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**Minutes from MSAC 69th Meeting, 6-7 April 2017**

**Sixth Community Pharmacy Agreement (6CPA) Pharmacy Programs – Medication Management Review (MMR) Programs**

**MSAC’s advice to the Minister**

MSAC advised that there was insufficient evidence to determine the clinical and cost-effectiveness of the continuing Sixth Community Pharmacy Agreement (6CPA) Medication Management Review (MMR) programs, and thus a weak basis to recommend that funding should be supported or ceased.

MSAC considered that the design of these pharmacy service programs could be improved by including formal collaboration with General Practitioners (GPs), by being targeted to appropriate patient populations, and by a reduction in the unit cost of providing each pharmacy service coupled with an incentive to increase this cost if adequate evidence can be furnished to justify it. Further enhancement of these programs might better justify the provision of continued funding of these services.

MSAC reiterated its advice from the previous meeting in the context of reviewing the Pharmacy Practice Incentive (PPI) program, regarding the need to collect robust comparative evidence focusing on improved health outcomes, and, at the very least, data collection by the pharmacists providing these services about what services were rendered to what type of patient and at what cost.

MSAC advised that the reviews of these existing PPI and MMR programs were worthwhile because they highlighted that these services could be assessed in the broader context of the healthcare system as a whole. This reflects the reality that many different types of healthcare practitioners provide overlapping services with the overarching aim of seeking better health outcomes for patients and avoiding unnecessary provision of healthcare resources. In this way, these reviews show that the net health outcomes for consumers can be compared to the net costs of providing these pharmacy services using the same approach used to justify government expenditure on other types of services provided by other healthcare practitioners and on other types of health technologies provided by other suppliers. MSAC advised that these health technology assessments are a valid tool to compare the clinical and cost-effectiveness assessments, and, over time, provide a way forward for optimising and justifying expenditure on pharmacy services compared to other expenditure options across the healthcare spectrum.

**Summary of consideration and rationale for MSAC’s advice**

The 6CPA between the Australian Government and the Pharmacy Guild of Australia (the Guild) commenced on 1 July 2015 and includes an allocation of $1.26 billion in funding for evidence based, patient focused programs and services delivered by pharmacy and pharmacists to improve health outcomes for consumers. Under the 6CPA, all programs and services delivered need to be reviewed by a health technology assessment body, such as MSAC, for clinical and cost-effectiveness and the health benefits they offer to the community.

At its March 2016 meeting, MSAC considered an initial high level synthesis of the available data and evidence to support these programs and requested a more detailed review to be conducted, informed by a comprehensive literature review. At its November 2016 meeting, MSAC considered the Pharmacy Practice Incentive (PPI) programs.

At this meeting, MSAC considered the Medication Management Review (MMR) programs. These include the:

* Home Medicines Review (HMR) program – designed to enhance the quality use of medicines and reduce adverse medicine events via a medication review conducted in the patient’s home by an accredited pharmacist.
* Residential Medication Management Review (RMMR) program – designed to enhance the quality use of medicines for consumers in residential aged care facilities (RACFs) via a medication review conducted in the facility by an accredited pharmacist.
* MedsCheck/Diabetes MedsCheck program – designed to provide for in-pharmacy medication reviews to enhance quality use of medicines and reduce adverse events, hospital admissions or medical presentations. MedsCheck is targeted at people taking five or more prescription medicines or those who have had a recent significant medical event. Diabetes MedsCheck is targeted at people with recently diagnosed type 2 diabetes or where their type 2 diabetes is less than ideally controlled and where patients are unable to gain timely access to other diabetes education or health services.

MSAC noted that the review of the MMR programs identified several primary studies that examined the HMR, RMMR and MedsCheck/Diabetes MedsCheck programs.

MSAC considered the evidence provided to support the impact of pharmacist-led HMRs on patient outcomes, based on the findings of a review of twelve primary studies (seven Randomised Controlled Trials, three retrospective cohort and two retrospective pre-post design studies), of which eight were conducted in Australia. MSAC advised that there is no clear evidence that HMR reduces hospitalisations and mortality or improves quality of life. MSAC also advised that there is low level of evidence to suggest that HMR increased time to next hospitalisation, although the evidence on the effect of HMR on reduction in health care resource use is conflicting. There is also insufficient evidence to assess patient satisfaction with pharmacist-led HMR.

MSAC considered the evidence provided to support the impact of pharmacist-led RMMRs on patient outcomes, based on the findings of a review of six primary studies (three RCTs, three retrospective cohort studies), of which two were conducted in Australia. MSAC advised that there is low level of evidence to suggest that RMMRs: have a positive impact on drug burden; may lead to more appropriate prescribing; and support identification of medication-related problems. However, MSAC advised that the available evidence does not show an impact on reducing hospitalisations, reducing mortality or improving cognitive functioning. MSAC also advised that there is conflicting evidence on the effect of RMMRs on falls reduction and medication costs, and insufficient evidence in regards to the effect of pharmacist-led RMMR on quality of life.

MSAC considered the evidence provided to support the impact of MedsCheck services on patient outcomes, which consisted of a review of thirteen primary studies (ten RCTs, one observational, one retrospective sub-analysis of a RCT, one cost-utility analysis), of which none were conducted in Australia. These studies examined the impact of pharmacy-based medication review services rather than the MedsCheck/Diabetes MedsCheck services specifically. MSAC advised that there is no clear evidence to indicate that such services have any impact on reducing mortality or on improving appropriateness of medication prescribing, although MSAC observed a positive effect of the medication review on patient satisfaction. MSAC advised that, while one RCT showed that the community pharmacy based medication review was associated with improvements in clinical outcomes, the trial was conducted overseas and may not be applicable to the Australian context. MSAC advised that there is conflicting evidence on the effect of the pharmacy based medication review on reducing hospitalisations, improving patient adherence and quality of life, and reducing drug burden and falls. Evidence demonstrating any impact of such services on reducing adverse events and health care resource use is inconclusive.

MSAC noted that previous program evaluations of the HMR (n = 5), RMMR (n = 3) and MedsCheck (n = 2) initiatives funded under former CPAs had been identified. These evaluations, however, did not satisfy the inclusion criteria for the evidence base as they are non-comparative and provided low level of evidence in regards to either the costs or the health outcomes of these programs. MSAC observed that these utilisation analyses were based on relatively limited claims payment data held by the Department of Human Services and the Guild.

Overall, MSAC considered that the available evidence relevant to the above MMR programs was little better in terms of robustness than the evidence considered for the PPI programs in November 2016. MSAC was concerned about the dated nature of presented evidence as well as the sparseness of Australian studies available (particularly for RMMR and MedsCheck services), and hence the applicability of the study findings to the contemporary Australian context. MSAC advised that there was insufficient evidence to determine the clinical and cost-effectiveness of the continuing 6CPA MMR programs, and thus a weak basis upon which to recommend that funding should be supported or ceased.

MSAC advised that further research would be required to make a more robust assessment of the comparative clinical and cost-effectiveness of the MMR programs. Given the widespread dissemination of all these pharmacy services, one option to collect informative comparative evidence would be a cluster randomised trial in which one arm continues the particular pharmacy service, and the other arm withdraws the service.

MSAC considered that the design and value of these pharmacy service programs could be improved by including formal collaboration with GPs and other healthcare networks, by being targeted to more appropriate patient populations, and by a reduction in the unit cost of providing each type of pharmacy service coupled with an incentive to increase this unit cost if adequate new evidence can be furnished to justify an increase. Further enhancement of these programs might better justify the provision of continued funding of these services.

MSAC reiterated its previous advice regarding the need to collect robust comparative evidence focusing on improved health outcomes, and, at the very least, data collection by the pharmacists providing these services about what services were rendered to what type of patient and at what cost.

MSAC advised that the reviews of these existing PPI and MMR programs were worthwhile because they highlighted that these services could be assessed in the broader context of the healthcare system as a whole. This reflects the reality that many different types of healthcare practitioners provide overlapping services with the overarching aim of seeking better health outcomes for patients and avoiding unnecessary provision of healthcare resources. In this way, these reviews show that the net health outcomes for consumers can be compared to the net costs of providing these pharmacy services using the same approach used to justify government expenditure on other types of services provided by other healthcare practitioners and on other types of health technologies provided by other suppliers. MSAC advised that these health technology assessments are a valid tool to compare the clinical and cost-effectiveness assessments, and, over time, provide a way forward for optimising and justifying expenditure on pharmacy services compared to other expenditure options across the healthcare spectrum.