

The Computer Matching Process

The South Australian Institute of Medical Education and Training administers the Computer Matching Service to South Australian hospitals who offer Trainee Medical Officer (TMO) positions and to candidates applying for these posts. The Service is conducted at the request of SA Health.

The Computer Matching is purely a mathematical process which matches the preferences of both hospitals and candidates. The algorithm was designed to be impartial to both hospitals/health services and candidates. Hospitals/health services only have candidates removed from their preference lists when a permanent match has been made to a higher priority of that candidate. A candidate will be appointed to the highest available hospital/health service on the *Candidate's Priority List* that includes them within the quota boundary of the hospital preference list at any time during the matching procedure.

The matching process starts by looking at the first hospital/health service on the Priority List of each candidate and making a match if the candidate appears within the quota boundary of the Preference List of that hospital/health service. When a candidate is appointed to their first priority choice, this is a permanent match, they are then removed from all other hospital/health service lists and, if the candidate was within their quota boundary, this boundary is moved down one to include the next preferred candidate on their list. After all the appointments possible have been made when considering the first priority only of each candidate, the next pass considers second priorities - and later passes lower priorities. If any match is made that is not to a candidate's first priority it is considered to be a temporary match; in this case the candidate is only removed from the lists of those hospitals/health services that are of lower priority on the candidate's list, and again a quota boundary adjustment is made if necessary.

Therefore, on each pass through the matching procedure, quota lists for some hospitals/health services may be partially or wholly filled, and for other hospitals/health service quota boundaries may have to be extended. Similarly candidates may achieve a permanent match, and no longer have to be considered, or obtain a temporary match but remain on their higher priority hospital/health service lists, hence a more desired hospital/health service position is still possible should it become available, due to a quota boundary extension, later in the procedure.

The matching process continues until all hospital/health service quotas have been filled, or all of the candidate's lists have been processed down to their lowest priority choice and no further appointments can be made. At the conclusion of the matching process all the remaining temporary matches are now considered as permanent appointments.

Each applicant and hospital must realise that the Service is conducted strictly and solely in accordance with the Regulations.

Selection and ranking of candidates

The actual selection and ranking of candidates is the sole responsibility of the employing hospital or health service concerned. The South Australian Institute of Medical Education and Training cannot assist candidates in selecting programs; the Council simply administers the mechanism for matching candidates to hospitals/health services according to the preferences expressed by both.