It matters who you are and where you live: Commonwealth, state and territory policies for access to care for Australians with chronic kidney disease and their caregivers

Javier Recabarren,^{1,2}*© Amanda Dominello,^{1,2}© Nicole Scholes-Robertson,^{1,2} Allison Jaure,^{1,2} Germaine Wong,^{1,2} Jonathan C. Craig,³© Martin Howell^{1,2}

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Abstract

Objective: To describe how Commonwealth, state and territory policies address access to care for Australians living with chronic kidney disease (CKD) with an emphasis on Aboriginal and Torres Strait Islanders and people residing in rural and remote areas.

Methods: We searched government health department websites for current policies up to March 2022 that addressed access to care for people with CKD.

Results: We included 98 policies: 28 were Commonwealth, and 70 were state or territory-based. There was wide variation in the policies for people with CKD in number and type across the jurisdictions. Of CKD specific policies, only three policies were specific for people living with CKD in rural and remote areas and no policies were specific for Aboriginal and Torres Strait Islander people.

Conclusion: There is a lack of CKD-specific policies addressing access to care for Aboriginal and Torres Strait Islander people and people living in rural and remote communities.

Implications for public health: Despite the known disparities in the burden of CKD there are few policies addressing CKD disparities for Aboriginal and Torres Strait Islander people and Australians living in rural and remote areas. Policies that specifically address the barriers to accessing care are required to reduce inequities.

Key words: Aboriginal and Torres Strat Islander people, health policy, chronic kidney disease, rural, equity

Introduction

he global prevalence of chronic kidney disease (CKD) is around 13.4%. In Australia, CKD affects 10% of the adult population, and it is estimated that one in three adults is at risk of CKD. CKD is also the cause of around 1.8 million hospitalisations a year and is associated with approximately 11% of total deaths annually, which is higher than many chronic diseases, including diabetes. ^{2,3}

The Australian health system is underpinned by universal health care that provides free access to public hospitals and heavily subsidised access to other health care services and prescription drugs.⁴

Nonetheless, there are disparities in the burden of CKD and the ability to access evidence-based health care.² Those living in rural and remote areas, socioeconomically disadvantaged communities, as well as Aboriginal and Torres Strait Islander people (hereafter respectively referred to as Indigenous Australians) are more likely to be affected by CKD.^{2,5} From 2014 to 2018, the incidence of patients with kidney failure requiring kidney replacement therapy was 3.5 times higher in remote and very remote locations compared to major cities and 1.9 times higher in disadvantaged socioeconomic areas.³ For Indigenous Australians the age-adjusted incidence rate is seven times higher than that of non-Indigenous Australians.³ These disparities in CKD burden and outcomes occur across all Australian jurisdictions.^{4–10}

*Correspondence to: Javier Recabarren, Centre for Kidney Research, The Children's Hospital at Westmead, Westmead, NSW 2145, Australia, Tel.: +61 404085271.

e-mail: iavier.recabarrensilva@sydnev.edu.au.

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¹Centre for Kidney Research, The Children's Hospital at Westmead, NSW, Australia

²Sydney School of Public Health, The University of Sydney, NSW, Australia

³College of Medicine and Public Health, Flinders University, SA, Australia

In this study, we define access as the patients' ability to attain appropriate health care services without financial hardship and receive health education and preventive services. ¹¹ According to the World Health Organization (WHO), the state has fundamental responsibilities for addressing access and facilitating social participation in health decisions. ¹² Likewise, targeted political decisions and public policies are crucial as they can determine equity in access to healthcare, general well-being, and promote social justice. ¹³ In this study, we define a health policy in accordance with the WHO definition: "the decisions, plans, and actions (and inactions) undertaken to achieve specific health care goals within a society or undertaken by a set of institutions and organisations, at national, state and local levels, to advance the public's health". ¹⁴ As such, all programs, initiatives, strategic plans, actions and services carried out by the health departments are considered health policies.

This study aims to identify, map out, and describe the extent to which government health policies at a Commonwealth, state and territory level address access to healthcare for people with CKD, with a focus on patients residing in rural/remote areas and Indigenous Australians. This may identify existing gaps in specific policy areas and population groups to inform the development of policies to reduce inequities in access for people with CKD.

Methods

We searched the websites of the Commonwealth Government Department of Health and the Department of Health websites for all Australian states and territories for health policies using the search terms: CKD, kidney policies, kidney disease in rural Australia, and renal services. Policies published up to March 2022 were selected if they applied specifically or non-specifically to people with CKD. The use of Health Department websites as the primary source to identify health policies has been reported previously and is regarded as an accurate source for health policies.^{4,15,16} We searched other government agencies, including the Departments of Education, Finance, Employment and Workplace Relations, Infrastructure, Transport, Regional Development, Communications and the Arts, and Social Services, to see if strategic health plans with a relevant aim could be included in these portfolios. We searched the websites of Kidney Health Australia, Australian Indigenous HealthInfoNet, and the National Rural Health Alliance, as they provide sources and links to policy documents relevant to kidney disease, Indigenous Australians and rural health. Author JR conducted the search; reviewers JR and AD screened the search results and identified eligible policies for inclusion.

After identifying all the policies for inclusion, we categorised them by policy type and population group. For the policy type, we used the WHO and the World Bank Universal Health Coverage Framework, which included different domains/components that should be included in the different health policies that seek to deliver good-quality and equitable health services according to need. Based on this framework, we organised the policy documents into five domains: 1) strategic frameworks or health plans (hereafter referred to as strategic health plans)—policies that organise priorities, set directions, and design the improvement of healthcare; 2) prevention and screening: policies that address early detection and intervention for CKD, including health promotion and education; 3) treatment and service provision: policies that support new or improved health

services for people with CKD; 4) financial assistance for patients: policies that provide financial support or the provision of concessions; and 5) support for caregivers and living kidney donors. Of note, we included the category 'support for caregivers and living kidney donors' as a new domain because some policies explicitly referred to this domain. Within each of these domains, we further categorised the policies according to the target population, organising them into three groups: policies for all Australians; policies specific for Aboriginal and Torres Strait Islander peoples; and policies for people living in rural/remote areas. The latter two were selected as these were identified a priori as populations with a higher burden of CKD and known disparities in outcomes (Tables 1 and 2).

When policies overlapped categories, either by policy type or population group, we classified them according to their main expected health care outcome or focus. Investigators JR and AD classified each of the policies, and then conducted a descriptive analysis of the content of the policy documents by analysing them according to how they applied to the different population groups within each policy domain.

Results

We identified 98 policies relevant to patients with CKD, 28 of which were Commonwealth and 70 were state- or territory-based government policies. A summary of these policies is provided in Tables 1 and 2. Across all policies, 41 were categorised as a strategic health plan, 5 addressed prevention and screening, 31 addressed treatment and service provision, 19 addressed financial assistance for patients, and two addressed support for caregivers and living kidney donors. Of the policies specific to people with CKD, there was wide variation and consistent policy gaps in the number and types of policies across the jurisdictions and the targeted groups. Half of the jurisdictions had strategic health plans and policies for treatment and service provision. Only the state of New South Wales and the Northern Territory had a specific policy that addressed prevention and screening, and there were inconsistencies in the financial assistance available to patients across the states and territories. Only three policies were specific for people living with CKD in rural and remote areas, and no policies were specific for Aboriginal and Torres Strait Islander people.

Strategic frameworks or health plans among the targeted populations

We found 41 strategic health plans, representing the majority of all policies. For those targeting chronic disease but applicable to CKD for all Australians, we identified that the Commonwealth had six strategic frameworks or health plans. One targeted children and young people, ¹⁸ one each for men's and women's health, ^{19,20} another aimed at improving integration of digital health in the health system to advance health access for people living in rural communities, ²¹ another targeted chronic conditions, ²² and one at advancing Australian organ and tissue donation and transplantation. ²³ States and territories have developed 10 strategic health plans targeted at chronic diseases. They included general wellbeing, ^{24–27} telehealth, ^{28,29} and strengthening the health system. ³⁰

Six strategic health plans specific for CKD were found in three jurisdictions, while one was developed by the Commonwealth. The 'National Strategic Action Plan for Kidney Disease (2020-2030)'

Policies across domains	All Australians		Aboriginal and Torres Strait Islander people		Patients in rural/remote communities	
	Chronic disease	CKD	Chronic disease	CKD	Chronic disease	CKD
Strategic frameworks or health plans National Strategic Framework for Rural and Remote Health					•	
National Aboriginal and Torres Strait Islander Health Plan 2021-2031			•			
Implementation Plan for the National Aboriginal and Torres Strait Islander Health Plan 2013-2023			•			
National Strategic Framework for Chronic Conditions	•					
National Action Plan for the Health of Children and Young People: 2020-2030	•					
National Framework for Health Services for Aboriginal and Torres Strait Islander Children and Families			•			
Cultural Respect Framework for Aboriginal and Torres Strait Islander Health 2016-2026			•			
National Men's Health Strategy 2020-2030	•					
National Women's Health Strategy 2020-2030	•					
National Strategic Action Plan for Kidney Disease						
Progressing Australian organ and tissue donation and transplantation to 2024: Strategic Plan	•					
Australia's National Digital Health Strategy	•					
Stronger Rural Health Strategy					•	
Prevention and screening Follow up services on behalf of eliqible health professionals			•			
Medicare health assessment for Aboriginal and Torres Strait Islander People. MBS Item 715			•			
Treatment and service provision Changes to Renal Medicine items (MBS Item 13105)						•
Practice Incentives Program (PIP)-Indigenous Health Incentives			•			
Chronic Disease Management Patient Information	•					
Integrated Team Care Program			•			
Medicare follow-up allied health services for people of Aboriginal and Torres Strait Islander descent (MBS Items 81300-81360)			•			
S100 Remote Area Aboriginal Health Services (RAAHS) Program			•			
Rural Health Outreach Fund					•	
Medical Outreach-Indigenous Chronic Disease Program			•			
Financial assistance for patients The Closing the Gap (CTG)-PBS Co-payment Program			•			
Eligible equipment payment	•					
Help with accessing super early	•					
Support for caregivers and living kidney donor Carer payment	•					
Supporting Living Organ Donors Program	•					
Total number of policies: 28	11	1	12	0	3	1

CKD, chronic kidney disease; PBS, Pharmaceutical Benefit Scheme; MBS, Medicare Benefits Scheme.

published in 2019 by the Australian Government Department of Health is the most comprehensive CKD strategic health plan currently available, providing a vision for CKD in Australia by 2030, "where geography, socioeconomic status or culture does not determine quality of care or health outcomes". This document describes a plan that aimed to tackle three main priority areas: prevention, detection and education; optimal care and support; and research and data that included short-, medium- and long-term actions. The policy had a significant focus on addressing the unequal burden of kidney disease among Indigenous Australians. The document highlighted a "comprehensive and coordinated suite of actions designed to address the causes of kidney disease, improve care and support for those affected, and build a world-class kidney research community underpinned by patient voices".

The other six CKD strategic health plans were found in the states of Victoria, Queensland, and the Northern Territory, with more specific goals. For example, the 'Renal directions: services and improved

kidney health for Victorians', published in 2013, described four main strategic directions: promoting healthy living and reducing renal risk factors; improving early detection and management of kidney disease; improving services for people with chronic kidney disease; and strengthening and sustaining renal services.³¹ The 'Advancing Kidney Care 2026 Plan' in Queensland, published in 2019, focussed on health care access,³² while the Northen Territory Health Department developed a renal strategy published in 2017 that focused on seven priorities, including prevention, early detection, better consumer participation and financial support.³³

Regarding policies for Indigenous Australians, the Commonwealth has developed four strategic health plans applicable to all chronic diseases (Table 1). The most relevant is the 'National Aboriginal and Torres Strait Islander Health Plan 2021-2031' published in 2021. This document "reinforces the importance of strength-based and human rights approaches that embed the cultural and social determinants of health", 34 and puts at the heart of its implementation the diverse

^aFurther information about Commonwealth policies can be found in Supplementary Information 2.

Table 2: Australian state and territory policies on access to health ca						
Policies across domains	All Australia	ns	Aboriginal and Tor Islander peo		People living in rural/remot communities	
New South Wales	Chronic Disease	CKD	Chronic Disease	CKD	Chronic Disease	CK
Strategic Frameworks or health plans "NSW Regional Health Strategic Plan ''2022-2032"	•					
"NSW Aboriginal Health Plan 2013-2023"			•			
A strategic health plan for children, young people and families 2014-24	•					
Prevention and screening Kidney Health Check		•				
Treatment and service provision Big Red Kidney Bus		•				
NSW Renal supportive care		•				
Patient Transport Service	•					
Kidney Donation - Living		•				
Integrated care for patients with chronic conditions	•					
Aboriginal Chronic Care Program			•			
Chronic Care for Aboriginal People			•			
The Away from Home Haemodialysis Program		•				
Financial assistance for patients Isolated Patients Travel and Accommodation Assistance Scheme					•	
Concessions and rebates	•				-	
Total: 14	5	5	3	0	1	0
Victoria		<u> </u>		U	<u> </u>	- 0
victoria Strategic frameworks or health plans Aboriginal health, wellbeing and safety strategic plan 2017-2027			•			
Victorian public health and wellbeing plan 2019-2023	•					
Victorian renal patient education framework		•				
Renal integrated care pathway guide for Victorian renal services		•				
Renal Health Clinical Network		•				
Renal directions						
Prevention and Screening Life! Program		•				
Treatment and service provision Funding for renal services in Victoria						
Health Independence Programs		•				
Outreach programs	•				•	
· ·					•	
Big Red Kidney Bus		•				
Financial assistance for patients Concessions & benefits	•					
Victorian Patient Transport Assistance Scheme					•	
Total: 13	4	6	1	0	2	0
South Australia Strategic frameworks or health plans Health and Wellheim Strategy 2020 2025						
Health and Wellbeing Strategy 2020-2025 Aboriginal Health Care Framework 2019-2024	•					
South Australia's Palliative Care Strategic Framework 2022-2027	•		•			
Treatment and service provision	<u> </u>					
Mobile Dialysis Unit for Aboriginal people Palliative Care 2020 Grants Program	•					•
Digital Telehealth Network for SA Health Services						
Model of Care for Aboriginal Prisoner Health and Wellbeing for South Australia	•		•			
Financial assistance for patients			•			
Cost and concessions	•					
Patient Assistance Transport Scheme	-				•	
Total: 9	5	0	2	0	1	1
Tasmania Strategic frameworks or health plans						
Long-Term Plan for Health care in Tasmania 2040	•					
Healthy Tasmania Fiver-Year Strategic Plan	•					

Policies across domains New South Wales	All Australia	ins	Aboriginal and Torres Strait		People living in rural/remote	
	Chronic Disease	CKD	Islander ped Chronic Disease	ople CKD	Chronic Disease	es CKI
Treatment and service provision	cinonic biscuse	CILD	cinome piscuse	Chb	cinome biscuse	Cit
Telehealth Tasmania	•					
Financial assistance for patients Patient Travel Assistance Scheme					•	
Concessions & rebates	•					
Total: 6	5	0	0	0	1	0
Western Australia Strategic frameworks or health plans WA Country Health Service Kidney Disease Strategy 2021-2026						•
Outcomes Framework for Aboriginal Health 2020-2030			•			
WA Aboriginal Health and Wellbeing Framework 2015-2030			•			
WA End-of-Life and Palliative Care Strategy 2018-2028	•					
Treatment and service provision						
Telehealth	•					
Financial assistance for patients						
Concessions WA	•					
Patient Assisted Travel Scheme					•	
Total: 7	3	0	2	0	1	1
Queensland Strategic frameworks or health plans Children's Health and Wellbeing Services Plan 2018-2028	•					
The Queensland Rural and Remote Health Service Framework					•	
Advancing Kidney Care 2026 Plan		•				
Telehealth Strategy 2021-2026	•					
Treatment and service provision MSOAP Indigenous Chronic Disease Program					•	
The Statewide Renal Clinical Network		•				
Financial assistance for patients						
The Patient Travel Subsidy Scheme					•	
Concessions	•					
Total: 8	3	2	0	0	3	0
Northern Territory Strategic frameworks or health plans Northern Territory Renal Services Strategy 2017-2022		•				
Northern Territory Health Strategic Plan 2018 -2022	•					
Strengthening our Health System Strategy	•					
Prevention and screening Territory kidney care		•				
Financial assistance for patients Patient Assistance Travel Scheme Guidelines					•	
NT Concessions scheme	•					
Total: 6	3	2	0	0	1	0
Australian Capital Territory						
Strategic frameworks or health plans	_					
Healthy Canberra ACT Aboriginal and Torres Strait Islander Agreement 2019-2028	•		•			
Treatment and service provision Renal supportive care		•	-			
The Chronic Care Program	•					
ACT Renal Services		•				
Financial assistance for patients Interstate Patient Travel Assistance Scheme					•	
Community assistance	•					
Total: 7	3	2	1	0	1	0

CKD, chronic kidney disease. ^aFurther information about state and territory policies can be found in Supplementary Information 2.

backgrounds and experiences of Indigenous Australians.³⁴ Similar to 'The National Strategic Action Plan for Kidney Disease (2020-2030)', this strategic health plan developed a holistic and broad approach with four priorities: genuine shared decisions with Indigenous Australians; improvement of the health system; a focus on prevention; and develop a culturally informed evidence base that considers the cultural and social determinants of health.³⁴

Victoria, South Australia, Western Australia and Australian Capital Territory also had strategic health plans. Whilst they have differences, all share the priority of providing direction, cultural respect, and vision to improve the health and wellbeing of Indigenous Australians. 35–38

Five strategic health plans were found for rural and remote areas, of which only one was specific to CKD. Among those addressing chronic disease in general, the Commonwealth developed the 'National Strategic Framework for Rural and Remote Health', published in 2012, which described a vision to establish policies, planning and delivering health care that could be used at the national, state and territory levels.³⁹ Queensland developed a health strategy to support hospitals and health services in planning and delivering sustainable health access for people living in rural and remote communities.⁴⁰ The only specific policy applying to CKD was the 'WA Country Health Service Kidney Disease Strategy 2021-26' published in 2021. This document focused on prevention and disease management, improvement of the kidney health workforce, and improvement of kidney health care access.⁴¹

Prevention and screening among the targeted populations

Prevention and screening accounted for five policies in total. The Commonwealth developed two chronic disease policies for Indigenous Australians. One policy supported a follow-up service providing preventative care and education by a practice nurse or Aboriginal and Torres Strait Islander health practitioner.⁴² The other provided for a free health check under the Medicare Benefits Scheme (MBS), "to help assess a patient's health and physical, psychological and social function".⁴³ Another general prevention policy was found in the state of Victoria with the 'Life! Program'. This preventive program, which began in 2007, focused on people at risk of developing type 2 diabetes, heart disease and stroke.⁴⁴

Specific policies for CKD prevention and screening were only identified in the states of New South Wales and the Northen Territory. The New South Wales 'Kidney Health Check Policy' that began in 2010 aimed to identify those at risk of developing CKD by developing an "opportunistic screening using the Kidney Health Check in order to identify the risk of CKD, and will target high-risk individuals in hospital settings". The Northern Territory Health Department, in collaboration with the Menzies School of Health Research, developed the 'Territory Kidney Care (TKC)'. This policy started in 2017 and assisted with the early identification and management of kidney disease by sharing selected patients' clinical information about their kidney health to allow early action and management of CKD. 46

For rural and remote communities, we did not identify policies aimed at providing prevention and screening services.

Treatment and service provision among the targeted populations

We identified 31 policies addressing treatment and service provisions, of which 21 were developed for all Australians applicable to chronic

diseases. The Commonwealth had one policy, 'Chronic Disease Management (CDM)' that aimed "to help nurses or Aboriginal and Torres Strait Islander health practitioners coordinate health care for patients with chronic or terminal medical conditions". At a state and territory level, these policies addressed access to palliative care and telehealth, 49–51 among others.

Specific policies for CKD accounted for 10, six of which were from New South Wales and Victoria. These policies covered the provision of haemodialysis away from home for different purposes, ⁵² holiday dialysis, ^{53,54} and access to comprehensive care. ^{55–57} In Queensland, service planning, expertise and advice for treatment improvement were offered to health clinicians caring for kidney patients. ⁵⁸ In Victoria, funding was provided for kidney health services targeting providers of public dialysis services, specialist services and home dialysis. ⁵⁹

For Indigenous Australians, eight policies in total addressed access to treatments and service provision covering chronic conditions, with five being from the Commonwealth. For example, the 'Medical Outreach-Indigenous Chronic Disease Program', funded under the Indigenous Australians' Health Program, supported multidisciplinary teams and individual health practitioners by providing financial aid for travel, accommodation, administration and training, 60 while the 'S100 Remote Area Aboriginal Health Services (RAAHS) Program', which began in 1999, supplied Pharmaceutical Benefit Scheme (PBS) medicines to Indigenous Australians living in remote areas. 61

At a state level, New South Wales had a policy that supported chronic disease management through education, home care, and care plans, ⁶² and South Australia developed a model of care designed to attend to the needs of Indigenous adult prisoners. ⁶³

For rural and remote communities, we identified four policies, of which two directly targeted CKD. One policy, at the Commonwealth level, introduced an MBS item (13105) in late 2018 aimed at improving access to dialysis in remote areas for people with endstage kidney disease. A second policy, developed by South Australia since 2014, provided a mobile dialysis truck to allow Indigenous patients from metropolitan centres to visit their homes in remote communities across South Australia.

Financial assistance for patients among the targeted populations

In total, we found 19 policies addressing financial assistance for patients, of which none were specific to CKD. For policies that targeted all Australians, support from the Commonwealth included a process for accessing preserved superannuation under certain circumstances⁶⁶ and a payment of \$183 AUD per year to contribute to the energy cost of running some medical equipment, such as dialysis machines.⁶⁷

From states and territories, we found complementary financial support for patients who used dialysis machines at home through the provision of subsidies or rebates towards the annual cost of electricity and water, with substantial variation across the jurisdictions. For instance, South Australia provided \$165 AUD per year to help with the electricity cost of home dialysis. In New South Wales, the 'Life Support Energy Rebate' contributed \$618.31 AUD annually, in the Australian Capital Territory, the 'Life Support Rebate' was \$128 AUD per year, in Western Australia, the financial assistance was \$103 AUD

annually for peritoneal dialysis,⁷¹ and in Queensland, the 'Electricity Life Support' provided a payment of \$653.34 AUD per year.⁷²

For Indigenous Australians, one Commonwealth policy was identified: 'The Closing the Gap (CTG)–PBS Co-payment Program' established in 2010. This policy aimed to provide access to lower-priced PBS medicines for Indigenous Australians living with, or at risk of, chronic disease.⁷³

Financial assistance for rural and remote areas in the states and territories was delivered in the form of a subsidy program to cover some of the travel and accommodation costs, and these varied across jurisdictions. For example, some states, such as New South Wales, Tasmania and Western Australia, included travel to a dialysis centre in their subsidies when patients needed to travel a cumulative minimum distance of 200 km⁷⁴ per week, more than 50 km⁷⁵ one way, or between 70 km and 100 km⁷⁶ one way, respectively. Similarly, the financial support related to other renal treatments also varied; Western Australia offered a broad range of renal services covered by this financial support, such as surgery and follow-up, appointments with a nephrologist, pre-dialysis education and home therapy training.⁷⁶

Support for caregivers and living kidney donors among the targeted populations

Only the Commonwealth had a developed policy applicable to all chronic diseases (Figure 1). The 'Supporting Living Organ Donor Program' supported people who have donated a kidney or a partial liver, and the 'Carer Payment' policy provids payment to a person who

delivers care to someone who has a severe disability that is also applicable to CKD. 77,78

For Indigenous Australians and rural and remote communities, this type of policy was not found at neither the Commonwealth nor the state and territory levels.

Discussion

In our study, we found that almost all Australian jurisdictions have policies that recognise the importance of chronic disease, with an emphasis on strategic frameworks or health plans, treatment and service provision and financial assistance for patients. However, there are consistent gaps in policies for prevention and screening and support for caregivers and living kidney donors (Figure 1).

There were 21 policies that specifically addressed health care for people with CKD, with substantial variations and gaps in both the number and type of policies across all jurisdictions and population groups. Furthermore, most of these policies were from the Commonwealth, New South Wales and Victoria (Supplementary Information 1). As shown in Figure 1, half of the jurisdictions have developed strategic health plans, among which the 'National Strategic Action Plan for Kidney Disease (2020-2030)' stands out for providing a broad range of initiatives and improvements from an inclusive and participatory perspective for all Australians. There were a limited number of prevention and screening policies, a policy gap that could be addressed with a coordinated national approach to reduce the prevalence and progression of kidney disease. 279

CKD is a pernicious silent disease in its early stages, and for kidney failure, there is a lifelong need for kidney replacement therapy

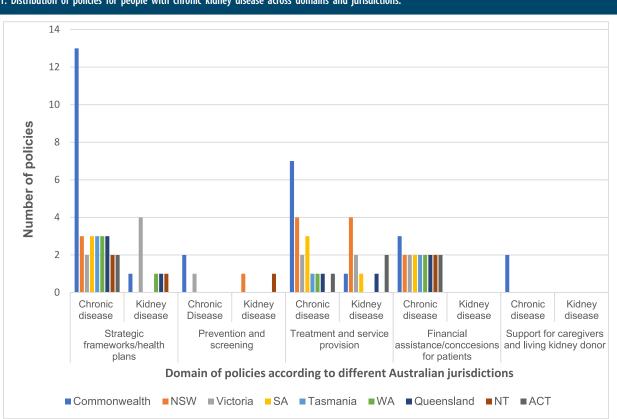


Figure 1: Distribution of policies for people with chronic kidney disease across domains and jurisdictions.

(dialysis or transplant). People receiving dialysis experience loss of identity, independence, ability to work, travel opportunities, and social isolation. There is often a similar toll for their caregivers. Socioeconomic insecurity compounds the impacts of financial distress for patients and their households. We located various financial assistance schemes available to people with chronic disease and their carers in the states and territories in relation to subsidies and rebates for utilities, accommodation and transport, and financial support for caregivers, but no assistance specific to people with CKD and their carers. In addition, as the types of assistance schemes vary between states and territories, it is difficult to know whether assistance across Australia is equitable and meets the needs of people with CKD.

People with CKD living in rural and remote areas in developed countries face unique barriers due to limited access to health care services and further socioeconomic burdens associated with travel distance and time away from their family and community for medical procedures, dialysis training and preparation for a kidney transplant (or donation) and dialysis. 7,8,81 People with CKD in Australia have also identified difficulties and a lack of support with accommodation, relocation support, and for caregivers on whom they depend to access treatment.81,82 Among the eighteen policies found applicable to rural and remote areas, three were specific for patients with CKD (Supplementary Information 1) They were the Changes to Renal Medicine items (MBS Item 13105) from the Commonwealth, a health framework from Western Australia, and a Mobile Dialysis Unit from South Australia. Although they were relevant, they also reflect important gaps in the needs of people with CKD in rural and remote areas. For the rest of the policies, all Australian states and territories have travel and accommodation schemes available to people with chronic disease living in rural and remote areas. However, variation was observed in these schemes in terms of the payment rates, travel distance covered, services and specialists offered to patients, and arrangements for the inclusion of escorts.83 This makes it difficult to assess whether the needs of people with CKD in rural and remote areas are being equally met across Australia. This is particularly pertinent to providing access to home-based dialysis.

Barriers to accessing health care are also profound for Indigenous Australian communities, ⁸⁴ with "unequal rates of transplantation and home dialysis by ethnicity and geographical location". ⁸¹ In particular, socioeconomic challenges and a lack of strategies to minimise the progression of CKD have compounded poor health outcomes. ⁵ At the 'Indigenous Patient Voices Symposium', Indigenous Australian patients from Western Australia, the Northern Territory and Queensland noted that inequities may be driven by the biomedical model of care that does not incorporate a culturally appropriate approach, which perpetuates "bias in the delivery of kidney health services without transparent and accountable mechanisms to redirect this predisposition". ⁸² In our study, we did not identify any policy that specifically addressed improved access to health care for Indigenous people with CKD.

Other chronic diseases, such as cancer and cardiovascular disease, have similar issues with disparities in health care access and health outcomes. This can be observed, for example, as the advanced stage of cancer diagnosis, higher risk of cancer death, and lower cancer survival are associated with the area of residence and socioeconomic disadvantage. Moreover, limited access to early diagnosis and treatment services in rural and remote communities, along with travel barriers, correlate with poorer cancer survival and a worse quality of

life.⁸⁵ Compounding this is the overlap between lower education and health literacy compared to urban residents and lower survival rates.⁸⁵ Similarly, cancer survival rates are worse for Indigenous Australians.⁸⁶

Although this study has described in detail the existing policies addressing access to health care for CKD patients in the different jurisdictions across Australia, there are some potential limitations. This study did not assess changes in policy over time. Only health department policies were included in the study, and we acknowledge that policies of other government departments and agencies may also deliver policies that impact people with CKD.⁴ In addition, we did not compare the extent to which policies from different jurisdictions aligned beyond placing them into categories. For example, we did not consider variations in services. Finally, our review did not include an assessment of the impacts or the extent to which policies addressed known barriers or costs, other than noting broadly the scope of subsidies or rebates.

The findings from this study can inform future research to assess the impact and outcomes of government policies as well as policy formulation to improve access to health care for people with CKD. Recent efforts have been made at the Commonwealth level to acknowledge and address the particular burden of CKD, including the introduction of the MBS item for the delivery of dialysis in remote areas in 2018 and the 'National Strategic Action Plan for Kidney Disease' in 2019. Also, it is worth mentioning current initiatives such as the National Indigenous Kidney Transplantation Taskforce (NIKTT) and the CARI Guidelines, which have the potential to drive essential policy changes for the improvement of access, quality of care, and outcomes for Indigenous Australians with CKD.

Improvements in policy are urgently needed to address persistent inequities.^{2,10} Given the pivotal role that states and territories have in the delivery of health care, there is a clear need for policy development and consistency across all levels of government that are specifically aimed at models of care that meet the needs of Indigenous Australians and people living in rural and remote communities. Indigenous Australians, for example, need culturally appropriate models of care that should be led, or at a minimum, informed by Indigenous Australians, and resources that focus on primary and secondary prevention of CKD.^{5,81} There is also a need to address the financial and travel burdens experienced by patients and families in rural/remote areas through outreach clinics and services by specialists and community-based or satellite haemodialysis services.⁸⁷ Finally, alignment of policies between jurisdictions is necessary to ensure costs and barriers to accessing health care and home-based treatment do not introduce new or exacerbate existing inequities.

Conclusion

There is substantial variation in policies targeting CKD in terms of numbers and type across Australia, and a lack of policies specifically for Indigenous Australians and people living in rural and remote areas. Consequently, this can exacerbate the structural health inequities that exist in CKD.

Ethical statement

None.

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Conflicts of interest

The authors have no competing interests to declare.

Author ORCIDs

Javier Recabarren (b) https://orcid.org/0000-0002-9850-0040 Amanda Dominello (b) https://orcid.org/0000-0002-5514-5886 Jonathan C. Craig (b) https://orcid.org/0000-0002-2548-4035

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Appendix A Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.anzjph.2024.100131.