**Minutes of the meeting of the Foundation Programme Board held on 15th November 2024**

**Present:** Duncan Henderson (DH) [Chair], Helen Adamson (HA), Simon Barker (SB), Edgar Brincat (EB), Lisa Black (LB), Fiona Cameron (FC), Alan Denison (AD), Fiona Drimmie (FD), Hilary Duffy (HD), Vicky Hayter (VH), Toby McDonald (TMcD), Shona McLellan (SMcL), Yatin Patel (YP), Jemma Pringle (JP), Christine Rea (CR), Joanna Stephen (JSe), Elaine Rowan (ER) & Joe Sarvesvaran (JS)

**Apologies:** Brian Conway (BC), Jennifer Duncan (JD), Olive Herlihy (OH), Alison Hodge (AH), Christine Heron (CH), Alison Hodge (AH), Izhar Khan (IK), David Kluth (DK), Hannah MacDonald (HMD), Malcolm McLeod (AMcL), Jen Mackenzie (JMacK), Crawford McGuffie (CMcG), Alistair Milne (AM), Matthew Murtagh (MM), Yvonne Moulds (YM) & Caroline Whitton (CW)

**In attendance:** Rachel Brand-Smith

|  |  |  |  |
| --- | --- | --- | --- |
| **Item No** | **Item** | **Comment** | **Action** |
| **1.** | **Welcome & Apologies** | The chair welcomed the following new members:* **Mr Toby McDonald** – BMA (Student Rep)
* **Dr Simon Barker** – BMA (Consultant Doctors)
* **Dr Matthew Murtagh** – BMA (Resident Doctors Rep)
 |  |
| **2.** | **Notes of the previous meeting 31/05/2024** | The following corrections were requested:* **Attendance:** Add Dr Yatin Patel to attendance list
 | **RBS** to amend the 31/05/2024 meeting notes |
| **3.** | **Matters Arising** |  |  |
| **3.1** | **Action Points from meeting held on 01/03/2024** | * See discussions items below
 |  |
| **3.2** | **PIA (Preference Informed Process) Process 2024** |  |  |
| **3.2.1** | **PIA - Process 2024** | Various issues were discussed in relation to the 2024 PIA system results including:* **PIA Process 2024:** DH confirmed that the new PIA system (where candidates rank their preferred Medical Schools and are allocated a computer generated number) was used for the first time this year. This is different from the previous system which used candidate scores and test results.
* **Categories of Candidates:** DH confirmed that the allocation process includes UK applicants and eligibility candidates. Eligibility candidates include overseas graduates and any UK graduates who apply more than two years after graduation.
* **Numbers of Candidates:** DH confirmed approx. 11,000 candidates applied in 2024 of which approx. 10% were placed on the Placeholder List.
* **PIA Results 2024:** DH confirmed that the PIA system had similar outcomes to the system used in 2023. For example, 74% of candidates received their first choice and 92% of candidates received one of their top five choices.
* **Scottish PIA Results:** DH confirmed that the Scottish Foundation School was the sixth most popular Foundation School in the UK for 1st choice applicants. All Scottish placements bar one were filled with first choice applicants. DH noted that only six UK Foundation Schools from a total of eighteen have a first-choice applicant ratio > 1:1.
 |  |
| **3.2.3** | **PIA - Categories** | Various issues related to the Pre-Allocation process were discussed including:* **Increase in Category 5B Applications:** DH noted that the number of criteria 5B (Widening Participation) applications has increased significantly. DH noted that this may pose a challenge for the Foundation Programme as these applicants now make up a significant proportion of some medical schools’ allocation. For example, London had one third of posts allocated to 5B applicants, leaving only two thirds of places available in the main allocation.
* **Review of Category 5B:** DH conformed that criterion 5B is likely to be reviewed by the UKFPO as the number of applicants using this criterion is predicted to increase year on year. In addition to this, a balance will have to be achieved when supporting individuals who apply under category 5A (Educational Circumstances). DH noted that all stakeholders (Medical Schools, BMA etc.) will be involved in discussions. TMcD confirmed that the UK MSC have not formulated a response to any of the proposed revisions yet.
* **General Discussion:** AD stated that it is important to recruit doctors that represent the backgrounds they come from. AD noted however that recruitment may be hampered by applicants’ lake of awareness or reluctance to apply to the Foundation Programme using this category.
 |  |
| **3.3.3** | **PIA – Other Related Issues** | Various other issues related to the new PIA system were discussed including:* **Candidates’ awareness of new system:** DH confirmed that many candidates were unaware that it was the UK Medical Schools which had requested that the allocation system be changes (with the support of the Medical Schools Council) and not UKFPO. DH noted that 66% of stakeholders (14,500) had voted in favour of changing the allocation process.
* **Process for 2025:** DH confirmed that the new PIA system (allocation algorithm and computer-generated number) will be used in 2025. Discussions have been ongoing regarding minor changes however it has been decided not to make any changes at present. This will allow a period of stability and provide data which can be analysed appropriately.
 |  |
| **3.4** | **PIA Placeholder System**  |  |  |
| **3.3.1** | **New Approach** | Various issues were discussed related to the Placeholder System including:* **Issues with previous ‘Reserve List’:** DH noted that there are various issues with the previous ‘reserve lists’ system. DH highlighted that this process has been oversubscribed for the past ten years and was further complicated by two specific problems that arose in 2023: large numbers of applications from the republic of Ireland and Foundation schools being allowed to estimate their allocation numbers.
* **High Rate of Irish Applications:** 2023 saw a high number of applicants from the Republic of Ireland who subsequently withdrew after being allocated a post. This caused significant vacancies in Scotland and Northern Ireland.
* **Foundation Schools Predicting Allocation Numbers:** DH confirmed that rather than use a nationally coordinated system UK Foundation Schools were asked to predict or estimate their likely vacancy numbers. Unfortunately, predicting allocation numbers was not straightforward and some school ended up with too many students and some too few.
* **New ‘Placeholder List’ 2024:** Due to issues related to oversubscription and lack of accuracy 2023 the Placeholder List was introduced in 2024. This was managed by a central UK team.
* **Final Allocation:** CR confirmed that Scotland placed all candidates on the Placeholder List by 31/05/2024. DH confirmed that the last UK nation to allocate applicants was Wales. Welsh applicants were initially told the geographical area of their posts. Final confirmation was in late July.
* **Allocation Deadline:** TMcD asked if the application deadline was 6th August or from the start of Shadowing Week. TMcD noted that the application deadline date impacts the date when advance notice is required for rotas. DH confirmed that the deadline date used 6th August.
 |  |
| **3.3.2** | **Communication with Candidates** | Various issues related to communication to candidates were discussed including:* **Communication with Applicants:** DH noted that UKFPO could have provided better communication around the new Placeholder Process. DH stated that the Scottish Foundation school addressed issues by holding two successful webinars for thirty applicants on the Scottish Placeholder list.
* **Future Communication with Candidates:** FC stated that it is helpful to reiterate to students that all eligible applicants will be offered a Foundation post. CR confirmed that once TPM receive the final dates from UKFPO an e-mail will be sent out with information to applicants ahead of ranking.
 |  |
| **3.3.3** | **Medical School Graduate Dates** | Various issues related to medical school graduation dates were discussed including:* **Late Graduate Dates:** DH stated that the allocation system is complicated by some medical schools’ late graduation dates. DH confirmed that approximately half of medical schools have late graduation dates. This means that applicants who fail finals after the main allocation in March must subsequently withdraw.
* **Action on Late Graduation Dates:** The UKFPO has asked the MSC and UK medical schools to address this issue for many years with limited success and it has been acknowledged that it is a significant challenge to redesign timing of undergraduate programmes.
 |  |
| **3.4** | **SFP (Specialised Foundation Programme)**  | Various issues related to the SFP (Specialised Foundation Programme) process were discussed including:* **Changes to Application Process:** DH confirmed that the application system for the SFP will be changed in 2025. The previously separate SFP allocation process will now be integrated into the main Foundation School allocation system.
* **New Application Process:** DH confirmed that any candidate who wants to apply to the SFP programme must firstly be placed in the Scottish Foundation Programme via the UK PIA process. After that, applicants can apply for one of the 54 academic or medical education posts.
* **SFP Application Form:** Candidates will use a white space application form which will not require references to additional degrees, research or publications and will be marked by academics from the Scottish medical schools.
* **Other UK Nations:** DH noted that Northern Ireland will now have a similar application system. Wales will continue to allocate SFP posts as part of the standard process. England has announced that they will use a hybrid system where one third of English SFP posts will be allocated by local medical schools within a given Foundation school. The remaining two thirds will be allocated by the PIA process at the same time as standard posts.
 |  |
| **3.5** | **Expansion Posts**  |  |  |
| **3.5.1** | **Expansion Posts – 2024 to 2027** | DH have the members a summary of issues related to Expansion Posts including: * **Expansion Posts Numbers:** DH confirmed that the Scottish Foundation programme had 954 F1 posts and 954 F2 posts in 2023. That number will now be increased by an additional 219 F1 posts between 2024 and 2026 and 219 F2 posts from 2025 to 2027.
* **Funding for Expansion Posts:** DH confirmed that funding has been agreed for 2025 however funding for 2026 will be discussed at the appropriate time with the Scottish Government Health Dept.
 |  |
| **3.5.2** | **Expansion Posts – Banding Post Issues** | Various issues related to expansion posts and banding were discussed including:* **Funding from Health Boards:** DH confirmed that NES pays for Foundation doctors basic 40-hour working week. Additional out-of-hours banding is supplied by territorial health boards. DH noted that due to the current financial climate some health boards are finding it difficult to commit to funding banded posts. DH noted however, this only affects a very small number of posts in two Health Boards at present. DH confirmed that discussions are ongoing to resolve this and noted that unbanded posts have multiple issues from a training and trainee perspective.
* **Impact on Curriculum:** FC highlighted that lack of access to banded posts impacts Foundation doctors’ ability to achieve curriculum requirements such as management of acutely deteriorating patients.
* **Use of Rotas:** FC suggested that banding issues be addressed through rota management. For example, two trainees could share banding and OOH commitments together. FD agreed that this could be achieved however some units may find this challenging.
* **Greater Flexibility Regarding Banding Funding:** FC suggested that banding funding should be more flexible. SB stated that such a proposal would have to be discussed with the Scottish Government through the BMA Residents Doctors Committee. SB noted that this might involve re-negotiation of Resident doctors’ contracts.
* **Differentiated Posts:** SB stated that the BMA would not support differentiated posts for Foundation doctors. DH noted that the Foundation programme cannot mandate banded posts for Foundation doctors as it is not specifically mentioned in the curriculum. There was general agreement from the members that offering unbanded posts to resident doctors was not suitable.
 |  |
| **3.5.3** | **Expansion Posts – Other Issues** | Various other issues regarding expansion posts were discussed including:* **Supervision of Foundation Doctors:** HF asked whether Educational and Clinical Supervision capacity has been addressed. DH confirmed that there are ongoing discussions with the Medical Education Directorates and DMEs regarding this issue and noted that some areas appear to be near capacity. DH also confirmed that NES will expanding the number of FPD and APGD sessions to address this issue.
* **Impact of Expansion on Rotas:** JS highlighted issues of the impact of expansion on rotas. JS noted that some boards can be financially penalised for failing to monitor rotas. Additional doctors could make rotas more robust and lead to financial savings. DH suggested that this level of detail requires extensive discussion at local level with units, rota organisers and DME teams.
* **Foundation Doctors & Intercalation:** YP stated that uncertainty over posts may prevent Foundation doctors from intercalating. DH noted that the resumption of the F2 destination survey will be helpful in establishing the rates of immediate progression to training posts or alternative pathways such as CF posts or overseas work. DH noted that the GMC cohort data indicates that 90% of trainees are in UK training posts within 3 years of finishing Foundation training.
 |  |
| **3.6** | **Foundation Programme Review** | AD gave the members an update regarding the Foundation Programme Review including:* **Foundation Review & Trainee Satisfaction:** This review was started in 2022 and looks at issues related to specific units within territorial boards. AD stated that the review has identified regional variations in trainee satisfaction rates however cautioned that this is just one method of gauging doctor responses.
* **Review Recommendations:** AD confirmed that the review recommends the re-structuring of Foundation School governance and organisational structures. In addition to this, there will be a revision of the quality matrices and assessments.
* **Quality Data:** DH noted that four regions within the Foundation School had different GMC quality rankings. For example, some areas had different rankings for F1 and F2. In addition to this, some regions had specific issues related to just F1. DH noted however that quality scores were calculated over a very narrow data range and large differences can be seen based on small differences in the number of data points. DH confirmed that he will be working on a paper with Neil Colquhoun regarding this.
* **Ranking Calculations:** YP asked what denominator was used when calculating results for schools and regions. DH confirmed that the denominator was 21. DH confirmed that there are eighteen UK Foundation School however information is broken down by Scottish region resulting in seventeen schools and four Scottish regions.
* **Different Survey Data:** FC noted that overall Quality results depend on which survey data is used. For example, GMC and STS surveys do not have complete concordance. AD noted that the Review survey approach requires refinement.
* **Definition of Coastal Areas:** FD asked what was meant by Coastal Areas in the Review data. FC confirmed that this represented Inverclyde, Paisley and Ayr.
* **East Region & North Region:** FD asked when the East Region and North Regions will be merged as this will impact data from the East Region. AD confirmed that a number of specialty APGDs were already working across East and North regions for example in Obstetrics and Gynaecology. DH confirmed there were no plans to merge East and North Foundation APGDs.
 |  |
| **3.7** | **STS Sexual Harassment Survey Results 2024** | Various issues related to the Sexual Harassment Survey including:* **Question Set:** LB noted that the survey questions did not specify who was carrying out harassment e.g. general public, workforce, management etc. DH acknowledged that clarity was required, and this would be fed back to survey authors. YP suggested that the survey results could be regarded as very low for Foundation relative to its large size. However, all agreed of the importance of addressing this issue.
* **Further Development:** FD confirmed that most territorial health boards are pursuing training in this area. YP suggested issues be discussed via the Active Bystander training programmes. FD stated that Trainers have been encouraged to discuss issue. DH suggested that Alastair Murray be invited to give a further presentation on this issue.
 |  |
| **3.8** | **Specialised Foundation Programme Induction** | * FC noted that the SFP programme has a separate induction process and various standardised materials have been created for doctors covering issues such as training sites, study leave etc. This will address some variations in regional practice.
 |  |
| **4.** | **Standing items of Business** |  |  |
| **4.1** | **Professional Development** |  |  |
| **4.1.1** | **Improving Foundation Initiative** | FC gave the members an update regarding the Improving Foundation Initiative* **Project Themes:** FC stated this project has been facilitated by the APGDs, CLs and DMEs etc. FC highlighted that this project is separate from assessments and processes carried out by the Quality Workstream but completements the quality process.
* **Project Data:** FC stated that there have been some significant improvements in the West Region and further information will be shared through FPOG. AD stated that data will be useful for NES Quality audits. AD and DH thanked FC and CW for their contribution to this project.
 |  |
| **4.1.2** | **Foundation Development Day 2025** | * DH asked if members would be permitted to hold a face-to-face Development Day if a free venue could be identified. AD confirmed that NES will support team meetings but will not support ‘non-essential meetings. AD noted that there may be further restrictions regarding face-to-face meetings after the next Scottish Government budget. HD stated she would report back to the members.
 |  |
| **4.1.3** | **SMEC 2025** | * DH stated that this would be held on the 24/04/2025 and 25/04/2025 and will be a virtual meeting online.
 |  |
| **5.** | **Training Management** |  |  |
| **5.1** | **General Update** | The following information was confirmed by TPM:* **New Administration Posts:** HD and ER confirmed that two new administrators (Amy and Kelsey) have been appointed.
* **FPD Post:** SMcL confirmed that Nadeka Rathnamala is still FPD for Dumfries. ER confirmed however that her SLA may require renewal.
 |  |
| **6.** | **Digital Update** | * CR stated that the Foundation portfolio is to be reviewed so that materials are similar to those used in England. CR confirmed that there would be no further updates in this training year.
 |  |
| **7.** | **Quality Management** | FD gave the members an update regarding Quality Management including: * **2024 Feedback:** FD confirmed that Quality have now received this year’s feedback from DME, FPDs, TPDs etc. and the results will be circulated soon. FD suggested a fact finding and quality engagement event could be held to discuss issues etc.
* **Foundation Quality Contact:** FC stated that she will act as a point of contact for all Scottish Foundation programme quality issues and will be meeting with Jill Murray to discuss requirements. FC confirmed that she will be attending SQMG meetings. FD stated she can be used as point of contact as she will be the Foundation rep on all three Quality workstreams in the new QM system.
* **QM and STB Quality Leads:** DH noted that the new QM process will require good communication between the team and FC. DH suggested that QM should give STB prior warning regarding which units will be discussed at the QM meetings so that FC is able to provide appropriate data etc.
* **Quality & GP Practices:** FC noted that GP practices that only take Foundation doctors and are not GP trainee practices, will have their quality activities managed by the GP team.
* **STS Survey 2025:** FD confirmed that the next STS survey will be issued in December and will use the new Quality Management format.
* **STS Survey & Simulation Workshops:** JP noted that Foundation doctors have been encouraged to discuss and engage with the STS survey through Simulation workshops. FD suggested discussing issue separately.
* **Quality Escalation Issues:** FD confirmed that the Quality escalation process is to be reviewed in the coming months.
 | **JP** to discuss Foundation doctor engagement with STS Survey through Simulation Workshops with FD |
| **8.** | **Postgraduate Dean** |  |  |
| **8.1** | **Postgraduate Dean - Update**  | AD gave the following update to the members including: * **Academic Liaison with Medical Schools:** AD confirmed that he is the Scottish Academic Liaison lead with a remit to ensure increased participation in academic medicine through routes such as the Scottish Medical Youth Academy and Medical ACT. AD confirmed that there has been a 13% rise in Scottish domiciled applicants in 2023-2024.
* **ScotCom Degree:** AD confirmed that the University of St Andrews have received GMC approval for a new medical degree and the first student cohort will start in the next two years
* **Review of Academic Career Pathways:** AD confirmed that two associate deans (Lyndsay Pope and Simera Bell) are working on a project reviewing academic pathways. This includes issues such as academic training posts, post-training academic careers, opportunities for trainees with protected characteristics etc.
* **SFP & Academic Output:** FC suggested that the SFP programme team gauge the programme impact by reviewing academic output and suggested this also be used for non-SFP doctors. AD noted that there is no overarching workforce strategy regarding this.
* **Medical Education Reform:** AD confirmed that NES will be leading a review of medical education. This will include looking at areas such as recruitment of Scottish domiciled students, doctor retention, wellbeing and experience, career pathways and models, Trainer training etc. AD stated that this links in with similar activities being carried out by the GMC.
 |  |
| **8.2** | **Postgraduate Dean – International Medical Students** | AD gave the members an update regarding IMGs including:* **WINS Programme:** AD stated that there is a revised introductory programme for international doctors (Welcoming International Students to Scotland). DH noted that this programme was of very high quality and had received very good feedback. DH noted however that there were issues related to running the programme when doctors have started their posts and require leave to attend.
* **F2s & Shadowing Week:** DH confirmed that standalone F2 doctors (who are mainly IMG doctors) can now access and receive funding to attend Shadowing Week as per a request from the Foundation STB.
* **Wellbeing Issues for INGs:** JS asked if there was a direct link with the NES Wellbeing Services for those who require additional support. AD noted that there are different levels of support for undergraduates and Foundation doctors. AD directed members to research carried out by Dr Mohammad al Hadid [Paper 1 - Medical Education - 2024 - Al‐Haddad - International medical graduates social connections A qualitative study.pdf](https://scottish-my.sharepoint.com/%3Ab%3A/g/personal/alan_denison_nes_scot_nhs_uk/ESqD4pSXwL9MqDBZW2DP9p0B_YpTiI1Rv9juOHCM3-whcw?e=xgWvyQ). JP highlighted Simulation workshops which work with IMGs. JP stated that wellbeing activities are expanding under the direction of Julie Marden.
* **IMG Induction Issues:** FC highlighted that 62% of trainees feel they did not have an adequate Induction according to the GMC ‘State of Medical Education’ Paper. FC noted that the Foundation Curriculum Group have data which could indicate that inadequate inductions could be viewed as discriminatory for doctors with protected characteristics. FD noted however that while training units must meet trainee requirements trainees also have a requirement to meet training expectations.
* **Trainee & Supervisors:** EB highlighted that some Supervisors are better matched to certain Foundation doctors than others. EB suggested Supervisors be identified for appropriate groups. YP noted that this has been attempted at FPD level. DH suggested that this approach be discussed at the Development Day.
 |  |
| **9.** | **Equality & Diversity Update** | * AD confirmed that he is working with AMEG group which is revising the NES ED&I requirements in line with GMC guidelines.
 |  |
| **10.** | **Foundation Programme Groups** |  |  |
| **10.1** | **Foundation Academic Group** | * DH stated that the SFP had a very successful presentation day and thanked LC and the other organisers.
 |  |
| **10.2** | **Foundation Curriculum & Assessment Implementation Group (FCAIG)** | Various FCAIG issues were discussed including:* **Teaching Resource Centre:** DH confirmed that the group have now set up the central online teaching resource. FC and EB thanked Joe and Alastair for their input to this excellent initiative.
* **Changes to Materials:** FC stated that there be no change to ARCP requirements however there will be some changes to Patient Safety and Sustainability materials.
 |  |
| **10.3** | **Foundation Programme Operational Group (FPOG)** | * FC confirmed that a SOP will be drafted for the proposed pilot of eight-month Foundation doctor rotations. This will also include a proposed evaluation process.
 |  |
| **10.4** | **Foundation Simulation Programme Steering Group** | JP gave the members an update related to the Simulation Programme including: * **Simulation Posts:** JP confirmed that the fourteen NES Simulation APGD posts will not continue after summer 2025, however some small roles will be developed to oversee existing workshops. JD asked about the future of the Simulation Programme. DH confirmed that the Foundation Simulation workshops will continue, but with a different oversight and reporting process.
* **Workshop Development:** JP stated that she is working on an interdisciplinary module with pharmacy however this has been suspended along with the Mental Health Simulation programme.
* **Foundation Doctors Feedback:** JP stated that there is now a national programme for collating feedback via CSMEN however there are issues with some trainees not completing feedback. The Simulation programmes has now moved to using Microsoft Forms which is organised by the research team at NES. An alternative approach would be to collate feedback via the Foundation School. FC suggested trainees do not receive certificate of completion unless they give feedback.
* **Foundation Doctors Attendance:** JP stated that there are ongoing issues with attendance and the recording of attendance.
* **Reports for August 20204:** JP confirmed that the reports for this academic year will be circulated soon, and a consultation process will be held to review these.
 |  |
| **11.** | **Board Member Updates** |  |  |
| **11.1** | **DME Update** | * The DME rep was not available
 |  |
| **11.2** | **Medical School Update** | * The Medical School rep was not available
 |  |
| **11.3** | **Foundation Trainee Update** | * The board trainee rep was not available
 |  |
| **11.4** | **Student Update** | * TMcD stated that the Scottish approach to SFP applications has been received positively
 |  |
| **11.5** | **Lay Representative** | HF raised various issues regarding doctors’ resilience including:* **Resilience Training:** HF asked if there were any workshops relate to resilience training within Foundation doctors’ inductions. FC confirmed that Foundation has the ‘Thriving in Medicine’ course which has received positive feedback.
* **How to address issues of Resilience:** JS stated that wellbeing and resilience issues are more difficult to address in larger training units however collaborative conversations in Simulation workshops are very useful. In addition to this, bespoke programmes are sometimes required for some units.
* **Mandatory Wellbeing Modules:** TMcD asked whether wellbeing and resilience modules were mandatory and whether there was any output data. FC confirmed that the Foundation School does not have mandatory modules however individual health boards may have mandatory courses.
 |  |
| **12.** | **AOCB** |  |  |
| **12.1** | **Out of Programme Application System** | * VH confirmed that the revised Out of Programme online application system will go live on 01/11/2024.
 |  |
| **12.2** | **ST6 Clinical Supervision of Foundation Doctors** | FC gave the members a summary of issues related to ST6 Clinical Supervisors paper including:* **Clinical Supervision Pilot:** FC stated that a pilot project conducted in England using final year Resident Doctors as Clinical Supervisors had been received positively. FC confirmed that this now has GMC approval and can be used by all four nations. If adopted, this project would require an expansion of supervisor training etc.
* **NES Approval:** FC stated that this paper would be presented to NES for consideration. CR confirmed that suggested changes could be supported within the ePortfolio system. Further detail will follow.
 |  |
| **13.** | **Date of Next Meeting** | Next Meeting:* 06/03/2025 (09:30 – 12:00) via TEAMS
* 30/05/2025 (09:30 – 12:00) via TEAMS
* 14/11/2025 (09:30 – 12:00) via TEAMS
 |  |