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REVIEW

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Medicare policy changes to primary health care funding for Australia's indigenous Peoples 1996–2023: a scoping review

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Abstract

Background The Australian Government began implementing Medicare policies in the late 1990s aiming to improve Indigenous Peoples' access to the primary care. No aggregate central list of what policies have been implemented exists. The aim of this review was twofold: first to perform a scoping review to identify any literature mentioning a policy implemented between 1996 and 2023 regarding Indigenous Peoples' access to Medicare or the Pharmaceutical Benefits Scheme for primary care, and secondly to synthesise and describe any policies to enable learning from past successes and failures.

Methods Scoping review following the PRISMA-ScR process. Seven electronic databases were searched for any papers identifying any policy implemented between 1996–2023 to improve Indigenous Peoples' access to primary care. This was supplemented with searches in Google, key government databases, hand searching and expert input.

Results Sixteen policies were implemented and organised into six categories according to the primary care barrier they targeted: Medicare Benefits Schedule (MBS) funding structure; lack of Indignenous-appropriate MBS items; Pharmaceutical Benefits Scheme (PBS) access barriers; inappropriate care from mainstream general practitioners; bureaucratic impediments to MBS and PBS access; and data gaps.

Discussion/conclusion This is the first synthesis of Medicare and PBS policy history to improve Indigenous Peoples' access to primary health care, and provides a platform for future analysis. Identifying the names of relevant policies in any area is key to accountability and reliance on individual expertise is no substitute for transparent and durable policy record-keeping. A searchable long-term policy repository should be established to ensure that related policies can be identified, and that key policy documentation is publicly available in perpetuity.

Keywords Health policy, First Nations Peoples, Aboriginal and Torres Strait Islander, Medicare, MBS, PBS, Medicines access, Health care access, Primary health care funding

Introduction

Aboriginal and Torres Strait Islander peoples (hereafter, respectfully, Indigenous Peoples) experience a disproportionate burden of disease (estimated at 2.3 times greater than non-Indigenous Australians), and lower life expectancies than non-Indigenous Australians (8.6 years for less for males and 7.8 years less for females) [1]. Chronic diseases account for 80% of the difference in the burden of disease observed between Indigenous Peoples and other Australians [2]. Chronic conditions occur at much

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earlier ages in Indigenous Peoples, and in the 35–74 years age group, chronic disease accounts for 75% of the mortality gap for males and 79% for females [2, 3]. These health inequities have manifested as a direct result of the ongoing impact of colonization: loss of land, language, culture and identity; and ongoing racism and discrimination [4, 5].

In response to experiences of racism in mainstream health services, and an unmet need for culturally safe and accessible primary health care, the first Aboriginal Community Controlled Health Service (ACCHS) was established in 1971 [6]. There are now over 140 ACCHS' across Australia. Unlike mainstream primary health services which tend to operate on a biomedical model of healthcare, ACCHS' offer comprehensive primary health care services which take an holistic approach to healthcare [7]. However, ACCHS' should be viewed as being in addition to mainstream healthcare services, and therefore provide Indigenous Peoples with greater choice for their health care needs [8].

Medicare is Australia's universal health insurance scheme. It is available to Australian and New Zealand citizens, permanent residents, some temporary residents, and citizens of nations that offer reciprocal benefits, once they register with Medicare. Medicare covers various medical and hospital services including consultations, procedures and tests that are listed on the Medicare Benefits Schedule (MBS), and all services in a public hospital. Each service listed on the MBS is allocated an MBS Item Number. Each MBS Item Number has a Scheduled Fee that is determined for by the Australian Government. Once patients are registered with Medicare, they can claim a rebate from Medicare for services: 100% of the Scheduled Fee for general practice (GP) services; 85% of non-GP services that are provided out of hospital; and 75% of services provided in a private hospital. A service provider can charge patients more than the Scheduled Fee, resulting in patients having to pay a gap fee. Some GPs do not charge more than the Scheduled Fee for their services and bill Medicare directly (a process known as bulk-billing), meaning that patients have no upfront out-of-pocket expenses.

The Pharmaceutical Benefits Scheme (PBS) is the system that subsidies prescription medications. Through this system, patients make a co-contribution payment to medicines on the PBS, which are provided at a greatly reduced cost to patients. The co-payment is further reduced for Commonwealth Health Care Concession Card Holders (for example, people on an old age or disability pension).

Three to six times the average national health expenditure on Medicare through the MBS and PBS is required to address Indigenous Peoples health disparities [9]. Up until the late 1990s it was widely believed that health expenditure for Indigenous Peoples was excessive [10], and much higher than for non-Indigenous people [11]. Two landmark reports reversed that belief. The first estimated that per-capita MBS expenditure for GP presentations for Indigenous Peoples was 35% of non-Indigenous expenditure in 1995–96, and PBS medicines expenditure was 22% of non-Indigenous expenditure [11]. The other report found nation-wide, systemic barriers to Indigenous Peoples' access to the MBS and PBS, and concluded radical changes were required to provide needs-based funding for Indigenous Peoples [12]. Whilst considerable increases have been made since, data for expenditure twenty years later in 2015–16 remained low, with MBS being less than 75% of non-Indigenous expenditure, and PBS at 37% [13].

There are many features of the MBS and PBS which impede access, particularly for Indigenous Peoples, including: the need for a Medicare Card (registration with Medicare requires a fixed address and some Indigenous Peoples have a mistrust of Government services due to past Government policies) [5]; cost (patient co-payment requirements for GP and PBS services); the fee for service basis for GP services (payment made for each item provided encourages volume-driven and fragmented care, rather than quality of outcomes and integrated care) [14]; the GP-centric nature of the MBS (the MBS mainly funds care provided by GPs, rather than other workforce types such as allied health professionals, Aboriginal Health Workers and nurses) [15, 16]; a lack of understanding of Indigenous Peoples' holistic health needs and inappropriate care from mainstream GPs (racism, lack of Indigenous status identification, lack of choice of male/female practitioners, fee for service resulting in episodic care that does not recognise holistic health needs) [5, 17–22]; and geographical access issues (a higher proportions of Indigenous Peoples live in rural and remote areas where there are fewer GPs and pharmacists) [5, 23]. Insufficient and inappropriate access to primary health care is reflected in higher potentially preventable hospitalisations for Indigenous Peoples (three times the rate of other Australians) [24].

To improve health outcomes and address some of the above-mentioned barriers, considerable policy efforts to improve GP-related MBS and PBS access for Indigenous Peoples have been made [26]; however, there is currently no central list of what policies have been implemented and no repository that stores these. The aim of this review was therefore twofold: first to perform a scoping review to identify any literature mentioning a policy implemented between 1996 and 2023 regarding Indigenous Peoples access to Medicare or the Pharmaceutical Benefits Scheme for primary care so we could identify

what policies existed, and secondly to synthesise and describe these policies to enable learning from past successes and failures.

Methods

We followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) [27] checklist: i) development of inclusion/exclusion criteria; ii) extraction and coding of study characteristics and findings; and iii) data analysis and synthesis of findings.

Eligibility criteria

Literature were eligible if they: (a) mentioned a policy focussing on Australia's Indigenous Peoples access to GP-related MBS or PBS funding; (b) were implemented between 1996 and 2023; and (c) were published in English. All literature (for example, journal articles, reviews, editorials, book chapters, conference proceedings, fact sheets and so on) were included.

Exclusion criteria

Not focused on Indigenous Peoples' access to GP-related MBS or PBS funded, implemented after 2023, or published in a language other than English.

Information sources and search strategy

An initial search was conducted in January 2024 in seven electronic academic databases: MEDLINE, Science Citation Index, Academic Search Complete, CINAHL, APA Psycinfo, Health Source: Nursing/Academic Edition, and Psychology and Behavioural Sciences Collection. In addition, the first 50 results in Google were searched. A modified search was conducted in Australian Indigenous Health InfoNet. The reference lists of full text papers were scanned to identify any papers not captured in the initial search, and expert input was also sought from an expert in Indigenous Peoples policy regarding MBS and PBS in primary care. Searches in three other key government sites (Analysis and Policy Observatory, the National Department of Health, and Services Australia (the department responsible for Medicare)), were not possible as there were no functions to combine search terms.

To ensure relevant results were obtained, search terms were developed using a modified version of the PICO (Population, Interest, Comparator and Outcome) Framework without the comparator component [28]. Alternative keywords for each search term were combined using the Boolean operator 'OR' to ensure all possible variations were captured; the search was then refined by combining the searches with 'AND'. The wildcard '*' was used to allow for word truncations. The keywords and search strategy are shown in Table 1. The search terms were constructed and agreed upon by two authors (HK and HS) and a university librarian. HK is an expert on the review topic, and HS is a skilled academic who teaches literature searching and research methods at the postgraduate level and has experience conducting systematic reviews.

Study selection

Papers were exported into Excel, and duplicates were removed. A stepwise procedure to identify relevant papers was used. Authors HK and HS performed the initial search. Authors HK, HS and GS screened the titles and abstracts against the inclusion/exclusion criteria; the remaining texts were retrieved in full and screened against the inclusion/exclusion criteria. HK supplemented the search by screening the reference lists of included papers, and through expert input. The authors met with the final list of included/excluded papers and resolved any disagreement by discussion and consensus. Reasons for exclusion were recorded.

Data collection and policy synthesis

Where available, the following data were extracted into a Microsoft Excel spreadsheet: first author, year, country, study type, aim, sample, methods, results and conclusion. As the primary purpose of this search was to identify all relevant policies, study quality was not appraised.

Policy synthesis was conducted by author HK and comprised summarising the purpose of the policy and categorising them according to the barrier they were intended to address. Disagreements were resolved by discussion and consensus. The policies are presented in a narrative format.

Table 1 Search terms and search string (except Australian Indigenous Health InfoNet)*

PIO	Search terms
Population	"Aboriginal" OR "Torres Strait Islander" OR "Indigenous" OR "first nations"
	AND
Interest	"Medicare" OR "MBS" OR "Pharmaceutical Benefits Scheme" OR "PBS"
	AND
Outcome	"policy" OR "program"

* Australian Indigenous Health InfoNet search string: Medicare OR Pharmaceutical benefit scheme) AND (Includes Indigenous information OR Indigenous specific)

Results

The initial search yielded 439 papers after duplicates were removed. After reviewing the abstracts against the inclusion criteria, 273 were removed as they did not meet the inclusion criteria. The full text of the remaining 166 papers were examined, and a further 69 were removed. In the 97 papers remaining (Table 2), 12 policies could be identified. An additional 4 policies were identified through hand searching and expert input, bringing the final total to 16 (see Fig. 1).

Study characteristics

Sixteen policies were implemented between 1996 and 2023 (Table 3.). These were organised into six categories according to the barrier they targeted: MBS funding structure ($n=3$); lack of Indigenous-appropriate MBS items (1); PBS access barriers (6); inappropriate care from mainstream GPs (3); bureaucratic impediments to MBS and PBS access (1); and data gaps (2). The policies are described further below. Table 3. provides the timeline of when the policies were implemented.

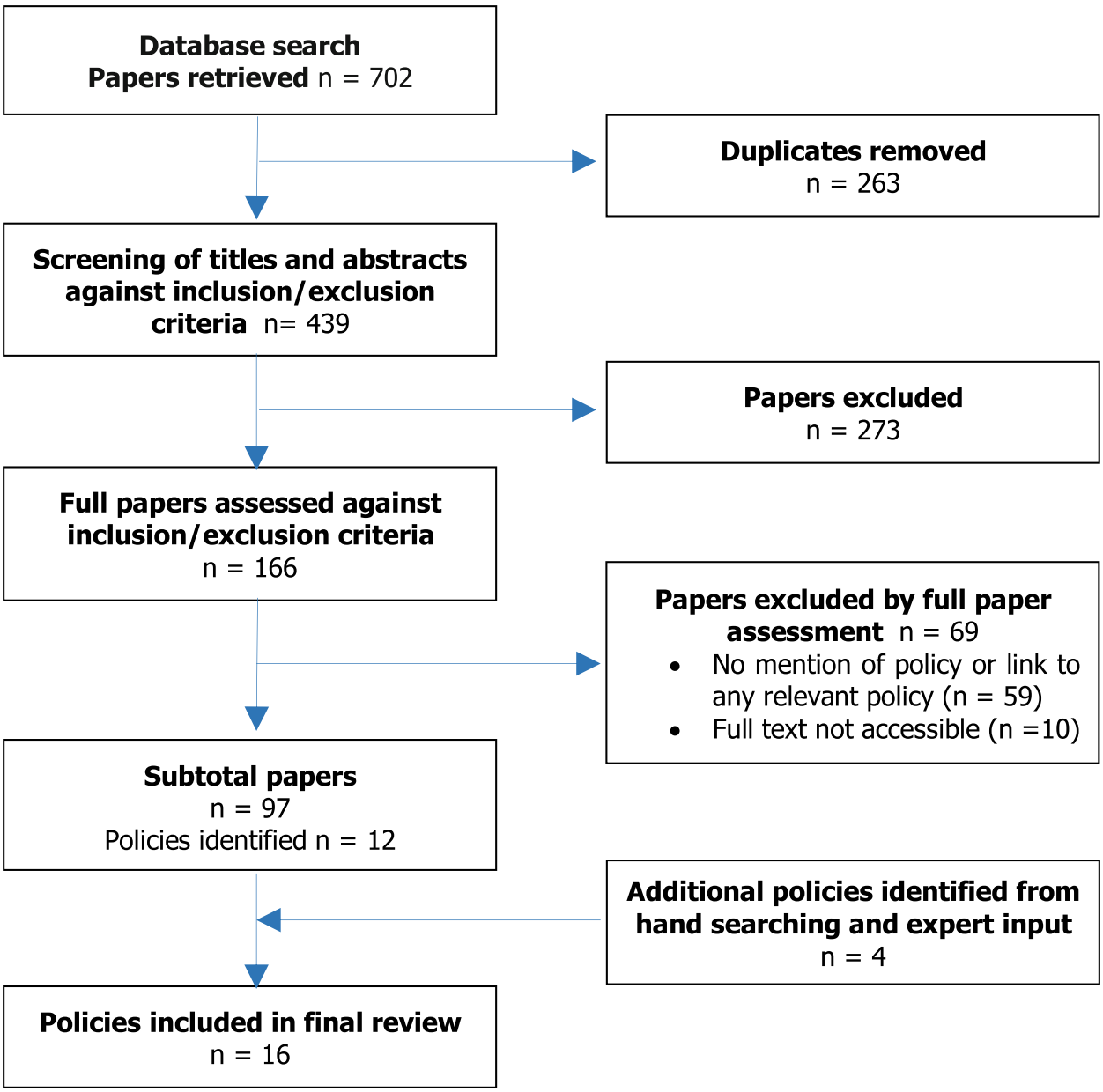


Fig. 1 PRISMA Flowchart showing papers searched and no. of policies identified

Table 2 Summary of literature that led to policies being identified to improve Indigenous Peoples access to primary care through the Medicare Benefits Schedule (MBS) or the Pharmaceutical Benefits Scheme (PBS)

Author & Year	Title	Aim	Results/Conclusion	Item identified
33 Creative. 2019 [29]	715 health check—Cairns video case study	To outline the potential benefits of the annual Health Check for Aboriginal and Torres Strait Islander people	The 715 is a useful tool for gauging issues in the local community; proactively engaging with the Indigenous community can encourage uptake of the health check	MBS 715
Aboriginal Health Council of South Australia. 2014 [30]	Medicare item numbers for AHPs, AHWs, PNs and MWs	To provide a list of Medicare Item numbers for Aboriginal Health Practitioners, Aboriginal Health Workers, Practice nurses and Midwives	A table providing the items numbers is provided and what must be undertaken to meet the requirements to claim the item	MBS items
Aboriginal Health Council of South Australia. 2016 [31]	MBS flow chart for chronic disease: Aboriginal and Torres Strait Islander	To provide a resource for ACCHS for what MBS items can be claimed for adults with or at risk of chronic disease	A flowchart outlines which MBS items can be claimed by GPs for Indigenous patients following an adult health check	MBS 715
Adams K, et al. 2014 [32]	Mental health and Victorian Aboriginal people: What can data mining tell us?	To improve understanding about Victorian Aboriginal people and mental health service patterns by examining four mental health administrative datasets	Improved analyses are needed to better understand, prevent and manage mental health problems in this group	MBS 81325, MBS 81355
Angeles MR, et al. 2023 [33]	Challenges for Medicare and universal health care in Australia since 2000	To identify the financing and policy challenges for Medicare as well as opportunities for whole-of-system strengthening	Piecemeal reforms of the past 20 years have been inadequate; more effective, coordinated approaches are needed	ACCHS, CTG PBS scripts
Australian Government Depart. Health. 2019 [34]	Your health is in your hands: 715 health check	To provide information about the 715 health check for Aboriginal and Torres Strait Islander people	The resource package includes brochures, posters, an animated video, video case studies, images for promotion via social media, and podcasts	MBS 715
Australian Government Depart. Health. 2020 [35]	Voluntary Indigenous identifier (VII) framework: a framework for the collection release use and publication of VII data: draft for consultation	To provide a set of guidelines outlining how Indigenous-status data are collected and used in the MVII database	The guidelines set out the legal and ethical obligations for data users, provides information about the quality of VII data, and estimates of Medicare data produced	MVII
Australian Government Depart. Health. 2021 [36]	Information for Aboriginal and Torres Strait Islander people: Closing the Gap Pharmaceutical Benefits Scheme co-payment program changes	To provide information to Aboriginal and Torres Strait Islander people on changes to the CTG PBS scheme	Information on eligibility and how to access medicines through the CTG PBS scheme is provided	CTG PBS scripts
Australian Government Depart. Health. 2021 [37]	Information for prescribers, Aboriginal and Torres Strait Islander health practitioners and their peak bodies: Closing the Gap Pharmaceutical Benefits Scheme co-payment program changes	To provide information to CTG PBS scheme in effect from Thursday 1 July 2021	Changes to the CTG PBS scheme effective from July 2021 are outlined	CTG PBS scripts

Table 2 (continued)

Author & Year	Title	Aim	Results/Conclusion	Item identified
Australian Government Depart. Health. 2022 [38]	Annual health checks for Aboriginal and Torres Strait Islander people	To provide culturally appropriate information to Aboriginal and Torres Strait Islander people on annual health checks	Information on where to get a free annual health check and what happens during the assessment is provided	MBS 715
Australian Government Depart. Health and Ageing. 2013 [39]	MBS health assessment for Aboriginal and Torres Strait Islander people (MBS Item 715)	To provide information on the need for the MBS 715 health assessment	Information is provided patient and practitioner eligibility, and components of the MBS 715 health assessment.	MBS 715
Australian Government Depart. Health and Aged Care. 2023 [40]	Changes to the Practice Incentives Program—Indigenous Health Incentive	To provide a resource for general practices and ACCHS in the changes to the PIP IHI	Information on the expected changes, and a table outlining payments for eligible health services under the PIP IHI	PIP IHI
Australian Government Depart. Human Services. 2016 [41]	Remote Area Aboriginal Health Services (RAAHS or AHS) and the Pharmaceutical Benefits Scheme	To introduce how Remote Area Aboriginal Health Services can supply eligible PBS medicines for free	PBS medicines scheme is explained; instructions for ordering and claims processes for approved Remote Area Aboriginal Health Services provided	s100
Australian Government Depart. Human Services. 2016 [42]	Education guide—Aboriginal and Torres Strait Islander health assessments and follow-up services	To provide information to health professionals and GPs on health assessments and follow up services for Aboriginal and Torres Strait Islander patients	Information provided on MBS 715, including eligibility, how to complete health assessment and follow-up services, and reporting requirements	MBS 715
Australian Government Depart. Human Services. 2016 [43]	Education guide—Chronic Disease Management services to support Indigenous health	To provide information on MBS items to GPs to plan and coordinate health care for patients with chronic or terminal conditions	Information about MBS chronic disease management items provided, and claiming restrictions; information on PIP IHI and CTG PBS	MBS items, PIP IHI, CTG PBS scripts
Australian Institute of Health and Welfare. 2017 [44]	Indigenous health check (MBS 715) data tool	To provide an online dynamic data display for the uptake of health assessments	Provides MBS 715 uptake rates, and enables comparisons of both rates and numbers over time	MBS 715
Australian Institute of Health and Welfare. 2019 [45]	Regional variation in uptake of Indigenous health checks and in preventable hospitalisations and deaths	To compare potentially preventable hospitalisations and potentially avoidable deaths by variation in uptake of Indigenous-specific health checks	Areas with large Indigenous populations tend to have high rates of potentially preventable hospitalisations and potentially avoidable deaths and high uptake rates of Indigenous health checks	MBS 715
Australian Institute of Health and Welfare. 2020 [46]	Medicare-subsidised GP, allied health and specialist health care across local areas: 2013–14 to 2018–19	To examine data on the use of non-hospital Medicare-subsidised services across local areas	There was growth in Medicare-subsidised service use between 2013–14 and 2018–19 depending on service use and where people live	MBS items

Table 2 (continued)

Author & Year	Title	Aim	Results/Conclusion	Item identified
Australian Institute of Health and Welfare. 2022 [47]	Medicare-subsidised GP, allied health and specialist health care across local areas: 2021–22	To examine data on the use of non-hospital Medicare-subsidised services across local areas in 2021–22	Usage varies depending on where a person lives in Australia; on average, people in metropolitan areas who did see a GP received more services	MBS items
Australian Institute of Health and Welfare. 2024 [48]	Health checks and follow-ups for Aboriginal and Torres Strait Islander people [web report]	To report the latest data on health assessments and the use of MBS items for chronic disease management among health check patients	Data on health assessment and the use of MBS items for chronic disease management are presented	MBS 715, MBS 10987
Bailie J, et al. 2014 [49]	Follow-up of Indigenous-specific health assessments—a socioecological analysis	To describe uptake of Indigenous-specific health assessments over the first 3 years of the Indigenous Chronic Disease Package	Although there was an increase in the uptake of health assessments, delivery and billing of Indigenous-specific follow-up items was relatively limited	MBS 715, MBS 10987, MBS 81300–81360
Bailie J, et al. 2015 [50]	Determinants of access to chronic illness care: a mixed-methods evaluation of a national multifaceted chronic disease package for Indigenous Australians	To examine how a prevention and management of chronic disease program among Indigenous people addressed various dimensions of access	Strategies to improve access to chronic care for Indigenous Australians need to be tailored to local circumstances and address the range of dimensions of access on both the demand and supply sides	ACCT
Bailie J, et al. 2017 [51]	Improving preventive health care in Aboriginal and Torres Strait Islander primary care settings	To use clinical audit data to create a framework for strategies in the delivery of recommended preventive chronic disease care	The framework should be useful for guiding development and implementation of barrier-driven, multi-level, tailored interventions for primary health care service delivery and policy contexts	MBS 715
Bartlett B & Boffa J. 2005 [52]	The impact of Aboriginal community controlled health service advocacy on Aboriginal health policy	To review the advocacy role of ACCHS in the development of Aboriginal health policy over 30 years	ACCHS' advocacy role has been crucial to developing appropriate strategies to address Aboriginal health disadvantage. ACCHS' are grossly under resourced compared to government partners	ACCHS
Bates N, et al. 2018 [53]	CancerCostMod: a model of the healthcare expenditure, patient resource use, and patient co-payment costs for Australian cancer patients	To describe the development of the CancerCostMod model of health service use	The distribution of cancer healthcare and individual costs by Indigenous status, rurality, and socioeconomic status are provided	CTG PBS scripts
Beks H, et al. 2022 [54]	Opportunities for further changes to the Medicare Benefits Schedule to support Aboriginal Community Controlled Health Organisations	To discuss the need for further MBS reforms to support ACCHS in delivering culturally appropriate and responsive primary healthcare services after COVID-19	It is important for the Australian Government to work closely with the ACCHS sector to develop further changes to the MBS funding model that resonates with cultural ways of working	ACCHS

Table 2 (continued)

Author & Year	Title	Aim	Results/Conclusion	Item identified
Beks H, et al. 2023 [55]	Implementation of telehealth primary health care services in a rural Aboriginal Community-Controlled Health Organisation during the COVID-19 pandemic: a mixed-methods study	To evaluate the implementation of telehealth primary healthcare services for Aboriginal and Torres Strait Islander peoples by a rural ACCHS during COVID-19	Telehealth maintained the delivery of ACCHO services to Aboriginal and/or Torres Strait Islander clients during COVID-19	Aboriginal-specific telehealth MBS items
Bradshaw S, et al. 2015 [56]	Promoting the uptake of preventative Aboriginal child health policy in Western Australia	To discuss preventative child health service delivery to Aboriginal children in Western Australia	The importance of understanding local populations, service provision, and the cultural aspects of care were identified	MBS 715
Brickley B, et al. 2023 [57]	Enhancing person-centred care and access to primary care for Aboriginal and Torres Strait Islander peoples	To explore the research on person-centred care during the pandemic, with a focus on care delivered by GPs to Aboriginal and Torres Strait Islander communities	Long primary care consultations must be appropriately funded through modifications to MBS items	Aboriginal-specific telehealth MBS items
Brown S. 2018 [58]	Remote possibilities: from a Pintupi dream to Medicare funding	To discuss the benefits of the introduction of the MBS item for dialysis treatment in a remote ACCHS	The new MBS item number allows provision of government-funded kidney dialysis, and frees the ACCHS from having to fund raise to do the same	MBS items, PBS items, CTG PBS scripts
Butler DC, et al. 2022 [59]	Aboriginal and Torres Strait Islander health checks: sociodemographic characteristics and cardiovascular risk factors	To quantify Aboriginal and Torres Strait Islander health check claims in Australian adults by SES and health characteristics	Those with the greatest healthcare need and at highest risk of cardiovascular disease were more likely to receive a health check; a significant proportion of patients had not had a health check yet	MBS 715
Campbell M, et al. 2017 [60]	Contribution of Aboriginal Community-Controlled Health Services to improving Aboriginal health: an evidence review	To collate and analyse the published evidence supporting the contribution of ACCHS to improving the health of Aboriginal people	The full range of pathways ACCHS' contribute to improving Aboriginal health should be considered when making resource allocation decisions	ACCHS
Central Queensland Wide Bay Sunshine Coast Primary Health Network. 2017 [61]	715 health check	To provide information about the 715 health check for Aboriginal and Torres Strait Islander people	Information on what a 715 health check is, what happens during and after the check, and information for doctors	MBS 715
Commonwealth of Australia. 2011 [62]	Evaluation of the Child Health Check Initiative and the Expanding Health Service Delivery Initiative	To present the findings and recommendations of the evaluation of the Indigenous health programs Child Health Check Initiative and the Expanding Health Services Delivery Initiative	The Child Health Check Initiative program achieved some successes, however, its overall impact was dulled by the way it interacted with communities and the existing health care system. The Expanding Health Services Delivery Initiative was successful	MBS 708

Table 2 (continued)

Author & Year	Title	Aim	Results/Conclusion	Item identified
Couch D, et al. 2021 [63]	The impact of telehealth on patient attendance and revenue within an Aboriginal Community Controlled Health Organisation during COVID-19	To examine the impact of telehealth on patient attendance and revenue within ACCHS during COVID-19	The provision of telehealth services increased the number of people able to access the medical clinic, which had a positive financial impact for the organisation	Telehealth Aboriginal health assessment
Couzos S. 2005 [64]	PBS medications: Improving access for Aboriginal and Torres Strait Islander peoples	To explore the barriers to accessing PBS medications for Aboriginal and Torres Strait Islander peoples and the s100 access scheme	Introduction of the s100 has been highly successful in increasing medicines access in remote ACCHS. The program needs to be extended to rural and urban ACCHS	s100
Couzos S, et al. 2011 [65]	Improving Aboriginal and Torres Strait Islander people's access to medicines-the QUMAX program	To outline the success of the QUMAX program in increasing the number of PBS medicines dispensed to patients in non-remote ACCHSs	Although it is unclear whether the QUMAX program has alleviated the PBS expenditure inequities, it has helped overcome the financial barrier to accessing PBS medicines in non-remote areas	QUMAX
Couzos S & Thiele DD. 2010 [22]	The new "Indigenous health" incentive payment: Issues and challenges	To identify some of the contentious issues surrounding the implementation and evaluation of the new PIP IHI	Funding for the new incentive will be channelled largely through general practices and outcomes must be carefully measured	PIP IHI, MBS 715
Davidson PM, et al. 2010 [66]	Improving medication uptake in Aboriginal and Torres Strait Islander peoples	To identify factors impacting on medication adherence in Aboriginal Australians and identify solutions to improve the quality use of medicines	Initiatives such as QUMAX, and improving communication across health care professionals and health care jurisdictions are important strategies to promote medication adherence	QUMAX
Davis B & Gordon S 2018 [67]	A new culturally informed and innovative commissioning approach to boost access and primary health care performance for Indigenous communities of rural and remote New South Wales and Queensland	To examine whether a new commissioning approach is addressing Indigenous chronic disease health disparities	Cultural competence in clinical practice was strengthened resulting in significant innovation, efficiency and demonstrated patient and system benefits	Brokerage model
Digiacomo M, et al. 2010 [68]	Facilitating uptake of Aboriginal adult health checks through community engagement and health promotion	To address the process issues and outcomes of a two-day screening and assessment programme to increase the uptake of adult health checks at an ACCHS	Undertaking screening in a culturally sensitive framework and within a interdisciplinary team increased acceptability of implementing the health checks	MBS 715

Table 2 (continued)

Author & Year	Title	Aim	Results/Conclusion	Item identified
Donato R & Segal L. 2013 [69]	Does Australia have the appropriate health reform agenda to close the gap in Indigenous health?	To assess whether the Closing the Gap strategy will be successful in addressing Indigenous disadvantage	Health inequality is unlikely to be achieved without core structural changes that include community engagement and ownership in program success in Aboriginal health, and are underpinned by a comprehensive funding system	ACCHS
Dwyer J, et al. 2004 [9]	National strategies for improving Indigenous health and health care	Volume 1 of a Review of the Australian Government's Aboriginal and Torres Strait Islander Primary Health Care Program	The paper contains proposals for expansion of primary health care for Indigenous Australians	MBS 715, MBS items
Fisher M, et al. 2017 [70]	Are changes in Australian national primary healthcare policy likely to promote or impede equity of access? A narrative review	To identify recent changes in national primary healthcare policy and assess implications for equitable access	Medicare supports equitable access to general practice, but there is a risk of reduced equity access arising from four areas of change	ACCHS
Fredericks B, et al 2011 [71]	Aboriginal community control and decolonizing health policy: a yarn from Australia	To provide an overview of Aboriginal history since 1788 and an account of the current health of Aboriginal people in Victoria	The role of the Victorian Aboriginal Community Controlled Health Organisation to support and advocate for improved health policy is highlighted	ACCHS
Gippsland PHN. 2017 [72]	My '715 health check' journey	To provide information about the 715 health check for Aboriginal and Torres Strait Islander people	The 'journey' of the 715 health check is described, from when patients ask their doctors about the check, to follow-up care	MBS 715
Gorham G, et al. 2018 [73]	Interesting times' evolution of dialysis in Australia's Northern Territory (1980–2014)	To provide a brief history of the development of dialysis services in the NT and how unique models of dialysis care have emerged	The provision of unique models of dialysis care has expanded considerably over the past 15 years; most are still provided by the Northern Territory Government	MBS 13105
Hayman N. 2010 [74]	Strategies to improve indigenous access for urban and regional populations to health services	To analyse Aboriginal and Torres Strait Islander Adult Health Check data for patients aged 15–54 years to identify cardiovascular risk	Aboriginal and Torres Strait Islander people will access mainstream primary health care services if community consultation and participation is properly undertaken	MBS 715
Hayman N. 2011 [75]	Improving Aboriginal and Torres Strait Islander people's access to the Pharmaceutical Benefits Scheme	To examine the accessibility of PBS drugs to Aboriginal and Torres Strait Islander people	The Indigenous Chronic Disease Package will reduce the cost of prescriptions for patients with chronic disease	PBS items, PIP IHI
Henderson J, et al. 2018 [76]	Commissioning and equity in primary care in Australia: Views from Primary Health Networks	To explore Primary Health Networks how population health planning primary health organisations impact service access and equity	Health data facilitates service access by redistributing services on the basis of need; service delivery was seen as fragmented; the model is at odds with how ACCHS' operate	ACCHS

Table 2 (continued)

Author & Year	Title	Aim	Results/Conclusion	Item identified
Kehoe H & Lovett RW. 2008 [18]	Aboriginal and Torres Strait Islander health assessments: barriers to improving uptake	To explore the reasons for low uptake of Aboriginal and Torres Strait Islanders health assessments in mainstream general practice in the Australian Capital Territory	Barriers include low levels of Indigenous status identification and Indigenous-specific preventive health interventions	MBS 715
Kelaher M, et al. 2004 [77]	Evaluation of PBS medicine supply arrangements for remote area Aboriginal health services under S100 of the National Health Act	To examine the performance of the s100 in terms of its aims	The s100 benefitted more than one-third of the Aboriginal and Torres Strait Islander population and increased PBS expenditure, indicating increased access to medicine	s100
Kelaher M, et al. 2005 [78]	Comparison of the uptake of health assessment items for Aboriginal and Torres Strait Islander people and other Australians: implications for policy	To determine whether there are disparities in uptake of health assessments items for Aboriginal and Torres Strait Islander people compared to other Australians	Further engagement of primary care providers and the community is required to ensure that the significant disparity in the uptake of Aboriginal and Torres Strait Islander health assessments is addressed	MBS 715
Kelaher M, et al. 2006 [79]	Improving access to medicines among clients of remote area Aboriginal and Torres Strait Islander Health Services	To report on the effectiveness of a program to supply PBS medicines to remote ACCHS under Sect. 100	The program benefitted over one-third of the Aboriginal and Torres Strait Islander population and improved access to medicines	s100
Kelaher M, et al. 2014 [80]	Does more equitable governance lead to more equitable health care? A case study based on the implementation of health reform in Aboriginal health Australia	To examine the impact of ACCHS on the uptake of health assessments	Stronger links between ACCHs and mainstream organisations were associated with improvements in the uptake of health assessments; incorporation of ACCHS in regional planning plays an important role in improving health equity	MBS 715, ACCHS
Kimberley Aboriginal Medical Services. 2020 [81]	GP MBS items 2020	To outline the MBS items that GPs can claim for face-to-face and COVID-19 telehealth consultations	A list of relevant MBS items and the associated fees is provided	MBS items
KPMG. 2014 [82]	National monitoring and evaluation of the Indigenous Chronic Disease Package: final report	To evaluate the Indigenous Chronic Disease Package	The ICDP has improved the capacity, capability and responsiveness of the primary health care service system to meet the needs of Aboriginal and Torres Strait Islander people	MBS items
Lloyd JE, et al. 2008 [83]	Changing shape: workforce and the implementation of Aboriginal health policy	To examine the implementation of the Northern Territory Preventable Chronic Disease Strategy and the role of the health workforce in Aboriginal health policy	There is a need to restructure organisations to give AHWs greater power in determining policy implementation priorities and to invest in professional development for the same	ACCHS, AHW

Table 2 (continued)

Author & Year	Title	Aim	Results/Conclusion	Item identified
Mayers NR & Couzos S. 2004 [84]	Towards health equity through an adult health check for Aboriginal and Torres Strait Islander people	Editorial discussing the challenges with GPs performing the Aboriginal and Torres Strait Islander adult health check due to the Medicare rebate	A range of supportive activities were listed that could encourage GPs to change practice to maximise the uptake of adult health checks for Indigenous Australians	MBS 710, MBS 715
McAullay D, et al. 2016 [85]	Improving access to primary care for Aboriginal babies in Western Australia: Study protocol for a randomized controlled trial	A study protocol for a randomised controlled trial to improve primary care to Aboriginal infants	The trial is both region- and population-based, is likely to be cost effective and sustainable, and improve health outcomes for Indigenous mothers and infants	ACCHS
Mitchell S, et al. 2020 [86]	Culturally safe and sustainable solution for Closing the Gap-registered patients discharging from a tertiary public hospital	To describe the development, implementation and review of a hospital-funded discharge medicine subsidy for patients registered with the Closing the Gap program	A culturally sensitive, site-specific and state-funded model of care was found to be sustainable	CTG PBS scripts, MBS 715
Nolan-Isles D, et al. 2021 [87]	Enablers and barriers to accessing healthcare services for Aboriginal people in New South Wales, Australia	To investigate barriers and enablers to accessing healthcare services for Aboriginal people living in regional and remote Australia	Six themes were important to include in efforts to progress better access to healthcare services, with consideration of geographical and local contextual factors	CTG PBS Scripts
Ong K, et al. 2009 [88]	A cost-based equity weight for use in the economic evaluation of primary health care interventions: case study of the Australian Indigenous population	To propose an alternative cost-based equity weight for use in the economic evaluation of primary health care services interventions	The proposed cost-based weighting mechanism encourages equity concerns to be considered in a consistent, explicit and transparent manner	ACCHS
Panaretto KS, et al. 2014 [89]	Aboriginal community controlled health services: leading the way in primary care	To determine what is known about ACCHS and why support should be both continued and enhanced	Funding support is required for existing and new ACCHS; mainstream primary health care providers should partner with ACCHS to monitor performance across both sectors	ACCHS, AHW, MBS 715
Peiris D, et al. 2012 [90]	Building better systems of care for Aboriginal and Torres Strait Islander people: findings from the Kanyini health systems assessment	To inform and explore ACCHS staff views on factors needed to improve the prevention and management of chronic diseases	The frameworks of Kanyini were found to be useful theoretical foundations for providing a policy framework for enhancing ACCHS sector contribution to health improvement	MBS items
Pettit S, et al. 2019 [91]	Holistic primary health care for Aboriginal and Torres Strait Islander prisoners: exploring the role of Aboriginal Community Controlled Health Organisations	To explore the experiences of ACCHS staff in primary health care to individuals inside or leaving prison with the view to how to strengthen the role they play	A holistic model of care including access to certain Medicare items, and consistent access to prisoners could strengthen ACCHS' primary health care role to people inside or leaving prison	ACCHS

Table 2 (continued)

Author & Year	Title	Aim	Results/Conclusion	Item identified
Pharmaceutical Benefits Scheme. 2016 [92]	Closing the Gap (CTG) Indigenous chronic disease package PBS co-payment measure: pharmacy staff resource booklet	To provide pharmacy staff with information about the CTG PBS Scheme	Information includes eligibility criteria, how the scheme works, and how to dispense CTG prescriptions provided	CTG PBS scripts
Queensland Aboriginal and Islander Health Council. 2021 [93]	QAIHC submission to the Australian Government Department of Health: Aboriginal health services Quality Use of Medicines and pharmacy support—discussion paper	Discussion paper on the Aboriginal Health Services Quality Use of Medicines Program	The redesign process should consider retaining and refining the majority of the programs' components that have been proven to successfully rather than trialling new components	QUMAX, s100
Royal Australian College of General Practitioners. 2018 [94]	Five steps towards excellent Aboriginal and Torres Strait Islander healthcare	To provide GPs practical advice on working towards the delivery of excellent Aboriginal and Torres Strait Islander healthcare	A five step practical guide is outlined about performing a health check, and registering patients for PIP IHI and CTG PBS scripts	MBS 715, CTG PBS scripts, PIP IHI
Reifels L, et al. 2015 [95]	Improving access to primary mental healthcare for Indigenous Australians	To examine the uptake, reach and outcomes of primary mental healthcare services provided to Indigenous Australians via the Access to Allied Psychological Services program	Service volume more than doubled between 2010–2012 indicating that enhancing mainstream primary mental healthcare programs can result in significant mental healthcare access	MBS items
Robinson G, et al. 2003 [96]	Aboriginal participation in health service delivery: coordinated care trials in the Northern Territory of Australia	To describe the impact on access from the reorientation of a remote primary health-care service in the Kimberley region of Australia	The ACCHS-government hospital-population health unit partnership enabled provision of a sustainable, prevention-focussed service in a very remote and socially disadvantaged area	ACCT
Rosewarne C & Boffa J. 2004 [97]	An analysis of the Primary Health Care Access Program in the Northern Territory: A major Aboriginal health policy reform	To describe the development of and lessons learned in implementing PHCAP in the Northern Territory	The basic funding model within PHCAP—is the best possible way to fund comprehensive PHC at the present time	PHCAP, ACCHS, s100
Saxby K, et al. 2023 [98]	Does affirmative action reduce disparities in healthcare use by Indigenous peoples? Evidence from Australia's Indigenous Practice Incentives Program	To determine whether the PIP IHI improved chronic disease healthcare	The PIP IHI significantly increased primary healthcare use, reduced specialist services; the largest increase in primary healthcare observed in major cities	PIP IHI
Schmidt B, et al. 2016 [99]	Community health workers as chronic care coordinators: evaluation of an Australian Indigenous primary health care program	To explore how a client-centred Chronic Care model was implemented by IHW at participating sites in a trial of IHW-led case management	IHWs alone are insufficient to improve chronic disease outcomes; issues affecting IHWs' capacity to implement the model must first be addressed	AHW

Table 2 (continued)

Author & Year	Title	Aim	Results/Conclusion	Item identified
Schutze H, et al. 2016 [21]	The uptake of Aboriginal and Torres Strait Islander health assessments fails to improve in some areas	To explore why Aboriginal and Torres Strait Islander Health Assessment uptake remains low in some metropolitan general practices	Barriers included low rates of Indigenous status identification, lack of knowledge of MBS item numbers, lack of organisational teamwork, and avoidance of billing specific MBS item numbers	MBS 715
Schütze H, et al. 2017 [20]	What factors contribute to the continued low rates of Indigenous status identification in urban general practice?—A mixed-methods multiple site case study	To explore the barriers to Indigenous status identification in urban general practice	Entrenched attitudes and beliefs of GPs and staff need to be addressed, as well as limitations to practice software capabilities	MVII, PIP IHI
Senior T. 2021 [100]	A dilemma	Opinion piece on the Indigenous adult health checks	The only way the health checks work is with good follow-up of problems identified during the assessments	MBS 715
Services Australia. 2020 [101]	Your guide to Medicare for Indigenous health services	To provide basic information about Medicare Indigenous health services	Available Medicare-funded Indigenous health services are provided, and a list of contacts and useful references	PIP IHI, MBS items, CTG PBS scripts
Services Australia. 2023 [102]	Closing the Gap PBS co-payment for health professionals	To provide GPs and health professionals information on the CTG PBS scheme	Patient registration, prescribing, dispensing and claiming pharmaceutical items under the scheme are explained	CTG PBS scripts
Si D, et al. 2008 [103]	Describing and analysing primary health care system support for chronic illness care in Indigenous communities in Australia's Northern Territory—Use of the Chronic Care Model	To understand how Indigenous primary care systems are organised to deliver chronic illness care and how this will inform efforts to improve the quality of care	Translating the Chronic Care Model into practical application proved to be useful in understanding the quality of primary care systems for prevention and management of chronic illness	ACCT
Siripol S. 2018 [104]	Health service delivery and health outcomes of at-risk populations	To explore the performance of health organisations providing health services for Aboriginal and Torres Strait Islander peoples and uptake of health assessments	Fifteen opportunities to strengthen service delivery were identified. There was no associations between cultural safety policies and health assessment uptake	MBS 715, MBS 10987
Stoneman J & Taylor S. 2007 [105]	Improving access to medicines in urban, regional and rural Aboriginal communities—is expansion of Sect. 100 the answer?	To review the barriers and enablers to strategies implemented to improve the access to and quality use of medicines in Aboriginal communities, including s100	s100 has increased access to medication; quality use of medicines issues remain and require pharmacists' remuneration to be reviewed and adequate training of AHWs	s100

Table 2 (continued)

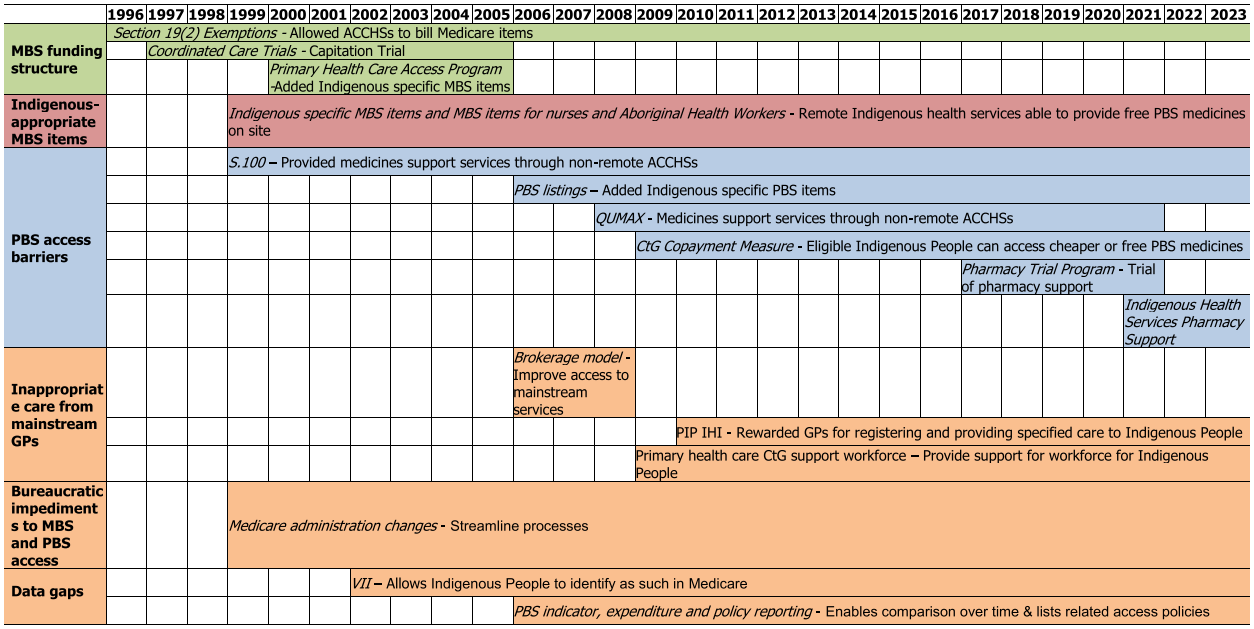
Author & Year	Title	Aim	Results/Conclusion	Item identified
Stoneman J & Taylor SJ. 2007 [106]	Pharmacists' views on Indigenous health: is there more that can be done?	To explore pharmacists' views in rural and remote NSW to take on a greater role in Indigenous health	Financial barriers and restrictions on time were barriers to taking on expanded roles; whilst interactions with AHWs were limited, their value was recognised	s100, ACCHS, AHW
Thomas S, et al. 2014 [107]	The cost-effectiveness of primary care for Indigenous Australians with diabetes living in remote Northern Territory communities	To evaluate the costs and health outcomes associated with primary care use by Indigenous people with diabetes in remote communities in the Northern Territory	Improving the use of primary care would not only yield better health outcomes for patients with diabetes, but would be cost-effective	MBS 715
Thorn G & Cox J. 2024 [108]	Improving health equity to primary care for First Nations peoples living in northern Queensland	To improve access to health assessments and integrated and coordinated care for Aboriginal and Torres Strait Islander people	Increased in Indigenous-status recording, MBS 715 Health Assessments and associated shared care management	CTG PBS scripts, MBS 715, PIP IHI
Trivedi AN & Kelaher M. 2020 [109]	Copayment incentive increased medication use and reduced spending among Indigenous Australians After 2010: A study of government-sponsored subsidies to reduce prescription drug copayments among indigenous Australians	To examine the effect of registration for the Closing the Gap copayment incentive on the use of prescription drugs and spending	Copayment reductions were associated with an increase in the use of medications and a reduction in out-of-pocket spendings	CTG PBS script
Trivedi AN, et al. 2017 [109]	Hospitalizations for chronic conditions among Indigenous Australians after medication copayment reductions: the Closing the Gap copayment incentive	To assess rates of hospitalisations for chronic conditions before and after the introduction of the CTG PBS scheme	Marked declines were observed in hospitalisations for chronic conditions following targeted reductions in medication copayments	CTG PBS scripts
Usher K, et al. 2021 [110]	Influence of COVID-19 on the preventive health behaviours of indigenous peoples of Australia residing in New South Wales: a mixed-method study protocol	Protocol to explore how COVID-19 influenced preventive health behaviours of indigenous Australians	MBS data will identify uptake of Indigenous Health Assessments during COVID-19. Qualitative results will explore the impact of COVID-19 on preventative health appointments attendance	MBS 715
Usher K, et al. 2023 [111]	Mental health and use of Medicare Benefits Schedule follow-up mental health services by Indigenous people in Australia during the COVID-19 pandemic	To investigate trends in mental health service claims for Indigenous people before and during COVID-19	There was a significant decline in MBS items specific to follow-up mental health services for Indigenous people; it is not known if this was due to COVID-19	MBS 81325, MBS 81355
Ware V. 2013 [5]	Improving the accessibility of health services in urban and regional settings for Indigenous people	To explore how to improve accessibility of metropolitan, urban and regional health services for Indigenous Australians	Barriers include availability (physical accessibility), affordability, appropriateness and cultural acceptability	s100

Table 2 (continued)

Author & Year	Title	Aim	Results/Conclusion	Item identified
Westbury N & Sanders W. 2004 [112]	Governance and service delivery for remote Aboriginal communities in the Northern Territory: challenges and opportunities	To identify opportunities for change and the development of more collaborative relationships between governments and Aboriginal communities	Further development of regional support organisations to assist and service local Aboriginal communities is a critical factor for change; in remote communities many services must still be addressed at the individual community level	ACCT
Wright K, et al. 2017 [113]	National Key Performance Indicators for Aboriginal and Torres Strait Islander primary health care: results from June 2016. National key performance indicators for Aboriginal and Torres Strait Islander primary health care series no. 4	To provide data on Indigenous primary health care key performance indicators from June 2012 to June 2016	The major areas of achievement against the key performance indicators are provided, as well as areas for improvement	MBS 715
Yadav UN, et al. 2023 [114]	Understanding the implementation of health checks in the prevention and early detection of chronic diseases among Aboriginal and Torres Strait Islander people in Australia: a realist review protocol	To identify context-specific enablers and tensions and contribute to developing an evidence framework to guide the implementation of health checks	Evidence informed recommendations will guide policymakers, researchers and wider stakeholders in codesigning people-centred interventions to improve the delivery of health checks	MBS 715
Zhao Y, et al. 2014 [115]	Better health outcomes at lower costs: the benefits of primary care utilisation for chronic disease management in remote Indigenous communities in Australia's Northern Territory	To determine if primary care represents an efficient use of resources for Indigenous patients with selected chronic disease	Primary care in remote Indigenous communities was shown to be associated with cost-savings to public hospitals and health benefits to individual patients	ACCHS
Zhao Y, et al. 2022 [116]	Remoteness, models of primary care and inequity: Medicare underexpenditure in the Northern Territory	To analyse Medicare expenditure by State/Territory, remoteness, and Indigenous demography	A simple capitation payment adjusted for age, sex and Indigenous status may mitigate up to 97% of the current primary health care shortfall	ACCT, MBS item, MBS 715

ACCHS Aboriginal community-controlled health service, *ACCT* Aboriginal Coordinated Care Trial, *AHW* Aboriginal Health Worker, *ATAPS* Access To Allied Psychological Services, *CTG* Closing The Gap, *MBS* Medical Benefits Schedule, *MVII* Medicare Voluntary Indigenous Identifier, *PBS* Pharmaceutical Benefits Scheme, *PIP IHI* Practice Incentives Program Indigenous Health Incentive, *PHCAP* Primary Health Care Access Program, *QUMAX* Quality Use of Medicines Maximised for Aboriginal and Torres Strait Islander People; s100: Sect. 100 of the National Health Act 1953

Table 3. Timeline and purpose of policies to improve primary care access to the MBS and PBS for Indigenous Peoples (1999-2023), by barrier



Policies aimed at improving the MBS funding structure

Sect. 19(2) exemptions (1996-ongoing)

Section 19(2) of the *Health Insurance Act 1973* prohibits services from receiving national Government health care financing from grant and Medicare sources, commonly referred to as 'double dipping'. Exemptions from this prohibition allowed ACCHSs to both access MBS funds and continue to receive grant funding for health care delivery, thereby providing improved financial viability [10] and establishing a new uncapped and flexible funding stream not subject to grant conditions [117]. However, some ACCHSs were concerned grant funding would be reduced if MBS funding was increased, and there was little support for ACCHSs to make organisational changes needed to increase MBS funding [12]. Furthermore, funds generated under the exemption varied considerably across ACCHSs [12, 118].

Aboriginal Coordinated Care Trials (ACCTs) (1997–2005)

As an alternative to the standard fee for service MBS structure, the (Aboriginal Coordinated Care Trials) ACCTs policy tested a form of capitation—a payment system where health-care providers are paid a fixed amount per person to provide all the care needed for a given period [119]. In the seven trial sites (which ranged from area health networks to individual ACCHS), funds were pooled between national and state governments, with a third-party community organisation as the 'funds holder' [120] [121]. Under this approach, the national Government replaced MBS and PBS to a set amount per person to a flexible funding pool.

Primary Health Care Access Program (PHCAP) (1999-?2006)

This policy, another capitation alternative to the standard fee for service MBS structure, was conducted in the seven ACCTs sites as well as 12 new regions [122]. Lessons from the previous ACCTs were acknowledged [121], and in a shift, the formula for capitation funding was increased by using 'multipliers' – factors used to augment average national MBS expenditure to address funding inequity. The first multiplier set minimum expenditure at double the average national MBS expenditure (to account for higher morbidity rates among Indigenous Peoples), and the second multiplier set maximum expenditure at four times the national average in remote locations (to account for higher costs of service delivery in remote areas due to increased costs associated with geographic access to geographic access). Another lesson learnt was that unlike the ACCTs, ACCHSs were allowed to continue to claim MBS funding as well as receiving capitated funding, an approach known as 'mixed mode' funding [97].

Policies aimed at addressing the lack of Indigenous-appropriate MBS items

MBS item numbers addressing health needs specific to Indigenous Peoples have gradually been added to the MBS since 1999. These can be divided into

Indigenous-only items (which are available only to Indigenous Peoples) and Indigenous-focussed items (which are designed to address health issues and structures primarily serving the needs of Indigenous Peoples, but do not specifically exclude non-Indigenous people) (Table 4).

Indigenous-only MBS items (1999-ongoing)

The introduction of the first Indigenous-only MBS item, a health check for Indigenous Peoples aged 55 and over [123], was an acknowledgment from Government that the health needs of Indigenous Peoples were sufficiently different from non-Indigenous people to justify specific MBS-funded care (Table 4). The health check was expanded in 2004 to include Indigenous Peoples aged 15–54, and again in 2006 to include those under 15 years of age (Table 4), and these three MBS items were combined into a single item number in 2010. Further Indigenous-only MBS items have been added over time (Table 4), including an item to support retinal screening for Indigenous Peoples with diabetes added in 2016.

Indigenous-focussed MBS items (2000-ongoing)

Indigenous-focussed MBS items were first added to support point of care testing for diabetes management in eligible Indigenous services in 2000, with additional items added in 2006 and 2015. Medicare items to support the work done by health workers other than GPs in ACCHSs (such as immunisations and wound care) were first added in 2006, with additional items added in 2008 and 2020. In 2018, an MBS item was added to support renal dialysis in very remote areas, a service required overwhelmingly by Indigenous patients [58]. Additional Indigenous-focussed MBS items have continued to be added over time (Table 4).

Policies aimed at overcoming PBS access barriers

Sect. 100 Remote area aboriginal health services program (1999-ongoing)

Arrangements made under Sect. 100 of the *National Health Act 1953* enabled remote ACCHSs to provide PBS medicines for free directly from their clinics. This was fundamentally different from standard PBS access

Table 4 Medicare Benefits Schedule (MBS) item numbers addressing health needs specific to Indigenous Peoples

Year	Item number	Purpose
1999	704	Older person's Health checks 55 years & over*
2000	73840	Point of care testing for diabetes management in eligible Indigenous health services
2004	710	Adult health check aged 15–54 (710)*
2004	10950 face-to-face	Individual allied health service for chronic disease management
2006	708	Child health check*
2006	10987	practice nurse or registered Aboriginal Health Worker to a maximum of 5/calendar year increased to a maximum of 10/calendar year in 2020
2006	73844	Point of care testing for diabetes management in eligible Indigenous health services
2006	10988 and 10989	Aboriginal Health Workers providing immunisations and wound care
2006	16400	Antenatal service provided by a midwife, nurse or Aboriginal and Torres Strait Islander health practitioner. Must be provided at, or from, a practice in a regional, rural or remote location
2007	10997	Aboriginal Health Workers and practice nurses delivering services to manage identified chronic conditions
2008	10987	Practice nurses and Aboriginal Health Workers acting on behalf of a GP and providing follow up services to Indigenous Peoples of issues identified in the health check
2008	13 items in the 81300–81360 range	Allied health professionals and Aboriginal Health Workers acting as independent health providers to whom the GP referred the patient providing care identified in a health check*
2010	715	Health checks for any age – amalgamated items 704, 710 and 708*
2011	10983	Telehealth support service by a practice nurse, Aboriginal health worker or Aboriginal and Torres Strait Islander health practitioner
2015	73839	Point of care testing for diabetes management was expanded to include diabetes diagnosis in eligible Indigenous health services
2016	12325	Retinal screening for Indigenous Peoples with diabetes*
2018	13105	Renal dialysis in very remote areas, services required overwhelmingly by Indigenous patients
2020	93000 Telehealth	Individual allied health service for chronic disease management
2020	93013 Phone	
2020	93048 Telehealth	Follow-up allied health service for Indigenous Peoples*
2020	93061 Phone	

*Patient must be an Aboriginal or a Torres Strait Islander person

arrangements as it did not involve patient payments, prescriptions, or the involvement of pharmacists in individual dispensing. The policy only applied to PBS medicines, so did not cover the cost of over-the-counter medicines not subsidised by the PBS [124].

PBS listings (1999-ongoing)

PBS listings include Indigenous-only items (which are available exclusively to Indigenous Peoples) and Indigenous-focussed items (which are available to certain non-Indigenous people as well as Indigenous Peoples).

PBS listings aim to reduce the cost of medicines for Indigenous Peoples by including them on the PBS. This ensures they are either available at no cost to the patient (under Sect. 100 arrangements) or PBS-subsidised and therefore more affordable (under standard dispensing arrangements). The scope of medicines listed has been contested over time, with stakeholders arguing for the list to be expanded [125]. PBS listings began in 1999 and items have continued to be added over time (Table 5).

Table 5 Pharmaceutical Benefits Scheme (PBS) item numbers addressing health needs specific to Indigenous Peoples [126]

Drug	Indication
Albendazole*	Whipworm infestation
Aspirin*	Cardiovascular disease
Bisacodyl	Constipation
Chloramphenicol	Eye infection
Ciprofloxacin	Chronic suppurative otitis media
Ferrous Fumarate	Iron deficiency anaemia
Ferrous Fumarate + Folic Acid	Pregnancy
Folic Acid	Pregnancy
Glucose And Ketone Indicator Urine	Diabetes
Hydroxocobalamin	Anaemia
Ivermectin	Human sarcoptic scabies
Ketoconazole	Fungal or yeast infection
Miconazole	Fungal or yeast infection
Terbinafine	Fungal or yeast infection
Loperamide	Diarrhoea
Magnesium	Hypomagnesaemia
Molnupiravir	SARS-CoV-2 infection
Mupirocin	Staphylococcus aureus infection
Nicotine	Nicotine dependence
Paracetamol	Pain
Prednisolone Acetate + Phenylephrine	Severe eye inflammation
Terbinafine	Dermatophyte infection
Thiamine	Thiamine deficiency
Sodium Chloride + Potassium Chloride + Glucose Monohydrate + Citrate	Dehydration

*Patient must be an Aboriginal or a Torres Strait Islander person

Indigenous health services pharmacy support (2021-ongoing)

This policy supports services provided by ACCHSs and service providers that contribute to the improvement of Quality Use of Medicines (QUM) and health outcomes for Indigenous Peoples through: QUM pharmacist support, QUM devices, QUM education, and QUM patient transport (Indigenous Health Services only) [127].

QUMAX program (2008–2021)

This policy funded urban and regional ACCHSs to support access to, and quality use of, PBS medicines. It included support for dose administration aids, cultural awareness training for pharmacy staff, quality use of medicines patient education, and funding to cover the patient payment for PBS medicines [12]. QUMAX ceased as a standalone program in 2021 and was absorbed into the Indigenous Health Services Pharmacy Support program [127].

Closing the Gap (CtG) PBS co-payment policy (2010-ongoing)

This policy aimed to improve PBS medicines access for eligible Indigenous Peoples by removing all or substantially decreasing patient payments [128]. Notably, it used standard pharmacy dispensing arrangements and was implemented in both ACCHSs and mainstream general practices.

Pharmacy trial program (2017–2021)

This policy included two Indigenous-specific trials aiming to improve medication management through increased pharmacy support in select sites: the Indigenous medication review service feasibility (IMeRSe) study (2017–2021) [129, 130], and the Integrating Practice Pharmacists into ACCHS (IPAC) project (2017–2020) [131]. The relevant Government advisory body rejected IMeRSe's recommendation to fund Indigenous-specific medication review services through the introduction of additional MBS items [132] and deferred a decision on IPAC's recommendation for funding for ACCHSs to employ pharmacists in non-dispensing roles [133].

Policies aimed at improving care from mainstream GPs

Brokerage model (2006-?2008)

This policy aimed to improve access to health care for urban Indigenous Peoples [134, 135] through a trial conducted in five urban locations [136] Under this policy, a third party independent of service providers, such as a local Indigenous Land Council, could refer Indigenous Peoples to registered mainstream general practices involved in Indigenous Peoples health, help organise appointments, and subsidise out of pocket costs [136].

Practice Incentive Program (PIP) Indigenous Health Incentive (IHI) (2010-ongoing)

This policy aimed to encourage mainstream general practices to improve care for Indigenous Peoples, by introducing three incentive payments for general practices: a sign-on payment; an annual payment for each patient registered for chronic disease management; and outcomes payments for reaching target levels of care [137].

Closing the Gap workforce (2010–2022)

This policy established three new types of primary health care workers: Indigenous health project officers, Indigenous outreach workers and Care Coordinators [82]. Indigenous health project officers were based in both the ACCHS sector (in national and state based peak bodies) and support organisations for mainstream general practice (then known as Divisions of General Practice, now Primary Health Networks (2023)). These positions were to provide leadership in Indigenous health, including increasing awareness of Closing the Gap initiatives. Indigenous outreach workers were based in Divisions/Medicare Locals to support Indigenous Peoples to access primary health-care services and follow-up treatment. Care coordinators based in both ACCHS' and mainstream sectors aimed to help coordinate care for patients with chronic disease.

Policies aimed at addressing bureaucratic impediments

Medicare administration policies (1999-ongoing)

This policy included the provision of alternatives for Indigenous Peoples without standard identification to enrol in Medicare (a key access barrier [9, 17]), streamlined billing arrangements to facilitate MBS claiming and established a network of Medicare Liaison Officers to support ACCHSs navigate the MBS, along with a free telephone hotline number [138, 139].

Policies aimed at addressing data gaps

Voluntary Indigenous Identifier (VII) (2002-ongoing)

The lack of identification of Indigenous Peoples is a barrier to GP-mediated service delivery [18, 20, 21] and GP-generated data collection [140]. This policy made provisions for Indigenous Peoples to voluntarily record their Indigenous descent with Medicare [141]. This included an Indigenous descent variable on the Medicare enrolment form. Indigenous Peoples are advised that recording their Indigenous descent will help to shape government plans and policies and see if the policies are making a difference [142].

PBS indicator, expenditure and policy reporting (2006-ongoing)

This policy included important PBS information in a new national reporting framework. The *Aboriginal and Torres Strait Islander Health Performance Framework* [143], introduced indicators grouped into three tiers (health status and outcomes, health determinants and health system performance), and two-yearly reports against those indicators are issued. The Framework includes indicators relevant to MBS and PBS access, although unlike MBS access, PBS access is specifically reported under the indicator 'access to prescription medicines' and Government policies aiming to increase PBS access are specified [144]. This information facilitates both the analysis of PBS access policies and the comparison of PBS expenditure over time.

Discussion

Our findings discuss policy efforts to address access barriers over a period of nearly 30 years. We identified 16 policies implemented between 1996 and 2023, compared them with access barriers and grouped them according to those barriers. PBS barriers had the highest number of policies ($n=6$), of which all but the Pharmacy Trials Program and QUMAX were ongoing. Of the policies aiming to address the MBS funding structure ($n=3$), two (which attempted fundamental changes) were time-limited, and one (which made minor changes) was ongoing. Of the policies aimed at improving care provided by mainstream GPs ($n=3$), one was time limited. Of the policies aimed at improving data gaps ($n=2$), both were ongoing. There was one policy each in the remaining two categories, lack of Indigenous appropriate MBS items and bureaucratic impediments to MBS and PBS access, and both were on-going. Policies which aimed to alter the fundamental MBS structure (CCT and PHCAP) were short-lived, but most other policies persisted over time.

Finding policies, particularly past policies, was very difficult without expert input. This difficulty supports concerns regarding policy amnesia, where past policies are forgotten or ignored [145, 146]. Institutional, governmental or organisational policy amnesia has been partially attributed to high rates of staff turnover [147]. More fundamentally, a lack of willingness, as well as ability, to apply knowledge gained from previous experience [148] is also a factor, where "the prevailing mentality militates strongly against any such recourse to the past" [148], p6. If policy decisions do not consider past policies or their effectiveness, policies remain in a state of perpetual infancy [149].

Identifying relevant policies, finding policy documentation and tracking changes over time is not straightforward, as it is difficult to identify related policies, to

access historical policy documentation, and to ascertain changes to the structure or funding of policies over time [147]. Most material is stored on ephemeral webpages; policies are often revised, merged and/or renamed as governments change; and funding changes are difficult to trace. While some policies have clear beginning and end dates, many do not, and it is sometimes difficult to determine if a policy still exists.

There are some attempts to capture policy history in this space. The Analysis and Policy Observatory's Public Policy Taxonomy was a step towards establishing a searchable policy repository, underpinned by an inferable classification and nomenclature system [150], but only limited search functions are available. The Australian Indigenous HealthInfoNet, which aims to support Indigenous health by making information readily accessible, also included limited search functions, but did include a lot of relevant grey literature.

Given this situation, a major methodological barrier to researching in this area is how to identify policies. We found some studies using document analysis of related policies in other fields: some were confined to point-in-time assessment rather than reviewing policies over time and these used online searches for key words to identify relevant documentation, mainly from government websites [151–154]. We found few examples of robust methods for undertaking historical reviews: some did not include methodology of how policies and relevant documentation were identified [155–162], and others had vague methodology [163, 164]. Others noted the same problem: that it was not possible to generate the names of relevant policies other than through expert knowledge [165, 166]. The need for researchers to know what to look for in advance undermines accountability and reflects the lack of a searchable policy repository. More fundamentally, reliance on individual expertise is no substitute for transparent and durable policy categorisation and record-keeping via a searchable policy repository. Our study had the advantage that some policies (those related to PBS access) have been identified by Government. However, we had to identify non-PBS policies and determine if they were in scope: other researchers may make different decisions.

Strengths and limitations

This review was undertaken using rigorous methods. It included a wide range of sources to comprehensively capture the scope of the available evidence. It is the first synthesis of Medicare and PBS policy history to improve Indigenous Peoples' access to primary health care, and provides a platform for future analysis. This review has a number of limitations. Only papers written in English were included and papers written in other languages may have provided different or additional views. However, given this paper focused on Australian policy, it is unlikely that this had an impact on the findings. The selected databases searched were chosen as they contained the most relevant and up to date information on the topic and only the first 50 hits on Google were searched, and it is possible that some items could have been missed. This paper was a descriptive policy synthesis only; policy characteristics and the effectiveness of policies were not analysed. Policy attributes should be investigated through the application of a decolonising framework for Indigenous health policy analysis [167]. The scope was limited to improvement to MBS and PBS access in primary care, and not secondary or tertiary services, and the results for these could differ. Further, this policy synthesis did not consider the two political policy periods that are covered: the 'practical reconciliation policy' (1996–2006) and the 'Closing the Gap policy' (2008-current). Political party policy approaches can affect the approach to policy development and implementation, however during the period of this review, we argue that for the two policy periods of this examination the policy frame is congruent where the policy focus was on changing the relatively poorer circumstances in health, or inequality of health outcomes.

Conclusion

This is the first synthesis of policy history to improve Indigenous Peoples' access to primary health care, and provides a platform for future analysis. Identifying the names of relevant policies in any area is key to accountability and reliance on individual expertise is no substitute for transparent and durable policy record-keeping. A searchable long-term policy repository should be established to ensure that related policies can be identified, and that key policy documentation is publicly available in perpetuity.

Abbreviations

ACCHS	Aboriginal community controlled health service
ACCT	Aboriginal Coordinated Care Trials
CtG	Closing the Gap
GP	General practitioner
IHI	Indigenous Health Incentive
IMeRSe	Indigenous medication review service feasibility
IPAC	Integrating practice pharmacists into ACCHS
MBS	Medicare Benefits Schedule
PBS	Pharmaceutical Benefits Scheme
PIO	Population, interest, and outcome
PIP	Practice Incentive Program
VII	Voluntary Indigenous Identifier

Supplementary Information

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Supplementary Material 1.

Authors' contributions
All authors conceived the study. HK and HS performed the literature search. HK, HS and GS performed the data screening. HK drafted the initial manuscript. HS substantially revised the manuscript. All authors reviewed subsequent drafts and approved the final manuscript.

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Data availability
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Declarations

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Not applicable.

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The authors declare no competing interests.

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