

**Methodology for a model extending an
integrated pharmacist program into all
Aboriginal Community Controlled Health
Services in Australia**

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Integrating Pharmacists within Aboriginal Community Controlled Health Services (ACCHSs) to improve Chronic Disease Management (IPAC) Project.

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Introduction

The IPAC Project has delivered significant benefits to the 18 participating Aboriginal Community Controlled Health Services (ACCHSs). It is proposed that this model be extended to all ACCHSs across Australia. The IPAC Project had a clear definition of ACCHS pre-requisites (inclusion criteria) based primarily on the *research* requirements through the Pharmacy Trial Program (PTP). The ACCHS inclusion criteria were not primarily related to the implementation of a national program.¹ A fundamental premise of the project was that the IPAC intervention would be generalisable to all ACCHSs. Additionally, the PTP Principle “Applicability and Context” requires projects to consider national implementation. The difference between mainstream and government-run AHSs compared to ACCHSs is well documented,² and the IPAC Project did not investigate the intervention in an AHS or mainstream environment. For these reasons, the model outlined below has been costed for all 140 ACCHSs across Australia. The program cost per annum presented here is comparable with other federally funded Aboriginal and Torres Strait Islander medicines initiatives and may help to close the gap in Aboriginal and Torres Strait Islander underutilization of nation-wide Australian pharmaceutical measures, such as the PBS and other Community Pharmacy Agreement related programs. Further rationale and assumptions used for this modelling are described below.

Pharmacists’ Salary

Due to the study design and nature of the PTP, costs were allocated only for the salary of the pharmacist plus on costs, for the IPAC Project. Using the IPAC Project methodology for allocation of pharmacist FTE and salary, together with AIHW statistics related to attendance of clients at Aboriginal Primary Health Services,³ a funding model for pharmacist salary has been proposed. The approach, as in IPAC, was to allocate a baseline 0.2FTE to each ACCHS then a further allocation of pharmacist FTE according to ACCHSs’ client numbers. Only a block funding model was costed for this report but analysis of IPAC data could be used to negotiate alternate methods.

The Workforce Incentive Payment (WIP) Practice Stream is a federal program that provides an annual payment of up to \$125,000 plus a remote loading to general practices and ACCHSs to employ nurses, AHPs, AHWs allied health professionals and, since February 2020, non-dispensing pharmacists.⁴ This maximum annual incentive payment is available to clinics with a Standard Whole Patient Equivalent (SWPE) number over 5000, and may be used to support a combination of eligible allied health professionals for a minimum average of 63 hours and 20 minutes per week. As such, the annual incentive amount available for any individual service provider working 1.0 FTE is capped at \$75,000, supplemented by MBS income for provision of additional billable services.

A survey of IPAC ACCHSs suggests that the majority of ACCHSs already use the maximum funds available for nurses, AHPs or AHWs. Therefore, these ACCHSs cannot access WIP funds for pharmacists without displacing other clinical staff and thus is not a viable option for funding an integrated pharmacist. Furthermore, non-dispensing pharmacists remain unable to claim MBS item fees for chronic disease management (CDM) services provided in a primary care setting, and therefore cannot supplement the maximum incentive payment available under the WIP.

While the WIP model caps the payment at \$125,000 per practice/ACCHS, this has not been done in the proposed integrated pharmacist model where large ACCHSs would be eligible for more than the maximum allocation. The IPAC model allocated more than 1 FTE pharmacist to 2 large urban practices with high patient numbers, and the results reflect a proportionate increase in numbers of services delivered.

While a mixed model encompassing baseline funding plus a fee-for-service methodology may be considered for future program rollout, block funding is likely to be more appropriate to enable integrated pharmacists to most effectively meet the unique needs of Aboriginal and Torres Strait Islander peoples. A block funding approach aligns with other Commonwealth funding approaches for ACCHSs (such as the Indigenous Australians' Health Programme); accommodates patient non-attendance at scheduled clinic appointments that occurred in some ACCHSs during the IPAC Project; and allows for the significant variation in preference for pharmacist services (including clinical governance, education and training, and patient-directed care) observed across ACCHSs in the IPAC Project.

Size of the patient population being serviced by the ACCHS is also a factor. Wakerman et al⁵ found that per capita health care costs increase with decreasing population, independent of remoteness. For this reason, the IPAC model and this proposed model provides a baseline 0.2FTE for all ACCHSs, regardless of their size, before allowing for the estimated population. This means that the per capita cost for smaller ACCHSs is higher than for larger ACCHOs. It also ensures that there is a minimum commitment of time for pharmacists in very small services (who may otherwise be allocated less than 0.2FTE) to allow regular contact, maximise integration into the ACCHS and to build rapport with staff.

Infrastructure support such as office facilities, computer access, transport, travel and accommodation for remote sites as well as salaries for people assisting the pharmacist were provided in-kind by the IPAC hosting ACCHS and could not be consistently costed. Thus, it is not included in this model but, for program sustainability, may need to be considered in future policy discussions.

Remoteness is another factor to be considered with studies demonstrating that health costs increase with remoteness. Rural loadings per WIP – Practice Stream have been used in this model (Table 1).

Table 1: Workforce Incentive Payment Practice Stream rural loadings used in this model.

Modified Monash Method Category	% loading
MMM1	0%
MMM2	0%
MMM3	20%
MMM4	30%
MMM5	30%
MMM6	50%
MMM7	50%

Table 2 outlines the proposed model for pharmacist salary using the IPAC methodology and WIP rural loadings.

Table 2. Proposed model for pharmacist salary using IPAC methodology and ACCHS remoteness.

	Total clients attending Aboriginal Primary Health Services *	Regular clients accessing ACCHSs, assuming constant proportion 85%	Total number of Aboriginal Primary Health Services	Approx number of ACCHSs in each region ¹	Baseline 0.2 FTE per ACCHS	Proportional pharmacist FTE ²	Baseline FTE plus proportional pharmacist FTE	Proposed % salary loading ³	Pharmacist Salary ⁴
Major Cities	97,473	82,657	23	16	3.2	10.0	13.2	0	\$1,645,586.26
Inner Regional	95,733	81,182	40	29	5.6	9.8	15.4	0	\$1,923,351.18
Outer Regional	117,294	99,465	45	32	6.4	12.0	18.4	20	\$2,758,649.40
Remote	82,259	69,756	26	18	3.6	8.4	12.0	30	\$1,951,520.82
Very Remote	90,314	76,586	64	45	9.2	9.2	18.4	50	\$3,456,154.43
Total	483,073	409,646	198	140	28	49.4	77.4		\$11,735,262.09

Assumptions:

1. The AIHW report combines ACCHS and state/territory funded primary Health Services. Therefore the number of ACCHSs in each region was not directly available, however, these data illustrate approximate values effectively. Figures in the table were based on the ratio of total ACCHSs to total Aboriginal Primary Health Services from AIHW report for each category. However, this may skew costs as health services in remote areas may be more often operated under state/territory governance.³
2. The proportional pharmacist FTE was based on 1FTE pharmacist per 8295 client population as per IPAC Project methodology. This is irrespective of age or chronic disease. It is unclear how this relates to the WIP formula of FTE per 5000 SWPE.
3. The salary loading for remoteness is based on WIP guidelines which uses the MMM category of remoteness (7 layers). The AIHW report used for estimated populations uses the ASGC-RA system (5 layers). Associations between classes are not straight forward. Therefore, assignment to class for this calculation may not be precise and is conservative, as some remote locations may be classified at a lower RA level.
4. The total national cost quoted above is a proposed maximum figure which assumes that all ACCHSs would wish to participate in the IPAC program and can access a suitable pharmacist/s.

Training and support for integrated pharmacists

Pharmacists integrated within ACCHSs work with complex patients, often with multiple chronic diseases, necessitating an understanding of social determinants of health and the public health challenges related to Aboriginal and Torres Strait Islander peoples. Training therefore needs to prepare pharmacists to work within ACCHS settings to deliver a diverse range of professional services within their scope of practice in a culturally-responsive manner.

While the comprehensive induction training program developed for use in the IPAC Project included some elements specific to the project, a large proportion of its content could be considered for incorporation into a future training program for pharmacists upon broader rollout of integrated pharmacist services to ACCHSs across Australia. Such a training program could be modelled on PSA's existing *General Practice Pharmacist Foundation Training* course,⁶ a multi-module online course intended to prepare pharmacists to work in a general practice setting; this concept could then be tailored to the ACCHS context.

Beyond training, the provision of ongoing support, along with the creation of a community of practice for pharmacists working with Aboriginal and Torres Strait Islander peoples, would enable sharing of sector knowledge and expertise with the aim of increased uptake, up-skilling and retention of pharmacists working in the ACCHS sector. Support for integrated pharmacists may be provided by various means as demonstrated in the IPAC Project, and should be multi-modal to take into account accessibility, ease of utilisation and responsiveness.

Recommendations for such a model are included in PSA's *IPAC Project Support for Pharmacists Report*⁷ which references the following methods: phone and email support, online resources repository, facilitated teleconferences, discussion forum, social media and mentor support. An estimate of the cost of training and support for integrated pharmacists is included in Table 3.

Table 3. Proposed cost per annum of training and support for integrated pharmacists.

	Year 1	Year 2	Year 3	Year 4	Year 5
Creation of online training course	\$530,000				
Facilitation of mentor, clinical and other support to pharmacists working (or intending to work) in the ACCHS sector	\$529,000	\$529,000	\$529,000	\$396,750	\$396,750
Creation and maintenance of a community of practice for integrated practice pharmacists in the ACCHS sector	\$62,000	\$62,000	\$62,000	\$62,000	\$62,000
Ongoing support for the PSA/NACCHO ACCHO Pharmacist Leadership Group	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000
Total Program Expenses	\$1,151,000	\$621,000	\$621,000	\$488,750	\$488,750

Program Support for ACCHSs

The novelty of employing an integrated pharmacist to many health services has had a considerable implementation burden on ACCHSs and pharmacists alike. This is evidenced by the gradual uptake of intervention activities within the IPAC Project and through findings in the Project's qualitative evaluation. Substantive and considered program support for pharmacists and ACCHSs' staff is needed as service providers develop workplans, understand roles and adapt to new healthcare activities and workflow. There is a risk that integrating pharmacists into ACCHSs without adequate support may limit uptake and effectiveness of an integrated pharmacist program.

Tested support methods for medicines-related programs within ACCHSs already exist. The Quality Use of Medicines Maximised for Aboriginal and Torres Strait Islander peoples (QUMAX) program has run effectively within a clearly defined set of program rules and support measures for over 10 years. Several reviews in this period have validated the program's effectiveness^{8 9 10}(8-10). The QUMAX program ACCHS support involves 1 FTE dedicated support staff member (including associated management and overheads costs) and provisions for 1 annual workshop and for occasional ACCHS site visits by support staff. We therefore propose an implementation of a support package that combines metrics and methods from the QUMAX program with those used in the IPAC project establishment and implementation phases, to ensure an ACCHS integrated pharmacist program is implemented as effectively and efficiently as possible.

The following proposed budget represents an estimate of the costs of a similar program to the QUMAX and the IPAC support programs, with support from NACCHO for health services. This provides for an average of 2 FTE project officers per year over the course of 5 years to support implementation of the program.

The role of the support program will include:

- Work with ACCHS, pharmacists and the funding body to implement and revise/improve the Program
- Oversee and support annual workplans developed by ACCHSs, consistent with the model used for QUMAX and s100 support allowance. The workplan would be consistent with the ideals of the program and the funding algorithm developed by the fund holder
- Provide support to ACCHSs and integrated pharmacists in optimisation of outcomes for clients via the Program
- Inform and develop Program materials and/or resources for pharmacists, consumers and participating ACCHSs as required
- Jointly develop the annual national meeting of ACCHSs and pharmacists
- Enable and advise on data collection and monitoring of program delivery

The package below is to be delivered over a 5-year period. The timing of funding for this program is skewed towards the earlier stages due to the novelty of this program and thus the need for active support and promotion early in the programs' implementation. Uptake for some ACCHSs may be delayed without investment in early implementation and communication as ACCHS identify the program and are enrolled, and then pharmacists are recruited over time. These methods could be incorporated into the salary, on-costs, IT and project publications and resources budget items shown in Table 4.

Table 4. Proposed costs per annum of program support to ACCHSs.

	Average per year	Year 1	Year 2	Year 3	Year 4	Year 5
Project officers FTE	(2.0 FTE)	(2.5 FTE)	(2.5 FTE)	(2.0 FTE)	(1.5 FTE)	(1.5 FTE)
Salary – project officers	250,000	312,500	312,500	250,000	187,500	187,500
Salary on costs (25% of salary) + IT, management fee	80,000	100,000	100,000	80,000	60,000	60,000
Travel (project officers + meeting travel)	50,000	75,000	75,000	50,000	25,000	25,000
Annual Meeting Expenses (i.e. annual workshop)	60,000	60,000	60,000	60,000	60,000	60,000
Project Publications & Resources	50,000	100,000	75,000	50,000	25,000	0
Total Program Expenses	\$490,000	\$647,500	\$622,500	\$490,000	\$357,500	\$332,500

Program Monitoring and Evaluation

In order to provide a comprehensive costing of proposed program implementation, a component of program evaluation has been incorporated into the report. It is understood that the framework for evaluation would be determined by the funding body and its existing mechanism.

While evaluation of the proposed service will not need to be as extensive as that undertaken in the IPAC Project, ongoing monitoring and assessment is essential to ensure that the program is meeting its stated objectives, identify any issues affecting implementation, and address these in a timely manner.

Components of monitoring and evaluation of the proposed service may include:

- Work with partners to identify key activity measures and design an evaluation framework;
- Develop data collection tools guided by the evaluation framework;
- Coordinate surveys and qualitative activities as required;

- Coordinate data management including collection, transfer and extraction, and storage;
- Manage all data processing including preparation of datasets for analysis;
- Provide biostatistical support including all statistical analysis and preparation of output reports;
- Provide data custodian services including data integrity monitoring, security, quality assurance;
- Prepare and deliver data reports for team members and project partners as required.

The provision of regular output reports based on pharmacist activity data would provide stakeholders with evidence that activities are being completed, help to target support within services where needed, provide data to support health promotion, and assist the community pharmacy sector to support collaborative activity.

It is proposed that pharmacist activity data be collected through an electronic pharmacist logbook, similar to the tool used in the IPAC project. The logbook used in the trial could be adapted and tailored to report on key pharmacist activity measures (such as medication reviews, follow-up assessments, contact with community pharmacy, etc), as agreed to by the business rules for the program. The services of an IT consultant would be required to tailor the logbook and facilitate access to the tool for all pharmacists and other relevant stakeholders.

Other evaluation strategies including surveys and qualitative activities undertaken at key points in time, as guided by the framework developed, could be used to facilitate formal feedback from stakeholders and support ongoing quality improvement of the program. Surveys could be implemented online and interviews with ACCHS staff, pharmacists and stakeholders conducted by Zoom/teleconference at one or two points in time over the proposed 5-year duration.

As James Cook University (JCU) College of Medicine and Dentistry led the evaluation of the IPAC Project, it would be well placed to collaborate with the Australian Department of Health, NACCHO, the PSA and other stakeholders to design an evaluation framework and implement resulting activities for broader program rollout.

Table 5 outlines the proposed budget required to fulfil this role.

Table 5. Proposed costs per annum of monitoring and evaluation of the proposed Service.

Expenses	Year 1	Years 2 - 5 (per annum)
1.5 FTE Project Officer/Biostatistician (including on-costs)	\$210,000	\$210,000
Overheads (35% of salaries)	\$73,500	\$73,500
1 month (160 hours) logbook adaptation, development and setup (\$110/hour ex GST x 160 hours)	\$17,600	
Logbook hosting (\$60/month ex GST)	\$720	\$720
1 day per month (8 hours) logbook ongoing maintenance (\$110/hour ex GST x 8 hrs/month)	\$10,560	\$10,560
Total (ex GST)	\$312,380	\$294,780

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