

Quotation and demand for the speciality of Endocrinology and Nutrition in the MIR exam 2001–2023



Cotización y demanda de la especialidad Endocrinología y Nutrición en el examen MIR 2001–2023

When analysing the choice of a speciality in the Spanish exam for accessing the resident physicians training programme (médico interno residente [MIR]), we can look at supply, demand or quotation (which depends on the ratio between supply and demand). Supply is the easiest to measure, as it is the number of places on offer. In a recent original article¹ we described a way of measuring the quotation, the quotation order, and showed how that quotation order had evolved in the speciality of Endocrinology and Nutrition (E&N) over time from 2001 to 2022. In this scientific letter we update the E&N quotation order to the 2023 place allocation exams, propose two ways of measuring demand and describe the changes in E&N demand from 2001 to 2023.

In 2023, 103 E&N places were allocated, the first with an order number of 165 and the last with an order number of 4421, with 2208, 1396.5 and 3277 respectively as median and 25th and 75th percentiles of order number. The quotation index was 135.42, resulting in a quotation order of 12th among all specialist areas and 3rd among medical specialities.

To measure demand we propose the indicators we have called *top* demand order and total demand order.

The *top* demand order measures which speciality is chosen by those who have the most choice: the candidates with the highest order number.

To obtain it, we analyse the number of places in each speciality awarded in the call for applications up to the time when the first speciality is full. Making the cut-off at this point makes sense for one main reason: as long as there are places left in all specialities, any candidate can (regardless of the city/hospital factor) choose the speciality of his or her preference.

The specialisations are then ordered by number of places allocated up to that moment, from highest to lowest (the first specialisation to be filled does not necessarily have to be the most in demand; there may be another specialisation for which more places have been allocated but which has not yet been filled, because it has more places available).

In the event of a tie in the number of places awarded between two or more specialities, the same order number is assigned to all of them (as if on an Olympic podium two silver medals were awarded and no bronze medals, then moving on to fourth place).

The total demand order takes into account all the places awarded in the call for applications, not only those of the candidates with the best order number. To this end, comparisons are made between each pair of specialities, determining for each pair, which of the two specialities is most in demand by candidates. It is calculated as follows:

Table 1 Demand for the speciality E&N in the MIR calls 2001 to 2023.

Call for applications	<i>Top</i> demand order No.	Total demand order No.
2001	16	18
2002	17	18
2003	14	18
2004	15	17
2005	10	17
2006	8	16
2007	11	12
2008	13	19
2009	15	22
2010	12	15
2011	14	22
2012	14	20
2013	16	22
2014	15	20
2015	14	20
2016	17	21
2017	16	22
2018	20	22
2019	22	23
2020	21	23
2021	23	23
2022	23	20
2023	16	18

1. All specialities are played against each other as in a league championship, but in a single match:
2. For each crossing of specialisations, the number of places allocated for each specialisation is calculated when the first of the two specialisations has been filled and two points are given to the specialisation in which more places have been allocated at that time (one point to each in case of a tie).
3. For each speciality, as is done in the ranking of a league championship, the points of all its crossings are added up.
4. The speciality with the highest number of points is the most in demand, and is assigned the order number 1, the second most in demand is assigned the order number 2, and so on.

Table 1 shows the changes in the *top* demand and total demand for E&N from the 2001 call to the 2023 call.

To put the demand for E&N in context, in the MIR call resolved in 2023 the specialities with greater total demand than E&N were, in this order: Dermatology, Anaesthesiology, Paediatrics, Plastic Surgery, Ophthalmology, Cardiology, Traumatology, Obstetrics and Gynaecology, Radiodiagnosis, General Surgery, Gastroenterology, Internal Medicine, Family and Community Medicine, Urology, Neurology, Otorhinolaryngology and Psychiatry. The next five after E&N were Medical Oncology, Intensive Care Medicine, Neurosurgery, Maxillofacial Surgery and Haematology.

It should be borne in mind that the quotation index/order of a speciality, as a ratio between supply and demand, is highly dependent on supply, and a very large supply of places can lower the quotation even in a speciality that is attrac-

tive to candidates. However, a large supply may improve the demand for one speciality compared to others with a smaller supply, by facilitating the choice of a place by city/hospital criteria as opposed to speciality criteria, depending on the personal circumstances of the candidate. Therefore, to get a full picture of how a speciality has evolved over time in the MIR, and its relationship with the other specialist areas within an exam call, one has to look at supply, demand and quotation, and not just at one or two of these elements.

In the choice of places for the 2023 MIR examination, there was an improvement in the demand for E&N compared to previous years, and also in the quotation, which is worthy of note, as the number of places available (supply) had increased. Whether this improvement is the first fruit of the proposals made by the Sociedad Española de Endocrinología y Nutrición [Spanish Society of Endocrinology and Nutrition] and the speciality's National Commission to make E&N more attractive,² time will tell.

References

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