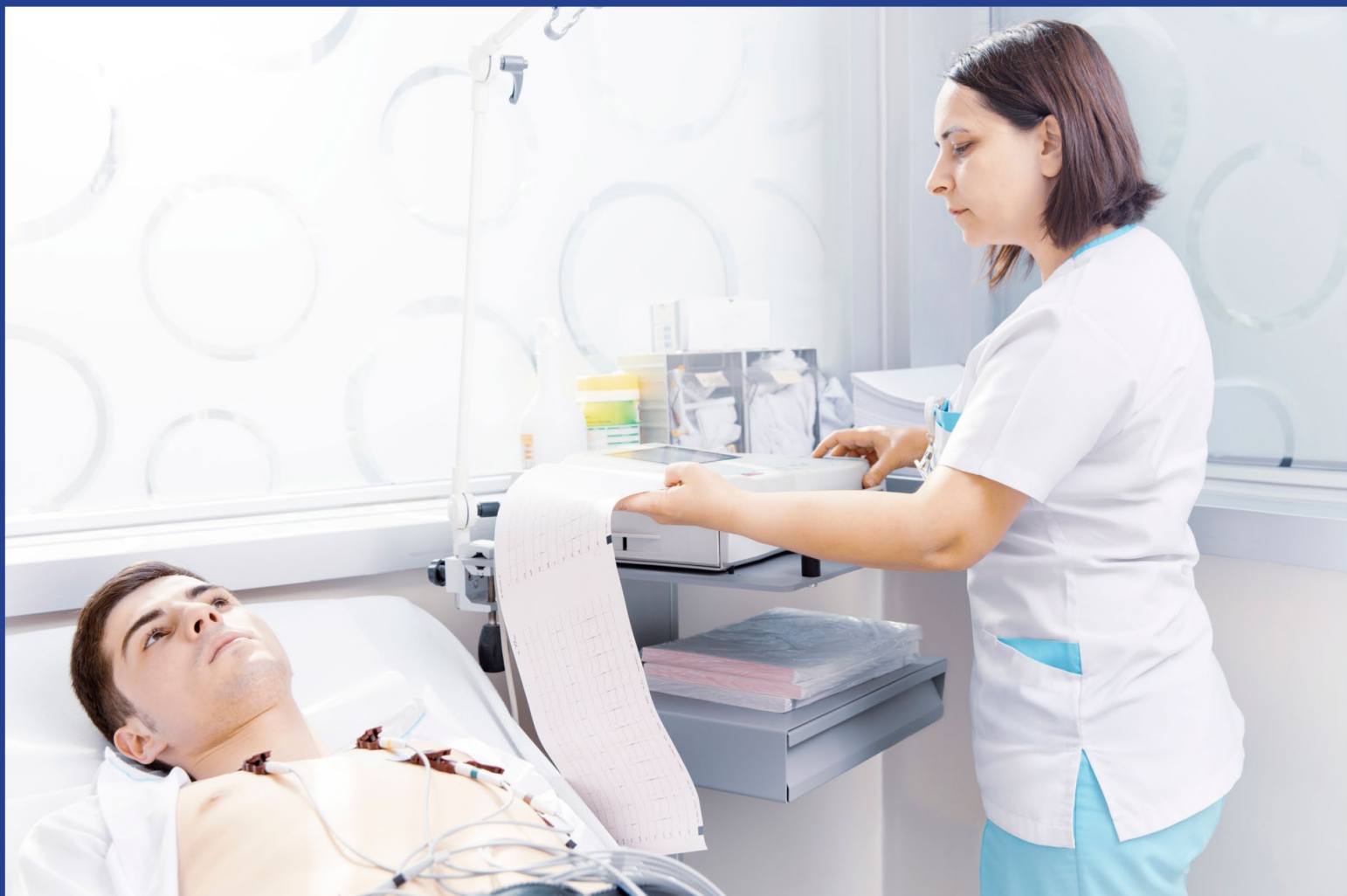


Electrocardiogram Review Committee Report

January 2022



Important Notes

This report does not constitute the final position on these items, which is subject to:

- consideration by the Minister for Health and Aged Care, and
- the Australian Government.

The views and recommendations in this report originated from the ECG Review Committee.

Contents

Introduction	5
Establishment of an Independent Review Committee	5
Key Recommendations	5
Membership of ECG Review Committee	6
Committee Membership	6
Scope of Review Committee	8
About the Medicare Benefits Schedule Review	9
Recommendations addressing the Terms of Reference	14
Recommendation 1 – Amend ECG item 11714 to include all medical practitioners and increase the daily claiming limitation to three services.	14
Recommendation 2 – Introduce a new item or amend ECG trace and formal report item 11704 to allow specialists and consultant physicians to claim an ECG Trace and Formal Report item with a consultation.	17
Recommendation 3 – Tiered Structure for guiding fee setting of the MBS ECG items	17
Implications for Tiers of ECG items:	18
Recommendations outside the scope of the Review	20
Submissions	21
Appendix A – Extract from the Medicare Benefits Schedule Review Taskforce Endorsed Final Report from the Cardiac Services Clinical Committee 2 August 2018	23
Electrocardiography (ECG) recommendations – that went out to consultation (pages 199-208)	23
General considerations	23
ECG trace and report – that went out to consultation	26
ECG report only – that went out to consultation	29
ECG trace only – that went out to consultation	32
In-hospital ECG – that went out to consultation	33
Repeat ECG services – that went out to consultation	35
Appendix B Extract from the Medicare Benefits Schedule Review Taskforce Endorsed Final Report from the Cardiac Services Clinical Committee 2 August 2018	37
Final Electrocardiography (ECG) recommendations (pages 47-48)	37
Appendix C	40
Submission from Australian Private Hospital Association (APHA) representative Dr Tony Hayek on 24 March 2021	40
Submission from Royal Australian College of General Practitioners (RACGP) on 1 April 2021	41
Submission from Dr Peter A Love on 6 April 2021	43
Submission from Rural Doctors Association of Australia (RDAA) on 7 April 2021	44
Submission from National Aboriginal Community Controlled Health Organisation (NACCHO) on 7 April 2021	45
Submission from Doctors Reform Society representative Dr Brett Montgomery on 14 May 2021	47
Abstract	48
Introduction	49
Methods	50

Results	50
Discussion	59
References.....	62
Appendix: Raw Data.....	64

Introduction

Establishment of an Independent Review Committee

The electrocardiogram (ECG) review commenced in February 2021 to address concerns raised by several peak bodies that 1 August 2020 changes to MBS ECG items undervalued the role of GPs, did not cover the cost of the service provision and would reduce patient access to ECG services. On 29 July 2020, the Minister for Health and Aged Care, the Hon Greg Hunt MP, announced the Department of Health (the Department) would undertake a review of the changes to MBS items for ECG, to commence six months post implementation.

The Department established an independent ECG Review Committee through an Expression of Interest process and 14 members were appointed to the Committee representing a broad range of sector groups as well as individual clinicians and a consumer representative.

Key Recommendations

This Report outlines the recommendations of this Committee, following consideration of high-level claiming data, qualitative feedback and submissions.

The Committee noted an overall reduction in out of hospital ECG MBS claims of 9% (233,295 claims) in the 12 months immediately following the 1 August 2020 ECG changes, when compared to the previous 12 months and a 15.9% decline (443,965 claims) when compared to the pre-COVID-19 1 August 2018 to 1 July 2019 period. The Committee also noted an increase in the average out-of-pocket payment for ECG services of \$3.91 when compared with the 12 months prior to implementation and increase of \$4.61 when compared with the same period 24 months prior. On the basis of this decline in services and increase in out of pocket costs, the Committee concluded that the changes to MBS ECG items may have contributed to a reduction in ECG services with costs representing a barrier to patient care. The Committee was concerned that this may translate in the long term to poorer health outcomes.

The Committee acknowledged additional variables, including the impact of the COVID-19 pandemic and a reduction in face to face consultations with the advent of telehealth services (from March 2020) as confounding factors in the decline in ECG services. The Committee observed that without the separation of these variables, it was not possible to conclusively attribute the cause of this decline to solely one variable.

The Committee acknowledged that health outcomes data was not available in the timeframe since implementation of the ECG changes, and that linking reductions in the number of MBS claimed ECG services to specific cardiac health outcomes would be difficult to conclude and attribute causation to, even if more comprehensive data were available in the future. The

Committee agreed to proceed with patient access being considered through the use of MBS claiming data, including out-of-pocket costs, and qualitative evidence.

The Committee's final recommendations are:

- Access for all medical practitioners (thereby allowing access for GPs) to the trace and clinical note item (11714) with an increase to the daily number of services claimable.
- Introducing a new item or amending existing ECG trace and report item 11704 for specialist/consultant physicians to access a trace and report item which can be claimed with a consultation item.
- A fee structure based on the application of a clinical value tier structure.

Membership of ECG Review Committee

Chair: Professor Sally McCarthy

Professional Biography:

- Professor Sally McCarthy MBBS, FACEM, MBA, FIFEM current positions:
- Senior Emergency Physician at the Prince of Wales Hospital in Sydney;
- Director of the Emergency Department of the South East Regional Hospital in Bega;
- Chair of the Australasian College for Emergency Medicine (ACEM) National Program, member of ACEM's Council of Advocacy Practice and Partnerships;
- Member National COVID-19 Clinical Evidence Taskforce infection prevention and control (IPC) Panel
- President of the International Federation for Emergency Medicine.

Previous roles include:

- Inaugural Medical Director of the Agency for Clinical Innovation (ACI) Emergency Care Institute NSW;
- Clinical Lead for the NSW Whole of Hospital Program; and
- President of the Australasian College for Emergency Medicine.

Professor McCarthy is actively involved in several ACEM Committees, including the Rural Regional and Remote Committee. Professor McCarthy was Chair of the Intensive Care and Emergency Medicine Committee of the MBS Review Taskforce.

Committee Membership

The Department sent expressions of interest (EOI) invites to all major peaks, key stakeholders, the Consumer Health Forum and advertised the EOI on the Department of

Health website. The Department received 20 applications for membership. In consultation with the Chair, 14 members were appointed to the Committee, which included GPs, specialists and a consumer representative.

Name	Position/Organisation
Professor Sally McCarthy (Chair)	Emergency Physician
Dr John Collis	Individual GP
Dr Christopher McCue	Individual GP
Dr Michael Davis	Cardiologist
Dr Brett Montgomery	Doctors Reform Society
Dr Steven Unger	Australasian Associations of Nuclear Medicine Specialists (AANMS)
Dr Elizabeth Dodd	Australian College of Rural and Remote Medicine (ACRRM)
Dr Simon Torvaldsen	Australian Medical Association (AMA)
Professor Michael Feneley	Cardiac Society of Australia and New Zealand (CSANZ)
Dr Atef Asham	Royal Australian College of General Practitioners (RACGP)
Dr Ewen McPhee	Rural Doctors Association of Australia (RDAA)
Dr Aubrey Almeida	Australian and New Zealand Society of Cardiac Thoracic Surgeons (ANZSCTS)
Tanya Hall	Hearts4Heart – Consumer Representative
Dr Tony Hayek	Australian Private Hospital Association (APHA)
Dr Chris Dalton	Private Health Australia (PHA)

Scope of Review Committee

Terms of Reference:

1. To consider the impact of the 1 August 2020 ECG changes to general ECG items 11704, 11705, 11707, and 11714, including patient health outcomes and patient access to ECG services. This does not include in-hospital claiming of these services.
2. To consider and provide advice about difference in fees for GPs and specialists for the same ECG service, that is item 11707 with reference to item 11714.
3. To consider the patient rebate for general ECG items, noting that MBS rebates may not necessarily cover the entire cost of a service.

Members reviewed the terms of reference, with some noting that the scope was too narrow. The Committee agreed to the Terms of Reference with agreement to make a recommendation for a future review of ambulatory ECG items and in-hospital claiming of ECG items.

Committee Meetings

Seven Committee meetings were held via videoconference on the following dates:

- 23 March 2021
- 27 April 2021
- 19 May 2021
- 8 June 2021
- 17 June 2021
- 20 July 2021
- 16 November 2021

About the Medicare Benefits Schedule Review

Background of the Review

Establishment of the Cardiac Services Clinical Committee

The Taskforce established the Cardiac Services Clinical Committee (CSCC) in April 2016, to make recommendation to the Taskforce relating to 189 cardiac MBS items. The Committee consisted of 18 members. The CSCC review drew on various types of MBS data, including utilisation of items, service provision, patients, co-claiming or episodes of services and additional provider and patient-level data. The review also drew on data presented in relevant literature and clinical guidelines. Due to the volume and complexity of the items in scope, the CSCC formed five working groups with broader membership to provide greater content expertise, including the 12-lead Electrocardiogram Working Group.

Review of ECG items

The ECG working group were tasked with the review of three MBS items: 11700, 11701 and 11702. The CSCC identified problems with the use of ECG items by GPs and specialists, due to a lack of clarity in the item descriptors, enabling largely inadvertent claiming of the trace and report item (11700) by both GPs and specialists. Additionally, the Taskforce highlighted considerable variability in ECG services between states, as well as urban and remote areas, and questioned the funding of in-hospital ECG services through the MBS. The changes recommended a restructure of ECG items to delineate the roles of GPs and specialists more clearly in providing ECG services.

The Taskforce reviewed these items with the goal of reducing low-value care and in some cases inadvertent misuse. The Taskforce noted that 98% of the 2.7 million ECG services claimed under the MBS were claimed as a trace and report item. There was concern that many providers were performing routine/baseline ECGs, screening ECGs or repeat ECGs of little to no clinical value. In addition, the existing items did not have requirements about retention of the trace in the patient's record or provision of a formal report. There was also concern about the 7% growth in service volumes, which was well above the 1-2% growth in population. The CSCC agreed that growth at this rate was not driven by shifting disease patterns and felt that the substantial and growing investment in a relatively straightforward activity could be better directed to other necessary services. The ECG Working Group and the CSCC were keen to emphasise that MBS funded ECGs were of most clinical value when the ECG trace and report were retained in the patient's record. They agreed that:

....storing an ECG trace and report, and making them readily available to other clinicians (with patient consent), provides greater value to the patient and the health system. The Committee has not specified the exact format in which the trace and report should be stored or made available, but it was agreed that uploading the trace and report to a patient's My Health Record would certainly meet the requirement for storage and accessibility. The Committee also emphasised the importance of retaining both the report and a copy of the trace (with sufficient resolution and clarity), so that the trace can be interpreted alongside the report. A formal report should be separate from any referrals or letters, and it should clearly document the relevant measures and findings from the study.

The suite of changes advised by the CSSC and later endorsed by the Taskforce were designed to improve the clinical value of ECGs. On this basis, a significant reduction in ECG services was anticipated.

Initial Recommendations

The initial recommendations from the CSSC were to amend the three items, to provide clarity about who could claim these items and associated claiming with a consultation item.

The ECG working group acknowledged the significant number of ECG services being provided by GPs and agreed that it would be detrimental to patient access to remove item 11702 from the MBS for this reason. The working group also considered it was an integral component of a specialist's consultation to incorporate an ECG and therefore recommended item 11702 should not be restricted by provider type.

Members agreed that ECG traces should only be taken where clinically indicated and where used to support clinical decision making. As such, 11702 should only be claimable where the provider has reviewed the trace. This would not require a formal report, however good clinical practice would include documenting the findings of the ECG report, in the patient's medical record.

Initial recommendations from the CSSC:

ECG item	Summary of descriptor
11700 - Trace and formal report item	Requested service (third party service) and not claimable with a consultation
11701 - Report only item	Accessible by specialist only and not claimable with a consultation
11702 - Trace only item	Accessible by specialist and GP and claimable with a consultation

Post-consultation and final recommendations

The recommendations of the CSCC were published in a report for public consultation from 22 August 2017 until 4 October 2017 (an extract from the report of the ECG recommendations is found at Appendix A). Feedback from the sector identified the need for the inclusion of an additional fourth ECG item which would only be accessible to specialists, recognising the need to have access to a trace and interpretation item alongside a consultation but reimbursed at a different level for specialists compared with the 11702 item.

Following post-consultation meetings, held between late 2017 and August 2018, the CSCC considered feedback and recommended to the Taskforce the inclusion of an additional fourth trace and interpretation ECG item accessible for both GPs and specialists, which could be claimed alongside a consultation. GP access was included in the recommendation for the fourth ECG item following GP representation to the Taskforce recommending GPs were able to provide the same service, at the same fee, as specialists. All four items were included in the Taskforce endorsed Final Report of 2 August 2018 ([Appendix B](#)).

Final recommendations from the CSCC (endorsed by the Taskforce):

ECG item	Summary of descriptor
11700 - Trace and formal report item	Requested service (third party service) and not claimable with a consultation
11701 - Report only item	Accessible by specialist only and not claimable with a consultation
11702 - Trace only item	Accessible by specialist and GP and claimable with a consultation
11703 - New item Trace and Interpret item	Accessible by specialist and GP and claimable with a consultation

Implementation of ECG changes

In September 2019, the Department formed an Implementation Liaison Group (ILG) on cardiac services to support the implementation of changes. The ILG's role was to provide advice on the implementation of MBS changes and mitigate any unintended consequences for patients and providers. Four meetings were held with the ILG between October 2019 and February 2020. At the conclusion of the meetings a revised ECG approach was agreed, resulting in the trace and clinical note item, with the higher rebate, only claimable by specialists. In recognition of stakeholder feedback that the recommended cardiac changes were complex and could result in significant disruption to the sector, the Government agreed to implementation of the changes in a phased approach.

The first phase of the Government's response to cardiac recommendations were implemented on 1 August 2020 and included the changes to ECG services. The Taskforce findings indicated a need to clarify appropriate use of items and incentivise best practice care. The Government's response to the recommendations supported making changes to ensure high-value care; where patients have access to the most appropriate tests for individual symptoms and conditions while ensuring patients receive procedures in line with current best practice to be implemented in a phased approach. These recommendations were informed by the expert clinical advice of the working group, clinical committee and Taskforce following extensive consultation over the preceding three years.

Summary of ECG changes and implications for providers effective 1 August 2020

Item 11704 (previously 11700) Requested service for Trace and Report	
Fee	\$32.25 (Previously \$32.25)
Summary	A requested service for a twelve-lead ECG to produce a trace and a formal report by a specialist or a consultant physician
Intent of Taskforce recommendation	The changes to this item aim to clarify the use of this item as a referred service because claiming practices highlighted the lack of clarity about the use of 11700. Providers were claiming the service themselves instead of requesting/referring for another provider to undertake.
Changes to practice	Cannot self-refer this item.
Claimable by	Specialist or consultant physician up to twice in a day
Rural/remote considerations	GP can request third party provider to complete the service. If there is no third-party provider to conduct this service, then a GP can perform a trace and request an 11705 (formal report) item from another service provider in another location (fax the trace).

Item 11705 (previously 11701) Service for Formal Report	
Fee	\$19.00 (previously \$16.05)
Summary	Preparation of a formal report on an ECG trace by a specialist, not claimable with a consultation
Intent of Taskforce recommendation	Changes to wording in the descriptor aim to clarify the requirements of a "formal report". This item was considered valuable for use as requested service in the inpatient setting, where patients in a private

Item 11705 (previously 11701) Service for Formal Report

	hospital with unforeseen heart issues and no on-site cardiologists
Changes to practice	No changes
Claimable by	Specialist or consultant physician up to twice in a day
Rural/remote considerations	This item allows for rural providers who are unsure of an ECG interpretation to refer the ECG trace to a specialist for a formal report.

Item 11707 (previously 11702) Service for ECG Trace to inform clinical decision

Fee	\$19.00 (previously \$16.05)
Summary	Twelve lead ECG to perform a trace, where the trace informs clinical decision making in a clinically appropriate timeframe
Intent of Taskforce recommendation	<p>Changes to this item restrict its use in the inpatient setting where routine (e.g. pre-operative) ECGs are performed, not warranting the remuneration of the MBS. The nursing staff time and ECG consumable costs are covered by the hospital.</p> <p>The item would be claimable with a consultation for all medical practitioners to allow time to interpret the trace and guide immediate treatment decisions.</p>
Changes to practice	Cannot be claimed in the inpatient setting
Claimable by	Medical practitioner (GP, specialist or consultant physician) up to twice in a day
Rural/remote considerations	GP can conduct the ECG trace and guide treatment decisions, no requirement for a formal report and a consultation can also be claimed.

Item 11714 (New item) Service for ECG Trace and clinical note

Fee	\$25.00
Summary	Twelve lead ECG to perform a trace and a clinical note
Intent of Taskforce recommendation	A new item introduced to recognise the need for specialists/consultant physicians to have access to a trace item alongside a consultation. The service does not require a formal report.

Changes to practice	A new item, which cannot be claimed in the inpatient setting, but can be claimed with a consultation
Claimable by	Specialist or consultant physician up to twice in a day
Rural/remote considerations	GP can refer for a specialist to perform this service, and the interpretation is made available to the GP.

Recommendations addressing the Terms of Reference

Recommendation 1 – Amend ECG item 11714 to include all medical practitioners and increase the daily claiming limitation to three services.

Rationale:

The Committee was initially presented with data, due to the short time since implementation of the ECG changes from 1 August 2020 to 31 March 2021, which showed a decrease in overall MBS claims for both in and out of hospital ECG services of 80,000 ECG claims per month when compared with the 1 August 2018 to 31 March 2019 period. Based on this data, the Committee agreed a significant impact to patient ECG services had occurred due to the MBS changes, acknowledging a significant reduction was expected following the blocking of in-hospital claiming for items 11704, 11707 and 11714, together with the new restrictions for specialists and GPs for 11704.

At the November meeting, with a full 12 months of post-implementation data available, the Committee was presented with a more comprehensive dataset which delineated where ECG services were provided, in and out of hospital and compared total service numbers, average out of pocket amounts and bulk billing rates by provider type and geographical location. The Committee observed an overall decline of 9% in ECG MBS claims (19,500 per month) in the out of hospital setting, when compared to the 12 months immediately prior to implementation and a 15.9% decline (37,000 per month) when compared to the same period 24 months prior and before the impact of COVID-19.

The Committee noted the decline in claims was more significant for GPs, where claims declined by 16.8% compared to the 12 months immediately prior to implementation and 16% compared to the same period 24 months prior. In contrast there was an increase in claims by cardiologists of 6% and pathologists of 17% compared with the 12 months immediately prior and a decline of 0.6% for cardiologists and 5% for pathologists compared to the same period 24 months prior to implementation.

There was also a significant decline in claims by 'other specialists' (36% decline compared to the 12 months immediately prior to implementation and 50% decline compared to the same

period 24 months prior). This significant decline was predominantly linked to intensive care specialists, immunology and allergy specialists and anaesthetists, suggesting claiming may have been linked to hospital related services.

With respect to average out of pocket costs and bulkbilling rates for out of hospital ECG services the Committee observed across all provider types, average out of pocket costs increased by \$3.91 and the bulk billing rate decreased by 1.5% compared to the 12 months immediately prior to implementation. When compared to the same period 24 months prior, average out of pocket cost increased by \$4.61 and the bulk billing rate decreased by 1.1%.

The Committee noted the increase in average out of pockets and decrease in bulkbilling rate was most significant in specialist providers with average out of pockets increasing by \$3.56 and the bulk billing rate decreasing by 3% for cardiologists and average out of pockets increased by \$8.30 for 'other specialists' compared to the 12 months immediately prior to implementation.

For GP providers average out of pockets increased by \$0.70 compared to the 12 months immediately prior to implementation and by \$0.98 compared to the same period 24 months prior. The bulk billing rate remained constant with the 12 months immediately prior to implementation and increased by 1.1% compared to the same period 24 months prior.

The Committee noted the impact of COVID-19 on face to face consultations during this 12-month period, with face to face consultations falling by 19.1% for GP's. The decrease in face to face consultations also saw the advent of telehealth and the Department confirmed telephone consultation services both substituted and supplemented face to face services with a significantly high uptake by GPs during this time. The Committee acknowledged that in the out of hospital setting it was difficult to distinguish a single cause of the observed ECG claim decline, noting the potential ongoing impacts of COVID-19 and the expansion of telehealth services. However, they determined that the 1 August 2020 changes, including specifically the removal of the trace and report item (11700) for GPs had contributed to the reduction in services and increase in average out of pocket costs with patient access consequentially impacted.

The Committee was unable to review any data related to health outcomes due to the short span of time since implementation, noting this is usually available after a number of years. The Committee Chair noted that even once comprehensive data is available, any changes in health outcomes may not be able to be solely linked causally to the ECG items but would need to take into consideration the impact of COVID-19 on patient health. It was also noted that there would be no way of determining whether ECG services were still being provided and not being claimed through the MBS. In this context the Committee focused on assessing

the impacts of the changes on patient access, through the use of claiming data, including out-of-pocket costs, and qualitative evidence.

Qualitative evidence was considered by the Committee through a submission from 51 GPs (See Appendix C for this submission) who asserted the changes created a barrier to access for at risk groups, such as patients with mental health issues, eating disorders or lower socioeconomic groups, and practitioners were concerned about the potential risk of a critical incident with the increased need for referring patients to specialists.

GP members of the Committee were concerned that the 1 August 2020 changes had blocked GP access to a trace and interpretation item and that GPs were now required to provide this service at a reduced fee. Members noted item 11707, the only item accessible to GPs following the changes, did not accurately reflect how they provide the service. Committee members were concerned that while the final report of the CSCC had advocated for both a trace-only and a trace and interpretation item for all medical practitioners, only a trace-only item had been implemented for GPs. While it was clarified that through the work of the Implementation Liaison Group, item 11707 provided for GPs to perform a trace and interpret, with GPs able to claim a consultation to allow time to consider the trace and inform clinical decision making, the consensus of the Committee was to provide all medical practitioners access to the trace and clinical note item (11714) and leave item 11707 unchanged at a lower rebate.

Members of the Committee were divided in their support of a fee differential between practitioners when performing the same service but agreed the recommendation should be inclusive of all “medical practitioners” and this should include access to Other Medical Practitioners (OMP). Submissions from GPs voiced concerns that the reduction in rebates from the reporting item they were claiming prior to 1 August 2020 (MBS item 11700 trace and report) could affect future practice viability and also discourage medical practitioners from pursuing GP fellowship and that GPs were generally feeling discouraged and devalued by the changes.

The Committee considered the requirement for a clinical note to be retained in the item descriptor for item 11714 and discussions confirmed a report referred to a different activity to a clinical note. It was agreed that a clinical note would demonstrate the medical practitioner had reviewed the ECG trace and interpreted this to inform clinical decision making and should be recorded by all medical practitioners in the patient’s medical record. In contrast, a report is provided to the “referrer” and should include a formal report detailing and commenting on the significance of the trace findings.

The Committee discussed the claiming limitations that had been introduced by the Taskforce, citing the limit of claiming two ECGs per day was generally suitable outside of the rural setting, whereas in the remote setting during an emergency patient retrieval it was not unusual to provide an ECG every 30 minutes. Prior to 1 August 2020 it was understood the GP in this setting would

claim the first three ECG services and therefore the Committee recommended an increase to three times a day, noting the claiming of more than three services was unreasonable.

Recommendation 2 – Introduce a new item or amend ECG trace and formal report item 11704 to allow specialists and consultant physicians to claim an ECG Trace and Formal Report item with a consultation.

Rationale:

The Committee considered amending item 11704 (requested trace and formal report) to allow claiming of this item with a consultation. The CSANZ representative raised the issue that specialists had been blocked from accessing a reporting item (11704) in the referred patient setting and as it was common practice to always provide a report back to the referring medical practitioner, there was no longer an item available to them for this purpose.

The Committee agreed access to an item for specialists and consultant physicians to provide an ECG trace and report, which has either been requested or self-determined and claimable with a consultation was a clinical service of high value and equivalent to item 11704. The reporting element of this item would require a formal report on the ECG sent to the requesting or referring doctor, separate to any letter, and not just for patient clinical notes, in addition to any measurements taken or automatically generated.

Recommendation 3 – Tiered Structure for guiding fee setting of the MBS ECG items

Rationale:

The Committee agreed to a tiered fee structure for the ECG items, representing a differential in the clinical utility and value of the service. The Committee concluded that the reporting items provided the most valuable clinical service, and in addition a formal report involved considerable time and resources, that must then be sent back to the referring/requesting doctor. The Committee suggested the fees for the tier one items should remain the highest reflecting the higher resources required to deliver the service and the highest clinical value and decrease in tier two and three in an approach consistent with the relativity of fees between the ECG items following the 1 August 2020 changes. The Committee agreed this fee structure was a reasonable approach to guide the Government's response to fee setting.

The Committee indicated that the current fees for MBS items did not adequately remunerate the work required to deliver the service provision despite an increase in the trace only item (item 11707) in the 1 August 2020 changes. The Committee agreed the fees were a decision of Government but noted that the fee for the ECG trace and reporting item (item 11700) that

the majority of GPs were claiming prior to the 1 August 2020 changes more accurately reflected the cost of providing the tier two item service.

Tier Level	MBS Service	Clinical Value
Tier One	ECG Reporting items 11704/117XX (potential new item in the context of a specialist consultation) and 11705 (exclusive of trace component in the fee)	This tier represents the greatest clinical value – includes a formal report which must be reported back to the referring doctor
Tier Two	ECG trace and clinical note 11714	This tier represents high clinical value when the trace is interpreted to directly influence clinical care and the clinical note is made available in the patient notes and accessible to all medical practitioners.
Tier Three	ECG trace item 11707	This tier represents a lower clinical value. The trace is conducted for the purposes of requesting a formal report (11705) or if a trace is requested by a provider.

Implications for Tiers of ECG items:

Tier One:

The Committee agreed that ECG items which fall under tier one provides the highest clinical value through the provision of the ECG formal report and trace, which is provided back to the referring/requesting medical practitioner and archived for future retrieval. Recommendation two recommended that specialist/consultant physicians should have access to a trace and formal reporting item, with the report and trace provided to the referring practitioner in the

context of a consultation by the same specialist. The ECG service in this context could be requested by the referring medical practitioner or could be self-determined by the specialist/consultant physician, and in both instances a referral to the specialist would be in place.

Requirements of items under this tier:

- Provision of a formal report and trace, from a 12 lead ECG trace, which is provided to the requestor/referrer. For the trace and report item, the trace will be undertaken by the claiming provider or persons on the medical practitioner's behalf. For a report only item the requesting provider will continue to provide the trace to the provider who undertakes the report.
- The ECG reporting service is provided by a specialist/consultant physician.
- A self-determined ECG service must have a referral in place to claim a consultation service.
- Provision of the formal report under item 11705 is provided to the requestor, including a copy of the trace to be retained in the patient's record.
- Item 11704 or equivalent cannot be provided as part of hospital or hospital substitute treatment.

Requirements of a formal report:

- Be in writing
- Include an interpretation of the trace, including the indicators for the investigation
- Include comments on the significance of the trace findings and the relationship to clinical decision making for the patient in the clinical context
- Include a copy of the trace and any measurements taken or automatically generated and
- Be provided to the referring/requesting medical practitioner

ECG items	Summary of descriptor
11704 - Trace and formal report item	Accessible by a specialist/consultant physician, claimable with a consultation only where a referral in place
11705 - Report only item	Accessible by specialist/consultant physician only

Tier Two:

The Committee recognised that ECG services provided under tier two delivered a valuable clinical service through the provision of a trace and clinical note, demonstrating the medical practitioner had reviewed the ECG trace and interpreted this to inform clinical decision making and should be recorded in the patient's medical record. The interpretation of the trace is not based solely on measurements or rhythm analysis automatically generated by

the ECG machine. Although a request is not required for this service, for specialists or consultant physicians a referral must be in place.

Requirements of items under this tier:

- Provision of a written clinical note in the patient's medical record from a 12 Lead ECG trace
- The ECG service is provided by a medical practitioner (the trace component can be undertaken by persons other than the claiming medical practitioner)
- For specialist/consultant physicians a referral must be in place
- Not provided as part of an episode of hospital or hospital substitute treatment

Requirements of a clinical note:

- Document the significance of the ECG trace findings and the relationship of the findings to clinical decision making

ECG item	Summary of descriptor
11714 - Trace and Clinical Note item	Accessible by all medical practitioners, provide a written clinical note and claimable with a consultation

Tier Three:

The Committee considered ECG services under tier three, although considered lower clinical value remained relevant in the context of requesting a formal report.

Requirements of items under this tier:

- Provision of an ECG trace for the purposes of providing the trace to a specialist/consultant physician for a formal report or
- Not provided as part of an episode of hospital or hospital substitute treatment

ECG item	Summary of descriptor
11707 - Trace only item	Accessible by any medical practitioner

Recommendations outside the scope of the Review

Recommendation 4

A future review of the Ambulatory ECG items is required in the context of use for patients admitted to hospital as a private patient. These items include items 11716, 11717, 11723 and 11735.

Rationale:

Members of the committee identified clinical scenarios where the use of ambulatory ECG is considered appropriate outside the capacities of telemetry. For example, in the rehabilitation setting.

Recommendation 5

A future review of in-hospital claiming of ECG items.

Rationale:

In relation to the restriction of in-hospital claiming of ECG services, other than item 11705, some members of the Committee disputed the Taskforce rationale that the cost of ECG service provision is covered by private health insurance accommodation fees. The Committee agreed that the likelihood of a relevant ECG abnormality being detected is vastly higher in an in-hospital patient than an ambulant patient in general practice.

In addition, the Committee agreed that in some rural and remote areas, under an exemption from Section 19(2) of Health Insurance Act 1973, doctors perform ECGs on patients in and out of hospital, as there may be no specialists in these areas. It is common practice in these locales that a GP will be providing outpatient-based services (in a clinic) and also covering the local hospital as the visiting medical officer.

Submissions

During the establishment of the ECG Review Committee, the Department provided opportunity for feedback to be provided to the Review Committee through submissions which were open to the public and advertised on the Department of Health website and communicated to peak bodies. Submissions were open from 1 February 2021 to 1 April 2021.

Six submissions received and disseminated to all Committee members for their consideration, these are included in Appendix B.

The key points of the submissions include:

- Rural and remote GP's have access to item 11714
- Increased costs to health system and patients if GPs are unable to access ECG items
- Recommendations to implement accreditation or training modules so GPs can have access to the items

The Committee members agreed that the issues raised by the submissions had been covered in the Committee meetings. Agreement was also sought from the authors of the submissions to be included in the report.

Appendix A – Extract from the Medicare Benefits Schedule Review Taskforce Endorsed Final Report from the Cardiac Services Clinical Committee 2 August 2018

Electrocardiography (ECG) recommendations – that went out to consultation (pages 199-208)

ECG Working Group membership

The Committee formed a Working Group to consider MBS ECG items 11700–11702. The ECG Working Group included the following members:

- △ Professor Mark Harris – Director, Centre of Obesity Management and Prevention Research Excellence in Primary Health Care (COMPARE – PHC); Foundation Professor of General Practice and Executive Director, Centre for Primary Health Care and Equity, University of New South Wales.
- △ Dr Maria Brosnan – Cardiologist, St Vincent's Hospital, Melbourne, and Baker IDI, Melbourne.
- △ Professor Jonathan Newbury – Professor of Rural Health, Adelaide Rural Clinical School, School of Medicine, University of Adelaide.
- △ Mr Alex Segler – Independent consumer.
- △ Professor Richard Harper (Ex-Officio) – Emeritus Director of Cardiology, Monash Medical Centre; Adjunct Professor of Medicine, Monash University.

The following recommendations were developed by the ECG Working Group and accepted unanimously.

The Committee also endorsed the recommendations unanimously.

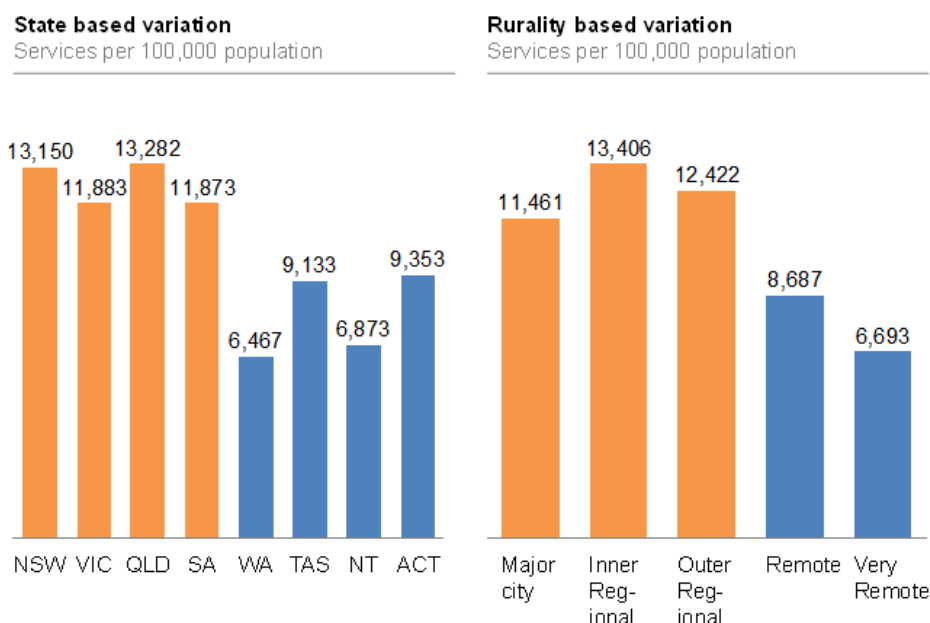
General considerations

- △ More than 2.7 million ECG services are claimed under the MBS every year at a cost of over \$71 million. Over 98 per cent of these services are claimed as a trace and report. There is considerable variability in ECG services per population with NSW and QLD having twice as many services as WA and the NT. People in remote and very remote areas claim 25–50 per cent fewer services than people in more urban areas. The Committee voiced concern about the volume and variability of ECG claims and the growth 7 per cent per year (well above population growth 1–2 per cent per year). The

Committee agreed that growth at this rate is not driven by shifting disease patterns and felt that the substantial and growing investment in a relatively straightforward activity could be better directed to other necessary services.

- △ The Committee noted that there is significant variation in per-capita services between states, and between urban, regional and remote populations (Figure 1). Drawing on their clinical judgement, Committee members could find no medical explanation for this variation and recommended that it should be addressed.

Figure 1: Geographical variation of ECG services (MBS items 11700, 11701, 11702)



Data is by date of service extracted on 20 June 2016. Unpublished data from 2014-15 (Department of Health).

Remoteness Area classes are based on ARIA. Reference: ASGS: Volume 5 – Remoteness Structure Australia July 2011, 1270.0.55.005. The patient postcode is linked to the Remoteness Area Concordance file.

- △ The Committee noted that when the ECG items were introduced, ECG machines were expensive and more complex and time-consuming to operate. Modern ECG machines are more affordable, and technological improvements (such as sticky electrodes, which have replaced suction cups) have reduced the amount of time and effort required to take an ECG trace.
- △ It was noted that GP clinics must have access to an ECG machine in order to meet accreditation requirements. This is outlined in the Standards for General Practitioners (fourth edition), Standard 5.2, “Equipment for comprehensive care”:
 - Criteria 5.2.1 Practice Equipment: “practice has timely access to a spirometer and electrocardiograph.” (55)

- △ The Committee discussed the possibility of removing ECGs from the MBS altogether, as it was agreed that they could now be considered a core part of patient history and examination (similar to taking blood pressure). However, it was ultimately agreed that ECGs do offer clinical value and should remain on the MBS, although steps need to be taken to reduce variability and improve the clinical value of these services.
- △ The Committee agreed that an ECG has two components: performing the trace and reviewing the trace. These should be considered separately, given that a medical practitioner almost never performs the trace, but should always perform the review (with or without a formal report).
- △ The Taskforce has indicated it may consider these recommendations in conjunction with other deliberations affect General Practice.

ECG trace and report – that went out to consultation

Current item descriptors and MBS data from FY 2014/15

Item 11700 – Schedule fee: \$31.25

Services: 2,642,948

Total Benefits: \$69,467,252

Average annual growth: 6.5%

Twelve-lead electrocardiography, tracing and report

Public data from 2014-15 (Department of Human Services).

Recommendation 16

△ Amend the descriptor for item 11700 to read:

Item 11700

The 11 recommendations, three of which are overarching recommendations, affect the entire Thoracic Surgery section of the MBS. Recommendations centre on improving the structure and sequencing of Thoracic Surgery MBS items, restricting inappropriate co-claiming, and creating new MBS items that reflect current clinical practice..

Explanatory notes: A formal report is separate to any letter and entails interpretation of the trace commenting on the significance of the trace findings and their relationship to clinical decision making for the patient in their clinical context, in addition to any measurements taken or automatically generated.

A GP referral to a cardiologist or consultant physician for a standard consultation should not be regarded as a referral for an ECG.

Rationale

These recommendations focus on improving the value of the MBS and are based on the following observations.

△ The Committee determined that item 11700 should remain on the MBS in recognition of the access it gives GPs—particularly rural GPs—to specialist review of a trace. Although all doctors should be capable of interpreting ECGs, the Committee acknowledged that GPs (and other clinicians) who are concerned about a trace, or are unable to obtain an adequate trace, should be able to seek additional support.

- △ The Committee agreed that many ECGs are of low value, particularly those performed without a referral, as the financially objective gatekeeping function is not present in non-referred services. It was also agreed that many providers routinely perform ECGs, screening ECGs or repeat ECGs in the absence of symptoms. There was consensus that defining a service for referred ECGs, particularly in regard to item 11700, would significantly increase the clinical value of the services provided. By involving two providers, there is an element of gatekeeping, which enhances the value of the services. (Appropriate gatekeeping weighs the value of specialist input against the inconvenience to the patient. This function is primarily performed by primary care clinicians and is a cornerstone of the Australian healthcare system.)
- △ The Committee agreed that storing an ECG trace and report, and making them readily available to other clinicians (with patient consent), provides greater value to the patient and the health system. The Committee has not specified the exact format in which the trace and report should be stored or made available, but it was agreed that uploading the trace and report to a patient's My Health Record would certainly meet the requirement for storage and accessibility. The Committee also emphasised the importance of retaining both the report and a copy of the trace (with sufficient resolution and clarity), so that the trace can be interpreted alongside the report. A formal report should be separate from any referrals or letters, and it should clearly document the relevant measures and findings from the study. The Committee noted that there is value in the extended hours offered by some pathology providers, which allow greater access to previous traces and reports outside standard business hours. Services rendered by providers who are not affiliated with a pathology company but offer an ECG trace and formal report service (including the storage and provision of data to appropriate providers) are of equivalent value.
- △ The Committee discussed at length the issue of co-claiming an ECG trace and report with a consultation. It noted that a referral to see a specialist physician does not constitute referral for a formal ECG, and it agreed that if an ECG trace is performed in association with a consultation, item 11700 should not be claimed. Instead, item 11702 should be claimed. This acknowledges the time and consumable requirements associated with taking an ECG trace, and the review of the trace is reasonably taken to occur as part of the consultation. Formal reports are not routinely provided nor required for traces reviewed during a consultation.
- △ The Committee discussed the potential implications this change may have on rural access, noting that many rural GPs serve dual roles in the community, offering consults in their rooms and supporting the local hospital. In the context of ECGs, this was

considered to involve three elements: performing an ECG trace, clinical decision-making, and urgent critical care and management.

- Trace: It was agreed that this would be appropriately remunerated under item 11702 and would not present any issues.
 - Clinical decision-making: A rural GP may review a trace, determine that an acute episode is occurring and requires urgent medical attention, and transfer the patient to hospital. An equivalent process occurs in urban areas. The key distinction is that in an urban environment, the duty of care often ends with the arrival of an ambulance; in a rural environment, the GP often retains duty of care in the hospital setting.
 - Urgent care in hospital: In an urban area, the patient would be managed in hospital by the relevant clinicians on duty. In a rural area, the GP will often assume the role of hospital clinician and provide the appropriate critical care. However, this is not related to ECG interpretation and would be remunerated through the relevant hospital funding mechanisms.
- △ Having considered the above, the Committee agreed that although the role of rural GPs is different from the role of their urban colleagues, there was no identified inequality with regards to ECG services that would necessitate a specific rural item or exception.
- △ The Committee agreed that these changes would improve the clinical value provided by item 11700 and would not restrict patient access to appropriate ECGs.
- △ The Committee agreed that there was a risk that providers may circumvent the request. For example, providers in large practices may refer to another provider in the same practice. This could also occur with item 11701. It was suggested that referrals could be restricted to GPs only, or to providers who are not located within the same practice. It was agreed that the wording from diagnostic imaging should be used to prevent referrals within a practice.

Following consultation the committee agreed to amend the descriptor for item 11700 to include the requirements of a report in the item descriptor. The provision of a formal report which interprets the trace as an aid to decision making adds greatly to the clinical value of an ECG. This should be available not only to the referring doctor but also, with patient consent, to other providers and in the future may be more accessible through My Health Record.

ECG report only – that went out to consultation

Current item descriptors and MBS data from FY 2014/15

Item 11701 – Schedule fee: \$15.55

Services: 27,158

Total Benefits: \$353,149

Average annual growth: -2%

Twelve-lead electrocardiography, report only where the tracing has been forwarded to another medical practitioner, not in association with a consultation on the same occasion

Public data from 2014-15 (Department of Human Services).

Recommendation 17

△ Amend the descriptor for item 11701 to read:

Item 11701

- △ Twelve-lead electrocardiography, referred service for a formal report only, by a medical practitioner, separate from any letter, where the tracing has been forwarded by the referring medical practitioner and where the referring practitioner is not a member of a group of practitioners of which the providing practitioner is a member.
- △ A copy of the trace and report are provided to the referrer, retained by the provider and made available to other clinicians upon request, with patient consent. Not claimable in association with a consultation. Claimable for admitted patients in a private hospital only where an unforeseen cardiac problem develops and the attending doctor reviews the trace and requests a second opinion and formal report regarding interpretation of the ECG in the context of clinical decision making. Both the request and report must be in writing and documented in the patient history. Not claimable for routine in hospital ECGs including routine pre-operative ECG.
- △ Claimable up to twice in a day. Not claimable for a trace that has been previously reported; or in association with a service to which 11700 applies.

Explanatory: A formal report is separate to any letter and entails interpretation of the trace commenting on the significance of the trace findings and their relationship to clinical decision making for the patient in their clinical context, in addition to any measurements taken or automatically generated.

Rationale

These recommendations focus on improving the value of the MBS and are based on the following observations.

- △ The Committee agreed that a specialist review of an ECG trace that cannot be adequately interpreted by the referring clinician is a clinically valuable service, when referred in the appropriate circumstances.
- △ As with item 11700, the Committee agreed that an ECG trace and report that is not readily available to other clinicians on request is of lower value. The trace and report should therefore be retained and readily available, or stored in an accessible location (e.g., via my Health Record), in order for the service to be claimable.
- △ The Committee noted that there is a risk that providers could refer within a practice, and it recommended that this should be prevented. A provider could also misuse the item by setting up a service to accept high volumes of digital traces in order to produce high volumes of low-value reports. However, it was noted that there is no financial incentive for referring providers to write referrals for such services, and that the provision of incentives or application of pressure is illegal in contexts such as pathology and diagnostic imaging items. Furthermore, the providers would remain medico-legally responsible for the reports provided, which is a significant risk if simply signing off on automatically generated reports.
- △ The Committee noted that in some private hospitals, there are wards or entire 'niche hospitals' where the nurses do not have the expertise to perform an ECG, and the hospital does not have the internal capability to perform an ECG. If ECGs are performed, such hospitals may also not have a doctor on site capable of interpreting them. The hospitals compensate for this by outsourcing this service to pathology providers. Several Committee members expressed strong concern that if there was no MBS funding for this, patients may not receive the appropriate care (for example, if they develop post-operative chest pain).

The Committee noted that all accredited GP clinics are required to be capable of performing an ECG, and stated that this should surely be a basic requirement for the accreditation and credentialing of a hospital. As noted in the recommendation from the Working Group, it was

felt that a hospital should only outsource services when this is a more cost-effective solution for the hospital, and that this does not justify additional billings.

The Committee determined that the recommendation should be amended to allow item 11701 to be retained for inpatient use as a referred service, not associated with consultation, or when a patient is seen by a provider who is capable of interpreting the ECG. The reporting provider should be external to the hospital and not involved in the care of the patient, with no financial or other incentives provided to the referring provider or hospital. This service is intended for patients with an unforeseen heart problem in a private hospital with no on-site cardiologist, or when the attending doctor wants a second opinion. The Committee felt that providing access to the reporting item may also reduce the volume of consults billed, which would be cost-effective as the schedule fee is considerably lower. It should be noted that this service should not be claimable for routine ECGs, including routine pre-operative ECGs.

Following consultation, the committee agreed to amend the descriptor for item 11701 to clarify the requirements of a report. The provision of a formal report which interprets the trace as an aid to decision making adds greatly to the clinical value of an ECG¹. This should be available not only to the referring doctor but also, with patient consent, to other providers and in the future may be more accessible through My Health Record.

¹ Pahlm O, Hammill S et al. Quality improvement in electrocardiogram recording and interpretation Journal of Electrocardiology 2008,41(5):367 - 369

ECG trace only – that went out to consultation

Current item descriptors and MBS data from FY 2014/15

Item 11702 – Schedule fee: \$15.55

Services: 106,606

Total Benefits: \$1,338,865

Average annual growth: 10.9%

Twelve-lead electrocardiography, tracing only

Public data from 2014-15 (Department of Human Services).

Recommendation 18

△ Amend the descriptor for item 11702 to read:

Item 11702

Twelve-lead electrocardiography, tracing only, where the trace is clinically indicated to inform clinical decision making and where the trace is reviewed by the provider in a clinically appropriate timeframe.

Not claimable for a patient admitted to a hospital or attending a hospital for the purposes of routine pre-operative assessment.

Rationale

This recommendation focuses on improving the value of the MBS and promoting best practice care. It is based on the following observations.

- △ The Committee acknowledged that (i) GPs provide a significant proportion of ECG services; (ii) the standard for accreditation requires ECG equipment to be present; and (iii) meeting accreditation standards is currently incentivised through the Practice Incentives Program (PIP). It felt that removing this item from the MBS may result in GPs no longer offering this service, which would mean that all services may become referred services, as occurred with joint injections. This would be detrimental to patients, providers and the health system. As a result, the Committee agreed that it is important to continue remunerating GPs for this service.
- △ It was acknowledged that although taking an ECG trace is easier than with previous technologies, it still requires time (usually that of a practice nurse) and consumables. For this reason, the Committee did not recommend removing item 11702 from the MBS.

- △ The Committee discussed whether it would be reasonable to consider an ECG an integral component of a specialist consultation, particularly a cardiologist consultation. Although it was acknowledged that many cardiologist consults do incorporate an ECG, the Committee agreed that the trace still takes time for the specialist or practice nurse to complete. For this reason, it felt that access to this item should not be restricted by provider type.
- △ The Committee agreed that ECG traces should only be taken where clinically indicated, and to support clinical decision-making. Regardless of the clinical indication for an ECG, there is also a chance that a life-threatening abnormality may be detected. For these reasons, item 11702 should only be claimable if the provider has reviewed the trace. This does not require a formal report, but good clinical practice would include documentation of ECG findings in the patient's medical record.
- △ The Committee recommended that ECGs not be claimable for routine pre-operative ECGs as these are not evidence based and are not recommended practice(56–60).

Following consultation the committee agreed to amend the descriptor for 11702. This item is for performing and recording the ECG trace only whether or not an automated analysis is performed. It may be claimed in association with 11701 claimed by a different specialist provider as a referred service.

The Committee also agreed to introduce a new item, 11703, to provide for the interpretation of an ECG trace. This recognised that ECG interpretation was part routine assessment of a patient on referral and that referring doctors would expect that an ECG be performed and interpreted without them having to specifically request it.

Concern was then expressed that GPs should be able to claim the new item if they also interpret an ECG tracing which was stored in the medical record. It was decided that this was reasonable if the GP took responsibility for interpreting the ECG themselves, made the ECG and their report or interpretation available on request (with patient consent) and did not send the ECG for formal reporting by a specialist (11701).

In-hospital ECG – that went out to consultation

Recommendation 19

- △ Make items 11700 and 11702 claimable only for patients not admitted to hospital.

Rationale

This recommendation focuses on improving the value of the MBS and is based on the following observations.

- △ The Committee agreed that the costs of performing an ECG trace—including nurse time and consumable costs—are already included in the accommodation fee for an admission. It was agreed that the care of an admitted patient reasonably includes the

review of ECG traces associated with that admission, and that items 11700 and 11702 should therefore not be claimed for an admitted patient. However, it was agreed that there may be instances where a provider requires a second opinion from a specialist on a non-routine inpatient trace (as described above), and that item 11701 should be retained for in-hospital use in these circumstances.

- △ Consideration was given to a potential exemption from this requirement for paediatric populations. Regarding the ECG trace, these costs are covered under the appropriate accommodation fees in an inpatient setting, and hospitals generally receive a paediatric loading to account for the higher care needs of these patients. Regarding the review of the trace to inform clinical decision-making, the Committee felt that this was not materially different (in terms of either time or skill) compared to when performed on an adult patient. Finally, it was noted that inpatient paediatric ECGs account for less than 0.05 per cent of services. Without significant evidence of a negative impact on patient outcomes, an exception would therefore be inappropriate.
- △ It was noted that ECG reporting is frequently claimed for the review of traces taken in conjunction with pre-anaesthetic checks. The Committee agreed that anaesthetists should be capable of interpreting an ECG in the acute setting, and that these items should not be claimed for ECGs taken in association with a pre-anaesthetic check.

Repeat ECG services – that went out to consultation

Recommendation 20

- △ Make item 11701 claimable up to twice per day, where each service is clinically necessary.

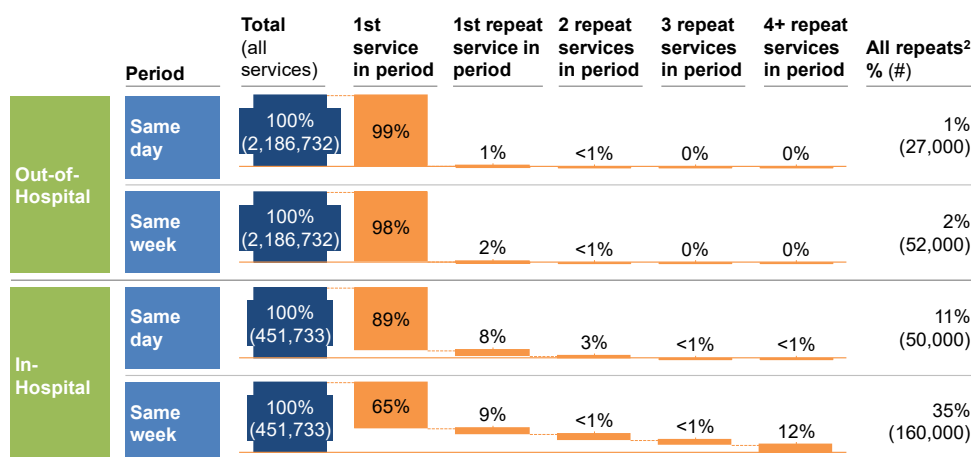
Rationale

This recommendation focuses on improving the value of the MBS and is based on the following observations.

- △ The Committee agreed that repeat ECGs are of lower value and should be restricted. However, it also noted the relatively low proportion of patients with same-day repeats (8 per cent) and acknowledged that there may be reasonable indications for this.
- △ It was agreed that the majority of same-day and same-week repeat ECGs are inpatient services, which will be addressed through the above recommendations for items 11700 and 11702. For item 11701, the Committee noted that there are many instances in which multiple ECGs would be appropriate for a patient. However, it felt that it would be reasonable to cap the number of services that are claimable under the MBS, as is done in areas such as intensive care. The Committee agreed that where a subsequent trace is referred for specialist reporting, a formal report must be provided. The Committee also agreed that there should be a maximum of two services claimable per day, as a patient requiring multiple ECGs for ongoing symptoms should have the direct involvement of a clinician capable of managing the patient.
- △ The Committee agreed that there is little value in screening ECGs in low-risk populations, and that such ECGs should not be funded by the MBS.
- △ It was noted that repeated screening ECGs could provide some benefits to higher risk patient populations. For instance, the offspring of patients with inherited cardiac disease, such as hypertrophic obstructive cardiomyopathy (HOCM), may receive repeat ECGs as part of evidence-based cascade screening.
- △ The Committee also reviewed the data presented on repeat ECG services performed in out-of-hospital settings (Figure 2). It noted that although fewer than 2 per cent of services are out-of-hospital same-day repeats, this still represents a significant volume of services (estimated 27,000 services) due to the volume of ECGs performed annually. Various clinical indications for repeat studies were discussed, and the Committee agreed that there are many clinical situations in which a same-day repeat ECG would be a clinically valuable service—for example, where a patient presents with a history of chest pain for review and is found to have a normal ECG, but returns later the same day

in acute chest pain and is found to have ischaemic changes. The Committee therefore determined that a maximum of two services per day would be a reasonable limit. However, fewer than 3,000 services would be affected each year by a limit of two claims per patient per day. This would not justify the associated administrative costs and the Committee therefore agreed not to recommend a frequency restriction.

Figure 2: In-hospital and out-of-hospital repeat ECG services



1. Sample population is all ECG trace and report services (item 11700) with date of service in 2014/15. Only includes 11700, excludes additional 11702 (trace only) which may have been performed in the same period. For patients who received both in-hospital and out-of-hospital services on the same day, these counted to their respective categories only.

2. All services except 1st in period by date of service. Trigger services rendered between 1 July 2014 and 30 June 2015 processed to 30 June 2016: Unpublished data from 2014-15 (Department of Health).

Appendix B Extract from the Medicare Benefits Schedule Review Taskforce Endorsed Final Report from the Cardiac Services Clinical Committee 2 August 2018

Final Electrocardiography (ECG) recommendations (pages 47-48)

Recommendation 16

△ Amend the descriptor for item 11700

Item 11700

Twelve-lead electrocardiography, referred service excluding self referral, for performing a trace and providing a formal report, separate to any letter, by a medical practitioner.

A copy of trace and report are provided to the referrer, retained by the provider and made available to other clinicians upon request, with patient consent.

The formal report is separate to any letter and entails interpretation of the trace commenting on the significance of the trace findings and their relationship to clinical decision making for the patient in their clinical context, in addition to any measurements taken or automatically generated.

Where the referring practitioner is not a member of a group of practitioners of which the providing practitioner is a member.

Not claimable for a patient admitted to a hospital or attending a hospital for the purposes of routine pre-operative assessment; in association with a consultation; or for a service to which 11701-11703 applies.

Recommendation 17

△ Amend the descriptor for item 11701

Item 11701

Twelve-lead electrocardiography, referred service for a formal report only, by a medical practitioner, separate from any letter, where the tracing has been forwarded by the referring medical practitioner and where the referring practitioner is not a member of a group of practitioners of which the providing practitioner is a member. The formal report is separate to any letter and entails interpretation of the trace commenting on the significance of the trace findings and their relationship to clinical decision making for the patient in their clinical context, in addition to any measurements taken or automatically generated.

A copy of the trace and report are provided to the referrer, retained by the provider and made available to other clinicians upon request, with patient consent.

Not claimable in association with a consultation. Claimable for admitted patients in a private hospital only where an unforeseen cardiac problem develops and the attending doctor reviews the trace and requests a second opinion and formal report regarding interpretation of the ECG in the context of clinical decision making. Both the request and report must be in writing and documented in the patient history. Not claimable for routine in hospital ECGs including routine pre-operative ECG.

Claimable up to twice in a day. Not claimable for a trace that has been previously reported; or in association with a service to which 11700 or 11703 applies.

Recommendation 18

- △ Amend the descriptor for item 11702

Item 11702

Twelve-lead electrocardiography, tracing only, where the trace is clinically indicated to inform clinical decision making and where the trace is reviewed by the provider in a clinically appropriate timeframe to identify potentially serious or life-threatening abnormalities but is not fully interpreted or reported.

Not claimable for a patient admitted to a hospital or attending a hospital for the purposes of routine pre-operative assessment. Not claimable in association with items 11700 or 11703.

- △ Create a new item number (11703) in addition to the current ECG items 11700, 11701 and 11702.

Item 11703

Twelve-lead electrocardiography, performing a trace and clinical interpretation, commenting on the significance of the trace findings and their relationship to clinical decision making for the patient in their clinical context.

Reported by a specialist or consultant physician as part of a letter to the referring doctor, or by a GP with the report documented in the patient's medical record.

A copy of trace and report/letter to be retained by the provider and made available to other clinicians upon request, with patient consent.

Claimable up to twice in a day.

Not claimable for a patient admitted to a hospital or attending a hospital for the purposes of routine pre-operative assessment; or for a service to which 11700-11702 applies; or for a trace that has been previously reported.

This item cannot be claimed where the interpretation is based solely on measurements or diagnoses automatically generated from the trace.

Recommendation 19

- △ Make items 11700 and 11702 claimable only for patients not admitted to hospital.

Recommendation 20

- △ Make item 11701 claimable up to twice per day, where each service is clinically necessary.

Appendix C

Submission from Australian Private Hospital Association (APHA) representative Dr Tony Hayek on 24 March 2021

I just wanted to follow up on some comments that Michael Feneley made.

The APHA fully supports Michael's comments and concerns about the narrow scope of the Review Committee.

While we understand the concerns expressed by the GP community re the August 1st 2020 changes, there was just as much concern with the changes to in-patient ECG items, expressed at the time by a number of organisations. Therefore, we believe the scope of the review committee should expand beyond item 11707 & 11714, to also include a review of items 11704 & 11705.

We feel that the changes have impacted ECG reporting services for patients in private hospitals. As an example, I am aware that one large private hospital was unable to fund an ECG reporting service provided by a group of Cardiologist, since the 1 August changes. This means that ECGs that are performed on in-patients, often with multiple co-morbidities, don't have a Cardiologist report and I would suggest this is a reduction in clinical standards that potentially puts patients at risk. While there is a mechanism through item 11705, that requires a referral, I don't believe this is occurring regularly, leaving a majority of unreported in-patient ECGs.

The inference of the changes to funding in-patient ECGs, is that the admitting doctor (more often than not, a surgeon) is responsible for reviewing and acting on a routine ECG and that the cost of performing an ECG in a private hospital is included in the accommodation fee.

On the first point, while I understand that a surgeon is capable of reviewing ECGs, I feel that best practice is that a Cardiologist review & report on all in-patient ECGs. On the second point, ECGs have not been negotiated into Hospital Purchaser Provider Agreements and are not included within the National Procedure Banding Schedule.

The 2018 Taskforce identified that annually 2.7 Million ECGs are performed, however it is our understanding that less than 10% of these are performed on in-patients in private hospitals. Therefore, it is our feeling that clinical value of funded Cardiologist reported in-patient ECGs, out weights any Medicare savings.

We just wanted the APHA's position to be noted, if the Department feels that the scope can't be expanded.

Submission from Royal Australian College of General Practitioners (RACGP) on 1 April 2021

Review of changes to MBS ECG items

The Royal Australian College of General Practitioners (RACGP) thanks the Department of Health (the Department) for the opportunity to provide a submission on changes to Medicare Benefits Schedule (MBS) items for electrocardiograms (ECGs).

The August 2020 changes to ECG items threaten patient access to timely diagnosis and management of heart conditions. It is vital that general practitioners (GPs) can provide high-quality services to patients in the community and that care remains affordable and accessible for patients.

The Cardiac Services Clinical Committee and the MBS Review Taskforce seemingly adopted a flawed set of assumptions regarding geographical variations in use of ECG item numbers. This resulted in the incorrect assumption that they represented low value care or over-servicing.

The RACGP has been contacted by numerous members who are concerned about the impact of these changes and the potential outcomes for providers and patients.

Role of GPs in performing ECGs

GPs are specialists in their own rights who have trained for years, and not merely conduits for referral of patients to other specialists. GPs are skilled at conducting, interpreting and reporting on ECGs. GPs and their teams can spend considerable time preparing for ECGs – setting up equipment, reviewing the trace, analysing patient history, deliberating on outcomes, and taking appropriate clinical action. The GP is also responsible for recording results and interpretation in the patient's medical record. GPs usually do not need to refer ECG results to medical consultants for ECG interpretation except in circumstances where further advice is required from another specialist practitioner. Having developed this skill, GPs are saving the health system a considerable amount of cost by providing this service directly to patients and responding to issues in a timely manner. This prevents the need for additional secondary and tertiary investigations and care that results in increased costs to the patient and the health care system.

Reduction in support for community-based care

The changes have significantly reduced the support available for ECGs conducted by GPs, who provide this care at lower cost and greater convenience and speed to patients than other medical specialists. As a result of the changes, MBS items for ECGs that include

reporting are no longer available to support patients requiring this care provided by GPs. Patient rebates for GP-performed ECGs are restricted to item number 11707 for tracing only. GPs previously used item 11700 (ECG tracing and report), which had a rebate of \$27.45. Item 11707 has a rebate of \$16.15, which is an increased cost to the patient of \$11.30 based on previous fees.

Since the introduction of item 11707, GPs have provided a total of 477,835 ECG services using this item, or an average of 79,000 per month². If all of these services were previously billed under item 11700, the total reduction in benefits paid to patients since August is nearly \$5.4 million (nearly \$900,000 per month). This is a significant increase in out-of-pocket costs at a time when per person personal health spending has increased on average 3.4% over the last decade³.

Impact of the changes on patient access

It is likely that reduced access to ECG tracing and interpretation due to excessive costs will increase demand to hospital departments or result in lack of early detection of heart disease. Timely access to ECGs through a patient's GP results in early diagnosis and management to prevent secondary complications.

This is of serious concern for Aboriginal and Torres Strait Islander people, for whom there is a high rate of cardiovascular disease⁴, and therefore a greater need for ECGs. Aboriginal Community Controlled Health Services need to bulk bill patients because the patients cannot afford the out-of-pocket costs. This creates further disadvantage for Aboriginal and Torres Strait Islander people as the health service must absorb a funding cut, resulting in less services for one of the most disadvantaged groups in our community where support is needed the most. This unconscious bias creates more disadvantage at a time when the Government had made a renewed commitment to reducing the gap between Indigenous and non-Indigenous people.

Furthermore, patients who are receiving psychotropic medications are at risk of developing a cardiac arrhythmia, which should be assessed regularly with an ECG (every six to 12

² Based on the number of services provided between August 2020 and January 2021 (the most recent month for which MBS billing data is available).

³ Australian Institute of Health and Welfare 2020. Health expenditure Australia 2018–19. Health and welfare expenditure series no.66. Cat. no. HWE 80. Canberra: AIHW.

⁴ Heart Research Institute. Heart disease in Indigenous communities. Newtown, NSW: HRI, 2021. Available at www.hri.org.au/heart-disease-indigenous-communities [Accessed 22 March 2021].

months). Again, the patient's usual GP is best placed to monitor the impact of any medication to ensure early identification and treatment of changes in cardiac health.

Recommendation – Allow item 11714 to be used to support access to ECGs performed by GPs

The RACGP recommends item 11714 be used to support access to ECGs performed by GPs in line with other specialists and consultant physicians. This would allow GPs to continue to claim item 11707 for tracing only, as well as item 11714 where a trace and clinical note (not a formal report) is provided as part of a patient's care. This reflects current usual practice.

GPs are medical specialists, and it is the RACGP's position that GPs should be paid the same as other medical specialists for doing the same work. This is particularly relevant in rural and remote areas where a GP may be the only provider offering a particular service. The rebate for item 11714 (\$21.25) is still significantly lower than the rebate for item 11700 (\$27.45), however it reduces the financial impact on patients receiving this service, and consequently the timely access to ECGs for diagnosis and appropriate management.

We recommend the descriptor for item 11714 be changed from "Twelve-lead electrocardiography, trace and clinical note, by a specialist or consultant physician" to "Twelve-lead electrocardiography, trace and clinical note, by a medical practitioner".

Our shared goal should always be ensuring we support high-quality care, while prioritising care that can be provided in community settings to reduce pressure on secondary and tertiary services. The RACGP looks forward to contributing to the work of the MBS ECG Review Committee in the coming months.

Dr Karen Price President

Submission from Dr Peter A Love on 6 April 2021

As a GP (whose past included being an emergency medicine GP specialist, senior lecturer UNSW School of rural health and a Director of Clinical training of junior doctors) I understand why the changes to ECG reporting payment was made but "one size doesn't fit all".

Like the mental health training (GPMHSC) ensure those that want to be able to read ECGs are trained appropriately to do so and recognise those tracings etc that need to be actioned urgently or semi urgently. As a rural generalist (ACRRM fellow) and when working in rural Australia it is mandatory as part of your training to know why you are doing the ECG and how to interpret same.

Solution

Have a training programme /module on ECGs, online, to do with a 100% correct to pass, that you need to do and redo each triennium to be able to claim the old item number 11700 for ECGs. Those that don't do the training can only claim 11707.

Just a thought

Dr Peter A. Love MBBS(Syd),MPH&TM,FACRRM

Gardens Medical Grp @CSU Thurgoona Campus

Submission from Rural Doctors Association of Australia (RDAA) on 7 April 2021

Thank you for allowing the Rural Doctors Association of Australia (RDAA) to provide a submission into the review of the ECG new item number descriptors which came into effect on 1 August 2021. We continue to receive feedback from our members on the changes and the negative impact this has had on their practice and patients.

Rural GPs in particular those who provide emergency services at their local hospital will often perform ECGs and proceed to progress a course of treatment without referral of the ECG to a cardiologist for interpretation and report. On occasion there may be telephone advice, but this is not necessarily the case in every situation.

RDAA would recommend that rural doctors (MMM 3-7) who are credentialled for emergency in their local hospital are provided with access to item 11714 which from the descriptor is a trace and clinical note. While the descriptor states it is not part of hospital treatment, it must be noted that in Victoria and South Australia for rural emergency services there is a Medicare billing arrangement in place for the non-admitted services.

In addition, there are Rural Generalists and Rural GPs who work in collaboration with a visiting cardiology service, have advanced skills in this area and provide this service to the full scope outlined in the item 11705 descriptor including the formal report back to a referring GP. RDAA believes these doctors should be given access to this item number as well. It could be established either through a provider code upon application and approval or through item descriptor and audit – the collaboration with a cardiologist or general physician would be the critical requirement.

RDAA believes if the issue is overuse of the ECG item numbers, then a 80/20 type rule may need to be developed to flag potential overuse of this item by GPs.

Dr John Hall

President

Submission from National Aboriginal Community Controlled Health Organisation (NACCHO) on 7 April 2021

NACCHO thanks the Department of Health for the opportunity to provide a late submission on recent changes to Medicare Benefits Schedule (MBS) items for electrocardiograms (ECGs).

NACCHO acknowledges the input of the Queensland Aboriginal and Islander Health Council (QAIHC), the Aboriginal Health Council of South Australia (AHCSA), the Aboriginal Health Council of Western Australia (AHCWA) and the Tasmanian Aboriginal Centre (TAC) on this submission.

NACCHO strongly supports the submissions to this Inquiry from QAIHC and the Royal Australian College of General Practitioners (RACGP). Cardiovascular disease (CVD) is a leading cause of preventable morbidity and mortality in Aboriginal and Torres Strait Islander peoples. Aboriginal and Torres Strait Islander Australians have CVD hospitalisation and death rates that were more than 60% higher than non-Indigenous Australians⁵. CVD still accounts for a quarter of Aboriginal and Torres Strait Islander deaths overall and 21% of all premature years of life lost. In addition, cardiovascular related events and mortality in the Aboriginal and Torres Strait Islander population occur, on average, about 10–20 years earlier than in non-Indigenous Australians⁶.

NACCHO estimate that around 51% of Aboriginal and Torres Strait Islander people access health care through an ACCHO or Aboriginal Medical Service (AMS), with around 49% accessing mainstream health services. The proportion of Aboriginal and Torres Strait Islander people accessing

⁵ Australian Institute of Health and Welfare 2020. Cardiovascular disease. Cat. no. CVD 83. Canberra: AIHW. <https://www.aihw.gov.au/reports/heart-stroke-vascular-diseases/cardiovascular-health-compendium>

⁶ Cardiovascular disease risk assessment for Aboriginal and Torres Strait Islander adults aged under 35 years: a consensus statement, Jason W Agostino, Deborah Wong, Ellie Paige, Vicki Wade, Cia Connell, Maureen E Davey, David P Peiris, Dana Fitzsimmons, C Paul Burgess, Ray Mahoney, Emma Lonsdale, Peter Fernando, Leone Malamoo, Sandra Eades, Alex Brown, Garry Jennings, Raymond W Lovett and Emily Banks, Med J Aust 2020; 212 (9): 422-427. <https://www.mja.com.au/journal/2020/212/9/cardiovascular-disease-risk-assessmentaboriginal-and-torres-strait-islander>

ACCHOs/AMSs is higher in rural and remote areas, and lower in urban centres⁷. NACCHO has significant concern regarding the changes made in August 2020 to cardiac diagnostic services on the MBS and supports the April 2021 submission of the RACGP, which notes:

This is of serious concern for Aboriginal and Torres Strait Islander people, for whom there is a high rate of cardiovascular disease, and therefore a greater need for ECGs. Aboriginal Community Controlled Health Services need to bulk bill patients because the patients cannot afford the out-of-pocket costs. This creates further disadvantage for Aboriginal and Torres Strait Islander people as the health service must absorb a funding cut, resulting in less services for one of the most disadvantaged groups in our community where support is needed the most. This unconscious bias creates more disadvantage at a time when the Government had made a renewed commitment to reducing the gap between Indigenous and non-Indigenous people.

The provision of timely ECG diagnostic services for Aboriginal and Torres Strait Islander people is critical, particularly in regional and remote areas where the incidence of rheumatic heart disease is prevalent. ECG is a key diagnostic criterion for diagnosis of acute rheumatic fever. Barriers to performing ECG may lead to misdiagnosis⁸. As both QAIHC and the RACGP note, ACCHOs are unlikely to pass on associated fees to patients, as this is contrary to the integrated care model. As a result, ACCHOs will absorb the related costs of this activity. While this change is unlikely to compromise the timeliness of patient care in ACCHOs, it will affect the ability of ACCHOs to claim a rebate services, which impacts on the sustainability of the service.

However, for Aboriginal and Torres Strait Islander people accessing mainstream services, the impact of this change is potentially severe. Mainstream health services are unlikely to willingly absorb the cost of providing ECG services, meaning costs are passed onto the patient, or diagnosis delayed by referral. Diagnostic delays compromise care for vulnerable Aboriginal and Torres Strait Islander patients and are likely to result in delays in treatment for patients presenting with conditions requiring urgent or emergency care. This has the potential to increase CVD related morbidity and mortality for Aboriginal and Torres Strait Islander peoples.

⁷ Aboriginal and Torres Strait Islander Health Performance Framework - Summary report 2020
<https://www.indigenoushpf.gov.au/publications/hpf-summary-2020>

⁸ The 2020 Australian guideline for prevention, diagnosis and management of acute rheumatic fever and rheumatic heart disease (3rd edition) <https://www.rhdaustralia.org.au/arf-rhd-guideline>

For Aboriginal and Torres Strait Islander people in regional, rural and remote locations, the risk of diagnostic delay is further exacerbated by limited access to specialist services⁹. Rural and remote health services are far more dependent on primary health care services, particularly GPs to provide timely diagnosis and care. This change risks further exacerbating existing health discrepancies between urban, regional and remote Aboriginal and Torres Strait Islander communities. As such, it is vital that GPs have the ability provide a full range of high-quality services to patients in the community and that care remains affordable and accessible for patients.

NACCHO support QAIHC's position that these changes devalue the skill of GPs, fundamentally compromise the opportunistic, comprehensive model of care delivered by ACCHOs and may contribute to widening the current health gap for our most vulnerable communities.

Australian Governments recently renewed their commitment to closing the life expectancy gap for Aboriginal and Torres Strait Islander people within a generation⁶. These changes undermine that commitment.

Recommendation

NACCHO recommends the urgent reinstatement of MBS Item 11700 for GPs to ensure they can continue to provide high quality, comprehensive and timely care to Aboriginal and Torres Strait Islander communities.

Submission from Doctors Reform Society representative Dr Brett Montgomery on 14 May 2021

Changing Medicare rebates for ECG services: views from General Practice

Dr Brett Montgomery MBBS DCH FRACGP MMedSci

⁹ Specialist outreach services in regional and remote Australia: key drivers and policy implications, Belinda G O'Sullivan, Johannes U Stoelwinder and Matthew R McGrail, Med J Aust 2017; 207 (3): doi:10.5694/mja16.00949 <https://www.mja.com.au/journal/2017/207/3/specialist-outreach-services-regional-and-remote-australia-key-drivers-and>

Abstract

Introduction

In August 2020, Medicare item numbers for ECG services were reformed, excluding general practitioners (GPs) from funding for the interpretation of ECGs. Research is lacking on GP views on this change.

Objectives

To identify and understand the thoughts, concerns and behaviours of Australian GPs regarding this policy change.

Methods

Qualitative study: analysis of invited free-text responses in an Australasian GP-only social media group.

Results

Data from 51 GPs revealed several themes. ECG interpretation was seen as a core task of general practice. The cessation of funding of ECG interpretation in general practice was seen as unjustified, unfair and hazardous. It was viewed as leading to financial stress for patients and doctors, and threatening the viability of Australian general practice. It was seen as especially a threat to vulnerable populations such as Aboriginal and Torres Strait Islander people, people living rurally, and people with mental illness.

Conclusion

This study finds no evidence in support of the recent Medicare policy change, and several reasons why it should be reversed. Better policy options for encouraging high-value use of ECG services are discussed.

Introduction

The electrocardiogram (ECG) is a cardiac investigation commonly performed, interpreted and relied on by medical practitioners from many specialties, including general practice. ECG interpretation is widely taught in Australian medical schools, and Australian general practices are required to demonstrate “timely access” to an ECG machine as part of their accreditation.¹

For some years in Australia, Medicare rebates have been provided for the tracing and reporting of ECGs by GPs and other specialists. For example, over 3 million rebates were provided for item 11700 (“twelve-lead electrocardiography, tracing and report”) in the 2019 calendar year.²

In August 2020, the Medicare item numbers for ECG services were reformed. One important aspect of these reforms was that reporting or interpretation of ECGs by general practitioners was no longer to be funded by Medicare.³ The only remaining funding for ECG services by general practitioners was item 11707, for performing a trace only, without funding interpretation or reporting.⁴ Indeed, the item number description warns it is to be claimed only “if ... the trace ... does not need to be fully interpreted or reported on”.⁴

This Medicare change was reportedly justified by the Minister for Health and the Department of Health as being “based on safety” and following the recommendations of the Medicare Benefits Schedule Review Taskforce.⁵ However, the decision to stop funding ECG interpretation by GPs is contrary to the recommendations of the taskforce. The taskforce, in the final report of its cardiac Service Clinical Committee, in fact recommended that the department: “create a new item to allow all practitioners to take and interpret an ECG when clinically required.”⁶ The taskforce also recommended a separate “trace only” item number.⁶ Thus, the taskforce’s intention was clearly that all practitioners, including GPs, be remunerated by one item number for performing a trace alone, and by another for the work of tracing plus interpretation.

The inconsistency between the Minister’s public statements, the changes to the Medicare schedule, and the recommendations of the taskforce is curious and apparently unexplained. (I wrote to the Minister on 31 July 2020 seeking an explanation for this inconsistency, but I have not received a reply.)

The loss of funding for ECG interpretation in general practice was reportedly of significant concern to general practitioners in Australia.⁷ However, no research seems available capturing GP views. This paper is a quick attempt to fill this gap within the narrow working timeframe of the ECG review committee.

Methods

In late April 2021 I wrote a post on the Facebook group “GPs Down Under” inviting comment on the Medicare ECG changes.

GPs Down Under is a social media group including several thousand Australian and New Zealand GPs. Membership is carefully restricted to members who can prove their status as registered doctors working in general practice. Although some members are from New Zealand, all replies appeared to be from Australian members.

I explained to invitees that the ECG review committee would have access to some Medicare claims data, but that this would have limitations. I wrote:

“I'd also like to gather qualitative data - i.e. your experiences and anecdotes about how these changes have affected your practice and your patients. I think the committee's work would be enriched by these stories.

Could you please post these below? I intend to share them with the committee in anonymised fashion. Please let me know if you do or don't consent for your replies below to be shared. If you consent, I will assume you want this to be anonymous unless you specifically tell me otherwise. Thank you!”

I included replies submitted up to and including 11 May 2021.

The responses were read closely and the themes emerging from these responses were identified. These themes are listed with supporting examples in the Results section.

Results

51 GPs provided data in response to my request: 50 in the Facebook thread, and one in a message directly to me. The raw response text is included in the Appendix. The responses are mostly deidentified, but a few participants specifically asked to be identified, so I have honoured this request.

Textual analysis led to the identification of several themes which are presented here with examples.

The changes have provoked unhappiness and confusion

While some participants offered no opinion on whether the changes were positive or negative, to the extent opinions were shared, they were consistently negative.

“Just reverse the decision, please!” – [GP 7](#)

GPs were unclear on the department’s rationale for enacting these changes.

"I've always written a report on every ECG I've done under Medicare or on a hospital patient. I continue to do this, I can't see why or how the panel/review/whatever came to the conclusion that an ECG tracing is just done! What would be the actual point?" – [GP 13](#)

"What were they thinking? Was it about cost? Was it about safety? Was it about partialists not understanding the skills of generalists? Was there any measure of the adverse effects that could befall these community patients by such a move? I'd love to know the answers." – [GP 7](#)

GPs see ECG interpretation in general practice as appropriate, often expected, and as having safety, convenience and financial advantages for patients and society

Participants felt confident in their role as interpreters of ECG.

"ECGs are core GP skills and we need to be able to do them whenever needed. One of the things about doing a reasonable volume of ECGs is keeping our skills up. I try to train myself not to look at the (often flawed) automated report, and decide for myself before seeing if the computer agrees!" – [GP 39](#)

"It's ridiculous that they removed the rebate for interpretation by GP. Are we meant to send every single ECG to the cardiologist?" – [GP 29](#)

Many shared anecdotes of situations in which they had competently and independently interpreted ECGs. Often these illustrated how timely ECG interpretation had helped to ensure safe care for a patient, streamlined a patient's path through the health system, and/or avoided unnecessary expense (such as emergency department presentations).

"Rural area: 70yo M breathlessness on exertion for 3-4 days, ECG showed subtle t wave inversion in inferior leads, borderline sats, referred to centre of excellence 1 hour away, PE found on CTPA. Another 70yo M feeling slightly 'off', HR fast, ECG showed new onset fast AF, given oral metoprolol in rural hospital, reverted back to sinus. 5-6 ECGs, all requiring interpretation, allowed to bill for 2. Saved costly transfer and management to regional hospital" – [GP 12](#)

*"At the ANZAC Day Service in [rural NSW town] an 86yo man had a presyncopal episode. Ambulance was called but ETA >40 mins as they were all ramped at our local hospital. [The patient was] pale, diaphoretic, rapid irreg pulse, history of paroxysmal AF but none recently. Quick chat with the police ... they drove him in their divvie van to my surgery so I could *gasp* do an ECG and monitor him rather than wait in the wind and rain for the ambos. Just as we were leaving, *bam* another chap, 72yo, pale and diaphoretic, no pain. Come on then, you can come too. My awesome RN came in to help, I can do one solo but 2 needs help. Ambos arrived at the surgery after 40 mins, by which time ECG 1 had determined sustained*

AF but no (other) ischaemic changes —> you go to ED; ECG 2 showed NSR and no acute changes, and now asymptomatic, so his ambulance crew got to move on to the next job. So the ED got one appropriate patient and avoided one who just needed a lie down and a cuppa.” – [GP 20](#)

"Patient presents for a standard 15min appointment one morning with dizziness. Hypotension and tachycardia. SVT on ECG. Chemically reverted with 2nd dose of adenosine. Patient went home without ever bothering those busy metro ED services and I went back to clinic and continued my day.” – [GP 15](#)

Some GPs also noted that they are still expected by other specialists to provide interpretation of ECGs, even though this is no longer funded. Most described complying with these expectations, though some felt the need to now set limits.

"I'm still asked to do ECGs and report on them by psychiatrists, gastroenterologists, etc.” – [GP 5](#)

"Shortly after the ECG rebate cut I got a letter from a cardiologist about a mutual patient, asking me to do an ECG in one month and let him know if the rhythm and/or QT interval were abnormal. So cardiologists sometimes refer to GPs for ECG reports. This sort of thing happens all the time in real life.” – [GP 24](#)

"For those patients who have been asked by their psychiatrist/hospital based eating disorder team, I write back and advise them that I won't be providing ECG services for the patient that they manage 90% of the time. There are BB cardiology services in town for the private people and really the hospital should be arranging their own ECGs in house.” – [GP 38](#)

Loss of respect/value, and consequent challenges to sustainability of the profession

GPs described feeling disrespected and devalued by the loss of Medicare rebates for interpretation of ECGs:

"It is ridiculous and insulting that as GPs our expertise in this is so denigrated that the Department of Health does not regard it as a service worth funding a patient rebate.” – [GP 15](#)

"It all boils down to one simple principle. Equal rebate for equal work. It doesn't matter if it is a GP or a cardiologist or a general physician interpreting the ECG. If they have the skills and they are able to competently do the job then they should all get the same rebate. The fact that non GP specialists get higher pay than GPs is an aberration that should be addressed, and not the natural order of things!” – [GP 30](#)

The loss of value and the threat to the sustainability of general practice was not felt only in monetary terms, but also in terms of morale and recruitment of future GPs:

"We are suffering 'Death by a Thousand Cuts'. To 'other' us, to suggest we are 'less than' our colleagues, to constantly freeze and/or reduce rebates is having a dire effect on our profession.

Many of us have patients we cannot possibly charge the difference for, nor send to a cardiologist for interpretation. So we wear the reduction in income. We wear the reduction in the perception of our profession by Medicare. We are clearly not valued and as an 'easy target'.

Colleagues are completely fed up, and leaving in droves. I (and I shamefully write this) for the first time have started encouraging my medical students to choose another specialty. Morale is very, very low.

I hesitated writing this because I'm certain the powers that be don't care. But in 5-10 years, when there is a critical shortage of GP's, when training programs are half empty, maybe only then will they realise what we actually do. That if you damage the base of a pyramid the whole bloody thing crumbles. And it will, if they don't recognise the psychological damage they are doing to us as a profession...

Every single employee will tell you that feeling VALUED is as important part of the job as remuneration. They are destroying this profession. I'm warning them that they are destroying us, and there will be a much larger fiscal issue if they don't stop." – [GP 32](#)

The decision to offer an ECG is largely unaltered, though has become more difficult for some

Many GPs described continuing to offer ECGs in the same manner as prior to the rebate changes:

"We continue to do ECGs exactly as previously ie where clinically indicated." – [GP 1](#)

"No change in practice. Just in rebate." – [GP 5](#)

Two GPs though admitted that the loss of rebate is affecting or threatening their decision-making:

"I am increasingly aware of gap fees affecting thought processes: for example, consciously overriding thoughts about whether or not to bring up doing a clinically-indicated ECG because of a patient's known financial circumstances." – [GP 45](#)

*"I'm embarrassed to say that when I'm working on my own after hours, with people waiting to be seen and a patient presents with atypical chest pain, I now find myself wondering whether the patient *really* needs that ECG. I know it takes a lot of time to do, and performing an ECG is a significant financial opportunity cost. When I catch myself thinking like this I scold*

myself. Professionally, I know I still have to do it... but I'm sure on a subconscious level I must omit some ECGs that really ought to be done." – [GP 50](#)

Increasing gaps for patients, increasing financial stress for practices

Many GPs described keeping their private fees for ECGs the same, meaning that privately billed patients face greater out-of-pocket gaps since the removal of rebates for ECG interpretation.

"We increased the gap- so the overall charge was the same with less patient rebate." – [GP 22](#)

"I used to bulk bill most ECGs just to keep things easy - ie known gap for the patient for their standard consult. Now I charge a set private fee for all including pensioners." – [GP 28](#)

"I charge a private fee – even to pensioners. I also ask them to write a letter to the local MP to complain." – [GP 38](#)

For GPs who bulk bill ECG services, the decrease in Medicare rebates has increased financial stress to practices.

"I doubt the rebate covers the cost of nursing and doctor wages (nor the cost of the dots), but we'll continue to do them and try to find savings in other places, as we do every time an item number is cut/axed." – [GP 17](#)

[redacted] – [GP 14](#)

A particular danger to people who are most vulnerable

GPs sense that the loss of funding for ECG creates barriers to important health care for vulnerable people.

"Although I have stuck to bulk billing, I wouldn't judge fellow GPs who no longer found this sustainable. I really worry that increasing gap fees for ECGs (whether in GP land or with specialists) will create barriers to necessary care for people." – GP 2

Several specific vulnerable populations were mentioned by GPs. Aboriginal and Torres Strait Islander people, and their dedicated health services, were felt to be particularly at risk from these changes. These people were acknowledged to be more at risk of heart disease, more likely unable to travel for cardiologist care, and less able to afford private fees.

"I work in an Aboriginal Medical Service and perform AND interpret ECGs on a daily basis. My patients often do not have the personal or financial resources to attend other providers for these. And their clinical presentations require immediate interpretation of the trace. I do ECGs for kids with suspected rheumatic heart disease, dialysis patients with chest pain, complex mental health patients with palpitations, pregnant women with mechanical heart valves on anticoagulation with chest pain who are survivors of ongoing DV (just to mention a

few of the patients I've performed and interpreted ECGs for this year). I interpret them all. Then refer the PATIENT (not the ECG) to a cardiologist or ED if necessary. My work continues as it did before the change in rebate, but now the AMS I work for receives less in Medicare rebates for the service I provide. So much for this government's commitment to closing the (insert swear word) gap.” – GP 16

“Speaking as a remote area GP in Indigenous health, there is no suggestion that my ECG workload could, would or even should have changed one iota since the MBS payment change. As the only health service within a 2-hour 'help' window, we do multiple ECGs every day in our high risk population, both as emergency and screening

We have a cardiovascular death or major event every week, and our mortality audits have Darwin cardiologists urging us to push ECGs on our sometimes-reluctant patients.

The very concept of us doing an ECG and waiting around for a specialist before actually acting on it is ludicrous to the point of fantasy. Besides the unacceptable clinical risk, it would be a ridiculous burden on a Darwin specialist to sit through a hundred remote-area ECGs every day, when they don't know the patient and, quite frankly, have more useful things to do.

Yep, only one thing has changed with the new MBS rebate - our health service does all the interpretation for free. Before, my skills were paid for. Now they are not. Simple.” – [GP 25](#)

Rural patients were also felt to be particularly affected by the changes, in several ways: more at risk in emergencies due to distance from hospital care, and more inconvenienced by travel for non-urgent ECGs elsewhere.

"Semi rural GP practice. 71 yo gentleman came in looking clammy, complaining chest pain. Quick history went straight to ambulance bay in clinic - ECG showed acute anterolateral STEMI. Urgent ambulance. Started thrombolysis - went straight to metro tertiary centre. Had angiogram and stent. Discharged 2 days later. He's back to his farm work. Would have been very different if I don't interpret or do the ECG or send him to the nearest hospital with no cardiac intervention service.” – [GP 48](#)

“Colleague did ECG recently for vague symptoms. ST elevation interpreted by him. Sent to Emergency, angiogram and stents needed. If he had sent outside the clinic for interpretation would have been days later as we are rural.” – [GP 9](#)

“It's an issue for us rural docs who often manage cardiac patients in rooms, in Ed and in hospital. This means we need to make decisions on ECG interpretation during the course of an ED or in patient stay == this might mean looking for subtle changes of hypo/hyperkalaemia, of evolving ST elevation or depression, not missing a Brugada etc etc.

The point is, we are the ones at the pointy end making the decisions for our patients ... there isn't time to 'do a trace and refer for interpretation' - the rural generalist IS the one making the decisions and managing the patient, often in an emergent time-critical setting...

#patientswill suffer if assume trace and interpretation are distinct in both time and silo specialty.” – [GP 7](#)

Patients with mental health difficulties were another group of particular concern – particularly people with eating disorders and those on medications potentially affecting the QT interval, such as methadone. Some GPs continue to bulk bill and interpret, but others have felt the need to stop offering this service.

“I am a methadone prescriber. If I perform an ECG for a methadone patient on other QT prolonging drugs, interpret, and adjust their dose, no one else is doing the interpretation. It is very difficult to get this patient population to pay for outside tests at a pathology provider. I don't think many ECGs would get done if I referred the patient out. Much like an AMS, we solely bulk bill and try and provide a full service GP. The value to the patient is much more than the rebate, and even underserved populations unable to pay a gap deserve full value healthcare.” – [GP 21](#)

“People who are unwell with eating disorders often need weekly ecgs. Pathology companies are now routinely charging a co-payment of \$50 even for those with HCC. Cost burdens are massive for families affected by ED. GP is already underfunded for the provision of care to this challenging group. We cannot provide ECGs at a loss as well.” – [GP 43](#)

“I have stopped most ECGs unless acutely symptomatic ... Psychiatrist requests for possible QT monitoring now also redirected to path.” – [GP 40](#)

The problematic act of referral

Many GPs described starting to refer patients outside the practice for non-urgent ECGs. GPs made the point that this does not save Medicare money compared to if GPs were funded for interpreting the trace, while threatening continuity and timeliness of care. It also seems associated with gap payments for many patients.

“We now routinely send them to pathology for reporting - so it costs the government the same as before the changes, but the patient now incurs a higher out of pocket cost as path company charges a gap.” – [GP 3](#)

“For routine ECGs I now send to pathology to trace and report so government and patient costs that way. Shame that GP don't get to stay in the loop of patient care more directly by being funded to do them onsite.” – [GP 6](#)

"It merely cost shifts to other more expensive areas of the health system so it's a false economy. e.g. non-urgent, pre-op ECGs will be sent to pathology companies or cardiology groups. Other "chest pains" will be sent to ED by ambulance (good luck with ramping!) when they could be assessed and managed in primary care clinics." – [GP 34](#)

There was also some concern that this drive for referral may lead to deskilling of GPs.

"Used to do all ecgs in rooms. Now only do emergency ones. Anything else refer." – [GP 35](#)

To this, [GP 11](#) replied sarcastically: "that'll be good for our skillset, won't it?"

Further, the quality of reporting of outside traces was felt to be in some cases minimalistic and lacking in application to the clinical context.

"Sending all to pathology (or ED if that is indicated). The cardiologist reports are minimalist even if I give the clinical picture and ask for a specific thing to be reported." – [GP 18](#)

"We send to pathology or if more urgent to ED. But the pathology reports are basically rate and sinus rhythm." – [GP 19](#)

"Well these are some of the reports patients paid for since the Medicare change."

The GP attached screenshots of ECG reports with the following text:

"SINUS RHYTHM

WITHIN NORMAL LIMITS"

"SINUS RHYTHM

WITHIN NORMAL LIMITS"

"POSSIBLE ECTOPIC ATRIAL RHYTHM

NO OTHER FINDING" – [GP 31](#)

ECG interpretation as professional obligation

Despite resenting the loss of a rebate, many GPs see continuing to offer ECG services as a professional obligation. For many this was due to a concern that patients could be harmed if the ECGs were not performed in a timely manner, or that they may not be done at all if reliant on a vulnerable patient following through with a referral.

"It is ridiculous and insulting that as GPs our expertise in this is so denigrated that the Department of Health does not regard it as a service worth funding a patient rebate. But I would like you to also point out that we continue to do the needful because of the duty of care and the ethical and legal obligation to perform an interpretation for each and every trace that we do." – [GP 15](#)

"The need is so stark where I am, I'd do ECGs if they weren't subsidised at all. Hell, I'd probably even buy a machine out of my own pocket, because I actually believe in patient care, and the majority of my patients die cardiovascular deaths. Yes, I would do it for nothing. But then again, volunteerism isn't really the most sustainable way to run a first world health system, is it?" – [GP 25](#)

However, there were several contrary cases, as illustrated in quotations in the "referring on" section above, where GPs have relinquished to role of GP interpreter in response to these rebate changes.

"I now send most to cardiology investigations unit. Patient now has to travel 2 hours for this. I only do emergency ones. I now focus on things with a rebate." – [GP 44](#)

Uncertainty about item number description interpretation

A small number of GPs were confused by the item number descriptions. One feared that wording of item 11707 prohibited interpretation of the trace, and another thought all funding for GP services had been ceased – even for performing a trace.

"I remember for the first ECG I did after the changes, I didn't bill anything at all - not even for the trace! That's because the item description for the 11707 is so confusingly written. It says that we should only use this item number if the ECG "does not need to be fully interpreted or reported on. But of course I was going to interpret it! - I would never do an ECG if it didn't need interpretation. I had to write to my MDO to check my understanding of the item number and if they thought it was OK for me to bill it. They said yes, but I don't think I ever went back and billed that one." – [GP 2](#)

"I did not realise 11707 applied to GP so for urgent onsite ECGs I have just been wearing the cost and unhappy about it as with all the undervaluing of GP service provision by Medicare" – [GP 6](#)

Baseline ECGs, and ECGs as routine part of cardiovascular risk assessment

Some GPs discussed the value in having baseline ECGs available to compare to assess whether ECG abnormalities are new or old.

"When patients come in with their undifferentiated whatever, it would be so helpful to be able to compare a new reading with a baseline ECG to help direct patient management... I also work in ED and the first step with a slightly abnormal but not necessarily acutely dodgy ECG is to compare with previous. For example, a nauseated diabetic with left bundle branch block. ??hot Cath lab vs potential outpatient/ Gp management" – [GP 47](#)

“Sometimes, when the acute ECG is unchanged of the previous one, we can avoid sending to the ED. Now, we don’t have one to compare, so they’d better go to ED, that LBBB might be new...” – [GP 20](#)

Some GPs expressed a belief that ECGs are an expected routine component of absolute cardiovascular risk assessment.

“[An ECG] is part of cardiovascular risk assessment.” – [GP 47](#)

“it’s part of the cardiovascular risk assessment - voltage criteria is how I know if there is LVH or not (therefore I will send out for a report on that feature if I can’t do it myself...), so I can use the risk calculator. So we “should” do ECGs so we can follow the Red Book for higher risk populations; and to properly assess risk for compliance with the requirements of item 699” – [GP 20](#)

The latter point is debateable and will be covered in the discussion section below.

Discussion

Principal findings

This study finds that Australian GPs have deep concerns about the recent loss of Medicare rebates for interpretation of ECGs. The policy change is seen as unjustified, unfair and hazardous.

GPs have responded variously to the change, by accepting a financial loss, by increasing out of pocket costs to patients, or by referring ECG testing and interpretation elsewhere. The change has presented a challenge to GPs’ professional practice, with some feeling a duty to continue interpreting ECGs in an unfunded manner, and others relinquishing this role. This is despite GPs seeing ECG interpretation as a familiar task for which they are well trained. The change is perceived not only as a financial threat but also as a threat to GP’s ongoing ECG skills, and as an injury to professional esteem. In the context of other pressures on primary care, it is viewed as a danger to a sustainable future GP workforce.

From a patient perspective, GPs are especially concerned about the inequitable effects of this change on the health of vulnerable people, especially poorer people, Aboriginal and Torres Strait Islander people, people with mental illness and people living rurally.

We lack specific evidence as to the health outcomes of this policy change. However, these results should be considered in the context of the large body of health policy research which finds that strong primary care systems predict better population health outcomes.⁸ There is also a large body of health economic research which finds that increasing out-of-pocket payments in health predict a decrease in access to health care.⁹ To the extent that this policy

shift weakens the involvement of primary care in patients' health journeys and imposes increased out-of-pocket expenses, it seems an unwise public health decision.

This research has also revealed an apparent misunderstanding among a small number of well-intentioned GPs that ECG screening for left ventricular hypertrophy is a routine requirement of absolute cardiovascular risk assessment. This is understandable, because our nationally endorsed cardiovascular risk assessment tool, the "Australian absolute cardiovascular disease risk calculator", prompts the user to input whether there is ECG evidence of left ventricular hypertrophy.¹⁰ Though there is the option to choose the "unknown" box, a reasonable user may get the impression that performing an ECG for this purpose is recommended. In fact, the Royal Australian College of GPs recommends against this, stating in its Red Book guide that this is unnecessary,¹¹ and in one of its Choosing Wisely campaign messages that ECGs are not recommended as screening tests in people at apparently low risk.¹² It is unfortunate that the absolute risk calculator implies that an ECG is necessary when it is not. Harmonising these various recommendations and making it easier for doctors to make wise choices, could be a useful goal for future reform.

Strengths and weaknesses

The main strength of this study is that it offers the authentic views of GPs on an otherwise under-researched topic.

This study also has limitations. It is a "rough and ready" piece of qualitative work which has not been subject to peer review. While we can be quite confident that the respondents were genuinely Australian GPs, it is likely that due to the self-selected nature of participation, the responses are not representative of all Australian GPs. The convenience sampling and the semi-open forum in which the responses were collected (on a Facebook thread restricted to GPs but including thousands of GPs) may have inhibited the participation of quieter participants, particularly participants with views felt not to be "mainstream" for the group. Also, the responses were generally short – mostly only a small number of sentences. This length is much shorter than typical interview-based qualitative research in which there is more scope to explore phenomena in rich detail.

Unanswered questions and future research

Future qualitative research which analysed longer interviews or observational ethnographic methods could perhaps generate richer findings. Ideally it would also include nurse, practice manager, practice owner and (above all) health consumer perspectives. Such qualitative research could be usefully complemented by quantitative research on ECG service use by sector and, ideally, health outcomes. However, reliably evaluating health outcomes of this policy change would be challenging.

Implications for policy

The concerns and reported behaviours of the participants in this study paint a worrying picture for the provision of health care to Australians in need of ECGs and for the sustainability of the general practice profession.

The rationale for the removal of Medicare funding for ECG interpretation has never been clear. This reform was contrary to the explicit recommendations of the MBS review taskforce. The present study offers no evidence to justify the change and a range of important reasons why the change should be reconsidered and reversed.

However, policy makers may very reasonably wish to discourage low-value use of ECGs. Promoting quality use of ECGs could help ensure optimal health outcomes while also improving efficient use of the health budget. There are opportunities to harmonise guidelines and clarify best practice for doctors of all specialties, including GPs. This would be a more responsible change than simply removing funding for all ECG interpretation in general practice.

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Appendix: Raw Data

GP 1

"We continue to do ECGs exactly as previously i.e. where clinically indicated. Some get bulk billed (e.g. pensioners) some get privately billed and I think the gap has increased, but not sure what it previously was."

GP 2

"I generally try to offer ECGs just as I would prior to the changes, and in largely bulk-billed fashion, despite the significant reduction in remuneration. I remember for the first ECG I did after the changes; I didn't bill anything at all - not even for the trace! That's because the item description for the 11707 is so confusingly written. It says that we should only use this item number if the ECG "does not need to be fully interpreted or reported on".

But of course, I was going to interpret it! - I would never do an ECG if it didn't need interpretation. I had to write to my MDO to check my understanding of the item number and if they thought it was OK for me to bill it. They said yes, but I don't think I ever went back and billed that one.

Although I have stuck to bulk billing, I wouldn't judge fellow GPs who no longer found this sustainable. I really worry that increasing gap fees for ECGs (whether in GP land or with specialists) will create barriers to necessary care for people."

GP 3

"We now routinely send them to pathology for reporting - so it costs the government the same as before the changes, but the patient now incurs a higher out of pocket cost as path company charges a gap."

GP 4

"I do the same as Stuart Anderson [GP 3] unless a chest pain presents."

GP 5

"No change in practice. Just in rebate. I'm still asked to do ECGs and report on them by psychiatrists, gastroenterologists, etc."

GP 6

"I did not realise 11707 applied to GP so for urgent onsite ECGs I have just been wearing the cost and unhappy about it as with all the undervaluing of GP service provision by Medicare - I'm feeling exhausted to attend to yet another type of Financial consent conversation ("I'm sorry, the government sets these rules not me, so legally I can't bulk bill you for x,y,z") as lately I've been doing this a lot explaining why telehealth has different rules now and I can see from the news today this will change again in July so I imagine I'll be spending the first 6 minutes of any telephone consult working out what the appointment is for before then deciding if I am able to bulk Bill or even partially Bill Medicare or not. Anyway, I digress - the point is - all these red tape changes take away time for us to actually deliver medical care, and remove financial reimbursement for the care we do provide. For routine ECGs I now send to pathology to trace and report so government and patient costs that way. Shame that GP don't get to stay in the loop of patient care more directly by being funded to do them onsite."

GP 7

"It's an issue for us rural docs who often manage cardiac patients in rooms, in Ed and in hospital. This means we need to make decisions on ECG interpretation during the course of an ED or in patient stay == this might mean looking for subtle changes of hypo/hyperkalaemia, of evolving ST elevation or depression, not missing a Brugada etc etc.

The point is, we are the ones at the pointy end making the decisions for our patients - who may have one, two, or even 4-5 ECGs over the course of a 4-48 hr hospital stay.

For the above examples, there isn't time to 'do a trace and refer for interpretation' - the rural generalist IS the one making the decisions and managing the patient, often in an emergent time-critical setting.

Our hospital billing is based on the MBS rebate. Not rebating ECG interpretation is yet another kick in the teeth for rural doctors who are managing complex patients... and a further impost on rural patients who already suffer worse health outcomes compared to metro counterparts.

Just reverse the decision, please!

The amount of folk needing PPM I've picked up...and referred (after performing, reading and reporting ECG). Then there are all those pre-anaesthetic checks where have needed to perform an ECG and make decisions based on risk factors/history/age/nature of operation/spidey-sense.

And those ECGs we've had to do in ED and for admitted patients. Heck, I remember one time when was managing an elderly lady with low output state, confusion, sepsis...no immediately available bloods...her ECG showed changes highly suggestive of pre-terminal hyperK and allowed us to initiate aggressive Rx for her ARF and hyperkalaemia, such that was packaged (IPPV, insulin infusion, calcium gluconate load and ongoing CaCl₂ infusion, IVABs, IDC, central line, arterial line etc) for handover to retrieval.

Whilst I view through a rural lens, I am sure plenty of metro GPs are also picking up ARF via hyperK on ECG in non-specifically unwell patients, as well as ECG changes of ischaemiaand of course rhythm disturbances and axis deviation

- In their rooms
- As part of a holistic consult
- As specialists in primary care

Not fragmented partialism as this latest MBS cull appears to support.

#patientswillsuffer if assume trace and interpretation are distinct in both time and silo specialty.

Also - as I am sure others have pointed out - our work involves performance of regular ECGs and interpretation for patients on antipsychotic meds, with eating disorders or just generally unwell....we are trained to pick up QTc abnormalities, subtle signs off hypo/hyperK, rhythm disturbance etc and to act on them in real time.

Don't get me started on thrombolysing AMIs in the bush, or management of Brady- & tachyarrhythmias.

It's a nonsense to presume we perform ECG trace and refer for another clinician to interpret. This would cause patient harm.

I guess I am interested in the logic or decision-making behind the cut in rebate..

Let's believe it was NOT about cost-cutting...but instead about a belief that #justaGP was competent to perform a trace....but interpretation and report needs to be left to a cardiologist.

If that is the case, then perhaps no hospital doctor should act on an ECG unless reviewed by a consultant cardiologist? No ED regs or RMOs acting on their own...no physician trainees or anaesthetic or ICU docs making decisions until a formal report issued.

It's nonsense and patients would suffer. The hospital would grind to a halt, workload (for reporting) would skyrocket and there would be delays, morbidity and mortality.

Primary care is basically one giant community hospital. We are the grunts on the ground (also working as trainees and consultant specialists) and we perform and act on ECGs to manage our patients.

Perhaps it is fair to tighten the rules to require a formal ECG report to be recorded...that's fair enough (the RGs do this for their R-exemption for radiology reporting and billing, and we also report ECGs in our inpatient notes). If reporting is a requirement, then make sure people issue a report. It can be done as part of the consult and after the "mischief is managed". THAT can be audited and indeed used as a quality control measure.

But to remove the rebate entirely?

What were they thinking?

- Was it about cost?
- Was it about safety?
- Was it about partialists not understanding the skills of generalists?
- Was there any measure of the adverse effects that could befall these community patients by such a move?

I'd love to know the answers."

GP 8

"Patient with biphasic t waves in V2/V3 convinced he had indigestion talked into attending ED based on ECG and immediate interpretation."

GP 9

"Colleague did ECG recently for vague symptoms. ST elevation interpreted by him. Sent to Emergency, angiogram and stents needed. If he had sent outside the clinic for interpretation would have been days later as we are rural."

GP 10

"My patients are now paying a higher gap: they're directed to complain to their MP and they complain to me. Some, say new onset AF, need serial ECGs in the community, I also monitor, as Tim Leeuwenburg said QTc for various drugs. As an ex coronary care Reg used to inserting pacemakers etc my skill set hasn't changed and I still interpret the ECG... AND several cases of posterior infarction missed by paramedics but hey Ho I'll send it to my local psychiatrist for a report for more \$\$\$\$. So yes evidence of certain harm and missed

opportunity if I couldn't read the ECG. Long term cost to the community is greater. Rebate hasn't changed how often I do an ECG."

GP 11

"lady in today...feels crap...bradycardic AF on ECG and clearly different to last year's in SR. Interpreted, called cardiologist, plan made, referral sent. No, I didn't write a damned formal report, I never have done - I just wrote what I saw and managed accordingly. Rebate \$16.15. Student wanted to know why I just didn't send to ED. Well, that would have cost the community...oh, nevermind"

GP 12

"Rural area: 70yo M breathlessness on exertion for 3-4 days, ECG showed subtle t wave inversion in inferior leads, borderline sats, referred to centre of excellence 1 hour away, PE found on CTPA.

Another 70yo M feeling slightly 'off', HR fast, ECG showed new onset fast AF, given oral metoprolol in rural hospital, reverted back to sinus. 5-6 ECGs, all requiring interpretation, allowed to bill for 2. Saved costly transfer and management to regional hospital"

GP 13

"I've always written a report on every ECG I've done under Medicare or on a hospital patient. I continue to do this, I can't see why or how the panel/review/whatever came to the conclusion that an ECG tracing is just done! What would be the actual point? (There was an item number previously for tracing only or report only- and given that one does sometimes do an ECG just so that the medical can go off or the ACAT referral be completed, I guess that one wouldn't maybe report those- but I still look them over.) I'd be going back to the previous system of a rebate for tracing and a larger rebate for tracing and report."

"Oh and my most recent patient (last week) of 56 was "feeling pretty crap" and looked very grey after a viral illness, so did BP - severely bradycardic and irregular pulse, did ECG - new onset AF and additional conduction defect- now has defibrillating pacemaker for his cardiomyopathy."

"Please don't advocate for this to be just a rural issue. After my (lost) battle to continue my urban procedural surgical rights because my skills were considered inadequate for an urban peripheral hospital (i.e. it's OK for you to operate on someone in Merredin or Narrogin but not in South Metro Health service) I'm over the health department predicating my skill level on the postcode of my provider number."

GP 14

[redacted]

GP 15

"Patient presents for a standard 15min appointment one morning with dizziness. Hypotension and tachycardia. SVT on ECG. Chemically reverted with 2nd dose of adenosine. Patient went home without ever bothering those busy metro ED services and I went back to clinic and continued my day.

If you feel that a bunch of anecdotes about how GPS went ahead and did the needful despite getting paid less is really going to help then sure ... but the point of this and all the other anecdotes is the skill to interpret ECGs is totally unrelated to the actual performance of the trace. It is ridiculous and insulting that as GPs our expertise in this is so denigrated that the Department of Health does not regard it as a service worth funding a patient rebate. But I would like you to also point out that we continue to do the needful because of the duty of care and the ethical and legal obligation to perform an interpretation for each and every trace that we do."

GP 16

"I work in an Aboriginal Medical Service and perform AND interpret ECGs on a daily basis. My patients often do not have the personal or financial resources to attend other providers for these. And their clinical presentations require immediate interpretation of the trace. I do ECGs for kids with suspected rheumatic heart disease, dialysis patients with chest pain, complex mental health patients with palpitations, pregnant women with mechanical heart valves on anticoagulation with chest pain who are survivors of ongoing DV (just to mention a few of the patients I've performed and interpreted ECGs for this year). I interpret them all. Then refer the PATIENT (not the ECG) to a cardiologist or ED if necessary. My work continues as it did before the change in rebate, but now the AMS I work for receives less in Medicare rebates for the service I provide. So much for this government's commitment to closing the (insert swear word) gap."

GP 17

"We've just opened an Urgent Care centre. We've always done diagnostic (never "routine") ECGs and are now doing more than before (and continue to interpret them). I doubt the rebate covers the cost of nursing and doctor wages (nor the cost of the dots), but we'll

continue to do them and try to find savings in other places, as we do every time an item number is cut/axed."

GP 18

"Sending all to pathology (or ED if that is indicated). The cardiologist reports are minimalist even if I give the clinical picture and ask for a specific thing to be reported."

GP 19

"Agree [with GP 18]. We send to pathology or if more urgent to ED. But the pathology reports are basically rate and sinus rhythm. Do reports done by pathology cost more than what the rebate was? E.g. phlebotomist cost and interpreter cost? Would be interesting to compare what happened to those figures."

GP 20

"At the ANZAC Day Service in [rural NSW town] an 86yo man had a presyncopal episode. Ambulance was called but ETA >40 mins as they were all ramped at our local hospital. Hubby saw it unfold over the crowd (he's quite tall) and I should have a look what was happening - pale, diaphoretic, rapid irreg pulse, history of paroxysmal AF but none recently. Quick chat with the police sergeant and snr constable, they drove him in their divvie van to my surgery so I could *gasp* do an ECG and monitor him rather than wait in the wind and rain for the ambos. Just as we were leaving, *bam* another chap, 72yo, pale and diaphoretic, no pain. Come on then, you can come too. My Awesome RN came in to help, I can do one solo but 2 needs help.

Ambos arrived at the surgery after 40 mins, by which time ECG 1 had determined sustained AF but no (other) ischaemic changes —> you go to ED; ECG 2 showed NSR and no acute changes, and now asymptomatic, so his ambulance crew got to move on to the next job. So the ED got one appropriate patient and avoided one who just needed a lie down and a cuppa.

But wait there's more... In routine GP, I've told my staff to stop doing ECGs unless it's acutely indicated. Not for preop assessment, not for qtc, not for health assessments. We would previously do one for high-risk patients, we all know the benefit of having a recent pain-free healthy ECG when they come in with chest pain or dizziness. Sometimes, when the acute ECG is unchanged of the previous one, we can avoid sending to the ED. Now, we don't have one to compare, so they'd better go to ED, that LBBB might be new.... "

Later, separate comment, re baseline ECGs:

"It's part of the cardiovascular risk assessment - voltage criteria is how I know if there is LVH or not (therefore I will send out for a report on that feature if I can't do it myself...), so I can use the risk calculator. So we "should" do ECGs so we can follow the Red Book for higher risk populations; and to properly assess risk for compliance with the requirements of item 699."

GP 21

"I am a methadone prescriber. If I perform an ECG for a methadone patient on other QT prolonging drugs, interpret, and adjust their dose, no one else is doing the interpretation. It is very difficult to get this patient population to pay for outside tests at a pathology provider. I don't think many ECGs would get done if I referred the patient out. Much like an AMS, we solely bulk bill and try and provide a full service GP. The value to the patient is much more than the rebate, and even underserved populations unable to pay a gap deserve full value healthcare. "

GP 22

"We increased the gap- so the overall charge was the same with less patient rebate."

GP 23

"Rebate barely covers cost of doing it. Nurse time, consumables, my time, etc. We have pathology collectors onsite - so I've been sending more that way. Paying me half, doesn't mean I'll do twice as many!"

GP 24

"Shortly after the ECG rebate cut I got a letter from a cardiologist about a mutual patient, asking me to do an ECG in one month and let him know if the rhythm and/or QT interval were abnormal. So cardiologists sometimes refer to GPs for ECG reports. This sort of thing happens all the time in real life."

GP 25

"Speaking as a remote area GP in Indigenous health, there is no suggestion that my ECG workload could, would or even should have changed one iota since the MBS payment change. As the only health service within a 2-hour 'help' window, we do multiple ECGs every day in our high risk population, both as emergency and screening."

We have a cardiovascular death or major event every week, and our mortality audits have Darwin cardiologists urging us to push ECGs on our sometimes-reluctant patients.

The very concept of us doing an ECG and waiting around for a specialist before actually acting on it is ludicrous to the point of fantasy. Besides the unacceptable clinical risk, it would be a ridiculous burden on a Darwin specialist to sit through a hundred remote-area ECGs every day, when they don't know the patient and, quite frankly, have more useful things to do.

Yep, only one thing has changed with the new MBS rebate - our health service does all the interpretation for free. Before, my skills were paid for. Now they are not. Simple.

The need is so stark where I am, I'd do ECGs if they weren't subsidised at all. Hell, I'd probably even buy a machine out of my own pocket, because I actually believe in patient care, and the majority of my patients die cardiovascular deaths. Yes, I would do it for nothing. But then again, volunteerism isn't really the most sustainable way to run a first world health system, is it?"

GP 26

"Mid 40s homeless, jobless man with a family history of multiple MIs among 1st degree male relatives. Pc - Recurrent exertional chest pain with a b/g of repeated discharge against medical advice from ED due to long wait and poor treatment.

Unable to afford private ECG gap that the practice charges. Yet not able to refer him publicly to the cardiac outpatients clinic as "needs an ECG" for triage.

Who do I send the bill to?"

GP 27

[redacted]

GP 28

"I used to bulk bill most ECGs just to keep things easy - i.e. known gap for the patient for their standard consult. Now I charge a set private fee for all including pensioners."

GP 29

"Rural SA: Recently managed a 75 yr old who was short of breath and lethargic. Known AF. Her ECG showed rapid ventricular responses. Given usual and extra dose sotalol with no effect. Eventually also gave digoxin and she cardioverted.

It's ridiculous that they removed the rebate for interpretation by GP. Are we meant to send every single ECG to the cardiologist?"

GP 30

"It all boils down to one simple principle. Equal rebate for equal work. It doesn't matter if it is a GP or a cardiologist or a general physician interpreting the ECG. If they have the skills and they are able to competently do the job then they should all get the same rebate. The fact that non GP specialists get higher pay than GPs is an aberration that should be addressed, and not the natural order of things!

Many examples [of GP interpretation without need for cardiologist input]. One that comes to mind is an older patient admitted into nursing home for respite care. My medical student examined his pulse and found him to be profoundly bradycardic. I went across the road to our clinic and brought over our ECG machine. 12 lead ECG confirmed third degree heart block. Discussion with person responsible and sent patient to the hospital. "

GP 31

"Well these are some of the reports patients paid for since the Medicare change."

The GP attached screenshots of ECG reports with the following text:

"SINUS RHYTHM

WITHIN NORMAL LIMITS"

"SINUS RHYTHM

WITHIN NORMAL LIMITS"

"POSSIBLE ECTOPIC ATRIAL RHYTHM

NO OTHER FINDING"

GP 32

"I'd like to comment on the fact that data will give you one aspect of the effect the changes have had. Less easy to collate, yet very palpable, is the effect on General Practice as a whole. We are suffering 'Death by a Thousand Cuts'. To 'other' us, to suggest we are 'less than' our colleagues, to constantly freeze and/or reduce rebates is having a dire effect on our profession.

Many of us have patients we cannot possibly charge the difference for, nor send to a cardiologist for interpretation. So we wear the reduction in income. We wear the reduction in

the perception of our Profession by Medicare. We are clearly not valued and as an 'easy target'.

Colleagues are completely fed up, and leaving in droves. I (and I shamefully write this) for the first time have started encouraging my medical students to choose another specialty. Morale is very, very low.

I hesitated writing this because I'm certain the powers that be don't care. But in 5-10 years, when there is a critical shortage of GP's, when training programs are half empty, maybe only then will they realise what we actually do. That if you damage the base of a pyramid the whole bloody thing crumbles. And it will, if they don't recognise the psychological damage they are doing to us as a profession.

I have Eating Disorder patients who need weekly ECG's. Every week I dutifully perform and check their ECG to ensure their electrolytes imbalances aren't about to send them into a sudden arrhythmia and cardiac death.

Every week as I BB multiple 11707's I resent it. I think about it. I grumble to myself. Then I think about how many ED presentations I've saved.

Then I think about leaving. Every single employee will tell you that feeling VALUED is as important part of the job as remuneration. They are destroying this profession. I'm warning them that they are destroying us, and there will be a much larger fiscal issue if they don't stop."

GP 33

"I'm not doing ECGs anymore. I am referring for ECG and reports. No money saved."

GP 34

"Eventually the costs (machine, consumables, staff time) will be prohibitive for GPs to keep doing. It merely cost shifts to other more expensive areas of the health system so it's a false economy. e.g. non-urgent, pre-op ECGs will be sent to pathology companies or cardiology groups. Other "chest pains" will be sent to ED by ambulance (good luck with ramping!) when they could be assessed and managed in primary care clinics."

GP 35

"Used to do all ECGs in rooms. Now only do emergency ones. Anything else refer."

To this, GP 11 replied (sarcastically): "that'll be good for our skillset, won't it?"

GP 36

"No change to the numbers of or reasons which I perform ECGs, and no change to the fees that I charge for them (that is, no reduction from what I was charging before the change to the MBS items)."

Dr Frank clarified that he does not bulk bill and that his patients pay greater gap fees now.

GP 37

"I'm not doing ECGs anymore either. I am referring them."

GP 38

"I charge a private fee - even to pensioners. I also ask them to write a letter to the local MP to complain. Hopefully not about me! For those patients who have been asked by their psychiatrist/hospital based eating disorder team, I write back and advise them that I won't be providing ECG services for the patient that they manage 90% of the time. There are BB cardiology services in town for the private people and really the hospital should be arranging their own ECGs in house."

GP 39

"Diagnosed and managed atrial flutter in a patient who presented with nausea. Had 3 ECGs and management by me with cardiology advice before seeing cardiologist for definitive treatment. Saved public health system thousands of dollars because I was confident with ECG interpretation and didn't send her to emergency department.

I do exactly the same number of ECGs as before. Mostly with a gap.

ECGs are core GP skills and we need to be able to do them whenever needed. One of the things about doing a reasonable volume of ECGs is keeping our skills up. I try to train myself not to look at the (often flawed) automated report, and decide for myself before seeing if the computer agrees!"

GP 40

"I have stopped most ECGs unless acutely symptomatic, when I still interpret but charge a larger gap. There have never been many. Routine pre op are now sent to pathology. Most other stable cardiac sent to cardiology. Psychiatrist requests for possible QT monitoring now also redirected to path. Also doing more 24 h Holters."

GP 41

"Don't find it worth doing as still end up interpreting it for the pt anyway...Not interested in doing free work. How can you not interpret when there's an anxious pt looking at your face. I just find it sneaky how free work is claimed off already hard working GPs. Too many confounding factors sometimes to privately charge quite often. The poor miss out or the doctor misses out."

GP 42

"ECG performed for patient with fatigue after noting bradycardia. It showed complete heart block. Was able to ring cardiologist and sort pacemaker insertion without needing patient to go to ED."

GP 43

"Eating Disorders. People who are unwell with eating disorders often need weekly ecgs. Pathology companies are now routinely charging a co-payment of \$50 even for those with HCC. Cost burdens are massive for families affected by ED. GP is already underfunded for the provision of care to this challenging group. We cannot provide ECGs at a loss as well."

GP 44

"I now send most to cardiology investigations unit. Patient now has to travel 2 hours for this. I only do emergency ones. I now focus on things with a rebate."

GP 45

"Still doing ECGs but everything takes longer because of financial consent, as the gap fee is now passed on to the patient. Some patients have declined due to financial reasons. This has resulted in them having to present elsewhere for their ECG and report. At least once this involved me recommending they present to ED.

I am increasingly aware of gap fees affecting thought processes: for example, consciously overriding thoughts about whether or not to bring up doing a clinically-indicated ECG because of a patient's known financial circumstances."

GP 46

[redacted]

GP 47

"Aside from managing all the undifferentiated unwell, there is also the issue of a baseline ecg reading. We have a large elderly complex multi morbidity patient group, as is so common now. When patients come in with their undifferentiated whatever, it would be so helpful to be able to compare a new reading with a baseline ECG to help direct patient management."

"[An ECG] is part of cardiovascular risk assessment. I also work in ED and the first step with a slightly abnormal but not necessarily acutely dodgy ECG is to compare with previous. For example, a nauseated diabetic with left bundle branch block. ??hot Cath lab vs potential outpatient/ Gp management"

GP 48

"Semi rural GP practice. 71 yo gentleman came in looking clammy, complaining chest pain. Quick history went straight to ambulance bay in clinic - ECG showed acute anterolateral STEMI. Urgent ambulance. Started thrombolysis - went straight to metro tertiary centre. Had angiogram and stent. Discharged 2 days later. He's back to his farm work. Would have been very different if I don't interpret or do the ECG or send him to the nearest hospital with no cardiac intervention service."

GP 49

"if you want to check for AF, LVH, ischaemic change, etc you need a ECG and to interpret it. Low threshold for spirometry similarly. Otherwise you will miss preventable conditions that will lead to worsening health, more hospital admissions, sickness benefits etc etc. Our practice has not changed its ECG policy since the change in the rebate - but COVID has kept many elderly out of the surgery."

GP 50

"I'm embarrassed to say that when I'm working on my own after hours, with people waiting to be seen and a patient presents with atypical chest pain, I now find myself wondering whether the patient *really* needs that ECG. I know it takes a lot of time to do, and performing an ECG is a significant financial opportunity cost. When I catch myself thinking like this I scold myself. Professionally, I know I still have to do it... but I'm sure on a subconscious level I must omit some ECGs that really ought to be done."

GP 51

"We have continued to do ECGs where clinically indicated: we have a practice on the South Coast of NSW and a large percentage of our clientele are elderly and sick. In the usual fashion, as GPs do, continue to treat on merit and take the pay cut - a proportion of our clientele struggle with affording basics and it hurts to think of depriving them.

Last week I had a 88 yo man who required PPM and a 62yo man who had a STEMI - all in the 'routine' days of GP"