NSW HEALTH

Assistant in Medicine Evaluation Report

NSW
GOVERNMENT

The NSW Ministry for Health acknowledges the traditional custodians of the lands across NSW. We acknowledge that we live and work on Aboriginal lands. We pay our respects to Elders past and present and to all Aboriginal people.

The views expressed in the report are not necessarily those of the NSW Ministry of Health.

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Executive Summary

The Assistant in Medicine (AiM) role was developed in March-April 2020 as part of New South Wales (NSW) Health COVID-19 medical surge workforce planning and was designed to supplement the existing junior medical workforce. The purpose of the position was to provide medical care and support, as part of the multi-disciplinary team. The role was developed by the NSW Ministry of Health in collaboration with NSW medical schools, Local Health Districts/Specialty Networks (LHD/SN) and the Health Education and Training Institute (HETI). A position description (Appendix One) was created, and the skills and capabilities required of the AiM were identified.

The first AiMs started on 8 June 2020 at Bathurst Hospital. During **2020**, over **400 medical students** worked as AiMs in NSW Health, approximately **40 per cent** of 2020 NSW final year medical graduates (domestic and international). AiMs were employed across a total of **41 facilities** in New South Wales and these are listed at Appendix Two.

Key features of the AiM position

- filled by final year medical students only.
- opt-in only, not mandatory.
- part-time position
  - AiMs could be rostered up to 32 hours per week.
  - Health facilities determined hours based on workforce needs up to that limit.
- The role was created by a time limited Determination by the NSW Ministry of Health (the Ministry) and adopted the terms and conditions of the NSW Medical Officers Award as there was no existing award for the AiM in Medicine.
- AiMs were employed by NSW Health and paid at 75 per cent of the NSW medical intern salary.

New COVID-19 funding was allocated to LHD/SN's for the AiM salary in addition to associated on-costs. Each LHD/SN determined the number of AiMs they could utilise and were responsible for determining where they worked. Districts were also given funding to establish a Director of Assistants in Medicine (DAiM) position in each facility that employed AiMs.

The Ministry of Health conducted an evaluation of the AiM position between August – November 2020 to define the role in practice and analyse its effectiveness in achieving the intended outcomes of the program.

Stakeholders reported that the program was a well-received and useful addition to the workforce during the COVID-19 pandemic. Based on feedback, it is clear that this role is effective in a pandemic scenario. The role also had unplanned benefits in supporting medical student transition to internship. There is an opportunity to examine how medical students could be utilised as part of the workforce in the future.

The effectiveness of the program during the COVID-19 pandemic response indicates that AiMs could be used to supplement the workforce in specific areas and during specific times such as winter surge or in areas that have high Junior Medical Officer (JMO) vacancies.

The impact of the AiM term on preparedness for internship and the learnings taken from the evaluation are a key area that the Ministry of Health should continue to progress, working together with key stakeholders.

Key findings

The evaluation found that overall, the AiM role was effective in achieving the intentions of the program and students were able to fulfil the requirements of the role. The AiM was valued by the medical workforce and medical schools as an opportunity to further integrate students in the team and utilise their skills and capabilities in managing the workload. The evaluation found that:

- Final year medical students employed as AiMs had the skills and capabilities required for the role and were able to perform the tasks required.

- The AiM role provided a different experience to that of a clinical placement.

- The AiM position clarified the student's role in the team, gave them responsibility and empowered JMOs to delegate to them. In comparison, feedback identified that medical students undertaking clinical placements usually don't have specific tasks and responsibilities within the medical team.

- The hours worked per week by AiMs was a factor in their effectiveness in the team. AiMs who worked 16 hours or more per week were well-integrated into the team and overall added more value to the team than those who worked less than 16 hours per week.

- Final year medical students who worked as AiMs reported feeling better prepared and more confident for internship.

- The AiM position provided paid employment to final year medical students at a time when many had lost their part-time jobs in non-healthcare settings as a result of the pandemic.

- There was strong support from a range of stakeholders for the role to continue in a non-pandemic scenario.

- The AiM program provided a means by which the relationships between the Ministry of Health, medical schools and LHD/SNs was further strengthened and provided greater opportunities for collaboration.

Key enablers to the success of the program

Implementation of the Director of Assistant in Medicine (DAiMs) role

The implementation of the DAiMs role was essential to support the AiM role. DAiMs were funded by the Ministry at each facility and were essential in supporting AiMs throughout the program and responding to and troubleshooting issues as they arose.

Responsiveness of Medical Schools

Medical deans were highly supportive of the program and ensured their students were prepared with education 'boot camps' and given adequate support to undertake the role. Universities were flexible and responsive in enabling their students to participate in the AiM program by reorganising their programs and providing support to students within a short period. Many medical schools changed the way their program was structured by scheduling virtual tutorials and classes around AiMs' shifts and many moved their established exam timetable to accommodate students in AiM terms.

Challenges and barriers

The evaluation identified some challenges and barriers and opportunities for improvement.

AiMs were unable to prescribe

A key limitation of the role was that AiMs were not legally able to prescribe. This needs to be considered when determining how AiMs are utilised.

Varying level of access to the eMedical Record (eMR) granted to Assistants in Medicine

Each district approached access to eMR differently and there was variation in the level of access that AiMs were granted across the districts. In some districts, AiMs had the same level of access as granted to interns but in others it was that of medical students, resulting in the requirement for all AiM entries in the eMR to be countersigned. This meant that at times, the requirement for junior doctors to countersign all AiM entries reduced the usefulness of AiMs in the team and was reported to have added to the overall workload of some junior doctors. In districts where the requirement for countersigning of eMR entries was limited, AiMs were able to have more autonomy in completing tasks and assisting the team.

Limited communication about the role prior to commencement

Due to a rapid rollout of the role as a response to the COVID-19 pandemic, there was limited communication and education to the system about the position. There were gaps in knowledge about the purpose of the role and AiM scope of practice across the multidisciplinary team. In cases where team members were unsure of their scope of practice, AiMs were often under-utilised as colleagues were unsure of what clinical tasks were appropriate to delegate.

Recommendations

1. **Assistants in Medicine (AiMs) should be utilised as part of the NSW Health medical workforce response in responding to future pandemic scenarios.**
   - NSW Health should develop a framework in collaboration with universities for how the AiM role could be activated in response to critical workforce requirements in future.

2. **NSW Ministry of Health should undertake further work to determine how the AiM role could be utilised in non-pandemic scenarios.**
   - This work should clarify what settings the AiM role can be used in on an ongoing basis.

3. **NSW Ministry of Health should lead work to improve the functioning of the role in both a pandemic and non-pandemic scenario.**

   This work should clarify and standardise:
   - the level of access that AiMs have in the eMR to support their role in the medical team
   - investigations that AiMs may order without the need for countersignature
   - mandatory training requirements for the AiM role

   The NSW Ministry of Health should develop:
   - A communication strategy and resources to inform stakeholders about the role of the AiM. These should be readily available to all LHDs/SNs.
   - An industrial arrangement to support the ongoing engagement of AiMs in NSW Health.

4. **NSW Health should use learnings from the AiM program to improve the transition of medical students into the workplace. This work should involve:**
   - Clarifying the final year student role in the team, particularly during the Pre-Internship Term (PRINT) term, to improve integration in the medical team. This work should be done in collaboration with medical schools and include developing a position description that outlines the roles and expectations of the final year student in the medical team.
   - Reviewing and considering the level of eMR access given to final year medical students to support better integration and contribution to the medical team teamwork and support preparedness to internship.
   - Ensuring junior doctors have the knowledge and skills to work with medical students in their team *e.g. delegation of tasks* via leadership skills training*.

1. Introduction

1.1 The role of the AiM

The AiM role was developed as part of NSW Health COVID-19 medical workforce surge planning. The position was developed in March 2020 when COVID-19 case numbers were rapidly increasing and concerns arose about NSW potentially experiencing a catastrophic situation as seen in Europe, United States of America and the United Kingdom. In this scenario, it was anticipated that large numbers of junior medical staff would either need to be redeployed to manage COVID patients or would be unavailable because they had been diagnosed with COVID or self-isolating as a result of exposure.

The AiM role was developed to supplement the existing junior medical workforce with final year medical students working in non-COVID-19 facing teams. The role was intended to provide medical care and support to patients as part of the multi-disciplinary team and free up other junior doctors to be diverted to the COVID-19 response. This included the assessment and management of patients across a range of clinical areas, while working under supervision. Successful public health measures, including social distancing and lockdown, allowed NSW to avert a catastrophic scenario. As a result, in most cases, AiMs worked in teams that continued to have an intern or a resident.

The role was developed by the NSW Ministry of Health in collaboration with NSW and Australian Capital Territory (ACT) medical schools, LHD/SNs and the Health Education and Training Institute (HETI) between March and May 2020. As part of the role development, a position description (Appendix One) was created, and the skills and capabilities required of the AiM were identified. Development of the requirements for the role was informed by work undertaken by the Ministry of Health in 2019 to identify the skills and capabilities required for commencing interns.

As there was no existing award for the AiM, the role was created by Determination by the NSW Ministry of Health and adopted the terms and conditions of the NSW Medical Officers Award. This Determination was developed in negotiation with industrial organisations. The Assistants in Medicine were paid at 75 per cent of the NSW medical intern salary. As salaried employees, AiMs were indemnified by Treasury Managed Fund.

LHDs/SNs identified the number and location of AiMs required in their services and were provided with funding to support the salary costs of both the AiMs and a Director of Assistant in Medicine (DAiM) at each facility. Whilst AiM positions were not accredited, they were funded only in facilities that were accredited by HETI for postgraduate year one (PGY1 doctors). A total of 436 final year medical students worked as AiMs in NSW Health facilities during 2020. The first AiMs were introduced into the workforce in mid-June 2020.

The AiM role was filled by final year medical students who opted-in through an Expression of Interest (EOI) process run by their medical school. Final year medical students from NSW and ACT universities were eligible to work as an AiM. Medical schools developed individual processes for identifying students who could undertake the role based on the position description. The students worked at the site where they undertook clinical placements. This allowed AiMs to remain connected with their medical school and with their student colleagues who continued in their clinical placements.

Macquarie University did not have final year students and therefore their students were not able to take up AiM positions. Australian National University (ANU) students undertake clinical placements in Southern NSW, however they generally do not complete final year placements there. ANU students were also required for the ACT response to COVID-19 and as a result, no ANU students took up an NSW AiM position. The students in AiM positions did not graduate early but remained enrolled students at their medical school throughout the program.

The AiM position was developed to meet a workforce requirement not an education and training need. There was no education/training time included in the position. Students were provided with mandatory training and facility-specific training as required by their allocated facility. It was expected that AiMs would continue to meet their educational requirements as students enrolled in their medical program when they were not working. It was agreed that AiMs would work where they were based for clinical placements.

In developing the role, some stakeholders suggested that AiMs should work where they would do their internship in 2021 as they felt this would have a greater impact on intern preparedness. This approach was not adopted for the following reasons:

- The AiM role was due to start before the allocation of 2021 intern positions was undertaken, so it was not known where students would work in 2021 (the first AiMs started in June 2020 and the allocation of 2021 positions commenced on 13 July 2020).
- some NSW medical graduates choose to take up an interstate intern position.
- many medical graduates complete their internship at a different hospital in NSW to where they completed their clinical placements. AiMs were continuing as enrolled medical students and it would have been complicated to have them working at a different site, away from their clinical school and their student colleagues who were not working as AiMs.

AiMs could work up to 32 hours per week, but each district determined the hours AiMs were required to work within their services. It was agreed that AiMs could work evening and weekend shifts but not night shifts. How the Assistants were rostered within these parameters was a decision made by each facility. The AiM rotations varied in length, with most working for a minimum period of eight weeks. Medical students not undertaking the AiM role continued with their clinical placements and studies. Once their AiM term ended, students returned to their medical school program and generally either completed further clinical placements or undertook their final examinations.

A Director of Assistant in Medicine (DAiM) was funded at each facility to provide oversight and support for AiMs. The funding for the DAiM role was based on the proposed number of AiMs at each site. At facilities with less than 10 AiMs, the DAiM was funded for two hours per week and at facilities with more than 10 AIMs the DAiM was funded for four hours per week

As students continued to be enrolled in their university education program, a shared-care model between the university and LHDs/SNs was developed to support students working as AiMs. The Clinical Dean and Clinical Academic medical school staff had ongoing regular contact with the students and provided pastoral care of the student in the AiM role. The DAiM at each facility provided employer support and oversight of the AiMs and was able to troubleshoot on-the-ground issues as they arose.

1.2 Evaluation Framework

Overview

The NSW Ministry of Health conducted an evaluation of the role of AiM to:

- understand how the role of the AiM functioned in practice
- identify whether the role was successful in meeting intended outcomes and if it would be successful in a catastrophic scenario
- identify challenges and blockers to the effectiveness of the role
- identify key factors for the role to be successful
- understand the key differences between an AiM and a medical student
- determine the potential impact of the program on medical training and intern preparedness
- consider whether there is scope for the AiM to continue in scenarios outside of a pandemic response.

Evaluation approach

The evaluation was carried out in four phases with a fifth phase to follow the completion of the program.

Phase 1: Planning and development

Phase 2: Data collection

Phase 3: Analysis

Phase 4: Final report and recommendations

Phase 5: Review impact of AiM program on intern preparedness

Methodology

Evaluation activities involved:

- distribution of four surveys completed by:
  – Assistants in Medicine (AiMs).
  – Junior Medical Officers (JMOs i.e. interns, PGY2s, accredited and unaccredited trainees) who worked with AiMs.
  – Senior Medical Officers (SMOs i.e. Staff Specialists, Visiting Medical Officers and Clinical Academics) with AiMs on their teams.
  – Directors of Assistants in Medicine (DAiMs).
- semi-structured interviews with AiMs, JMOs, SMOs, Directors of Medical Services, Medical Deans, the Australian Medical Students' Association (AMSA) and the NSW Medical Students' Council
- reviewing de-identified mid and end of term AiM term assessments
- review of unrostered overtime data.

About the surveys

As part of the recruitment processes, AiMs were advised that an evaluation would be undertaken and asked to provide an e-mail address. The Ministry of Health distributed a de-identified survey link directly to AiMs advising them of the evaluation and providing details of how to complete the survey. Surveys were also developed and distributed to JMOs and SMOs and these were distributed by JMO Units within each facility. The DAiM survey was distributed by the Ministry of Health.

Survey responses

Overall the surveys received the following response rates:

1. **AiM Feedback Survey: 212** (50% response rate)
2. **JMO Survey: 414** (response rate unknown)
3. **SMO Survey: 174** (response rate unknown)
4. **DAiM Survey: 20** (50% response rate)

About the consultation interviews

Twenty-eight semi-structured stakeholder interviews were undertaken with both individuals and focus groups. All sessions were conducted virtually due to COVID-19 restrictions. A set of structured questions was developed by the Ministry of Health to facilitate broad discussion around the experience of working as, and alongside, AiMs in NSW Health. Interviewees were put forward by universities, facilities and other contacts within NSW Health. Stakeholders were also able to utilise this time to ask questions they had about the evaluation and the program. A thematic analysis of interview feedback was undertaken to understand and identify themes. These themes were then used to inform the evaluation report findings.

The table at Appendix three provides a full summary of the data collected and analysed.

1.3 Summary of Key Findings

The evaluation found that the AiM position was effective and that students who opted-in were able to meet the requirements of the role. Stakeholders reported that the program was a well-received and useful addition to the medical workforce during the COVID-19 pandemic. Based on feedback, it is clear that this role would be effective in an ongoing or future pandemic scenario. The role has also had unplanned benefits in supporting medical student transition to internship.

Assistants in Medicine had the skills and capabilities required for the role

In all settings AiMs had the skills and capabilities to successfully undertake the role. AiMs were able to perform the role as described in the position description with a high level of skill, including completing discharge summaries, cannulation and venepuncture, scribing on ward rounds and organising consults.

AiMs were well integrated into the team

AiMs were successfully integrated into the team and added value. There was variation in how AiMs were utilised across different sites and teams depending on workforce requirements, but overall, feedback was that with clarification around their roles and responsibilities, AiMs were able to contribute effectively to managing the overall team workload. Whilst students in medical teams often don't have specific tasks and responsibilities attached to their role, the AiM role provided clarity and responsibility and empowered JMOs to delegate to them.

AiM terms were different to clinical placements

Having AiMs on the team was found to be a very different experience for both medical officers and students. AiMs reported that during their time in the role, they experienced more responsibility and autonomy than during a clinical placement. The AiM position gave them 'a taste' of their internship year and allowed them to feel better prepared. Some AiMs even stated that the program provided them with the most valuable learning experiences they have had to date and helped them to feel equipped with the skills of working as a junior doctor. In turn, medical officers reported that as AiMs were paid and had an associated set of skills and capabilities, they felt more comfortable to include them in the team workload. AiMs also reported they felt more useful and that the rest of the team appreciated their input. AiMs were seen to be a valuable addition to the medical workforce by their peers.

JMOs were enabled to work to the top of their scope of practice

AiMs' ability to take over many of the tasks associated with the JMO role, often enabled junior doctors to focus on clinical tasks and patient care, respond to critical calls and attend theatre more frequently, whilst allowing them to gain experience in a teaching/supervisory role. Whilst not all JMOs preferred this added responsibility and felt it added to their workload, most agreed that working with and delegating tasks to AiMs and allowing them to take over part of their workload enabled them to practice to the top of their scope. By many reports, having an AiM on the team often allowed junior doctors to review patients in a timelier way, improved patient flow and allowed them to finish their working day on time.

The program helped AiMs feel better prepared for internship

An unintended but beneficial outcome of the program has been the potential impact of the role on preparedness for internship. Evaluation findings have echoed results of the *2015 Review of Medical Training,* which found that interns in NSW are not always work ready as a result of:

- a lack of definition around the requirements of students entering internship
- a lack of structure to clinical placements in the current model of medical training.

The structure and definition of the AiM role helped them feel part of the team, which was also felt by other team members. By integrating AiMs as team members with more structure around their role and increased expectations, those in an AiM role felt that this enhanced their experience and allowed them to gain firsthand experience of the skills required in their internship year. In some cases, AiMs reported that they had completed up to 30 discharge summaries during their rotation. The exposure to a large proportion of what will be required in their internship year is likely to positively impact work readiness of students who have completed their AiM term. Further evaluation will be undertaken to confirm this.

AiM created paid role when students were losing other employment

Many medical students have part-time jobs while studying. Many of their part-time jobs in areas such as hospitality and retail were heavily impacted by COVID-19 restrictions and the paid AiM role replaced this loss of income from other employment sources. The AiM program also provided an opportunity for medical students to undertake a paid role that also allowed them to gain experience in their field rather than seek employment in other industries. This opportunity has not been widely available to students in NSW Health prior to the AiM program.

2. Evaluation Findings and Discussion

2.1 How did the AiM role function in practice?

Overall, **436** final year medical students worked as Assistants in Medicine in NSW hospitals from the following universities:

- University of New South Wales: **99**
- University of Notre Dame: **14**
- Wollongong University: **46**
- University of Newcastle/University of New England Joint Medical Program (JMP): **79**
- Western Sydney University: **83**
- The University of Sydney: **115**

The AiM cohort included domestic and international full-feepaying students from NSW universities. In normal circumstances, international students have visa restrictions that limit the hours they can normally work, however in April 2020 the Australian Government announced that international students studying relevant medical courses would be exempt from the usual 40-hour per fortnight work limit if they were working in support of COVID-19 health efforts and at the direction of the relevant health authority. This announcement allowed international students to participate in the AiM program.

Preparation for the role

Universities were responsible for putting forward students to the employing facilities who they determined had the skills and capabilities to undertake the assistant role. Universities ran 'education boot camps' to both assist in identifying students capable of undertaking the role and to prepare them for the role. Hospitals provided on-site orientation and facility-specific training to the selected candidates.

Overall, AiMs reported that they felt well prepared to take on the role. The survey results found 92% of AiM respondents attended a boot camp and overall, 68% of AiMs who responded to the survey said they felt the boot camp was helpful in enabling them to take on the role. AiMs reported that they were given adequate support in taking up the position, with 88% of survey respondents agreeing that they felt well prepared for the demands of the role.

The work undertaken by universities to prepare AiMs for the role allowed the role to be deployed rapidly and the students to work effectively. However, further work would be required to develop a framework for how adequate preparation of AiMs would occur in the future if there was a need for redeployment of AiMs in a future workforce crisis.

Hours worked and period of employment

In developing the role, it was agreed that the AiMs could work up to 32 hours per week but that the hours worked would be determined locally, based on requirements. Contracted hours for AiMs varied depending on hospital and medical school requirements. Data from NSW Health's human resources and payroll system Stafflink showed that:

42% of AiMs were contracted to work **32 hours** (four days per week)	**34%** were contracted to work **16 hours** (two days per week)
4% worked **30 hours** per week	**3%** were contacted to work **eight hours** per week.

There was no single approach to determining contracted hours. Feedback indicates that at some sites, the medical school course requirements had a greater influence in determining contracted hours and in other locations workforce requirements were the main consideration. Another factor was the desire to provide as many students as possible the opportunity to work as an AiM. At some sites, this resulted in each AiM working less hours (e.g. 8 or 16 hours) so that more students had the opportunity to take up the role.

Each LHD/SN also determined the period that they needed the services of the AiMs and when they would work in the district. Periods of employment ranged from eight weeks to 30 weeks. Feedback indicates that this was determined by the identified workforce needs at the time funding was allocated, along with medical school timetabling including the scheduling of exams.

Specialties in which Assistants in Medicine worked

In developing the role, it was agreed that the AiMs would not be allocated to work in wards that had COVID-19 patients. AiMs were deployed to non-COVID-19 facing teams across a range of specialties.

Of the Assistants in Medicine who responded to the survey, 42% reported they were allocated to a general medical team, 21% to the Emergency Department and 14% to a surgical team. The remainder of respondents who indicated a specialty area noted that they worked in intensive care units, obstetrics and gynaecology, paediatrics, psychiatry, rehabilitation medicine and anaesthetics.

Decisions about which specialties/departments/ units AiMs could be allocated to were made locally and were usually dependent on:

- workforce requirements
- if appropriate supervision was available
- if teams expressed an interest in having an AiM and how effective AiMs could be in each team.

In some facilities AiMs were not initially deployed to work in the Emergency Department (ED), but after positive feedback from other specialty areas on AiM performance during initial terms and their effectiveness, some facilities subsequently allocated them to work in ED.

Table 1. Specialty areas worked, as reported by AiMs
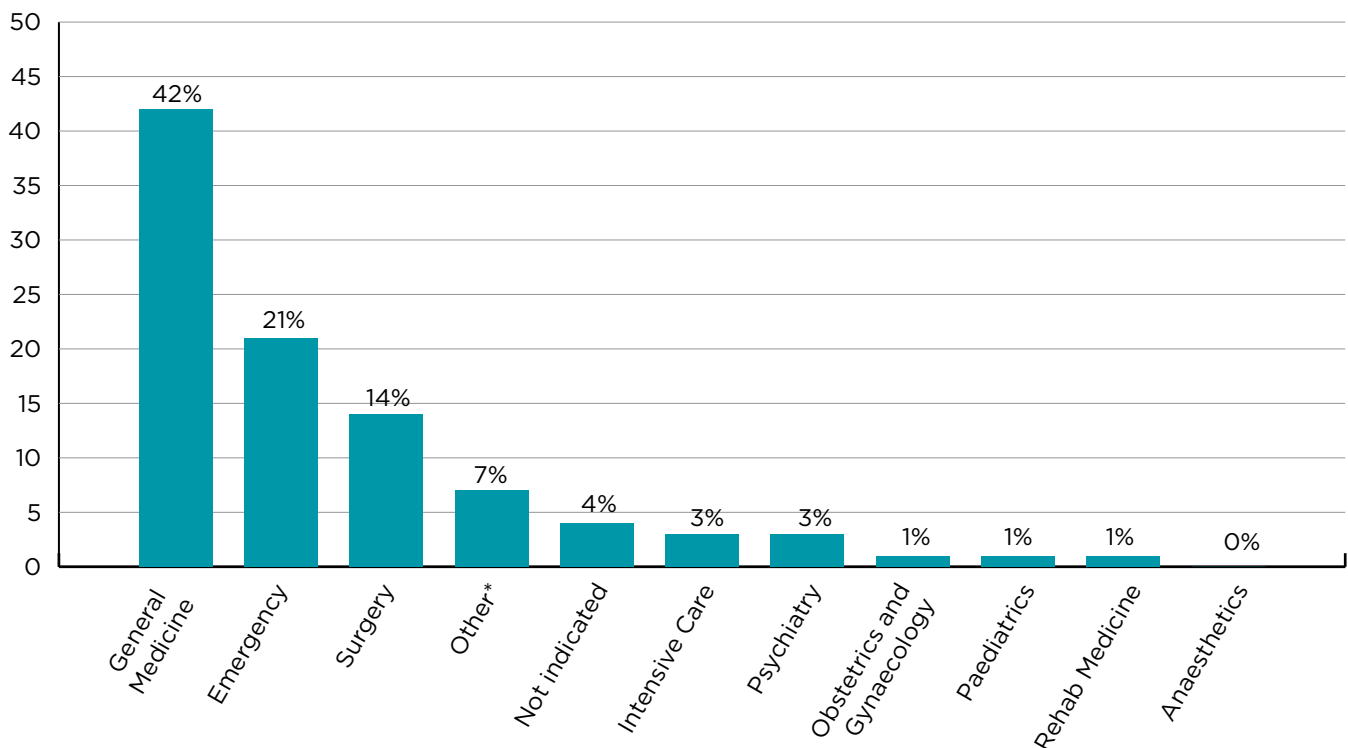
Source: AiM Feedback Survey. n= 203

After-hours shifts

In the development of the role, it was agreed that AiMs could work evening and weekend shifts but not night shifts. It was up to each facility to determine if they wanted to utilise AiMs during after-hours shifts. The evaluation identified that there were varied approaches to after-hours rostering of AiMs across the different facilities. 47% of AiMs who responded to the survey reported that they worked after-hours shifts during their term.

The following reasons were given for not rostering AiMs to after-hours shifts:

- supervision requirements
- after hours workload did not require additional staff
- having AiMs after hours could add to JMO workload as they needed to provide supervision.

56% of Consultant Supervisor survey respondents who worked with AiMs said that AiMs should not be rostered on to after-hours shifts, as they lacked the skills and experience required to manage the workload independently during periods where there was less supervision. Many reported they felt that this would only be suitable if there was a consultant on after hours shifts otherwise the burden on JMOs would be too high. The evaluation found that many AIMs reported that working after hours was a positive experience, allowing them to get firsthand experience of managing an after-hours workload.

Level of access to the electronic medical record (eMR)

In NSW each LHD/SN administers its own version of the eMR. The level of access that AiMs received at each LHD/SN was determined at a local level and varied between districts. In some districts the AiMs' level of access was the same as a medical student, which meant that all entries in the medical record needed to be countersigned by a medical officer. Other districts provided a level of access that did not require all entries to be countersigned and allowed AiMs to order some investigations without countersignature required.
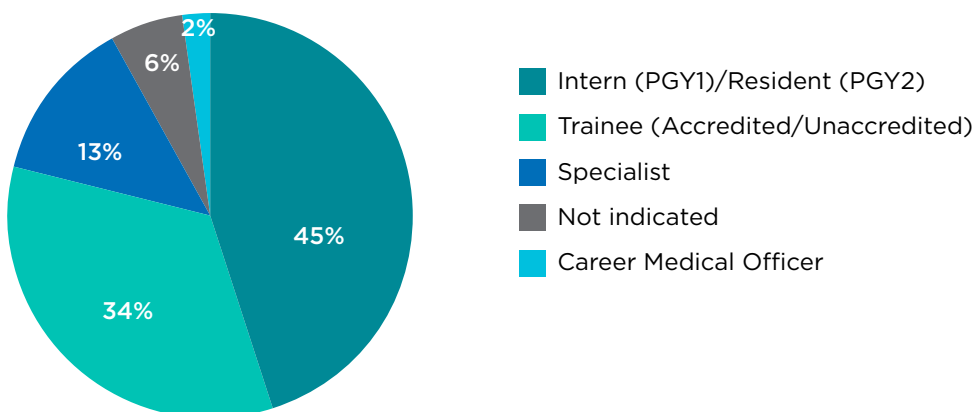
Countersignature requirements, as reported by DAiMs

- 63% of DAiMs who responded to the survey reported that AiMs needed a co-signature for pathology orders in EMR.
- 47% of DAiMs who responded to the survey reported that AiMs needed a co-signature to write notes in EMR.
- 89% of DAiMs who responded to the survey reported that AiMs required a co-signature for discharge summaries.

Utilisation of AiMs in in the medical team structure

There were different approaches across facilities as to how AiMs were used by the medical team. Where AiMs worked with interns and residents, it was reported that they most commonly worked collaboratively to divide the workload based on skill level and task suitability. In many cases, AiMs would take on tasks that allowed JMOs to work to the top of their scope of practice. AiMs who responded to the survey indicated that day-to-day delegation of tasks was generally provided by JMOs, see Table 2.

Table 2. Day-to-day delegation of tasks

Intern (PGY1)/Resident (PGY2)
Trainee (Accredited/Unaccredited)
Specialist
Not indicated
Career Medical Officer

45%
34%
13%
6%
2%

Source: AiM Feedback Survey. n= 199

> *They allowed me to focus on tasks that could only be done by a doctor and I wasn't bogged down with cannulas and taking bloods. (JMO One)*
>
> *I was able to have more time in my day to go to theatre and to see more surgical patients. (JMO Two)*

Where AiMs worked directly with Senior Medical Officers and trainees in accredited and unaccredited positions, they would generally accompany them on ward rounds and write notes in the eMR, order tests and pathology, obtain results and organise consultations on their behalf. When on an evening shift, AiMs would usually work with an intern, resident or trainee and undertake tasks like cannulation and ordering tests to enable the after-hours doctor to attend the review of patients.

Feedback from junior and senior doctors who responded to the surveys indicated that it took about two weeks for AiMs to integrate into the team and to become familiar with the requirements of their role and how to manage their workload (see Table 3). Once fully integrated, many teams reported that they noticed the days AiMs weren't there, indicating that AiMs were able to make a significant impact on their workload during the time that they were there.

Tasks undertaken by AiMs

The position description and associated skills and capabilities (Appendix One) outlined the tasks and procedures the AiM may be required to undertake. AiMs did not have a prescriber number or hold provisional or general registration and therefore were not able to prescribe medications.

Decisions about what tasks AiMs would carry out on a day-to-day basis were made by hospitals and individual teams based on their workforce requirements and team needs. The most commonly undertaken tasks were medical record documentation, preparing discharge summaries and organising consults.

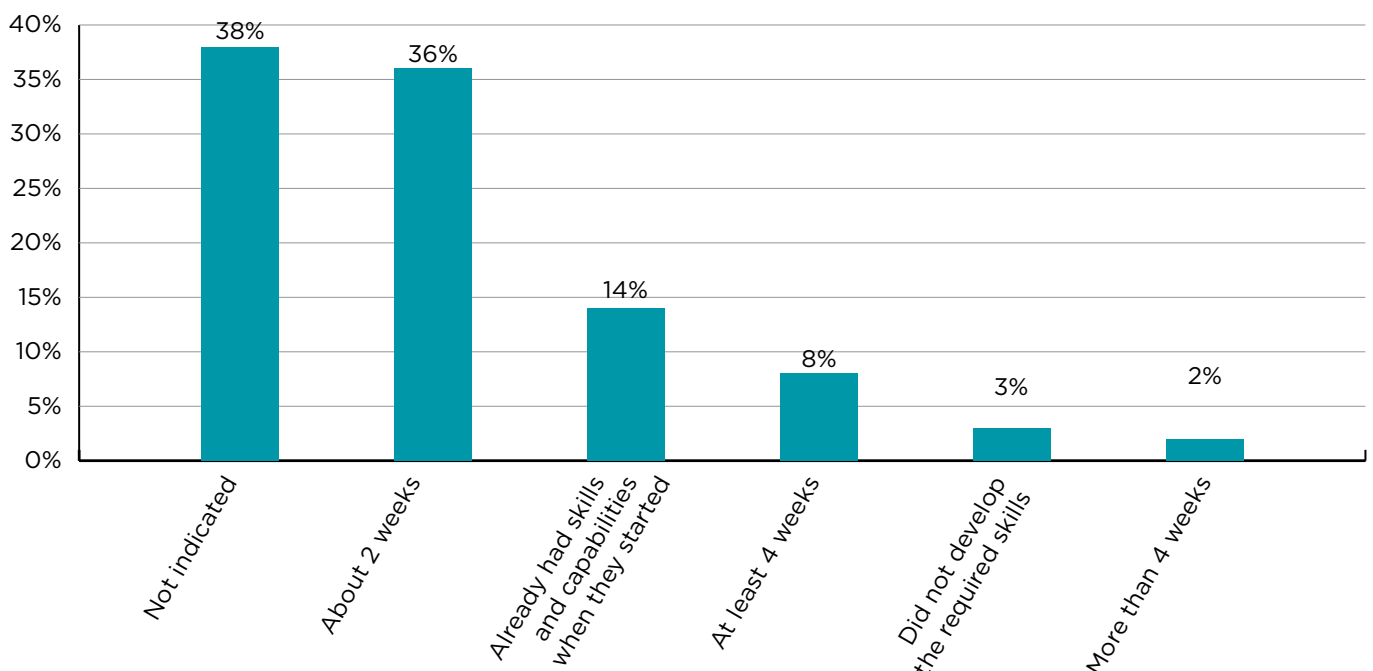Table 4 on the following page shows the range of tasks AiMs reported they performed during their term.

> *After a couple of weeks, they became used to the role and you would notice the days they weren't there. (SMO One)*
>
> *They do intern jobs like discharge summaries, basic consults, ordering tests, bloods and cannulas. They have been a big help. (SMO Two)*
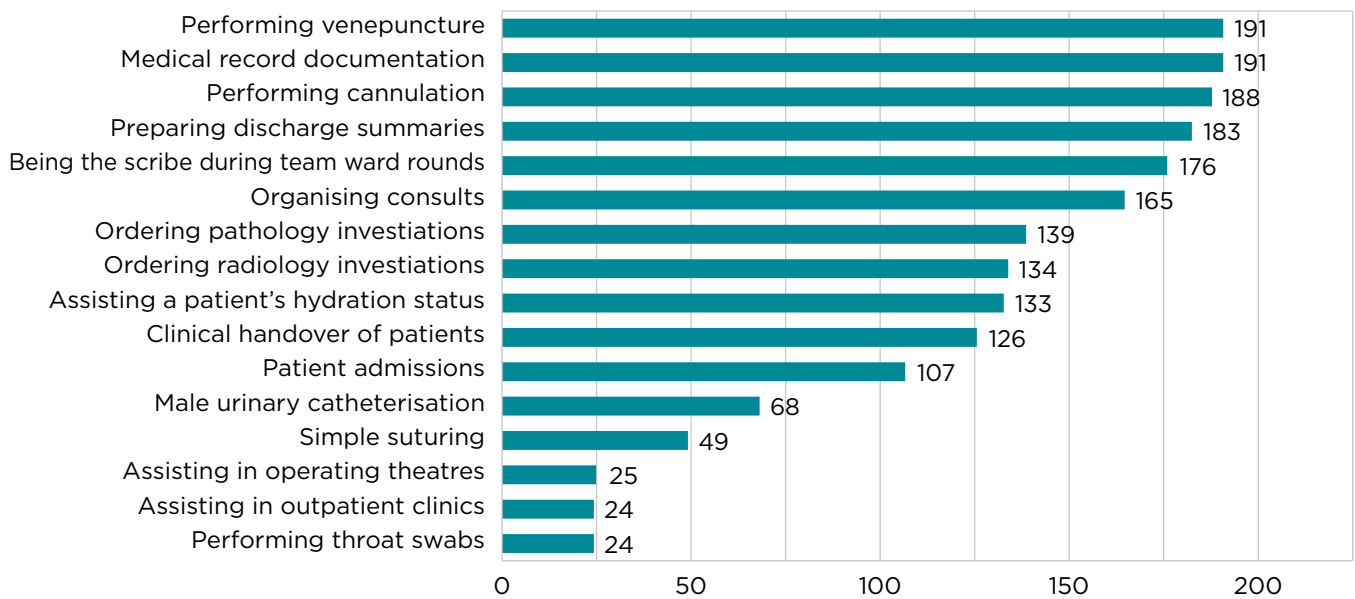
Table 3. Time required for AIMs to develop necessary skills, as reported by JMOs and SMOs

Category	Percentage
Not indicated	38%
About 2 weeks	36%
Already had skills and capabilities when they started	14%
At least 4 weeks	8%
Did not develop the required skills	3%
More than 4 weeks	2%

Source: JMO Feedback Survey and SMO Feedback Survey. n=339

Table 4. Tasks performed by AIMs

Task	Value
Performing venepuncture	191
Medical record documentation	191
Performing cannulation	188
Preparing discharge summaries	183
Being the scribe during team ward rounds	176
Organising consults	165
Ordering pathology investiations	139
Ordering radiology investiations	134
Assisting a patient's hydration status	133
Clinical handover of patients	126
Patient admissions	107
Male urinary catheterisation	68
Simple suturing	49
Assisting in operating theatres	25
Assisting in outpatient clinics	24
Performing throat swabs	24

Source: AiM Feedback Survey. n= 201

2.2 Was the role of AiM effective?

It was understandable that many stakeholders initially had concerns and reservations about final year medical students working as an AiM as this was a new role that had never been piloted in Australia. The 2015 *Review of Medical Intern Training* found that medical graduates were not considered to be work ready for internship, and so concerns about final year students' ability to work as Assistants in Medicine were not unfounded. Some initial decisions about areas where AiMs were assigned to work and the level of access to eMR granted to AiMs in some sites reflected these concerns. The rollout of the AiM role in a non-catastrophic situation allowed these concerns to be tested and addressed in a supported environment.

Overall, the evaluation found that final year medical students working as AiMs were able to carry out the roles and responsibilities within the limited scope required of them. Survey and interview feedback indicated that they were able to contribute to the team in the manner envisaged during the development of the role.

The evaluation also found that AiMs were an effective and valuable supplement to the medical workforce during the COVID-19 pandemic with the right support and supervision in place. It is acknowledged that AiMs cannot fully replace the role of JMOs due to their limited scope – especially around prescribing – but they were able to undertake many tasks that fall within the JMO workload and so were seen to be an effective and

valuable part of the workforce by their peers. The AiM program has shown that medical students are a valuable resource that can be mobilised during a pandemic situation and potentially could also be utilised in a non-pandemic situation.

Most SMO and JMO members of the medical workforce reported that after approximately a two-week period of orientation, once AiMs were well integrated in the team, they were able to carry out the tasks in their position description with a high level of skill.

AiMs were able to undertake the tasks as required. The survey asked JMOs to rate the AiMs' ability to carry out a range of tasks. When asked how they rated the AiMs' ability to carry out the tasks outlined in Table 5 (see page 14), JMOs and SMOs who responded to the survey consistently considered them to be above average. When asked if AiMs made a valuable contribution to the functioning of the team, JMOs, SMOs and DAiMs who responded to the survey agreed that they did.

> *They were able to scribe well, complete discharge summaries with a countersign, order simple tests and pathology with no countersign and have been involved in admissions and assessments with supervision.*

Table 5. Skill level of AiMs, as rated by JMOs and SMOs
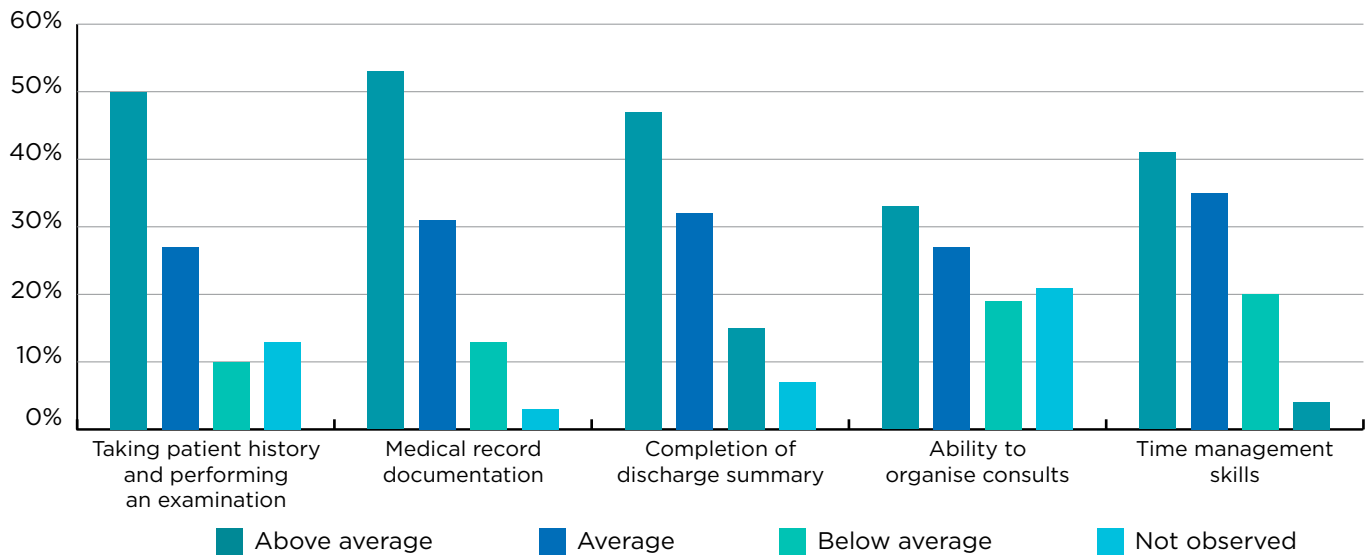
Source: JMO and SMO Surveys. n= 333

Some supervisors reported that by the end of their term, AiMs were working to the same level, and in some cases more efficiently, than the intern/s they had on their team/s.

> *The AiM I work with functions at a similar level to an intern, it took them about two weeks to gain that level of skill.*

Feedback received during semi-structured interviews was overwhelmingly positive about the impact that AiMs were able to have on team functioning, particularly in areas where they were able to provide relief from high levels of JMO vacancies and in rural and regional hospitals that usually operate with less medical staff than metropolitan hospitals.

A review of de-identified mid and end of term assessments showed that supervisors generally scored AiMs' performance across the different domains as three or higher on a five-point Likert scale.

> *During rounds they operate similarly to an intern.*
>
> *The AiM has been a godsend to the team.*
>
> *I was impressed with their understanding of the shift.*

The assessment form also asked AiMs to record the range of tasks they were performing and volume. This assessment information confirmed the survey results on tasks and procedures performed by AiMs. A copy of the Assessment form is at Appendix 4. Supervisor comments at assessment consistently indicated positive reports of AiM performance and summarised their effectiveness within the team.

Despite some initial resistance to the role, partially due to concerns that AiMs would increase their workload, most JMOs agreed that AiMs were able to effectively assist them in managing their workload by undertaking tasks that included scribing, ordering tests, taking bloods, inserting cannulas and completing discharge summaries. This was especially the case in districts where AiMs had a sufficient level of access to eMR. 26% of JMOs who responded to the survey stated that having AiMs on the team changed their roles and responsibilities and often allowed them to see more patients, attend theatre more frequently and practise to the highest end of their scope.

> *I could focus on medical management of patients by delegating routine but time-consuming tasks.*
>
> *[AiMs] allowed me to focus on clinical care and to provide more timely response to tasks.*
>
> *They allowed me to function as a supervised registrar within my team.*

There were also reports that with an AiM on the team, JMOs felt more confident to take sick days and allocated days off knowing that there would be an AiM to assist in covering their responsibilities. Interview feedback suggested that particularly during the changeover period between interns, AiMs were reported to be helpful. Consultation found that AiMs were *"excited and enthusiastic to complete the mundane tasks others don't want to do"*.

The general consensus from stakeholders was that even though AiMs had a limited scope and did not fully replace an intern or resident, they were a positive addition to the medical workforce and were a useful and helpful supplement to the team in managing their workload.

> *They helped us finish tasks in a timely manner and improved the social dynamic of the team.*
>
> *In a crisis situation they would not have completely filled the gap, but it would have been useful to have them there.*

AiMs found the experience to be overwhelmingly positive and in the feedback survey, 96% of AiMs stated that they enjoyed working as an AiM in NSW Health and 96% would recommend the role to future students. A comparison of university responses did not indicate any significant differences across the cohort, with all student survey respondents indicating they enjoyed working as AiMs, see Table 6.

AiMs worked effectively across a range of specialties

Based on evaluation feedback, there were no specialties in which AiMs were not able to be utilised successfully.

Despite some initial concerns around placing AiMs in critical care areas such as ED or the Intensive Care Unit (ICU), in cases where AiMs were allocated to these specialties they were reported to be working effectively. For example, at Fairfield Hospital, AiMs were placed in ICU as a trial for how the role could support this specialty if COVID-19 numbers rose dramatically and placed extreme pressure on this workforce. Feedback from Fairfield Hospital was that this was a positive inclusion to the department, and teams considered AiMs to be a valuable addition to the department during this time.

The evaluation showed that in hospitals where AiMs worked after hours shifts, they positively assisted in managing the after-hours workload.

At St Vincent's Public Hospital, AiMs were only rostered to after-hours shifts where they were utilised as an assistant to the rostered after-hours intern or Resident Medical Officer (RMO). Feedback from medical officers at St Vincent's Hospital indicated that this was an effective use of the role and that AiMs were able to autonomously carry out procedural tasks such as cannulation and venepuncture, leaving the JMO to focus on more time-critical clinical tasks. The evaluation showed that overall, AiMs were of benefit on the after-hours

Table 6. AiMs' enjoyment of the role – university comparison

I enjoyed working as an AiM						
	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Not Indicated
Newcastle/UNE/JMP	21%	58%	9%	0%	3%	9%
University of Sydney	58%	35%	2%	2%	2%	2%
University of New South Wales	51%	39%	0%	0%	0%	10%
University of Notre Dame Sydney	Not Available (<10 responses)					
Western Sydney University	67%	26%	0%	0%	0%	7%
Wollongong University	62%	27%	4%	0%	4%	4%
Grand Total	51%	38%	2%	0%	1%	6%

shift and that it had a strong impact on their colleagues' ability to manage the after-hours workload. One respondent commented: *"The job board was cleared for the night RMO for the first time in the history of the hospital."*

A downside of working after-hours shifts for AiMs was the lack of continuity of care experienced with being an integrated AiM in the same team. After-hours AiMs often worked alongside a different JMO every shift, which meant they weren't as able to get to know team members as AiMs allocated to teams.

Hours worked impacted integration of AiMs into teams

AiMs could work up to 32 hours per week, but the actual hours worked were determined locally and varied between sites. In areas where AiMs were rostered to less than 16 hours, some teams reported they were not able to fully integrate as a team member and were less able to practice continuity of care and follow the patient journey. Some hospitals reported that they did not see the value in having AiMs on the team for only a couple of days across four weeks as this was not enough time for AiMs to learn how their teams worked and become a contributing member. Overall, feedback suggested that for AiMs to be both helpful to the team and to experience continuity of care provision, they need to be rostered on for more than two days (16 hours per week).

Two days a week is enough, one day would not be beneficial.

2.3 What were the challenges and barriers to the implementation of the AiM role?

Whilst the AiM role was well-received, consultation identified some key challenges to its implementation. A quick rollout of the program in response to the COVID-19 pandemic meant that it was not possible to run a pilot and, as such, untested elements of the program prevented the role from operating to its full potential in some areas. Addressing these barriers would improve the effectiveness of the role in practice, if implemented in the future.

Level of Access to Electronic Medical Records (eMR)

Limited access to eMR and a requirement for countersignature of all eMR entries was a significant barrier to the role's effectiveness. As this was a new role, many sites limited the eMR access to that of a medical student, which requires all entries to be counter-signed.

Lack of access to eMR correlated with a reduction in satisfaction with the AiM role from junior doctors in the team.

A lack of a description with precise eMR privileges differentiated from students prevented them having full access.

There was a lot of difficulty in the initial start-up of establishing eMR access.

Without the ability to use eMR to support the functionality of their role, AiMs had to be in close proximity to JMOs throughout their shift in order to efficiently seek sign-off on orders and activities such as discharge summaries, thus limiting their flexibility within the team and ability to function without a JMO present. A large proportion of JMOs also noted that an excessive requirement for countersignature at times created an additional workload for them and limited the role's effectiveness

Overall, the evaluation found that to successfully implement the AiM role, a level of access to eMR that allows AiMs to autonomously complete the full suite of tasks assigned to them in their position description should be provided. It is recommended that further work is undertaken by the Ministry to clarify and standardise the level of access that AiMs have to eMR across all districts to support their role in the medical team.

Ordering of investigations

AiMs did not have a provider number and were not able to order any investigations that attract a Medicare rebate (e.g. private patients). However the level of access they had to ordering investigations for public inpatients for both radiology and pathology varied between sites from all investigations ordered requiring a countersignature, investigations ordered on a ward round not requiring a countersignature, and in other sites having a list of investigations that could be ordered without a countersignature but others requiring a countersignature.

As identified with the level of access to the eMR, the level of access requiring countersignature decreased the effectiveness of the role. While the requirement for countersignature was able to be addressed in most situations because interns and residents were available, in a catastrophic scenario, this could impact the effectiveness of AiMs within the medical team.

The evaluation has identified that further work should be undertaken to determine what investigations should be able to be ordered routinely by an AiM without a countersignature.

Lack of understanding of the AiM role by the multi-disciplinary team

Due to the rapid rollout of the program, there was limited communication to the system about the AiM role prior to them commencing. The evaluation found that many members of the multi-disciplinary team working with the AiMs had not been briefed about the assistant role and did not clearly understand the AiM's role and responsibilities. Evaluation findings consistently suggested that communication about the role could have been improved and would have allowed the role to be more effective. This is reflected in the evaluation survey results, which found:

- **60%** of JMOs reported that they **were not briefed** about the role before the AiM started in their team.
- Only **52%** of JMOs stated that the **roles and responsibilities** of the AiM were clear to them.
- Overall, SMOs and DAiMs reported they were **better informed** and **received clearer communication** about the role.
- **83%** of SMOs were **briefed about the role** and **89%** reported that they were **clear about the AiM's roles** and responsibilities.

Whilst this data suggests the role was well understood by senior staff, findings indicated that JMOs often received less information. As 48% of AiMs reported that a JMO was responsible for their day-to-day delegation of tasks, it is essential that this cohort understands the roles and responsibilities of AiMs.

For successful integration of the role, better communication around AiM scope, roles and responsibilities, including providing information resources to all members of the workforce is necessary. Clarity around the level of responsibility associated with the AiM position would also allow the role to be more effective in reducing overall team workload, as it would enable all staff members to understand what tasks can and cannot be delegated to AiMs. It is recommended that a communications strategy and resources are developed to inform stakeholders about the role of the AiM. These resources should be readily available to all LHDs/SN and universities.

Prescribing limitations

AiMs did not have a prescriber number and were not able to prescribe. While AiMs can perform many of the tasks of an intern and resident they are not able to prescribe and so this limits their ability to fully replace JMOs deployed in a pandemic. The evaluation identified that this was managed/mitigated by the JMOs in the team undertaking this task. However, the inability to prescribe needs to be considered when allocating AiMs to a team, especially if working in a team without an intern or resident. It needs to be identified in this situation who will ensure that medications and discharge scripts are charted.

> *Their role in a pandemic would have to be with a JMO on the team as their inability to chart medications would have been very difficult to manage.*

Appropriate supervision

The role of the AiM was developed with the intention that they would work under supervision as a junior team member. As there wasn't as much need to re-deploy and cover the JMO role as was planned for in the COVID-19 response, AiMs worked alongside interns and residents, and for the most part, this cohort provided day-to-day supervision and task delegation. In the event of a catastrophic pandemic situation where JMOs were redeployed, the evaluation has shown that there would need to be suitable supervision provided for the role to be effective.

Impact of hours worked on the experience of AIMs

AiMs who responded to the survey indicated that regardless of the hours they worked, they felt like a valued member of the team (Table 7). However, there was some tension in terms of balancing hours worked to support team functioning with what was most beneficial for the student. Survey feedback suggested that AiMs preferred working two days per week as this provided the optimum balance for them to manage their work and study requirements, whereas team members felt four days per week better supported continuity of care. In areas where AiMs worked two days a week, they usually shared the role with another AiM who provided continuity for the other two days.

AiM survey results also indicated that across all participating universities, there were no significant differences in how valued AiMs felt within the medical team, with all cohorts indicating that over 65% of AiMs felt like a valued member of the team.

Table 10 describes the impact of AiMs on JMO workloads. Overall, 47% of JMOs who responded to the survey question reported that AiMs decreased their workload and the most significant decrease was found to be where AiMs worked four days per week.

Table 7. AiMs' experience of feeling a valued team member by number of days worked
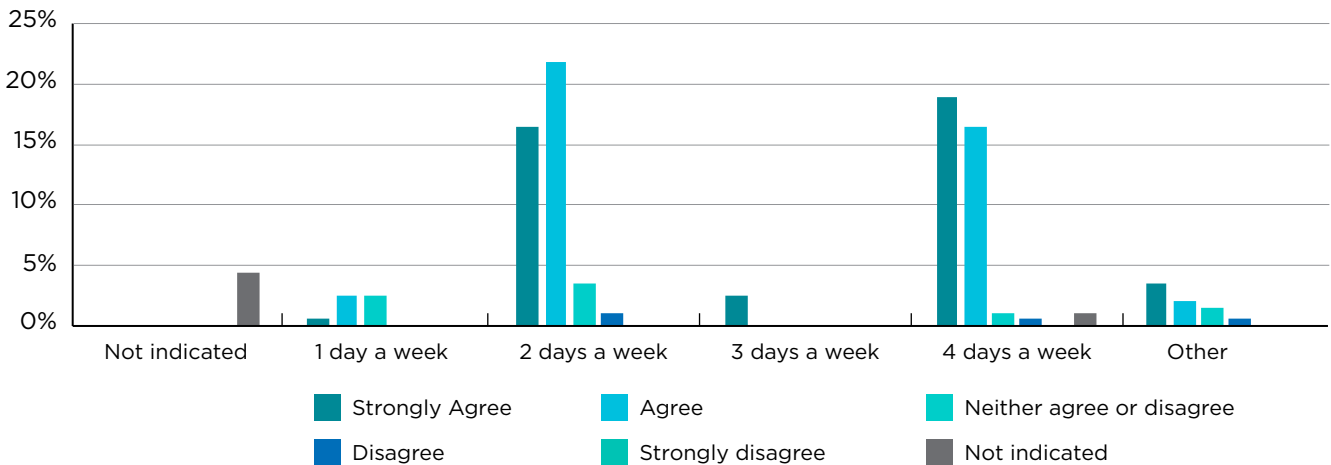
Source = AiM Feedback Survey. n=201

Table 8. Ability to balance AiM role and study, as reported by AiMs
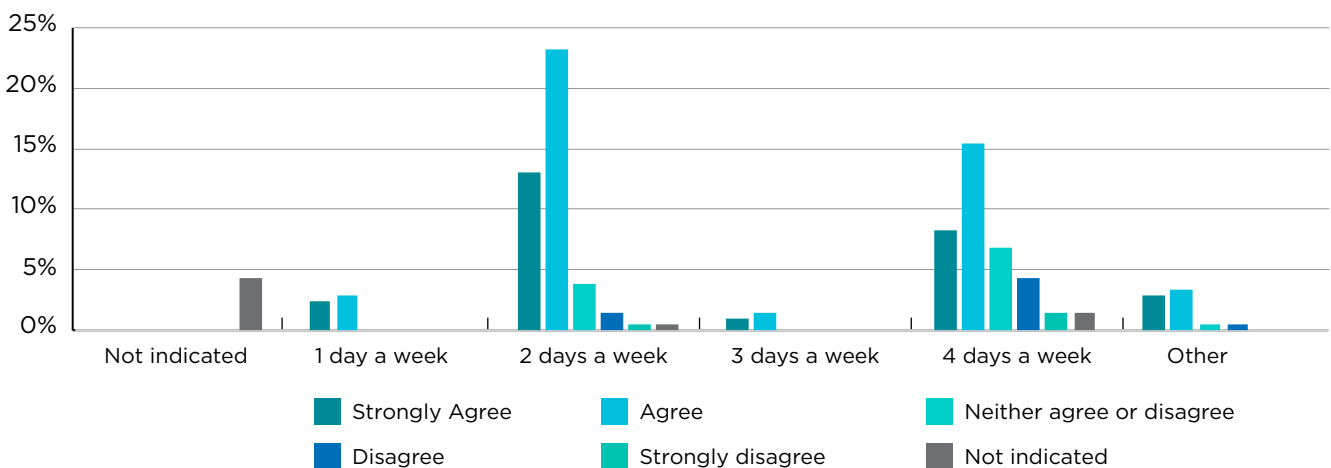
Source AiM Feedback Survey. n=199

Table 9. Impact of AiM on JMO workload
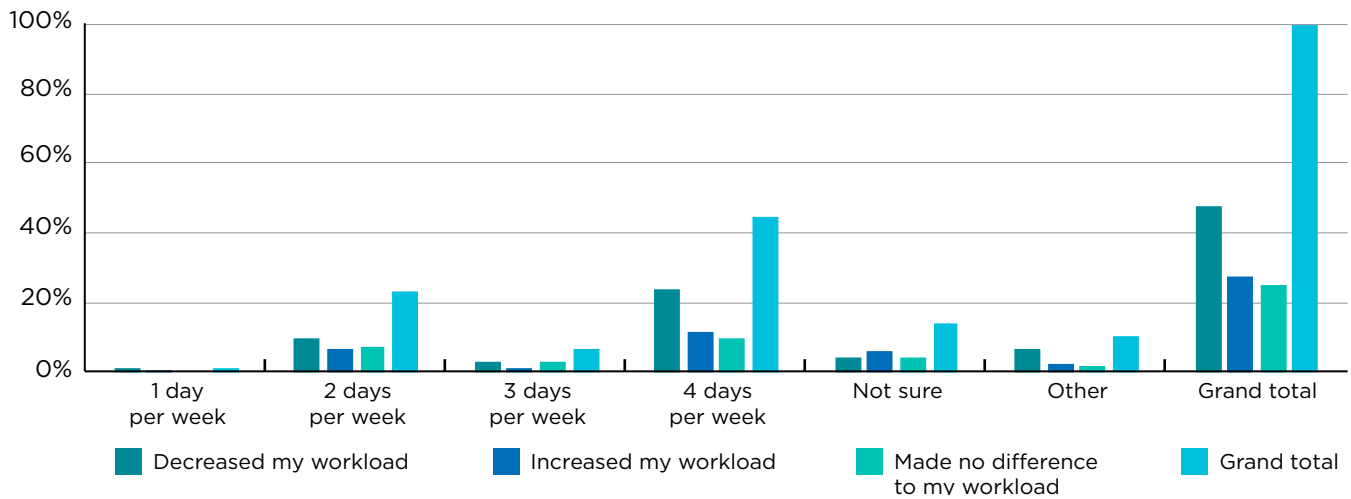
Source: JMO Feedback Survey. n=230

Coordination with university schedules

The AiM role was developed rapidly, and after the medical school timetables for 2020 had been developed. Medical schools were responsive and adapted their programs to support the utilisation of AiMs as part of the pandemic response. There was ongoing communication between medical schools and LHD/SN's as the AiMs were rolled out, however at times timetabling clashes did occur, which impacted on medical students' work and study balance.

Any future deployment of final year medical students should ensure that student medical school commitments, including exam schedules, are considered as well as workforce requirements when rostering AiMs. In some districts, consideration was given to the impact of AiM terms on exams whereas others did not. Where AiMs had an exam block either during or directly after their AiM term, they reported that it was difficult to balance study with the requirements of the role.

2.4 Was there a difference between an AiM and a medical student on clinical placement?

While the role was developed as a workforce solution, the evaluation also identified that participating in the AiM program also enhanced the medical students' experience and supported the transition from medical student to intern. These lessons should be taken forward to further enhance the student experience and support work-ready interns. AiMs have been found to hold a significantly different role to medical students within the team.

As many as 76% of JMOs responding to the survey indicated that the AiM in their team functioned differently to a medical student on clinical placement and over 50% of SMOs responding to the survey echoed this.

Despite the fact that AiMs were still final year medical students with an equivalent skill-level, in the role of AiM, they were viewed as being more capable and were given an increased level of responsibility. According to AiMs, this increased level of responsibility significantly enhanced their experience. While facilities tried to avoid allocating AiMs to the same team as medical students undertaking clinical placement, where this did occur, teams did treat AiMs and the students on clinical placement differently due to their experience working in the program.

Medical officers reported that AiMs were *"less of a burden"* to them than medical students on clinical placement and could add more value to the efficiency of the team. JMOs reported that they felt more empowered to delegate to AiMs than to students due to the defined skills and capabilities of the AiM role and the fact that they were a paid member of the team. Many senior and junior doctors indicated that the fact that AiMs were paid was a key factor in why they felt more comfortable to include and delegate tasks to AiMs.

Many AiMs also reported that their level of responsibility was significantly increased during the program and many suggested having a position description which outlined skills and responsibilities assigned to their role was a key factor in enabling

them to participate more actively in the team workload. Many respondents also noted that as an AiM, they experienced more opportunities to learn practical skills and gain an understanding of how the system works. Interview feedback suggested that as a medical student, AiMs at times felt unmotivated and did not receive as many opportunities to develop 'hands on' skills.

AiMs' exposure to and involvement in the process of team decision-making was seen to be an additional benefit to students. AiMs reported that being included in ward rounds and in team decision-making processes helped them understand *"how to be a doctor"* in a way they had not experienced before.

> *[As an AiM] I feel like less of a burden.*

Increased learning opportunities for students

Consultation with medical officers determined that the medical student's role in the team can at times be unclear. Requirements for students vary across medical schools and a role description for a medical student is not available to guide their scope of practice. The level of immersion in the team and the responsibility allocated to students is largely determined on a case-by-case basis in alignment with how proactive and engaged the student is. Medical officers reported that proactive students

often ensure their immersion in the team by seeking out opportunities however, overall, this is determined by the individual and teams are often led by students' own interest and university requirements.

> *The biggest learning point was understanding the way a ward works, especially prioritisation. When it came to delegating tasks, AiMs were able to learn how to know which to do first and how to keep track of their work.*

Increased inclusion in team workload

The medical team often view the student as an observer whose priority in their placement is to learn and as a result, don't feel comfortable to consider them when delegating tasks. This particularly applies to the delegation of procedural and paperwork-based tasks such as discharge summaries. Many medical officers noted that because students were often off the ward engaging in tutorials and learning activities, they couldn't rely on them to be present and as a result, prefer that they follow the team members and observe their activities.

> *As a medical student you don't get to work as part of the team and people can't rely on you to be there all the time, so you don't get responsibilities or allocated tasks.*

Table 10. AiM ability to balance the role with medical school requirements
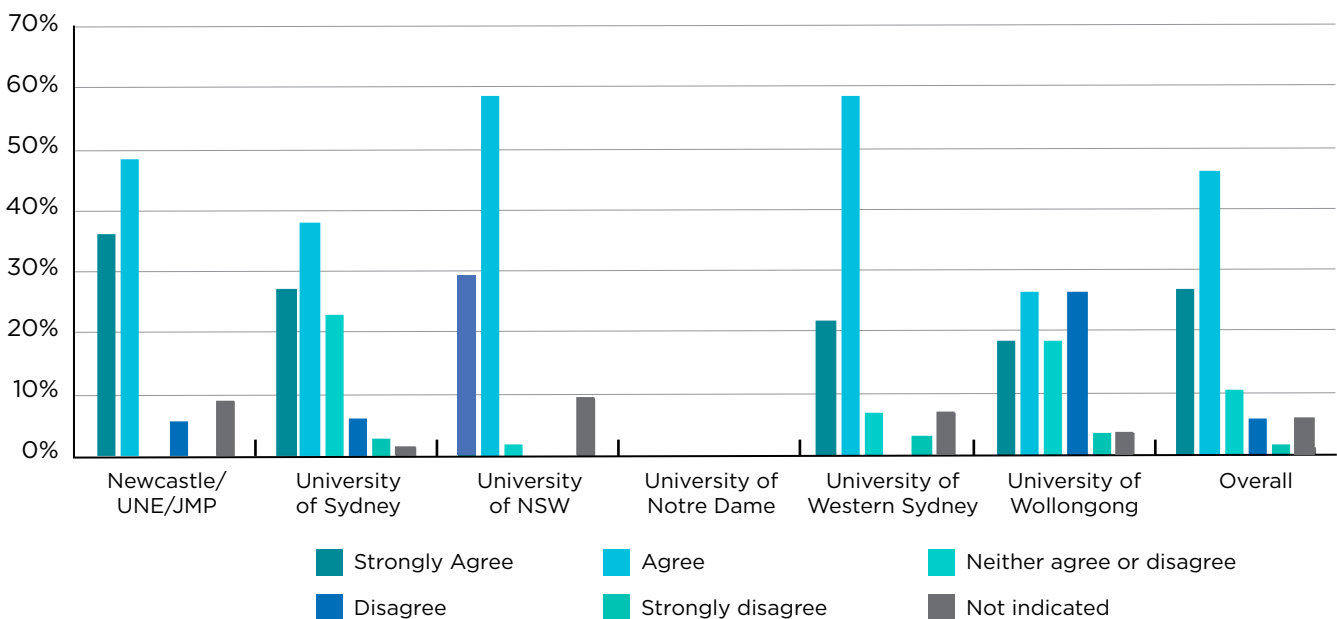
Source: AiM Feedback Survey. n=199

Interview feedback indicated that the clear parameters around the AiM role allowed medical officers to feel empowered to delegate tasks to AiMs. They were able to get to know them individually, understand their capability level and felt comfortable with the knowledge that they were being remunerated for their work.

Extended time with team increased opportunities to develop non-technical skills

Whilst experience varied across different districts, AiMs spoke positively about the benefit of being part of a team for an extended period. This continuity meant AiMs could get to know their colleagues better who, in turn, were able to rely on them more. AiMs emphasised that this embedded role allowed them to improve their 'non-technical and procedural' skills markedly, including their communication with other team members and patients, ability to manage conflict and appropriate pathways for escalating issues.

Evaluation feedback indicated that many stakeholders considered the employment of the AiM to be a key factor in increasing the integration of the final year medical student in the team. However, it is also clear that setting transparent capabilities and expectations for the role, that were understood by all members of the team and the AiM, was a significant factor in contributing to successful integration and supporting the transition of the medical student to an intern role.

Selection of students into the AiM positions

It was determined that universities would manage the AiMs selection process and put forward those students they considered to be suitable for NSW Health to employ. Universities took expressions of interest and there were varied approaches to selection. Some universities chose to prioritise access to positions by requesting LHD/SNs employ them in shorter contracts to maximise positions, others excluded students who had progression issues or those who required remediation.

Feedback from AiMs indicated that they felt the selection process needed to be more transparent. Many students were keen to complete a term as an AiM but did not get the opportunity and felt that a fair and consistent selection process was necessary.

However, overall, the evaluation found this process worked well and allowed the rapid deployment of final year medical students into the AiM role. In future, further work could be done to strengthen the selection process to support rapid deployment of staff, ensure consistent processes across the different medical schools and provide a clearer and more transparent process for students wanting to take up the role.

2.5 Has the role impacted on medical graduate work readiness and preparedness for internship?

AiMs reported that by working alongside JMOs, and in cases where there was no intern/RMO on the team partially stepping-up into their role provided them with firsthand experience as a junior doctor that was not achievable during their placements. AiMs also reported the role enabled them to take a more engaged and active role in patient care and to understand the patient journey through the hospital, which is essential for first-year internship.

> I felt more part of the team, [the team] get to know you and understand your capabilities so you get asked to do more.
>
> It has been a huge confidence boost for internship, I will be able to pick things up more quickly as I have had firsthand insight into how to do the role.

Much of the feedback indicated that undertaking more of the practical elements of teamwork including learning how the working day is structured, understanding how to prioritise key tasks and learning how to keep track of work was an invaluable experience for the internship year.

> As an AiM, you are consistently doing these same tasks every day and there are more consistent opportunities to practice clinical skills. Next year, it will be much quicker to pick up things than if I didn't do an AiM term.

Consultation with medical schools echoed these reports. However, while universities were overall supportive of the AiM role, further work would need to be undertaken to determine how the role could be incorporated into each medical program, should the role continue in a non-pandemic scenario. One significant issue is that only 40 per cent of final year medical students undertook the AiM role and so equity of access for all students to an experience considered of benefit would need to be considered. Medical schools also raised some concerns that the practical focus of the program may detract from the theoretical learning aspect of clinical placement and that if placements were to operate similarly to AiM terms, there may be a loss of knowledge and learning opportunities for students.

2.6 Conclusion

The evaluation has shown that overall, the AiM role was effective in achieving the intentions of the program and was also valued by the medical workforce and medical schools as an opportunity to further integrate students in the team and utilise their skills and capabilities in managing the workload. Whilst key stakeholders agree that the role was effective, there is currently no identified funding source nor an ongoing need, post COVID-19, for all students undertaking their final year of medical school to work as an AiM within the current medical workforce structure. However, there is certainly opportunity to examine how medical students could be utilised as part of the workforce in the future.

The effectiveness of the program indicates that AiMs could be used to supplement the workforce in specific areas and during specific times such as winter surge or in areas that have high JMO vacancies. This would be separate to their medical school program. Instead of working a part-time job in another industry, a final year medical student could work part-time as an AiM. This would be a similar model to the Assistant in Nursing (AiN) position, which is often taken up by nursing students. In order to implement this, it is clear that appropriate orientation would be required and that AiMs could not be used in a casual or sporadic fashion, as they would not be able to develop a high level of familiarity and confidence within the team that would allow them to succeed.

It has been identified that whilst universities were able to deploy students rapidly on an ad-hoc basis during the 2020 COVID-19 pandemic, it is recommended a framework is developed to support the process going forward to ensure the role can be rolled out in a timely manner in the event of a future workforce crisis.

The impact of the AiM term on preparedness for internship and the learnings taken from the evaluation are a key area that the Ministry of Health should continue to progress, working together with key stakeholders.

Appendix One:
AiM Position Description

POSITION DESCRIPTION

Assistant in Medicine

NSW GOVERNMENT | Health

Our CORE values

Collaboration Openness Respect Empowerment

ourpeopleourculture

Organisation	NSW Health
Local Health District /Agency	?
Position Classification	?
State Award	Public Health Medical Officers (State) Award
Category	?
Vaccination Category	*(will only populate for the advertised PD, not in the PD library)*
ANZSCO Code	*(will only populate for the advertised PD, not in the PD library)*
Website	www.health.nsw.gov.au

PRIMARY PURPOSE

The purpose of the position is to provide medical care and support, as part of a multi-disciplinary team, which is consistent with the level of clinical competency and experience of the appointee. This includes the assessment and management of patients across a range of clinical areas, whilst working under the supervision of doctors in senior roles.

ESSENTIAL REQUIREMENTS

- Final year medical student in an Australian Medical Council (AMC) accredited medical school
- Student registration with Australian Health Regulation Agency (Ahpra) and the Medical Board of Australia.
- Assessed by student's Medical School to have the skills, knowledge and attributes to perform the AiM role in the hospital workplace.
- Working with Children Check
- National Police Check
- Aged Care Check for Australian Government funded positions

KEY ACCOUNTABILITIES

Assist with the management of patients, in and after hours, in order to provide high quality, safe, patient-centred care. This includes undertaking admissions, assisting with patient assessments, implementing treatment plans, participating in ward rounds, and organising referrals, consultations, and diagnostic investigations.

Identify and assess the deteriorating patient, implement appropriate initial patient management and escalate

Perform procedures under instruction and supervision, to assist with patient care and contribute to learning.

Discharge patients under supervision as directed, following all relevant protocols, to ensure effective follow-up and continuity of care of patients after discharge.

Participate in the Department's quality assurance activities to actively manage and improve the safety and quality of health care for patients, ensure that appropriate standards are maintained, gaps in meeting national safety and quality standards are identified and raised, and to contribute to the continual improvement of self, colleagues, the department and the service provided by the hospital.

Prepare accurate documentation, including eMR and discharge letters, in relation to patient care, while maintaining confidentiality and privacy, to ensure timely and efficient communication of patient information, and to ensure patient records are effective and accurate for current and future use if needed.

Communicate patient-relevant information in a timely and clear manner to everyone involved in the patient's care, to facilitate shared decision-making, transfer information in a timely fashion, and hence ensuring quality patient care. This includes escalating issues when required, and respecting confidentiality and privacy.

Monitor own performance, participate in performance review and available educational experiences, and actively seek to learn and obtain feedback in order to develop and understand your own skills, knowledge and capability; and therefore, to exercise judgement and know when to seek assistance.

Actively monitor and manage own health, safety and wellbeing, seeking assistance when needed.

SELECTION CRITERIA

1. Assessed by student's Medical School to have the skills, knowledge and attributes to perform the AiM role in the hospital workplace
2. Proficient clinical skills to carry out the key accountabilities for the role
3. Ability to work in a complex clinical environment including appropriate escalation
4. Ability to work effectively as part of a multidisciplinary team
5. High level communication skills, both written and verbal
6. Skills in time management, prioritisation and problem solving
7. Commitment to own continuing professional development and basic physician training program
8. Commitment to quality improvement and patient safety

KEY RELATIONSHIPS

Who	Why
Patients and their families/carers	To communicate information regarding hospitalisation, treatment, and progress in a sensitive, timely, and clear nature as essential for optimal patient care and experience. To safeguard to all parties that privacy and confidentiality rights will be respected and upheld at all times.
Consultants providing clinical supervision, Head of Department	To enable positive working relationships whilst under direct supervision to facilitate professional development and learning. To enable supportive working connections whilst operating in a challenging and complex environment, with the aim of upholding personal health and wellbeing through open communication channels to seek advice on clinical, educational and personal matters.
Other clinical staff (medical, nursing, allied health) within the unit and in other units and in the community as relevant	For coordinating patient care as part of a multi-disciplinary team and across other teams.

| Administrative staff members for example admissions, bed management and patient flow department | To coordinate patient care and follow up as part of a multi-disciplinary team and across other supporting teams that is timely, progressive and positive for each clinical care episode. |
| | To promote positive working relationships between inpatient professional groups, well as support and maintain the need for a cooperative, and harmonious multidisciplinary working environment where everyone is supported to contribute and share professional advice. |

OTHER REQUIREMENTS

- Model the NSW Health CORE Values of Collaboration, Openness, Respect and Empowerment.
- Participate in clinical handover, to transfer information, accountability and responsibility for a patient or group of patients, following the ISBAR protocol, National Australian Standards. Clinical handover happens within and between Medical, Surgical, Emergency, Paediatric and Critical Care teams.
- Complete mandatory training as required by the hospital, local health district or specialty network, and NSW Health
- Attend all applicable organisation-wide, hospital, department and role orientation sessions
- Abide by all conditions/provisions of employment
- Conduct all required responsibilities and tasks of the role in a manner that is consistent with legislation, local and state-wide delegations, procedures, policies and manuals, which include but are not limited to the following areas:
  - *NSW Health Code of Conduct
  - *performance management and development
  - *work, health and safety
  - *records management
  - *confidentiality and privacy
- All staff are expected to take reasonable care that their acts and omissions do not adversely affect the health and safety of others, that they comply with any reasonable instruction that is given to them and with any policies/procedures relating to health or safety in the workplace, as well as notifying any hazards/risks or incidents to their managers.
- Act as role model and promote a culture and supporting practices that reflect the organisational values through demonstrated behaviours and interactions with patients/clients/employees
- Comply with supervision requirements as set out by the Australian Health Practitioner Regulation Agency and the Medical Board of Australia.

Appendix Two:
NSW Health LHD/SN and facilities where AiMs worked

Local Health District/Specialty Network	Facility
Far West Local Health District	Broken Hill
Hunter New England Local Health District	John Hunter Hospital John Hunter Children's Hospital Calvary Mater Newcastle The Maitland Hospital Manning Rural Referral Hospital Tamworth Rural Referral Hospital Armidale Rural Referral Hospital Mental Health
Western New South Wales Local Health District	Bathurst Hospital
Northern Sydney Local Health District	Royal North Shore Hospital Ryde Hospital Hornsby Hospital Mona Vale Hospital
Western Sydney Local Health District	Westmead Hospital Auburn Hospital Blacktown/Mount Druitt Hospital
South Western Sydney Local Health District	Bankstown Hospital Campbelltown Hospital Liverpool Hospital Fairfield Hospital
Central Coast Local Health District	Gosford Hospital Wyong Hospital
Sydney Local Health District	Royal Prince Alfred Hospital Concord Hospital
Illawarra Shoalhaven Local Health District	Wollongong Hospital Bulli Hospital Shellharbour Hospital Port Kembla Hospital SHH Mental Health Shoalhaven Hospital
Northern New South Wales Local Health District	Lismore Hospital Tweed Heads Hospital
Mid North Coast Local Health District	Port Macquarie Hospital Coffs Harbour Hospital
St Vincent's Hospital Network	St Vincent's Public Hospital
South East Sydney Local Health District	St George Hospital Sutherland Hospital Prince of Wales Hospital
Nepean Blue Mountains Local Health District	Nepean Hospital
Southern New South Wales Local Health District	South East Regional Hospital Goulburn Hospital

Appendix Three:
Summary of data collected as part of the AiM Evaluation

Methodology

A range of data (both qualitative and quantitative) was used to conduct the evaluation. The table below provides a summary of the data collected and analysed.

Overview of the data collected

Qualitative	
Mid and end of term performance reviews	Mid-term performance reviews were carried out by AiM supervisors halfway through their term or at the end of their term. Feedback from supervisors was overwhelmingly positive and overall, AIMs were marked higher by supervisors than the self-grading mark they gave themselves against all domains.
Semi-structured feedback interviews: AiMs	AiMs were interviewed in individual and focus group formats. Questions were developed by the Ministry of Health and used to guide broad conversation around the experience, advantages and disadvantages of being an AiM in NSW Health.
Semi-structured feedback interviews: Junior Medical Officers	Junior Medical Officers were interviewed individually in a semi-structured question and answer format. JMOs were asked about their experiences working with aims and the advantages and disadvantages of having an AiM on their team.
Semi-structured feedback interviews: Directors of Assistants in Medicine	Directors of Assistants in Medicine were interviewed individually in a semi-structured question and answer format. DAiMs were asked about their experience working in the role and the experience, advantages and disadvantages of managing AiMs in their hospitals.
Semi-structured interviews: Directors of Medical Services (DMS) and Executive Directors of Medical Services (EDMS)	Executive Directors and Directors of Medical Services were interviewed individually in a semi-structured question and answer format. EDMS' and DMS' were asked about their experience managing the role of AiM and the advantages and disadvantages of having them in their hospitals.
Semi-structured interviews: Universities	Medical deans were interviewed individually and in focus groups in a semi-structured question and answer format. Medical deans were asked about their experience having students participate in the AiM program and the advantages and disadvantages of the program and its impact on medical training in their organisations.

Quantitative	
	Form
Survey of AiMs	A survey tool was developed to gather feedback from AiMs on their experience in the program. The survey was distributed to all AiMs shortly before the commencement of their first term. Survey data was captured and analysed to understand the experience of the program from the AiM perspective.
Survey of Junior Medical Officers	A survey tool was developed to gather feedback from JMOs (PGY1, PGY2 and Accredited/Unaccredited Trainees) on the experience of having an AiM in their team. Survey data was captured and analysed to understand the experience of the program from the JMO perspective.
Survey of Senior Medical Officers	A survey tool was developed to gather feedback from Senior Medical Officers (Staff Specialists, Consultants and Visiting Medical Officers) on the experience of having an AiM in their team. Survey data was captured and analysed to understand the experience of the program from the SMO perspective.
Survey of Directors of Assistants in Medicine	A survey tool was developed to gather feedback from Directors of Assistants in Medicine on their experience running the AiM program and managing AiMs in teams across their hospital. Survey data was captured and analysed to understand the experience of the program from the DAiM perspective.
Unrostered overtime	Unrostered overtime data from 2019 was collected and compared against unrostered overtime taken in 2020 to determine whether AiMs have had a significant impact on overall workload reduction. It is important to note that there are varying factors that could have contributed to a reduction in unrostered overtime and results cannot be directly attributed to AiMs.

Appendix Four:
Mid and End of Term Assessment Form

Assistant in Medicine

Term Assessment Form

Assistant in Medicine details		The form is being completed for	
Name:		Mid-Term	
University:	Select an option	End-of-Term	

Term Details	
From:	
To:	
Term name:	
Hospital:	Select an option

About this form

The purpose of this form is to provide feedback to the Assistant in Medicine on their performance.

The form is to be completed by the term supervisor and by the Assistant in Medicine (for self-assessment) at the mid-point and at the end of the term.

This form **has not been designed** for recruitment purposes and should not be used for such purposes.

Instructions for Assistants in Medicine

Complete this form before assessment meetings and discuss it with your supervisor at those meetings.

Instructions for supervisors

Complete and discuss the form with the Assistant in Medicine (AiM). Consider the AiMs self-assessment and the observations of others in the discussion. The supervisor should:

- Assign a rating for AiM performance against each outcome statement.
  Note: Assigning a rating of 2 or 4 indicates that the performance falls between the descriptions provided.
- Use the 'Not observed' option where appropriate and note this for further action.
- At the end-of-term assessment, assign a global rating of progress.
- Get feedback from other members of the multi-disciplinary team, including junior doctors, nursing and allied health staff

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Domain 1: Science and Scholarship – The Assistant in Medicine as scientist and scholar

1.1 **Knowledge:** Consolidate, expand and apply knowledge of the aetiology, pathology, clinical features, natural history and prognosis of common and important presentations at all stages of life.

AiM Rating:	Supervisor Rating:	Description:
5 ☐	5 ☐	Applies extensive knowledge to patient care.
4 ☐	4 ☐	
3 ☐	3 ☐	Applies sound knowledge to patient care.
2 ☐	2 ☐	
1 ☐	1 ☐	Demonstrates inadequate knowledge.
Not ☐ performed	Not ☐ observed	

Supervisor comments on Domain 1

Assistant in Medicine comments on Domain 1

Domain 2: Clinical Practice – The Assistant in Medicine as practitioner

2.1 **Patient safety:** Place the needs and safety of patients at the centre of the care process. Demonstrate safety skills including effective clinical handover, graded assertiveness, delegation and escalation, infection control, and adverse event reporting.

AiM Rating:	Supervisor Rating:	Description:
5 ☐	5 ☐	Demonstrates all aspects of safe patient care.
4 ☐	4 ☐	
3 ☐	3 ☐	Demonstrates most aspects of safe patient care.
2 ☐	2 ☐	
1 ☐	1 ☐	Demonstrates unsafe patient care.
Not ☐ performed	Not ☐ observed	

2.2 **Communication:** Communicate clearly, sensitively and effectively with patients, their family/carers, doctors and other health professionals.

AiM Rating:	Supervisor Rating:	Description:
5 ☐	5 ☐	Communicates effectively in routine and difficult situations.
4 ☐	4 ☐	
3 ☐	3 ☐	Communicates effectively in routine situations.
2 ☐	2 ☐	
1 ☐	1 ☐	Does not communicate effectively.
Not ☐ performed	Not ☐ observed	

University: Select an option ▾

Hospital: Select an option ▾

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2.3 Patient assessment: Perform and document a patient assessment - incorporating a problem focused medical history with a relevant physical examination and generate a valid differential diagnosis.

AiM Rating:	Supervisor Rating:	Description:
5 ☐	5 ☐	Performs and documents focused patient assessments for routine and complex patients.
4 ☐	4 ☐	
3 ☐	3 ☐	Performs and documents focused patient assessments for routine patients.
2 ☐	2 ☐	
1 ☐	1 ☐	Performs unfocused or incomplete patient assessments and/or documentation.
Not performed ☐	Not observed ☐	

Assistant in Medicine to complete. Have you been required to complete a patient admission? Select an option ▾

If yes, approximately how many patient admissions have you undertaken?

2.4 Procedures: Safely perform a range of common procedural skills required for work as an Assistant in Medicine.

AiM Rating:	Supervisor Rating:	Description:
5 ☐	5 ☐	Performs procedures with a high degree of technical proficiency and sensitivity towards patients.
4 ☐	4 ☐	
3 ☐	3 ☐	Performs most common procedures in a technically safe and effective manner on routine patients.
2 ☐	2 ☐	
1 ☐	1 ☐	Performs common procedures with limited technical proficiency and sensitivity to patients.
Not performed ☐	Not observed ☐	

Assistant in Medicine to complete. Please indicate the type and number of procedures performed

Procedure	
Venepuncture ☐	
Blood cultures ☐	
Venous blood gases ☐	
Arterial blood gases ☐	
Blood pressure measurement ☐	
Other (please specify) ☐	

University: Select an option ▾   Hospital: Select an option ▾

2.5 Investigations: Arrange common, relevant and cost-effective investigations, and interpret their results accurately.

AiM Rating:	Supervisor Rating:	Description:
5 ☐	5 ☐	Identifies and arranges appropriate investigations and interprets investigations accurately
4 ☐	4 ☐	
3 ☐	3 ☐	Arranges appropriate investigations and requires some guidance on interpretation.
2 ☐	2 ☐	
1 ☐	1 ☐	Arranges inappropriate investigations and/or interprets incorrectly
Not performed ☐	Not observed ☐	

Assistant in Medicine to complete:

Please list the type **radiology** investigations arranged (e.g. plain film x-rays, Ultrasound, CT Scan)

Has a junior medical officer been required to counter-sign an investigation request? Select an option ▾

Assistant in Medicine to complete:

Please list the type of **pathology** investigations arranged

Has a junior medical officer been required to counter-sign an investigation request? Select an option ▾

2.6 Emergency care: Recognise the deteriorating patient, implement appropriate initial patient management and escalate

AiM Rating:	Supervisor Rating:	Description:
5 ☐	5 ☐	Identifies deteriorating or critically unwell patients, initiates basic management, actively anticipates additional requirements and seeks appropriate assistance.
4 ☐	4 ☐	
3 ☐	3 ☐	Identifies deteriorating or critically unwell patients, initiates basic management and seeks appropriate assistance.
2 ☐	2 ☐	
1 ☐	1 ☐	Does not identify deteriorating or critically unwell patients or cannot initiate basic management correctly or does not seek appropriate assistance.
Not performed ☐	Not observed ☐	

University: Select an option ▾   Hospital: Select an option ▾

2.7	**Patient documentation:** Produce timely, accurate and concise medical documentation	

AiM Rating:	Supervisor Rating:	Description:
5 ☐	5 ☐	Produces medical record entries that are timely, accurate and concise regarding history, examination findings, investigation results, and management plans. Documentation captures and prioritises the most important issues for the patient
4 ☐	4 ☐	
3 ☐	3 ☐	Produce medical records that are accurate and include relevant patient information
2 ☐	2 ☐	
1 ☐	1 ☐	Medical entries omit clinically significant history, examination findings, investigation results or management plans and/or are overly inclusive and include redundant and/or repetitive information
Not ☐ performed	Not ☐ observed	

Assistant in Medicine to complete.

Have you had the role of 'scribe' (making eMR entries) during a ward round? [Select an option ▾]

Have you completed discharge summaries/letters? [Select an option ▾]
If yes approximately how many?

Supervisor comments on Domain 2

Assistant in Medicine comments on Domain 2

University: [Select an option ▾]   Hospital: [Select an option ▾]   Page 5 of 9

Domain 3 – Health and Society – The Assistant in Medicine as a health advocate

3.1 **Cultural competence:** Awareness of cultural diversity and the ability to function effectively and respectfully when working and treating people of different cultural backgrounds.

AiM Rating:	Supervisor Rating:	Description:
5 ☐	5 ☐	Is respectful of patients' cultures. Considers relevant information regarding patients' cultural or ethnic background in management approaches and documents these. Appropriately accesses an interpreter or other culturally focused services
4 ☐	4 ☐	
3 ☐	3 ☐	Has an awareness of the cultures of others and is respectful of those.
2 ☐	2 ☐	
1 ☐	1 ☐	Has an inadequate awareness of, or difficulty accepting and understanding, the cultures of others. Lacks awareness of relevant cultural issues e.g. not specifying when an interpreter is required
	Not ☐ observed	

3.2 **Aboriginal and Torres Strait Islander health:** Apply knowledge of the culture, spirituality and relationship to land of Aboriginal and Torres Strait Islander peoples, to clinical practice and advocacy.

AiM Rating:	Supervisor Rating:	Description:
5 ☐	5 ☐	Practises and advocates cultural safety for Aboriginal and Torres Strait Islander peoples.
4 ☐	4 ☐	
3 ☐	3 ☐	Practises cultural safety for Aboriginal and Torres Strait Islander peoples.
2 ☐	2 ☐	
1 ☐	1 ☐	Disregards cultural safety for Aboriginal and Torres Strait Islander peoples.
	Not ☐ observed	

Supervisor comments on Domain 3

Assistant in Medicine comments on Domain 3

University: Select an option ▾   Hospital: Select an option ▾

Domain 4 – Professionalism and Leadership – The Assistant in Medicine as a professional and leader

4.1 Professionalism: Provide care to all patients in accordance with *Good Medical Practice: A Code of Conduct for Doctors in Australia[1]*, and demonstrate ethical behaviours and professional values including integrity, compassion, empathy and respect for all patients, society and the profession.

AiM Rating:	Supervisor Rating:	Description:
5 ☐	5 ☐	Behaves in a highly professional manner and is a role model for others.
4 ☐	4 ☐	
3 ☐	3 ☐	Behaves in a professional manner and occasionally needs assistance when under stress.
2 ☐	2 ☐	
1 ☐	1 ☐	Behaves in a manner that demonstrates disregard for professional standards.
	Not ☐ observed	

4.2 Self-management: Optimise their personal health and wellbeing, including responding to fatigue, managing stress and adhering to infection control to mitigate health risks of professional practice.

AiM Rating:	Supervisor Rating:	Description:
5 ☐	5 ☐	Manages the impact of work on personal health and wellbeing and actively supports others.
4 ☐	4 ☐	
3 ☐	3 ☐	Manages the impact of work on personal health and wellbeing.
2 ☐	2 ☐	
1 ☐	1 ☐	Demonstrates impaired professional performance or other evidence of poor self-care.
	Not ☐ observed	

4.3 Teamwork: Respect the roles and expertise of other healthcare professionals, learn and work effectively as a member or of an inter-professional team, and make appropriate referrals.

AiM Rating:	Supervisor Rating:	Description:
5 ☐	5 ☐	Works effectively as a member or leader of the inter-professional team and positively influences team dynamics.
4 ☐	4 ☐	
3 ☐	3 ☐	Works effectively as part of the inter-professional team.
2 ☐	2 ☐	
1 ☐	1 ☐	Works in a way that disrupts effective functioning of the inter-professional team.
	Not ☐ observed	

4.4 Time management: Effectively manage time and workload demands, be punctual and show ability to prioritise workload to manage patient outcomes and health service functions.

AiM Rating:	Supervisor Rating:	Description:
5 ☐	5 ☐	Effective management and high work output without undue personal stress.
4 ☐	4 ☐	
3 ☐	3 ☐	Effective management and prioritisation of most tasks and may need assistance during very busy times.
2 ☐	2 ☐	
1 ☐	1 ☐	Unable to manage and prioritise tasks in a timely manner resulting in task build-up.
	Not ☐ observed	

Supervisor comments on Domain 4

Assistant in Medicine comments on Domain 4

University: Select an option ▾   Hospital: Select an option ▾

Global rating (required only for the end-of-term assessment)

Assign a global rating of progress to assess the Assistant in Medicine readiness to work as an intern. In assigning this rating consider the Assistant in Medicine's ability to practice safely, work with increasing levels of responsibility, apply existing knowledge and skills, and learn new knowledge and skills during the term.

Global Rating	
☐ Satisfactory	The Assistant in Medicine has met or exceeded performance expectations in the term
☐ Borderline	Further information, assessment and/or remediation may be required before deciding that the Assistant in Medicine has met performance expectations.
☐ Unsatisfactory	The Assistant in Medicine has not met performance expectations in the term.

Please comment on the following:

Strengths

Areas for Improvement

University: Select an option ▾   Hospital: Select an option ▾

Supervisor

Name (print clearly)

Signature

Position

Date

Assistant in Medicine

I (insert name)

confirm that I have discussed the above report with my assessor and know that if I disagree with any points, I may respond in writing to the Director of Assistant in Medicine within 14 days.

Signature

Date

Director of Assistant in Medicine

Name (print clearly)

Signature

Date

Director of Assistant in Medicine comments

Return of form

Please forward to (contact person, department):

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[1] Good Medical Practice: A Code of Conduct for Doctors in Australia

University: Select an option

Hospital: Select an option