

EXECUTIVE SUMMARY

This report of the Professional Relativities Study (PRS) describes the work carried out by the National Centre for Classification in Health (NCCH) for the Medicare Schedule Review Board (MSRB) between 1997 and 2000 to develop medical work relativities for items in the General Medical Services Table (GMST) of the MBS³. The PRS is part of the Relative Value Study (RVS), a comprehensive review of the GMST of the Medicare Benefits Schedule (MBS) jointly managed by the Australian Medical Association (AMA) and the Department of Health and Aged Care (the Department). The PRS consultancy deals with measurement of medical professional work involved in approximately 3,000 items in the MBS. Other aspects of relative values of items such as Practice Costs and Remuneration Rates are covered by other consultancies (PricewaterhouseCoopers (PwC) and Healthcare Management Advisors (HMA) respectively).

Structure of the report

Part A of this report documents the results for procedure items and attendance items and provides some insight through the *Notes to the PRS Work ARVU and Work AIR Tables* to interpretation of the results. It contains the preliminary results of a study to establish an Australian Relative Value Scale for medical professional work. Two scales are presented:

- Australian Work Relative Value Units (Work ARVUs) which reflect medical professional work predominantly for procedure items in Categories 2-4 of the MBS
- Attendance Item Work Relativities (Work AIRs) which relate to the new attendance items which were developed by the MSRB during the PRS but which have not yet been implemented.

Australian Relative Value Units for professional work (Work ARVUs) have been developed for relevant MBS procedure items and attendance items not covered by the new attendance item structure. While the original aim was to include the new attendance items on the same scale, the MSRB decided to keep these separate.

Part B introduces and outlines the method used to establish Work ARVUs. A detailed method paper was initially produced in October 1998. This document, along with other background material, is one component of the *PRS Resource Material* and is being provided to the MSRB along with this report (see *Table of Contents*). Other relevant documents are provided as attachments to this report. The distinction between resource material and attachments was made based on relevance to reading of this report as well as size considerations. Issues covered in detail in the *PRS Method - October 1998* are summarised here, while methods which have evolved since October 1998 are elaborated in this report.

³ For the PRS, the GSMT refers to the Health Insurance (General Medical Services Table) Regulations to the Health Insurance Act 1973 excluding optometrical consultations described in Group A10 of the Table and cleft lip and cleft palate services described in Groups C1 (orthodontic services), C2 (oral and maxillofacial services) and C3 (general and prosthodontic services) of the Table. The PRS specifically excluded consideration of services contained in the other two Tables covered by Regulations to the Health Insurance Act, namely the Diagnostic Imaging Services Table and the Pathology Services Tables.

Method

Part B builds on the October 1998 method which was based on achieving clinical consensus on estimates of work value for items in the MBS and to determine relativities between items. Work was described in terms of time and intensity of each item. 'Time' was defined as that required for face to face delivery of the service (intra service time) as well as time for preparation and follow-up (pre and post service respectively). Intensity was divided into elements labelled Cognitive Skill, Technical Skill and Stress.⁴ These and other definitions used in the PRS were determined by the Professional Relativities Technical Committee (PRTC) which met twice during initial stages of the PRS (see *Glossary of terms and PRS definitions*, p.99). Definitions were based on those used in the Harvard⁵ study to develop a Resource Based Relative Value Scale (RBRVS) relating to items listed in the American Medical Association Current Procedural Terminology (CPT).

On the whole, the MBS as a fee schedule can be characterised as containing more *bundled* items⁶ than CPT. The MBS is structured according to specialty area, but there is a great deal of cross specialty use of items. Because of this, and because the consensus approach required assembling specialty group representatives to estimate work value and item relativity, items were allocated to specialty groups using Health Insurance Commission (HIC) data on claims by specialty for each procedure item. This process is described in detail in Section 1, while Section 2 covers the methods adopted for presenting items to clinician consultants and consensus groups for ranking and rating⁷. The clinical workforce was initially divided using 32 groups approved by the MSRB. Subsequently, some groups were combined based on similarity of specialty, sharing of items or to ensure a statistically valid sample of items. A separate group was assembled for attendance items (Consensus Group on Attendance Items – CGAI), which met three times during the study.

The main reason for separating the attendance item process from that of the procedure item was the differences between the Australian *referral* system and the US predominately *open access* system.

Twenty-three groups were involved in the process of ranking and rating items on a within group basis. This was an extremely difficult exercise especially for groups with hundreds of items. Most consensus groups met face to face three or four times and much work was undertaken by teleconference and, for clinicians, out of hours. Section 3 summarises the way in which consistency checks were applied to consensus group data and formulae were derived to calculate imputed relative values (IRVs) from time estimates and intensity ratings.

⁴ Where Cognitive Skill also encompasses Clinical Judgement and Communication Skills, Technical Skill also encompasses Physical Effort and Stress refers to Stress due to Risk.

⁵ Hsiao WC, Braun P, Dunn DL et al (1992). An overview of the development and refinement of the Resource-Based Relative Value Scale. The foundation for reform of US physician payment. Medical Care 30 Supplement:NS1-NS12.

⁶ *Bundled* items are those MBS items which list or cover two or more procedures.

⁷ *Ranking and rating* refers to the PRS clinician tasks of estimating times, rating intensities and ranking of items allocated to clinicians for review.

The transformation of 23 groups of data to a common scale using ‘between group’ consensus and statistical methods is covered in Section 4. Group data were merged using link items common to the groups being aligned. This process yielded IRVs for nine groupings of specialties.

A detailed mapping between MBS items and CPT codes was carried out in several stages and involved both the NCCH and the AMA. Its aim was to express MBS items in terms of CPT codes for the purpose of deriving a common scale for MBS item relativities. This mapping and its validation are set out in Section 5. Health information managers (HIMs) and clinicians were involved in a disciplined exercise to determine the equivalence between items in the US and Australian systems.

US Medicare Work RVUS (US Work RVUs) for one-to-one MBS-to-CPT maps and for commonly performed and high value items were used along with IRVs to draw calibration curves (relationship of IRVs to US Work RVUs) for the nine groups of specialties. This method is portrayed in Section 6. Each curve expressed the relationship between IRVs and US Work RVUs for items allocated to that group. The MSRB determined that the curves be used to arrive at the relative value for all items except skin lesion excision items, mapped items which acted as inliers in deriving the curve and certain significant outliers. Inliers and significant outliers with acceptable maps were given the relative value relating to the CPT item to which they were mapped. An additional step in establishing Work ARVUs was to rationalise the link items which had acquired different Work ARVUs during the calibration curve exercise.

A substantial amount of work was conducted to apply rigorous methods in a thorough and systematic way throughout the study. This was particularly apparent during the validation and adjustment processes applied and the consensus group meetings and consolidation of results. Section 7 sets out the validation processes used to determine and check time estimates of procedure items and total times for specialties compared with target hours. Data on theatre times from operating theatre systems in the public and private sectors were particularly useful in informing groups during the estimation phase and in individual adjustment of item times for high frequency items as well as global adjustment for other items. Sources such as the Hospital Casemix Protocol and Australian Institute of Health and Welfare (AIHW) publications on medical workforce practices, procedure data, casemix statistics and HIC data on MBS claims were used extensively.

A Coordinating Committee comprised of NCCH staff, Medicare Schedule Review Task Force (MSRTF) and MSRB members, met fifteen times during the last months of the project to make decisions on data validation. The activities of this committee as well as clinical input to the review of significant outliers identified during the calibration curve process are documented in Section 7. A great deal of attention was paid to work substitution⁸ involving cross study comparison with the Practice Costs Study to determine which items involving technician time were costed in that project. Issues relating to items covered by the multiple procedure rule were addressed during the ranking and rating process in which non standalone items were identified and estimated accordingly (Section 2).

⁸ Work substitution refers to cases where persons other than the medical practitioner perform part of the service.

Section 8 deals specifically with attendance items and their relationship with procedures. The attendance item relativities use a new attendance item structure. It incorporates:

- Content of consultation
- Indicative times
- Location
- A split between new and existing patients
- A split between referred and non-referred patients
- Different direct to indirect time proportions between consultant physicians⁹ and other medical practitioners

Ranking and rating data on attendance items were collected through consultation with the profession, but those data have not been used directly in calculating the relative values presented here. These latest attendance item relativities were developed by the MSRB and incorporate:

- MSRB determined working assumptions of ratios of direct to indirect time (two assumptions of these ratios are compared, resulting in two sets of relative values for each attendance item detailed in 8.2 *MSRB working assumptions*, p.86);
- MSRB determined working assumptions of work intensity relationships between the items (intensity peaks at particular times and loadings for new and referred patients).

These attendance item relativities invite further development. The most important step will be to develop ARVUs for attendance items making them comparable with procedure items. Other outstanding tasks involve the creation of work intensity loadings for different locations and further splitting of items to reflect some of the particular types of professional attendances in the current MBS structure (eg. attendances associated with acupuncture and contact lenses).

These matters relating to attendance items plus other outstanding work are highlighted in Section 9. NCCH considers there is still considerable scope for anomalies to have occurred in the relative values in this report which may have disturbed relativities between families of items. These anomalies may have resulted from the consultative data collection processes or the generalised application of various statistical methods to bring the data on to a common scale including:

- Different treatment of high and low frequency or value items;
- Application of maps and calibration curves to different items; and
- Time adjustments.

While a number of validation processes have been undertaken as part of the PRS, the relativities presented cannot be considered to be a 'final' result until further work is undertaken. The most important of these outstanding processes is confirmation of the clinical consistency of Work ARVUs for items by the medical profession. The additional processes discussed in Section 9 should be considered before the outcomes of the PRS are considered ready for practical application.

⁹ Throughout this report, the term *consultant physician* includes consultant psychiatrist.

While the relative values reported here should be viewed in the context described above, it should be noted that an extraordinary amount of time, energy and goodwill from the study team and from participating clinicians has been devoted to this extremely complex project. It has been greatly assisted by its forerunner, the Harvard RBRVS. Never before in Australia has such a disciplined review of the MBS taken place, and the completion of the study reflects the commitment of government and the medical profession to this task. The practical and political difficulties cannot be denied however. Issues of equity are at stake – equity within the profession as well as equity between this scale of fees and prices for medical services and services provided by other health disciplines and the community generally.