Efficacy and Outcome of Rapid Access Rheumatology Consultation: An Office-based Pilot Cohort Study

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ABSTRACT. Objective. Waiting times for first appointments are a major obstacle to timely rheumatology care. To improve access, a cooperative of office-based rheumatologists established an immediate access network, offering brief initial assessments for patients with musculoskeletal problems.

> Methods. Patients were assessed at presentation and followed up after 6 months. Data were analyzed regarding demographics, diagnostic accuracy, clinical variables such as pain levels, and care.

> Results. There were 335 patients assessed in the 6 cooperating practices during dedicated office hours. There were 124 patients (38%) who had a symptom duration of < 3 months. For patients with rheumatoid arthritis (RA), this proportion was 43% (70% for self-referred patients with RA). In the 325 patients available for reassessment after 6 months, initially suspected diagnoses were confirmed in 88%. Confirmation rates were 93% for RA (59 patients) and 84% for spondyloarthritis (SpA; 46 patients). At the followup examination, the visual analog scale for pain in patients with RA had significantly decreased from a median (interquartile range) of 70 (57.75-80) to 27.5 (20-42). For patients with SpA, the decrease was from 65 (50–79) to 30 (20–40).

> Conclusion. The Rapid Access Clinic resulted in a substantial improvement of access to rheumatology assessment. More than one-third of the patients presented < 3 months after symptom onset. Suspected diagnoses of inflammatory rheumatic diseases were confirmed in almost 90%. This initiative demonstrates the feasibility of a rapid access service and indicates high diagnostic accuracy in such a setting. In particular, with respect to early access, it compares favorably with similar hospital-based approaches. (First Release April 1 2016; J Rheumatol 2016;43:1130-5; doi:10.3899/jrheum.151210)

Key Indexing Terms: EARLY ARTHRITIS CLINICS RHEUMATOID ARTHRITIS

QUALITY OF CARE

RAPID ACCESS CONSULTATION HEALTHCARE RESEARCH

Rheumatic diseases are frequent in all age groups and social classes, and constitute major social and health burdens. They may cause frequent sick leave and occupational disability. Diseases such as rheumatoid arthritis (RA) are characterized by their chronic and progressive character and may lead to premature loss of joint function. After 2 years, about 75% of patients have already developed joint damage with erosions¹. Early diagnosis as well as the establishment of effective therapy within a few months of first symptoms is therefore of paramount importance and an integral part of diagnostic paths and therapeutic guidelines^{1,2,3,4,5,6,7,8,9}.

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Accepted for publication February 19, 2016.

In the last decade, because of a better understanding of the pathogenesis of inflammatory rheumatic diseases and their progression, highly effective drugs have been developed, revolutionizing treatment. Until the end of the 1990s, a reduction in the number of swollen joints and an easing of pain intensity was an acceptable goal. Today, rheumatologists aim for remission and a symptom-free status^{2,5,6,10}. Nevertheless, RA, the most common chronic inflammatory disease, is still diagnosed too late. The delay from onset of symptoms to a first specialist consultation and the start of therapy can last from several months to more than a year. Possible reasons might be misinterpretation of symptoms, lack of awareness about the progressive course of the disease and effective therapies, or limited availability of specialists, resulting in a long waiting list for an appointment with a rheumatologist^{11,12,13,14}. This has eventually led to a discussion of how to improve the sometimes insufficient interface management between general practitioners (GP) and rheumatologists 14,15.

Among other factors, a lack of access to specialists primarily office-based rheumatologists or in rheumatology clinics — lead to waiting times much longer than the recommended period of a maximum of 3 months from symptom

onset to start of therapy¹². Patient awareness is an important part of early referral. The role of the GP is of paramount importance because they are usually the first to see the patient with musculoskeletal problems. In most cases, it is their decision to refer a patient to a specialist. Considering these facts, and also in planning further education, it is important to note that the incidence of inflammatory rheumatic disease is relatively low¹⁶. It has been calculated that a German GP sees 0.45 cases of incidental RA per year, in other words, 1 patient every 2 years¹⁰. The GP's inadequate experience with inflammatory rheumatic illness can also lead to a delay in referring the patient to a specialist^{6,13,17}.

To improve access, a cooperative of office-based rheumatologists established an immediate access network, offering brief initial assessments for patients with musculoskeletal problems [Rapid Access Clinic (RAC)].

To shorten waiting times for specialist consultation and easily initiate early, adequate therapy, arthritis clinics have already been established in several European countries such as the United Kingdom, the Netherlands, Germany, and Austria, and in North America^{11,12,13}. These initiatives have been undertaken in areas with high population densities, such as large metropolitan areas. Whether such an approach to facilitate specialist access is feasible in rural areas has not been studied. The RAC was therefore established as a pilot project to assess feasibility of a decentralized system facilitating access to (rheumatology) specialist consultation.

In our present study, we summarized patients' diagnoses and characteristics of our Rapid Access Rheumatology Clinic (RAC) at presentation and after 6 months.

The aim of the investigation was to provide an account of those patients who presented at the RAC and to document the quality of advice given.

The objectives of our work were to (1) report on the patients' demographic data, symptoms, duration of illness, and initial tentative diagnoses, (2) assess the predictive validity of these diagnoses, comparing them with the "final" diagnosis after 6 months, (3) compare the outcome "pain" after 6 months with the initial symptoms, (4) describe treatment after 6 months, and (5) assess potential improvements in access with regard to shorter waiting times for specialist rheumatologist appointments.

MATERIALS AND METHODS

Project setup. In the autumn of 2012 in Upper Austria, among 6 office-based rheumatologists, a so-called RAC was set up. This service included an initial examination carried out by an experienced specialist in internal medicine and rheumatology, either on the same day (if the patient presented directly to the office) or after the shortest possible waiting time of definitely less than 1 week (if the patient or his/her GP called to schedule an appointment). It is important to mention that patients can self-refer to rheumatology services in Austria and these were also included in our cohort.

Each of the 6 physicians had a certain consultation time within their office hours earmarked for the RAC (e.g., every Monday afternoon, open ended, depending on the RAC demand) for prescheduled appointments.

The service was supported and advertised by the Upper Austrian

Chamber of Medicine. All family doctors were informed both by mail and/or e-mail, and there was an awareness campaign in the local press.

All participating rheumatologists had a contract with the Austrian public social security; thus, patients were assessed without extra fee.

A targeted history and physical examination was carried out with close regard to the patients' problems. Both a tentative diagnosis and a proposal for further medical care were given to the patients. The recommendation could either be for further diagnostic procedures and/or therapy by a GP, or for a specialist or clinic of another medical discipline. In the case of a genuine rheumatologic diagnosis, an immediate examination and treatment was initiated. In any case, the GP and/or the patient was provided with a written report.

All patients presenting at the RAC had the following details documented: age, sex, duration of symptoms, pain intensity on a 100-mm visual analog scale (VAS), discipline of the referring physician, diagnosis given in the referral, the tentative diagnosis given by the first assessor, and recommendations for the patient.

Referral and rheumatologists' diagnoses were grouped into the following categories: RA, spondyloarthritis (SpA), connective tissue diseases (CTD), gout, polymyalgia rheumatica (PMR), "other inflammatory" (undifferentiated or unclassifiable mono- and oligoarthritis), osteoarthritis (OA), fibromyalgia syndrome/central sensitivity syndrome (FMS/CSS), and "other noninflammatory."

Patients' contact details were recorded for further followup 6 months after the initial assessment, where patients were contacted again and asked to give the following information: diagnosis after 6 months, therapy after 6 months [nonsteroidal antiinflammatory drugs (NSAID), analgesics, glucocorticoids, disease-modifying antirheumatic drugs (DMARD)], and pain intensity.

Patients cared for in one of the participating rheumatological practices were approached during a subsequent visit. Others, cared for elsewhere, were contacted by telephone and interviewed using a short questionnaire (Supplementary data available online at jrheum.org). Alternatively, or additionally (in particular, if the diagnosis reported by the patient appeared unreliable), the GP caring for the patient was interviewed with the patient's consent.

The study was approved by the local ethics committee and conducted according to the guidelines of the Declaration of Helsinki. Written informed consent was given by all participants.

The Fisher's exact test or chi-square test for trend was used to statistically evaluate differences. The data were analyzed with the statistics program ALMO version 15 (www.almo-statistik.de).

RESULTS

There were 335 RAC patient visits documented between October 2012 and March 2013 in the 6 practices. Patient disposition is shown in Figure 1. Age range was between 17 and 88 years [median 54, interquartile range (IQR) 46–64]. The median ages grouped by suspected diagnoses were 57.9 for RA, 55.8 for gout, and 48.4 for FMS/CSS. Patients with "other inflammatory" (median age 49.8), "other noninflammatory" (47), and SpA (42.7) were significantly younger (p < 0.001 by Student t test), and patients with PMR (69.9) and OA (60) were significantly older (p < 0.001).

Of the patients, 63.3% were women. There were 216 patients (64.5%) who were referred by their GP, 6 (1.8%) by an orthopedic specialist, and 25 (7.5%) by some other specialist. There were 85 patients (25.4%) who presented without a referral; data were missing for 3 patients (0.9%). Details concerning referral diagnoses are given in Table 1A. The most frequent referral diagnoses concerning inflam-

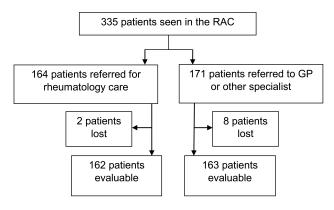


Figure 1. Patient disposition. Patients for rheumatology care were those with initial RAC diagnoses of RA, SpA, CTD, PMR, and other inflammatory diseases. RAC: Rapid Access Rheumatology Clinic; RA: rheumatoid arthritis; SpA: spondyloarthritis; CTD: connective tissue disease; PMR: polymyalgia rheumatica; GP: general practitioner.

matory diseases were RA and SpA. There were 48 patients who had no referral diagnosis at all.

Reliability of referral diagnosis. The cases with an unclear or missing referral diagnosis were excluded when calculating the agreement between referral and RAC diagnosis. Of 284 referral diagnoses, 117 (41.2%) were confirmed by the rheumatologists. Confirmation was highest with SpA (82.7%) and OA (68.8%), whereas suspected RA was confirmed in only 34.4% (Table 1B).

Symptom duration prior to presentation at the RAC. The

median duration of symptoms (IQR) was 6 months (2.5–24), with a maximum of 20 years and a minimum of a few days. The median symptom duration for RA, as suspected by the rheumatologist at first presentation, was 4 months with 43% of the patients with RA diagnosed within 3 months (Table 2).

In 5 of the 6 participating practices, data regarding symptom duration of patients with RA at first appointments, for a time period of 6 months before the implementation of the RAC, were available. These 48 patients had reported a median symptom duration of 6 months. Only 8 (16.6%) were seen with a symptom duration of up to 3 months.

Among the suspected diagnoses by the rheumatologist, the longest duration of symptoms was seen in FMS/CSS, OA, and CTD (Table 2).

Significantly more self-referred patients with suspected RA had a symptom duration of 3 months or less (7/10 or 70%) compared with those referred by their GP (13/42 or 31%) who had a symptom duration of 3 months or less (p = 0.0327, Fisher's exact test).

Patient followup after 6 months. There were 325 patients (n = 97%) who were available for followup after 6 months. Change in patient perception of pain on the VAS. For 274 patients, diagnoses and pain VAS ratings after a 6-month period were available.

The median (IQR) VAS for pain at presentation was 63 (46.25–75.75). After 6 months, the median pain rating had decreased to 30.5 (20–50). The differences according to disease categories are shown in Table 3. For most diagnoses,

Table 1A. Referral diagnoses. Diagnosis suspected by the referring physicians (or self-referred). Values are n.

Variables	RA	SpA	Gout	CTD	PMR Iı	Other nflammatory	OA	FMS/CSS	Other Noninflammatory	No Diagnosis	Total
GP	94	19	0	7	7	10	13	3	56	7	216
Orthopedic	3	1	0	0	0	0	0	0	2	0	6
Other specialist	10	2	0	1	0	2	1	1	7	1	25
Self-referred	15	0	0	0	3	1	2	2	22	40	85
Total	122	22	0	8	10	13	16	6	87	48	332

Of the 22 referrals of SpA, 7 were referred as PsA (31.8%). Of the 13 referrals of other inflammatory diseases, 5 were patients with monoarthritis and 8 with oligoarthritis. Of the 16 OA referrals, 7 were referred as OA of the hands (43.8%). Three patients were missing data. RA: rheumatoid arthritis; SpA: spondy-loarthritis; CTD: connective tissue disease; PMR: polymyalgia rheumatica; OA: osteoarthritis; FMS: fibromyalgia syndrome; CSS: central sensitivity syndrome; GP: general practitioner; PsA: psoriatic arthritis.

Table 1B. Reliability of referral diagnosis. Agreement in the diagnosis between referring physician (or patient) and rheumatologist at baseline. Values are n (%).

Variables	RA	SpA	Gout	CTD	PMR	Other Inflammatory	OA	FMS/CSS	Other Noninflammatory
GP	33 (35.1)	16 (84.2)	0	2 (28.5)	4 (57)	3 (30)	10 (76.9)	1 (33.3)	17 (30.4)
Orthopedic	0	1 (100)	0	0	0	0	0	0	1 (50)
Other specialist	4 (40)	1 (50)	0	1 (100)	0	1 (50)	0	1 (100)	4 (57.1)
Self-referred	5 (33.3)	0	0	0	0	1 (100)	1 (50)	1 (50)	9 (40.9)
Total	42 (34.4)	18 (82.7)	0	3 (37.5)	4 (40)	5 (38.4)	11 (68.8)	3 (50)	31 (35.6)

RA: rheumatoid arthritis; SpA: spondyloarthritis; CTD: connective tissue disease; PMR: polymyalgia rheumatica; OA: osteoarthritis; FMS: fibromyalgia syndrome; CSS: central sensitivity syndrome; GP: general practitioner; PsA: psoriatic arthritis.

Table 2. Symptom duration. Distribution of patients at the RAC with a duration of symptoms of under or over 3 months. Six patients were missing data.

Diagnoses Suspected at		Symptom Duration, Mos			
First Visit by Specialist	n	≤ 3 Mos, n (%)	Median		
RA	58	25 (43.1)	4		
SpA	46	15 (32.6)	6		
Gout	12	7 (58.3)	3		
CTD	7	0 (0)	24		
PMR	23	18 (78.2)	3		
Other inflammatory	28	17 (60.7)	2.5		
OA	82	16 (19.5)	9		
FMS/CSS	9	1 (11.1)	60		
Other noninflammatory	64	25 (39.1)	5.5		
Total	329	124 (37.6)	6		

RAC: Rapid Access Rheumatology Clinic; RA: rheumatoid arthritis; SpA: spondyloarthritis; CTD: connective tissue disease; PMR: polymyalgia rheumatica; OA: osteoarthritis; FMS: fibromyalgia syndrome; CSS: central sensitivity syndrome.

pain was significantly less at 6 months with the exception of patients with CTD who had the lowest median pain levels at initial presentation and whose improvement did not reach statistical significance. Likewise, in patients with FMS/CSS, no improvement was seen.

Change in diagnoses after 6 months. In patients who were available for followup after 6 months, 87.7% of the diagnoses were confirmed after 6 months. With the exception of the category "other inflammatory," the initial categorization was confirmed in > 80% (Table 4). The 29 patients in the category "other inflammatory" were often initially (baseline) given a descriptive diagnosis of undifferentiated arthritis, monoarthritis, or oligoarthritis. The initial suspected diagnosis was altered after 6 months in 2 patients (6.9%) to RA, 4 patients (13.5%) to SpA, 4 patients (13.5%) to gout, 1 patient (3.5%) to PMR, 4 patients (13.5%) to OA, and 2 patients (6.9%) to "other noninflammatory" disease. Additionally, 11 patients (37.9%) remained in the "other inflammatory" category (such as undifferentiated arthritis, viral arthritis, etc.). One patient

was symptom-free after 6 months. Additional information on changes of diagnoses can be found in the Supplementary Table 1 (available online at jrheum.org).

Patients with a subsequent change in diagnosis were predominantly found in the "other inflammatory" group. Patients with a descriptive diagnosis of oligo- or monoarthritis (and lacking the typical symptoms of gout), who presented early in their course of disease, especially showed a higher percentage of diagnostic errors.

Therapy. For 325 patients, data on treatment were available after 6 months (Supplementary Table 2, available online at jrheum.org). Of the patients, 95% (57 of 60) finally diagnosed as having RA received DMARD. One 86-year-old man was treated with low-dose prednisolone only and 2 patients refused DMARD treatment. Of the patients with RA, 85% were treated with methotrexate, 6.7% with sulfasalazine, and 18.3% with biologics (biological DMARD). Of note, 50% of the patients still took low-dose prednisolone (2.5–5 mg/d). There were 130 patients (40%) who received a combination of 2–5 antirheumatic drugs, e.g., NSAID and/or gluco-corticoids with DMARD.

Patient satisfaction feedback. In a small sample of 30 RAC patients, a survey regarding their satisfaction with the service was conducted. All individuals rated their overall satisfaction with this service as 1 on a scale of 1 (very satisfied) to 5 (not satisfied at all).

DISCUSSION

Our present pilot project by 6 office-based rheumatologists was initiated in 2012 for the first time in the private sector in Austria. However, as far as we know, this is the first cooperative non-hospital initiative ever.

The agreement rate between the referral diagnosis and the suspected diagnosis by the rheumatologist was 41%, whereas the rheumatologists' initial diagnoses were confirmed at 6 months in 88%. This points to the lack of experience with these illnesses because of the relative rarity, especially of inflammatory rheumatic diseases, in general practice.

Table 3. Change in patient perception of pain on the VAS. Values are median (IQR) unless otherwise specified.

Diagnosis	VAS Baseline	VAS After 6 Mos	p N	o. Evaluable Patients
RA	70 (57.75–80)	27.5 (20–42)	< 0.001	54
SpA	65 (50–79)	30 (20–40)	< 0.001	37
Gout	80 (66-82.5)	20 (13.5–25.5)	< 0.001	11
CTD	47 (38.5–60.75)	29.5 (23.5–36.25)	0.0258	6
PMR	75 (68–80)	20 (10-39.5)	< 0.001	19
Other inflammatory	62 (42–69)	28 (9.5–43)	< 0.001	11
OA	50 (38–65)	40 (28–52)	< 0.001	77
FMS/CSS	62 (40.5–76.25)	64.5 (32–70.75)	0.522	8
Other noninflammatory	60 (40–70)	37 (10–50)	< 0.001	51
All patients	63 (46.25–75.75)	30.5 (20–50)	< 0.001	274

VAS: visual analog scale; IQR: interquartile range; RA: rheumatoid arthritis; SpA: spondyloarthritis; CTD: connective tissue disease; PMR: polymyalgia rheumatica; OA: osteoarthritis; FMS: fibromyalgia syndrome; CSS: central sensitivity syndrome.

Table 4. Agreement of suspected RAC diagnoses at baseline and after 6 months.

Diagnosis	Suspected Diagnosis RAC, n	All Diagnoses,	Evaluable Diagnosis after 6 Mos, n	Confirmed Diagnosis after 6 Mos, n	Agreement of Confirmed Diagnosis with Baseline, %
RA	59	17.6	59	55	93.2
SpA	46	13.7	45	38	84.4
Gout	12	3.5	12	11	91.6
CTD	7	2	7	7	100
PMR	23	76.8	22	21	95.4
Other inflammatory	29	8.6	29	11	37.9
OA	85	25.3	80	79	98.8
FMS/CSS	9	2.6	9	8	88.8
Other noninflammatory	y 65	19.4	62	55	88.7
Total	335	100	325	285	87.7

RAC: Rapid Access Rheumatology Clinic; RA: rheumatoid arthritis; SpA: spondyloarthritis; CTD: connective tissue disease; PMR: polymyalgia rheumatica; OA: osteoarthritis; FMS: fibromyalgia syndrome; CSS: central sensitivity syndrome.

Further, this demonstrates that even a short evaluation of just 10 to 15 min by an experienced rheumatologist can result in a predominantly correct diagnosis.

Of note, particularly in RA, 43% of patients were diagnosed in under 3 months, with a median of 4 months. In comparison with other studies, this is a favorable result. The median duration of symptoms in the Immediate Access Rheumatology Clinic at the Medical University of Vienna was 9 months. In their study, 36% of their patients with RA presented within 3 months¹¹. In a study by van der Linden, *et al*, 31% of patients presented within 3 months⁶.

Our results are comparable to the findings in the Immediate Access Rheumatology Clinic at the Medical University of Vienna¹¹. The diagnosis agreement rate after 6 months in Vienna was 75% for inflammatory diseases compared with 80% in our RAC. In Vienna, the rate for RA was 77% compared with 93% in our RAC. Reliability of diagnosis was found to be better than in a university setting. This may be because of the experience of the practice-based rheumatologists, but it may also represent a self-fulfilling prophecy because in the outpatient setting (RAC), patients will likely be seen by the same rheumatologist (confirming his own diagnosis), whereas in the university clinic setting, being seen by the same physician is less likely; therefore, a conflicting diagnosis could be determined.

Not surprisingly, decrease of pain levels after 6 months were highest in gout, followed by PMR and RA. Pain levels in FMS/CSS remained largely unchanged because of the character of this disease group. Patients with RA were generally assessed earlier than patients with SpA. Almost all patients with RA were receiving sufficient therapy with DMARD after 6 months. These results are likely to be attributable to early diagnosis associated with the implementation of adequate treatment. However, whether this is solely attributable to the easier access cannot be determined in our analysis.

Of note, self-referred patients with RA presented significantly earlier than those referred by a GP. Several special awareness programs targeting the general public regarding arthritis have been run in Austria over the past 2 decades^{18,19}. This may be one of the reasons for this observation.

Our study shows that even outside metropolitan areas, a network of experienced office-based rheumatologists can provide rapid access consultation as recommended by international consensus^{20,21}. Although this can be seen as an advantage of this "low threshold" specialist access, this may not be feasible in different systems where open specialist access does not exist. Direct initial contact between a patient and a specialist is possible in the Austrian health system.

Given the incidence rate for RA $(54/100,000 \text{ women}, 25/100,000 \text{ men})^{16,22}$ among the population in Upper Austria $(1,221,277 \text{ over age } 15)^{23}$, RA incidence estimate for Upper Austria is 487 new cases per year (246.5 per 6 mos). Thus, about a quarter of incident cases were seen in the RAC.

Before the implementation of the RAC, appointments for patients were made depending on the office schedule, usually with waiting times of 6 to 10 weeks, except for emergency or a GP requesting an urgent patient's consultation. With the implementation of our RAC, every patient was seen within 1 week (with or without referral) if there was a suspicion of an inflammatory rheumatic disease or the patient/referrer stressed its urgency, regardless of the duration of symptoms.

Waiting times for non-RAC patients did not extend because the RAC is solely a regrouping of patients. The early recognition of RA and/or acute pain problems, highlighted on first contact, meant that the patient accessed the RAC system, thereby freeing the slots in the regular schedule for non-urgent or return appointments. Further, patients in RAC without the need for (rheumatologic) specialist treatment can be identified quickly and are given appropriate recommendations for further care. Therefore, overall workload and working hours in the 6 practices remained the same before

and after implementation, but with a different schedule. There is a considerable workload for health professionals and doctors during RAC hours. Earmarking a capacity for 6 to 10 RAC patients per day (distributed over the participating practices, about 240–400 assessments per year) seems appropriate. Patients accepted the symptom-based assessment, appreciating a short waiting time, and were generally satisfied.

A limitation of our study is its setting in 1 country and within the framework of the Austrian health service, which does allow free access to a physician of choice for every patient. In this system in a country with universal health insurance coverage, the GP's role is quite extensive and the burden of caring for a multitude of medical complaints restricts the GP's ability to deal with more complex cases; thus possibly delaying referral in more urgent cases. As stated by Westhoff, *et al*, a higher level of perception among the public, and even more among GP, is needed to improve participation of rheumatologists in the treatment of patients with arthritis²⁴.

Our system of an RAC within a network of office-based rheumatologists might be used as a model for a decentralized setting. In a rheumatological practice or in smaller non-university hospitals, it seems to be sufficient to provide an RAC once a week to reduce waiting times and to improve the care of patients with rheumatic diseases.

ACKNOWLEDGMENT

Logistical support was provided by the Upper Austrian Chamber of Medicine.

ONLINE SUPPLEMENT

Supplementary data for this article are available online at jrheum.org.

REFERENCES

- Machold KP, Stamm TA, Nell VP, Pflugbeil S, Aletaha D, Steiner G, et al. Very recent onset rheumatoid arthritis: clinical and serological patient characteristics associated with radiographic progression over the first years of disease. Rheumatology 2007;46:342-9.
- 2. Bykerk V, Emery P. Delay in receiving rheumatology care leads to long term harm. Arthritis Rheum 2010;62:3519-21.
- Möttönen T, Hannonen P, Korpela M, Nissilä M, Kautiainen H, Ilonen J, et al; FIN-RACo Trial Group. FINnish Rheumatoid Arthritis Combination therapy. Delay to institution of therapy and induction of remission using single-drug or combination-disease-modifying antirheumatic drug therapy in early rheumatoid arthritis. Arthritis Rheum 2002;46:894-8.
- Nell VP, Machold KP, Eberl G, Stamm TA, Uffmann M, Smolen JS. Benefit of very early referral and very early therapy with disease-modifying anti-rheumatic drugs in patients with early rheumatoid arthritis. Rheumatology 2004;43:906-14.
- Smolen JS, Landewé R, Breedveld FC, Buch M, Burmester G, Dougados M, et al. EULAR recommendations for the management of rheumatoid arthritis with synthetic and biological disease-modifying antirheumatic drugs: 2013 update. Ann Rheum Dis 2014;73:492-509.
- van der Linden MP, le Cessie S, Raza K, van der Woude D, Knevel R, Huizinga TW, et al. Long-term impact of delay in assessment of patients with early arthritis. Arthritis Rheum 2010;62:3537-46.

- van Nies JA, de Jong Z, van der Helm-van Mil AH, Knevel R, Le Cessie S, Huizinga TW. Improved treatment strategies reduce the increased mortality risk in early RA patients. Rheumatology 2010;49:2210-6.
- Symmons DP. Looking back: rheumatoid arthritis—aetiology, occurrence and mortality. Rheumatology 2005;44 Suppl 4:iv14-iv17.
- 9. Smolen JS. Treat-to-target: rationale and strategies. Clin Exp Rheumatol 2012;30 Suppl 73:S2-6.
- Westhoff G, Edelmann E, Kekow J, Zink A. [Diagnostic spectrum, treatment indication and symptom duration in initial referrals to the rheumatologist]. [Article in German] Z Rheumatol 2010;69:910-8.
- Gärtner M, Fabrizii JP, Koban E, Holbik M, Machold LP, Smolen JS, et al. Immediate access rheumatology clinic: efficiency and outcomes. Ann Rheum Dis 2012;71:363-8.
- 12. Raza K, Stack R, Kumar K, Filer A, Detert J, Bastian H, et al. Delays in assessment of patients with rheumatoid arthritis: variations across Europe. Ann Rheum Dis 2011;70:1822-5.
- Villeneuve E, Nam JL, Bell MJ, Deighton CM, Felson DT, Hazes JM, et al. A systematic literature review of strategies promoting early referral and reducing delays in the diagnosis and management of inflammatory arthritis. Ann Rheum Dis 2013;72:13-22.
- Fautrel B, Benhamou M, Foltz V, Rincheval N, Rat AC, Combe B, et al. Early referral to the rheumatologist for early arthritis patients: evidence for suboptimal care. Results from the ESPOIR cohort. Rheumatology 2010;49:147-55.
- Harrington T. Improving access to rheumatology care: a continuing challenge. J Rheumatol 2008;35:1233-4.
- Wiles N, Symmons DP, Harrison B, Barrett E, Barrett JH, Scott DG, et al. Estimating the incidence of rheumatoid arthritis: trying to hit a moving target? Arthritis Rheum 1999;42:1339-46.
- Roberts PC, Taylor WJ. Time to treatment in rheumatoid arthritis: factors associated with time to treatment initiation and urgent triage assessment of general practitioner referrals. J Clin Rheumatol 2010;16:267-73.
- Machold KP, Stamm TA, Eberl GJ, Nell VK, Dunky A, Uffmann M, et al. Very recent onset arthritis—clinical, laboratory, and radiological findings during the first year of disease. J Rheumatol 2002;29:2278-87.
- Machold KP, Köller MD, Pflugbeil S, Zimmermann C, Wagner E, Stuby U, et al. The public neglect of rheumatic diseases: insights from analyses of attendees in a musculoskeletal disease awareness activity. Ann Rheum Dis 2007;66:697-9.
- Emery P, Breedveld FC, Dougados M, Kalden JR, Schiff MH, Smolen JS, et al. Early referral recommendation for newly diagnosed rheumatoid arthritis: evidence based development of a clinical guide. Ann Rheum Dis 2002;61:290-7.
- Combe B, Landewe R, Lukas C, Bolosiu HD, Breedveld F, Dougados M, et al. EULAR recommendations for the management of early arthritis: report of a task force of the European Standing Committee for International Clinical Studies including Therapeutics (ESCISIT). Ann Rheum Dis 2007;66:34-45.
- 22. Humphreys JH, Verstappen SM, Hyrich KL, Chipping JR, Marshall T, Symmons DP. The incidence of rheumatoid arthritis in the UK: comparisons using the 2010 ACR/EULAR classification criteria and the 1987 ACR classification criteria. Results from the Norfolk Arthritis Register. Ann Rheum Dis 2013;72:1315-20.
- Statistik Austria. [Internet. Accessed February 25, 2016.] Available from: www.statistik.at/web_de/statistiken/menschen_und_ gesellschaft/bevoelkerung/volkszaehlungen_registerzaehlungen_ abgestimmte_erwerbsstatistik/index.html
- Westhoff G, Schneider M, Raspe H, Zeidler H, Runge C, Volmer T, et al. Advance and unmet need of health care for patients with rheumatoid arthritis in the German population—results from the German Rheumatoid Arthritis Population Survey (GRAPS). Rheumatology 2009;48:650-7.