

# A national survey of medical morning handover report in Australian hospitals

Matthew J Fassett, Terry J Hannan, Iain K Robertson, Steven J Bollipo and Robert G Fassett

There is currently heightened interest and focus on ensuring adequate clinical handover between after-hours and day personnel in hospitals, as instanced by the recent publication of Australian Medical Association guidelines on the subject.<sup>1</sup>

We recently reported on the implementation of medical morning handover report (MMHR) at Launceston General Hospital.<sup>2</sup> Canberra Hospital reported similar experience with morning handover.<sup>3</sup> As we believed the use of MMHR was not common in Australia,<sup>3-7</sup> we decided to conduct a survey of Australian hospitals accredited by the Royal Australasian College of Physicians (RACP) to investigate whether MMHR is commonly practised and define the format used. We report here the results of our survey.

## METHODS

At the time of our survey, in 2005, we identified from the RACP website 76 Australian hospitals accredited for basic physician training (BPT).<sup>8</sup> A questionnaire was faxed to the director of BPT at each hospital (as identified from the RACP website), and a return fax number and mailing address were provided. Within 4 weeks, all hospitals were faxed a reminder letter.

Survey responses were returned anonymously. The questionnaire<sup>9</sup> sought data on the prevalence and format of MMHR. We also requested information on the hospital's level of RACP accreditation for BPT; its Rural, Remote and Metropolitan Areas (RRMA) classification;<sup>10</sup> and the state or territory in which the hospital was located.

Returned data were manually coded, and statistical analysis was performed using Stata software version 9.2 (StataCorp, College Station, Tex, USA). The association between the use of MMHR and hospitals' RRMA classification and the trend associations between level of RACP accreditation (treated as a rank-order variable) and use of MMHR were estimated by logistic regression. Results were expressed as odds ratios (ORs).

## RESULTS

Of the 76 hospitals invited to participate in our survey, 53 returned questionnaires (a response rate of 70%). Overall, 27 of 1590 possible responses to questions (1.7%) were illegible or not provided. This accounts for the different

## ABSTRACT

**Objective:** To investigate the prevalence and format of medical morning handover report (MMHR) in Australian hospitals.

**Design, setting and participants:** Questionnaire survey faxed to 76 Australian hospitals accredited for basic physician training by the Royal Australasian College of Physicians (RACP). The survey was conducted in 2005.

**Main outcome measures:** Use of MMHR; structure and format of meetings.

**Results:** 53 of 76 (70%) hospitals responded. However, some data (1.7% of possible responses) were missing or illegible. Prevalence of the use of MMHR in respondent hospitals was 58% (31/53). Analysing the data by RACP accreditation level, 18/24 Level 3 hospitals (75%) conducted MMHR compared with 5/9 Level 2 hospitals (56%) and 7/18 Level 1 hospitals (39%) (odds ratio [OR] for trend, 2.17; 95% CI, 1.12–4.23;  $P = 0.023$ ). 44 of 53 respondents reported their Rural, Remote and Metropolitan Areas (RRMA) classification. MMHR is less likely to be held in hospitals in regions classified as RRMA 2–4 (8/21 [38%]) than those in capital cities (RRMA 1) (16/23 [70%]) (OR, 0.27; 95% CI, 0.08–0.95;  $P = 0.042$ ). In 62% of hospitals, MMHR was chaired by a consultant, and at most hospitals (23/31 [74%]), meetings were 15–30 minutes long.

**Conclusions:** In spite of RACP accreditation requirements, the use of MMHR in Australian hospitals accredited for basic physician training is low.

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denominators in some data. Of the 53 respondent hospitals, 31 (58%) reported using MMHR.

## Demographics

The location of hospitals receiving questionnaires, the number that responded and the number that reported using MMHR are shown in Box 1. The response rate ranged from 52% in New South Wales to 100% in several of the smaller states/territories. For the 44 hospitals that indicated their RRMA classification, the number using MMHR is outlined in Box 2. A lower proportion of hospitals in RRMA 2–4 (ie, smaller metropolitan or larger rural areas) used MMHR (8/21 [38%]) than in RRMA 1 (ie, capital cities) (16/23 [70%]) (OR, 0.27; 95% CI, 0.08–0.95;  $P = 0.042$ ).

## Level of RACP BPT accreditation

Hospitals with a higher level of RACP BPT accreditation were more likely to use MMHR (Box 2): 39% of Level 1 hospitals compared with 75% of Level 3 hospitals (OR for trend, 2.17; 95% CI, 1.12–4.23;  $P = 0.023$ ).

## Structure and format of MMHR

The structure of MMHR in various hospitals is summarised in Box 3. Most hospitals (23/31 [74%]) conduct an MMHR of 15–30 minutes'

duration, chaired by a consultant (18/29 [62%]), with 1–2 consultants present (18/28 [64%]). The most common number of attendees is 5–10 (14/31 [45% of hospitals]).

Most meetings focus on complete handover of cases (20/30 [67%]) and most (22/29 [76%]) involve no formal teaching. MMHR was used by nearly all hospitals (28/29 [97%]) to discuss ward problems occurring overnight (Box 4).

## 1 Location of respondent hospitals and use of MMHR

State	Number of hospitals		
	Receiving survey	Responding to survey	Using MMHR
NSW	31	16	5
WA	5	3	1
Qld	17	12	7
Vic	13	12	9
SA	5	3	3
Tas	2	2	2
ACT	1	1	1
NT	2	2	2
Total	76	53*	31*

MMHR = medical morning handover report.

\* Two respondents did not indicate location.

## 2 Use of MMHR, by RRMA classification and RACP accreditation level

	Number of hospitals	Hospitals using MMHR
<b>RRMA classification</b>		
1 (capital cities)	23	16 (70%)
2	8	3 (38%)
3	11	4 (40%)
3/4	1	0
4 (small rural centres)	1	1 (100%)
Total	44*	24 (55%)
<b>RACP accreditation level</b>		
Level 3	24	18 (75%)
Level 2	9	5 (56%)
Level 1	18	7 (39%)
Total	51†	30 (59%)

MMHR = medical morning handover report.  
RACP = Royal Australasian College of Physicians.  
RRMA = Rural, Remote and Metropolitan Areas.<sup>10</sup>  
\* Nine respondents did not indicate RRMA classification. † Two respondents did not indicate RACP accreditation level. ◆

## 3 Structure of medical morning handover report (MMHR)

Structure of MMHR	Number (%) of respondents
<b>Duration (minutes)</b>	
5–15	1 (3%)
15–30	23 (74%)
30–60	7 (23%)
<b>Chairperson</b>	
Registrar	7 (24%)
Consultant	18 (62%)
Director of Medicine	2 (7%)
Registrar and consultant	1 (3%)
No official chairperson	1 (3%)
<b>Number of attendees</b>	
2–4	3 (10%)
5–10	14 (45%)
10–15	8 (26%)
15–20	4 (13%)
> 25	2 (6%)
<b>Number of consultants attending</b>	
None	3 (11%)
1–2	18 (64%)
2–4	5 (18%)
4–6	1 (4%)
> 6	1 (4%)

## 4 Format of medical morning handover report (MMHR)

Format of MMHR	Number (%) of respondents
<b>Formal teaching</b>	
Yes	7 (24%)
No	22 (76%)
<b>Focus of meeting</b>	
Education	5 (17%)
Complete handover of cases	20 (67%)
Education and complete handover of cases	5 (17%)
<b>Chairing of meeting</b>	
Formal	9 (31%)
Casual	12 (41%)
1–2 interesting cases with quick handover	7 (24%)
Formal and casual	1 (3%)
<b>Discussion of overnight ward problems</b>	
Yes	28 (97%)
No	1 (3%)
<b>Identification of patients</b>	
By name	27 (90%)
By initials only	2 (7%)
By medical record	0
By name and medical record	1 (3%)
<b>Breakfast and coffee provided</b>	
Yes	6 (20%)
No	24 (80%)

## DISCUSSION

The prevalence of MMHR in the 53 responding RACP BPT-accredited hospitals was relatively low, at 58%. Level 3 RACP-accredited and RRMA 1 hospitals were the most likely to use MMHR.

A limitation of our study is that the questionnaires were only distributed to hospitals listed as accredited for BPT on the RACP's website.<sup>8</sup> Hence, non-accredited hospitals and, potentially, some smaller rural and regional hospitals would not have been included. This could have resulted in an over-estimation of participation rates in MMHR. Another limitation of our survey is that, by surveying the directors of BPT at each hospital, we included MMHR related to internal medicine and excluded such areas as emergency medicine and surgery.

The low rate of use of MMHR is not in keeping with recently published Australian Medical Association guidelines<sup>1</sup> or with RACP

accreditation requirements that a consultant-led clinical handover should be conducted.<sup>10</sup> An increased commitment to this quality activity is required. One way of encouraging hospitals to conduct MMHR would be to link this to other accreditation procedures, such as those of the Australian Council on Healthcare Standards and the Confederation of Postgraduate Medical Councils.

## COMPETING INTERESTS

None identified.

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