MATTHEY, S., KEMP, L., MILLS,

Commonalities and challenges: A review of Australian state and territory maternity
and child health policies. *Contemporary Nurse: A Journal for the Australian
Nursing Profession*, 40, 106-117.

SHEPHERD, M. L. 2011. Behind the scales: child and family health nurses taking care of