Coroners' recommendations for prevention of resident deaths in aged care

The role of primary care providers

Georgia Aitken, Athena Demosthenous, Lyndal Bugeja, Melissa Willoughby, Carmel Young, Joseph E Ibrahim

Background and objectives
Currently, very little is known about how coroners consider a role for general practitioners (GPs) and registered nurses (RNs) in recommendations for the prevention of premature death. Involving these professions in recommendations generally directed towards government organisations or residential aged care providers and management may contribute to more successful broader policy changes. The aim of this article was to examine whether coroners' recommendations describe a specific role for GPs and RNs in the prevention of premature death in residential aged care settings and, if so, what domains of practice were considered.

Methods
This study was part of a larger retrospective cohort study. The National Coronial Information System (NCIS) was used to extract coroners' reports that included recommendations directed towards GPs and RNs. The following information was extracted: mechanism of death, incident location, text of coroners' recommendations.

Results
Of 162 unique recommendations, 14 (8.6%) were relevant to GPs and 10 (6.2%) were relevant to RNs. Most recommendations were made in the domains of 'applied professional knowledge and skills', 'organisations and legal dimensions' and 'provision and coordination of care'. Recommendations were primarily made in response to natural cause deaths and complications of clinical care.

Discussion
Coroners' recommendations have a limited focus directed towards GPs and RNs, and recommendations focus on their roles in application of skills and knowledge, legal domains, and provision and coordination of care. Recommendations were mainly made in response to deaths due to suboptimal care or from 'complications of clinical care'. Formulating recommendations for these health professions may increase accountability and the likelihood of a recommendation being effectively implemented.

GENERAL PRACTITIONERS (GPs) and registered nurses (RNs) are the main primary healthcare providers for older people living in residential aged care facilities (RACFs). In Australia, there are over four million GP consultations each year[1] and 21,916 RNs employed within RACFs.[2] As such, these professionals are pivotal in any efforts to prevent premature deaths in this population.[3] The role of GPs and RNs to promote public health and injury prevention is a key domain of both professions, as articulated by their respective regulatory bodies.[4,5]

Information about the causes and potential prevention of injury-related or premature deaths s drawn from multiple sources. A primary source is coronial investigations, which, in Australia, are led by coroners, who can also make recommendations for initiatives to improve public safety. Coroners' recommendations are public and are considered significant by the public and professionals.

Coroners' recommendations may have a greater likelihood of implementation by incorporating a specific role for GPs and RNs. Involving these professions may also contribute to more successful broader policy changes by including them in recommendations generally directed to government organisations or RACF management.

Contemporary research shows that health outcomes improve if health professionals are accountable for clinical care, engage in a manner to strengthen communication, collaborate with other team members and implement evidence-based practice.[6,7] If coroners promoted these aspects directly, it would reinforce how practice should be improved, and empower GPs and RNs to advocate and act.

The epidemiology of premature deaths in RACFs and nature of recommendations has been described in Australia.[3,8] The degree to which coroners consider a role for GPs and RNs in recommendations for the prevention of premature death is currently not known. This study examined whether coroners' recommendations describe a specific role for GPs and RNs in the prevention of premature death in RACFs and, if so, what domains of practice were considered.

Method

This study was part of a larger national cohort study[3] of deaths of RACF residents reported to coroners between 1 July 2000 and 30 June 2013.

Data from the National Coronial Information System (NCIS)[9] were examined and, where the death met selection criteria (Box 1), the following information was extracted:

- mechanism of death
- incident location
- text of coroners' recommendations.

Domains of practice for RNs and GPs were identified using nationally recognised frameworks for nurses and GPs.[4,5] Content analysis was conducted to classify each recommendation into the relevant domain (Table 1).

Ethics approval

Ethics approval was granted as part of a larger study,[3] by the Victorian Institute of Forensic Medicine Research Advisory Committee (reference: RAC 011/13) and the Department of Justice Human Research Ethics Committee (reference: CF/13/8187).

Results

Of the 183 recommendations made, 162 were unique. Only the unique recommendations were included in the analysis. Among the 162 recommendations, 14 (8.6%) were classified as being explicitly relevant to GPs and 10 (6.2%) to RNs (Table 1).

Of the 14 recommendations classified as relevant to GPs, the majority were in the domain of 'applied professional knowledge and skills' (n = 7, 50%) followed by 'organisational and legal dimensions' (n = 4, 29%) (Table 1). Recommendations in the former category describe a need for improved adherence to clinical guidelines, and competence in medical decision-making. In the latter category, recommendations focused on the need for improved knowledge of and compliance with reporting requirements as mandated in legislation. Other domains included 'professional and ethical role' (n = 2, 14%) and 'communication skills and the doctor–patient relationship' (n = 1, 7%).

Of the 10 recommendations relevant to RNs, the majority (n = 6, 60%) were in 'provision and coordination of care' (Table 1). Within this domain, the recommendations described a need for improved adherence to clinical guidelines, especially regarding administration of therapeutic substances. Other domains included 'professional practice' (n = 2, 20%) and 'collaborative and therapeutic practice' (n = 2, 20%). Overall, the focus was on clinical management and documentation, with little in the domains of communication, collaboration with other team members and consideration of evidence-based practice in relation to care of patient. No recommendations were made for 'population health and the context of general practice' and in 'critical thinking and analysis'.

Of the 14 recommendations relevant to GPs, all were for natural cause deaths (n = 6, 42.9%) and complications of clinical care (n = 8, 57.1%) (Table 1). GPs were not considered in any recommendations for other external causes of death (eg falls, choking, resident–resident aggression).

Of the 10 recommendations relevant to RNs, the majority occurred in deaths deemed as complications of clinical care (n = 7, 70%; Table 1). This was followed by natural cause deaths (n = 2, 20%) and a falls-related death (n = 1, 10%).

Discussion

Coroners' recommendations following the investigation of deaths of RACF residents describe a limited role for GPs and RNs. Less than 10% of recommendations explicitly mentioned a role for GPs and RNs, and recommendations focused on their roles in application of skills and knowledge, legal domains, and provision and coordination of care. Recommendations were mainly made in response to deaths from 'natural cause' due to suboptimal care (Box 1) or from 'complications of clinical care'. To our knowledge, this study is the first to examine whether coroners' recommendations explicitly describe a role for GPs and RNs.

The finding that coroners' recommendations do not describe a wider role for health professionals in prevention of other causes of premature death is a missed opportunity. Our primary study showed that the rate of premature deaths increased in RACF residents over the study period, especially in falls-related deaths.[3] As primary care providers, GPs and RNs have the potential to play a significant preventive part in decreasing these rates and improving standard of care.

The paucity of coroners' recommendations directed at GPs and RNs may be attributable to a range of factors. One is the legal principle that the coronial process is not intended to apportion blame or establish fault,[10] and recommendations directed at health professionals may be misinterpreted as criticism of the individuals involved. The nuances of the coroners' role are often not recognised by clinicians, especially those who are rarely involved in any legal proceedings. The findings and recommendations are dependent on the evidence, including expert evidence, led at an inquest, and must be relevant to the facts before the coroner.

An important role of the coroner is to look at whether the standard of practice is being met and, at times, to make recommendations about how it can be improved. Therefore, recommendations may arise from cases where the standard of practice has in fact been met by the individuals and organisations, as well as from cases that are critical of the health professionals involved because of deficits in care and may lead on to a professional conduct referral and/or civil claim. It is the latter situation that leads to health professionals often perceiving any recommendation about healthcare provision as a criticism. If it is the case that a health practitioner's care does not adhere with clinical practice or guidelines, and has a contributory role in the death, the usual regulatory avenue is to notify the Australian Health Practitioner Regulation Agency (AHPRA). In many cases, a mortality review may have been conducted by the relevant health service and findings implemented prior to the completion of the coronial investigation, so the coroner concludes that no additional recommendations are required.

Any recommendations that are made suggesting a greater role of GPs or RNs would often follow a finding

of substandard or deficient care, and will typically be narrow so as to address the specific care deficits. From a legal perspective, a role of lawyers representing health professionals and organisations in coronial inquests is to ensure that the coroner does not make findings that suggest their clients had a role in the deceased's death or that there was a failing that led to the death. Given that a team of healthcare workers, rather than single individuals, provide care to a resident, identifying a single professional group is not always reasonable or accurate.

The focus of recommendations on the provision of medical care, and domains describing legal and ethical responsibilities, is in keeping with coroners' focus on standards of practice being met and compliance with legal requirements. A key aim of coroners' recommendations is to improve public health and safety;[11] therefore, it is surprising that no recommendations address population health and organisational roles of GPs. As previously stated, the findings and recommendations made by coroners are dependent on the evidence, including expert evidence, led at an inquest. Recommendations are directed to individuals and organisations on this basis, which may explain why there are no recommendations relating to improving public health and safety. Coroners may also focus their recommendations at the level of RACF management rather than a single professional group.

It is surprising that external causes of deaths, other than those from complications of clinical care, rarely yielded recommendations, despite healthcare practitioners having the potential to play a significant preventive part in these incidents. This may also be explained if the tendency is to direct recommendations to management of the RACF rather than healthcare professions. Further research comparing coroners' recommendations aimed at the level of government or RACF management with those directed at individual professional groups would highlight differences in focus and content.

Generalising the findings to other settings should be done with caution. Although the population of the study was all deaths reported to the coroner in Australia for over a decade, the event rate of recommendations was small, precluding any analytical statistics. It is likely that we have underestimated the number of relevant recommendations, as definitions used to describe GPs and RNs vary[12–14] and given the limitations of the NCIS as a data source.[15]

These findings identify the limited focus of recommendations directed towards GPs and RNs in comparison with their broader role as healthcare service providers. There is an opportunity for coroners to consider a greater role for health professionals in the prevention of death. Formulating recommendations for the health professionals may increase accountability and the likelihood of a recommendation being effectively implemented.

Table 1. Relevant recommendations according to professional domains of general practice[4] and nursing,[5] and by cause of death

Professional domain of general practice	Complications of clinical care n (%)	Falls-related n (%)	Natural cause n (%)	Total n (%)
Applied professional knowledge and skills (eg physical examination and procedural skills, medical conditions, decision making)	5		2	7 (50.0)
Organisational and legal dimensions (eg information technology, records, reporting, confidentiality, practice management)			4	4 (28.6)
Professional and ethical role (eg duty of care, standards, self-appraisal, teacher role, research, self-care, networks)	2			2 (14.3)
Communication skills and the patient–doctor relationship (eg communication skills, patient centeredness, health promotion, whole person care)	1			1 (7.1)
Population health and the context of general practice (eg epidemiology, public health, prevention, family influence on health, resources)				– (–)
Total	**8 (57.1)**	**–**	**6 (42.9)**	**14 (100.0)**
Professional domain of registered nursing	**n (%)**	**n (%)**	**n (%)**	**Total n (%)**
Provision and coordination of care (eg coordination, organisation and provision of care; including assessment of patients, planning, implementation and evaluation of care)	3	1	2	6 (60.0)
Collaborative and therapeutic practice (eg establishing, concluding and sustaining professional relationships with patients and the healthcare team)	2			2 (20.0)
Professional practice (eg professional, legal and ethical responsibilities; accountability for practice, functioning in accordance with legislation and protection of patient rights)	2			2 (20.0)
Critical thinking and analysis (eg self-appraisal, professional development and the value of research and evidence for practice)				– (–)
Total	**7 (70.0)**	**1 (10.0)**	**2 (20.0)**	**10 (100.0)**

Authors

Georgia Aitken BA, Research Assistant, Health Law and Ageing Research Unit, Department of Forensic Medicine, Monash University, Southbank, Vic. geait1@student.monash.edu

Box 1. Case identification, inclusion criteria and data extraction

Case identification

The National Coronial Information System (NCIS) is a data storage and retrieval system that contains information on all deaths reported to Australian coroners since 1 July 2000.[9] Deaths were identified when the incident location was classified as one of the following:

- home for the elderly/retirement village
- nursing home, hospice, palliative or respite care
- residential care facility.

Permanent or respite care residents were distinguished by matching residential and incident location against a list of accredited residential aged care facilities (RACFs). A coded and free text search of the NCIS identified cases in which a recommendation or preventive comment was made. When coronial findings were not attached but recommendations had been made, the coronial office was contacted for a copy of the text recommendations. Reports were manually read to determine if recommendations or preventive comments were directed towards registered nurses (RNs) or general practitioners (GPs).

The definition of GP is a primary care practitioner who plays a central part in the delivery of healthcare to the Australian community.[16] The definition of GP was applied broadly to include doctors, medical practitioners, treating medical officers, treating doctors and any professional and peak bodies that has an impact on the individual medical practitioners and their profession. The definition of RN was a nurse with a bachelor's level degree who practises independently and interdependently, assuming accountability and responsibility for their own actions and delegation of care to enrolled nurses and healthcare workers.[17] Again the definition of RN was applied broadly to include nursing staff, nursing profession, senior nursing staff and any professional or peak bodies that impact on the individual nurse and their profession.

Inclusion and exclusion criteria

Inclusion and exclusion criteria was taken from the larger study looking at premature deaths of RACF residents.[3] In addition, cases were included only if recommendations or preventive comments were made by coroners, and if recommendations or preventive comments were directed towards RNs or GPs. Repeated recommendations for the same event were excluded from analysis.

Data extraction

The following information was extracted and recorded using Microsoft Excel:

- the relevance of recommendations
- the domain of practice each recommendation targeted
- the nature of each death for which a relevant recommendation was made.

Deaths considered as 'natural cause due to suboptimal care' refer to those resulting from natural causes but where there was a deficit in clinical care that could be considered a contributing factor. This is often described differently by clinicians, pathologists and coroners. Examples include a delay in commencing antibiotic therapy in a person with sepsis

Athena Demosthenous, Medical Student, Health Law and Ageing Research Unit, Department of Forensic Medicine, Monash University, Southbank, Vic

Lyndal Bugeja PhD, Associate Professor, Health Law and Ageing Research Unit, Department of Forensic Medicine, Monash University, Southbank, Vic

Melissa Willoughby BA (Hons), Research Assistant, Health Law and Ageing Research Unit, Department of Forensic Medicine, Monash University, Southbank, Vic

Carmel Young RN CritCare, Research Nurse, Health Law and Ageing Research Unit, Department of Forensic Medicine, Monash University, Southbank, Vic

Joseph E Ibrahim MBBS, PhD, FRACP, Professor and Head, Health Law and Ageing Research Unit, Department of Forensic Medicine, Monash University, Southbank, Vic. joseph.ibrahim@monash.edu

Competing interests: None.

Provenance and peer review: Not commissioned, externally peer reviewed.

Funding: This work was supported by the Department of Health and Human Services, Victoria, Australia, and the Department of Forensic Medicine, Monash University. None of the funders influenced the design, methods, subject recruitment, data collections, analysis or preparation of paper. The views and opinions expressed in this article are those of the authors and do not necessarily reflect the official policy or position of any agency or departments of the Australian Federal Government, the State Government of Victoria, Monash University, the Victorian Institute of Forensic Medicine or the Coroners Court of Victoria.

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