

Table 1 Interventions and Strategies				
Author, Publication year, Country	Study design, Population description and size	Intervention or Strategy	Reported Outcome Type (ECHO)	Kiles et al Framework Mapped Levels
<i>Clinical Pharmacy Practice</i>				
Deidun et al., 2019, Australia	Quantitative, Retrospective review; Aboriginal and Torres Strait Islander Peoples; (n=64), one First Peoples primary healthcare service, remote location	1. Medicines review and optimization	1. Clinical outcomes 2. Humanistic outcomes	1. Patient 2. Practice 3. Community
Drovandi et al., 2022 Australia	Mixed methods, pragmatic pre and post quasi-experimental, participatory; Aboriginal and Torres Strait Islander Peoples; (n =17/104, 16%) 20 First Peoples primary healthcare services	1. Medicines review and optimization	1. Humanistic outcomes	1. Patient 2. Practice
Duck, B., 2020, New Zealand	Quantitative, descriptive study, Maori and Pacific Islander Peoples (n=unknown), primary healthcare practices, rural	1. Medicines optimization 2. Advanced Pharmacy Practice	2. Clinical outcomes	1. Practice 2. Community
Swain et al., 2015 Australia	Qualitative descriptive study, Aboriginal Health Workers; (n=14/31, 45%), 11 First Peoples primary healthcare services, urban, regional, rural, and remote	1. Medicines review and optimization	1. Humanistic outcomes	1. Patient 2. Practice 3. Community
Swain & Barclay, 2015 Australia	Qualitative explorative study, focus groups, thematic analysis: Aboriginal and Torres Strait Islander Peoples; (n =102) 11 First Peoples primary healthcare services, urban, regional, rural, and remote	1. Medicines review and optimization	1. Humanistic outcomes	1. Patient 2. Practice 3. Community

Harrop et al., 2024 Australia	Quantitative, pre-post, quasi-experimental (compared to non-First Peoples cohorts), interventional study: Aboriginal and Torres Strait Islander Peoples; (Pre n =199 vs 440, 45%, Post n = 119 vs 467, 26%) Tertiary Hospital, Cardiac Unit, Metropolitan	<ol style="list-style-type: none"> 1. Medicines optimization 2. Care coordination 	<ol style="list-style-type: none"> 1. Clinical outcomes 	<ol style="list-style-type: none"> 1. Patient 2. Practice 3. Community
Deming et al., 2018, (US)	Quantitative service evaluation; American Indian and Alaska Native Peoples; (n=31) 13 clinical sites	<ol style="list-style-type: none"> 1. Medicines review and optimization 2. Pharmacy-led clinic 3. Case-conferencing 4. Telepharmacy 	<ol style="list-style-type: none"> 1. Clinical outcomes 	<ol style="list-style-type: none"> 1. Patient 2. Practice
Duvivier et al., 2017, US	Quantitative service evaluation; American Indian and Alaska Native Peoples (n=unknown) Indian Health Service-wide	<ol style="list-style-type: none"> 1. Medicines review and optimization 2. Advanced Pharmacy Practice 	<ol style="list-style-type: none"> 1. Clinical outcomes 2. Humanistic outcomes 	<ol style="list-style-type: none"> 1. Patient 2. Practice 3. Community
Gallegos et al., 2022, US	Quantitative service evaluation; American Indian Peoples; (n=3500), regional and rural location	<ol style="list-style-type: none"> 1. Medicines review and optimization 2. Advanced Pharmacy Practice 3. Telepharmacy 	<ol style="list-style-type: none"> 1. Economic outcomes 2. Clinical outcomes 3. Humanistic outcomes 	<ol style="list-style-type: none"> 1. Patient 2. Practice 3. Community
Geiger et al., 2018 US	Quantitative service evaluation; American Indian and Alaska Native Peoples; (n=1789) 11 separate IHS facilities, rural	<ol style="list-style-type: none"> 1. Medicines review and optimization 2. Advanced Pharmacy Practice 3. Case-conferencing 	<ol style="list-style-type: none"> 1. Clinical outcomes 	<ol style="list-style-type: none"> 1. Patient 2. Practice
Martin et al., 2015 US	Quantitative service evaluation; American Indian and Alaska Native Peoples; (n=30) one First Peoples primary healthcare service, rural location	<ol style="list-style-type: none"> 1. Medicines review and optimization 2. Pharmacy-led clinic 	<ol style="list-style-type: none"> 1. Clinical outcomes 2. Humanistic outcomes 	<ol style="list-style-type: none"> 1. Patient 2. Practice 3. Community
Moore et al., 2014 US	Quantitative service evaluation; American Indian and Alaska Native Peoples (n=4058) 7 IHS hospitals/clinics, 21 Tribal	<ol style="list-style-type: none"> 1. Advanced Pharmacy Practice 2. Case Management 3. Medicines optimization 	<ol style="list-style-type: none"> 3. Clinical outcomes 	<ol style="list-style-type: none"> 1. Patient 2. Practice 3. Community

Lawrence et al., 2019 New Zealand	healthcare programs and 2 urban programs across 13 US states Quantitative program evaluation; Māori and Pacific Peoples; (n=630/887, 71%) primary healthcare in a region	1. Medicines optimization	1. Clinical outcomes 2. Humanistic outcomes	1. Patient 2. Practice
O'Connell J et al., 2022 US	Quantitative, retrospective longitudinal data analysis; American Indian and Alaska Native Peoples; (n=9844) adults aged 18 and older, 5 locations	1. Medicines review and optimization 2. Advanced Pharmacy Practice	1. Clinical outcomes *SDOH were used to measure impact on clinical outcomes	1. Patient 2. Practice 3. Community
O'Connell J et al., 2021 US	Quantitative, retrospective longitudinal data analysis; American Indian and Alaska Native Peoples; (n=28,578) 15 IHS units	1. Medicines review and optimization 2. Advanced Pharmacy Practice 3. Case-conferencing	1. Clinical outcomes	1. Patient 2. Practice 3. Community
Pett et al., 2016 US	Quantitative, retrospective chart review, pre and postintervention; American Indian and Alaska Native Peoples; (n=61) one First Peoples primary healthcare service	1. Medicines review and optimization 2. Pharmacy-led clinic	1. Clinical outcomes	1. Patient 2. Practice
Rose J.L., 2007 US	Quantitative, cross-sectional study; Alaska Native and American Indian Peoples; (n=990) 12 remote sites	1. Medicines review and optimization 2. Telepharmacy	1. Economic outcomes 2. Clinical outcomes	1. Practice
Weston-Buffalohead J.M., 2007 US	Quantitative, descriptive, secondary data; American Indian Elders; (n=36) one residential care home	1. Medicines review and optimization	1. Clinical outcomes	1. Patient 2. Practice 3. Community
Hikaka et al., (39) 2021, New Zealand	Quantitative feasibility study;	1. Medicines review and optimization	1. Clinical outcomes 2. Humanistic outcomes	1. Patient 2. Practice

Hikaka et al., (62) 2021, New Zealand	Māori Peoples; (n=17) adults aged 55 and older, community-dwelling Mixed Methods, structured interview with open ended questions post intervention; Māori Peoples; (n=17) adults aged 55 and older, community-dwelling	1. Medicines review and optimization	1. Humanistic outcomes	1. Patient 2. Practice
Erker et al., 2021, Canada	Mixed methods service evaluation; Canadian First Nations Peoples; (n=66) one First Peoples primary healthcare service	1. Medicines review and optimization	1. Clinical outcomes 2. Humanistic outcomes	1. Patient 2. Practice
Rick et al., 2017 US	Quantitative, controlled quasi-experimental study and retrospective analysis of secondary data; American Indian Peoples; (n=48) three retail sites	1. Medicines optimization 2. Innovative partnerships	1. Clinical outcomes 3. Humanistic outcomes	1. Patient 2. Practice 3. Community
Medicines Access				
Mitchell et al., 2020 Australia	Quantitative case study; Aboriginal and Torres Strait Islander Peoples; (n=296), one hospital location	1. Medication subsidy	1. Economic outcomes	1. Patient 2. Practice 3. Community
Trivedi et al., 2017 Australia	Quantitative observational time trend study, pre and post intervention; Aboriginal and Torres Strait Islander Peoples (n=42,651) age 15 years and older in 16 urban, regional, and remote locations	1. Medication subsidy	1. Clinical outcomes	1. Patient 2. Community
Trivedi et al., 2020 Australia	Quantitative quasi-experimental study, pre- and post-intervention, comparison group;	1. Medication subsidy	1. Economic outcomes	1. Patient 2. Community

Kelaher et al., 2006 Australia	Aboriginal and Torres Strait Islander Peoples; (n=1948) state-wide Mixed-method federal government program evaluation; Aboriginal and Torres Strait Islander Peoples; (n= 36%) 153 remote health services Australia-wide	1. Medication subsidy	1. Economic outcomes 2. Humanistic outcomes	1. Patient 2. Practice 3. Community
The Senate, 2011 Australia	Quantitative Federal Government report; Aboriginal and Torres Strait Islander; (n=170,000) 173 remote First Peoples primary healthcare services	1. Medication subsidy	1. Economic outcomes 2. Humanistic outcomes	1. Patient 2. Practice
dos Santos, 2015 Brazil	Quantitative, retrospective descriptive study; Native Brazilian Peoples; (n=unknown) Nation-wide, Indigenous health care system data	1. Rationalized access to essential medications (Quality Use of Medicines, QUM)	1. Economic outcomes	1. Patient 2. Practice 3. Community
Patel et al., 2015 Australia	Quantitative randomized, open label trial; Aboriginal and Torres Strait Islander Peoples; (n=315/623, 50%), primary healthcare, various sites	1. Innovative Drug Formulation	1. Clinical outcomes	1. Patient 2. Practice
Liu et al., 2015 Australia	Qualitative, semi-structured interviews; Aboriginal and Torres Strait Islander Peoples; (n=24/94, 26%), primary healthcare centres, various locations	1. Innovative Drug Formulation	1. Humanistic outcomes	1. Patient
Pilcher et al., 2014 New Zealand	Quantitative randomized controlled trial (RCT);	1. Innovative Drug Formulation	1. Clinical outcomes	1. Patient 2. Practice

Selak et al., 2016 New Zealand	Māori Peoples; (n=44/303, 15%), various sites Quantitative randomized, open label trial; Māori Peoples; (n=256/513, 50%), 54 primary healthcare centres	1. Innovative Drug Formulation	1. Clinical outcomes	1. Patient 2. Practice
Managing Medicines				
McRae et al., 2008 Australia	Mixed methods program evaluation, questionnaire, 3-phase survey, semi structured interviews; Aboriginal Health Workers; (n=47), 10 localities	1. Health literacy	1. Humanistic outcomes	1. Patient 2. Practice
Gaspard et al., 2021 Canada	Quantitative program evaluation; Canadian First Nations Peoples; (n=4000 Elders)	1. Health literacy	1. Humanistic outcomes	1. Patient 2. Practice 3. Community
Walke et al., 2022 Australia	Mixed methods approach, questionnaire and focus groups; Aboriginal Peoples; (n=30) community-dwelling	1. Dose administration aids	1. Humanistic outcomes	1. Patient 2. Practice 3. Community
Navin et al., 2021 US	Quantitative retrospective analysis; American Indian and Alaska Native Peoples; (n=25) one IHS facility	1. Dose administration aids	1. Clinical outcomes	1. Patient 2. Practice