Online Supplementary Text 1: General structure, content and assessments of the rheumatology training programs.

Four out of the 45 EULAR countries did not provide specialist medical training in rheumatology (Cyprus, Iceland, Montenegro and San Marino). One country had two official national curricula (Turkey). Four (Estonia, Germany, Lebanon, Serbia) reported having no national curriculum but rather only local or university-specific curricula. In one of these countries (Estonia) it was a *de facto* national curriculum as there was a single training center. In four additional countries local curricula included information relevant to the survey (Armenia, Latvia, Lithuania, Switzerland).

Most countries' national curricula (n=25/37, 68%) had been updated in the past 5 years (2008-2012), and in only four (11%) no update had taken place in the past ten years (≤2002). Thirty-one countries' national (84%) curricula were approved by the government, in 11 (30%) approval was granted by the rheumatology societies, in 11 (30%) by a medical society or association and in seven (19%) by one or several universities (more than one organism could be in charge of approving the curriculum).

In 14 countries (34%), dual certification (i.e. certification in internal medicine and in rheumatology) was mandatory prior or concurrently to the certification in rheumatology.

In total, 32 (78%%) countries included a rotation (mandatory or optional) in another specialty (out of orthopedics, rehabilitation medicine, immunology, radiology or neurology) in their training program. These rotations were mandatory in 22-41% of the countries and optional in 22-32% of the countries (Online Supplementary Table S1). On average these rotations were 2-2.5 months long. Pediatric rheumatology was included as a separate rotation in the training of almost 40% of the countries. Training in pediatric rheumatology, not necessary in the form of a separate rotation, was included in the training programs in 51% of the countries (mandatory in 10 countries (24%) and optional in 11 (27%)).

The work in the emergency room or performing on-call duties was part of the training program of several countries. Overall, in more than half of the countries (n=26 (63%)) trainees had mandatory on-call duties in internal medicine or general medicine during the rheumatology training program. In 22 (54%), these were performed during the part of the training program spent in internal medicine and in 17 (42%), these obligations (i.e. on-call duties in internal medicine) were performed during the rheumatology-specific part of the training. In an additional 17% of the countries, these on-call duties were optional. Performing on-call duties as a rheumatologist (i.e. seeing patients as a rheumatologist and not as an internist) was mandatory in 17 countries (41%) and optional in an additional 11 countries (27%)

In 17 countries (41%) it was possible to undertake part-time training, in case the trainee wished so. In 33 countries (80%), interruptions during training were permitted - either for research or for another reason, but this excluded maternity leave. Most countries allowed trainees to perform part of their training abroad (n=31, 76%) and/or in another department within the same country (n=33, 80%).

The syllabus in 27 countries (66%) specifically included training in clinical history and clinical examination of the different musculo-skeletal (MSK) regions.

Ten countries established a minimum number of knee joint aspirations (mean 80, SD 143), eight a minimum of shoulder soft tissue injections (mean 78, SD 133), 11 a minimum of synovial fluid crystal identifications (mean 31, SD 21) and ten a minimum number of MSK ultrasounds (mean 145, SD 136).

Some countries had a mandatory (n=5) or an optional (n=10) research period. However in many countries research training was not mentioned (n=13) or no specific research period was specifically included (n=13).

Thirty countries (73%) specified a system for assessment of competence progression throughout the training (continuous assessment) in an official document. For most countries, this took on the form of a discussion of the clinical (n=26) and/or the general (n=21) curriculum with their educational supervisor. In some countries, this was also performed through periodic written (n=9), oral (n=12) or practical (n=13) examinations. Evaluation of procedural skills was performed in 20 countries, while 16 assessed the acquisition of some of the generic competencies. Only three countries included an assessment by a patient and only ten included teaching observation.

Online Supplementary Table S1: Rotation (mandatory or optional) in selected specialties.

	Mandatory rotation N(%)	Optional rotation N(%)	Length (months) Mean (SD)
Orthopedics	16 (39%)	10 (24%)	2.2 (2.6)
Rehabilitation medicine	17 (41%)	9 (22%)	2.6 (2.5)
Immunology	14 (23%)	10 (24%)	2.4 (3.0)
Radiology	15 (37%)	13 (32%)	2.1 (2.6)
Neurology	9 (22%)	11 (27%)	2.0 (3.0)
Pediatric rheumatology	6 (15%)	10 (24%)	1.8 (1)

Online Supplementary Table S2: Clinical competencies specifically mentioned in the rheumatology training curricula out of the pre-specified 29 competencies

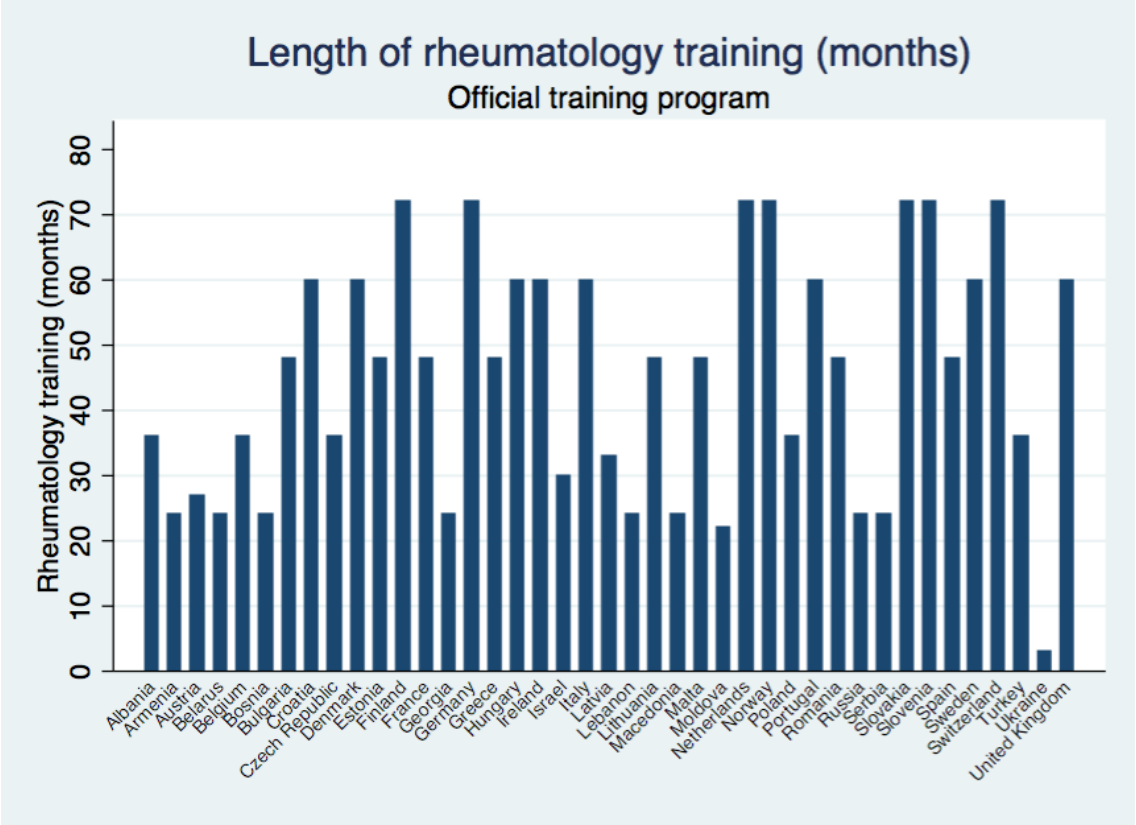
Clinical competency	Countries with specific mention in curriculum, n(%)
Osteoarthritis	36 (88%)
Crystal arthropathies	34 (83%)
Rheumatoid arthritis	33 (80%)
Spondyloarthritis	35 (85%)
Juvenile Idiopathic Arthritis	29 (71%)
Connective tissue diseases	35 (85%)
Systemic lupus erythematosus	31(76%)
Antiphospholipid syndrome	30 (73%)
Systemic sclerosis	30 (73%)
Sjögren's syndrome	32 (78%)

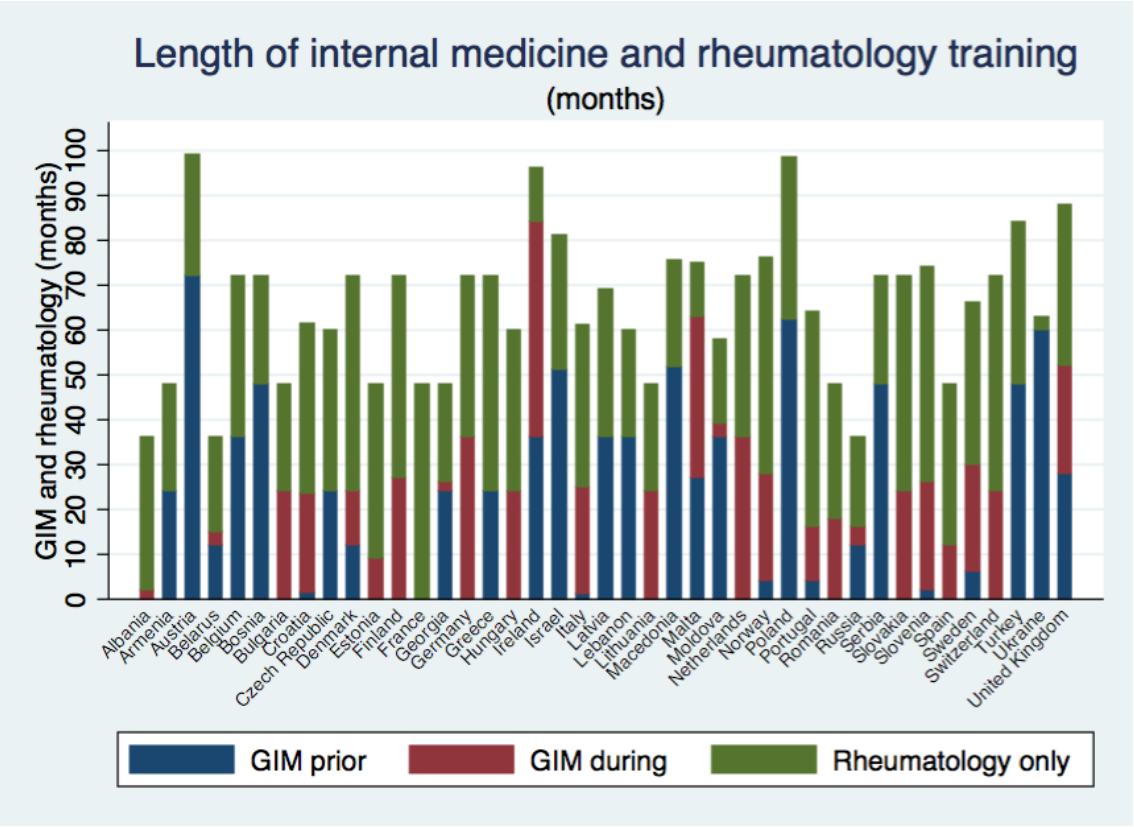
Inflammatory muscle disease	32 (78%)
Vasculitides	35 (85%)
Giant cell arteritis/polymialgia reumatica	30 (73%)
ANCA-associated vasculitis	30 (73%)
Small vessel vasculitis	30 (73%)
Bone disorders	34 (83%)
Non-articular and regional MSK syndromes	33 (80%)
Axial syndromes	31 (76%)
Regional MSK disorders	33 (80%)
Fibromyalgia	32 (78%)
Metabolic and endocrine disorders	31 (76%)
Infection and arthritis	34 (83%)
Septic arthritis	32 (78%)
Osteomyelitis	24 (59%)
Neoplastic disease	31 (76%)
Bone tumours	25 (61%)
Multiple myeloma	23 (56%)
Sarcoidosis	29 (71%)
Familial Mediterranean Fever	21 (51%)
SUMMARY: countries with all pre-specified clinical competencies	13 (32%)

Online Supplementary Table S3: Generic competencies specifically mentioned in the rheumatology training curricula out of the pre-specified 15 competencies

Generic competencies	Countries with specific mention in curriculum, n(%)
Patient-doctor relationship	26 (63%)
Patient autonomy/confidentiality	20 (49%)
Shared decision making	23 (56%)
Breaking bad news	16 (39%)
Team working/Multidisciplinary care	24 (59%)
Collaboration with primary care	18 (44%)
Time management	17 (42%)
Sustainable clinical practice	20 (49%)
Disease prevention	21 (51%)
Use of clinical guidelines	23 (56%)
Appraisal of evidence	23 (56%)
Interpret statistical methodology	25 (61%)
Teaching/mentoring	24 (59%)
Professional behaviour	24 (59%)
Medical ethics and legal issues	31 (76%)
SUMMARY: countries with all pre-specified generic competencies	9 (22%)

Online Supplementary Figure S1: Structure and length of training in rheumatology in different countries. a) Length of official rheumatology training program (this may or not include training in internal medicine, depending on each country's curriculum); b) Summary of length of general internal medicine training (GIM) (prior and/or during training) and specific rheumatology training.





* Note: In some countries the "rheumatology only" part also includes rotations in other related areas such as orthopedics, rehabilitation medicine, immunology, etc.

GIM - general internal medicine