Supplement 1: Intervention descriptions

Intervention choice

The interventions used in this study were education combined with feedback, and a Computerized Decision Support System (CDSS). These specific interventions were chosen based on an informal barrier analyses at the study centre, using the framework proposed by Cochrane *et al*. (36). This framework groups determinants of guideline adherence into different themes such as cognitive-behavioural barriers, barriers embedded in the guideline or evidence, and barriers related to support or resources. In the years before this study started, the study centre already invested in improving knowledge and attitudes concerning RA treatment. As a result, amongst others, up to date RA treatment guidelines were available and a safe learning environment was created. Looking at the Cochrane framework, we concluded that the theme 'barriers related to support or resources' was not yet optimally covered at the study centre. Therefore, we decided to develop our own CDSS to aid rheumatologists in their daily practice. As the latest updates from the local RA guideline (2013) had not been presented in an educational session before, we decided to also include education and feedback in our intervention strategy. This resulted in a standard intervention strategy (education and feedback) being tested against an extended intervention strategy (education, feedback and CDSS).

When developing both interventions we took into account existing reviews on factors of success for education, feedback and CDSS. For example, CDSS uptake was found to be more successful if adequate technical support and training were present, CDSS was integrated into the workflow and the messages were relevant and on time (18-20). For education and feedback factors like attendance, the source of feedback and the complexity of the targeted behaviour influence intervention effects (15, 16). Modifiable factors from these reviews were reckoned with during the development process.

Education and feedback

All included clinicians attended a one-hour group session, combining an educational meeting with feedback. During this meeting clinicians received background information on the effectiveness of tight control treatment strategies in RA treatment, the importance of guideline adherence for RA patients and the content of existing local RA treatment guidelines. With regard to the latter, extra attention was given to the local guideline on biological dose optimisation, which was disseminated just before this study started. The session finished with feedback on current guideline adherence of the clinicians, using results from a previous study on guideline adherence in this centre (24) and existing feedback systems in the study hospital. Due to this combination we could give feedback on all but two indicators (concomitant cDMARD use and bDMARD dose reduction) included in this study. The PowerPoint slides used during this intervention can be found in Supplement 2.

Computerized Decision Support System

Background on the Computerized Physician Order Entry System used at the study clinic

In order to fully understand the CDSS used as an intervention in our study, it is first necessary to know how the EHR at the study clinic worked before the study. At the study centre EZIS v. 5.2 (Chipsoft) is used by all physicians and a Computerized Physician Order Entry (CPOE) system was already integrated in this EHR. As the CDSS intervention in this study focused at the CPOE, a description of the different CPOE categories before the intervention is given in Table I.

Description of the Computerized Decision Support System

The main aim of the changes made to the CPOE was to facilitate guideline adherence by clinicians working at the outpatient clinic of the rheumatology department. By reorganising the CPOE system and including CDSS it should be more difficult for clinicians to accidently forget about important recommendations from the local RA guidelines. To achieve this goal, four changes were made to the CPOE.

The first of four changes included a reorganisation of the CPOE system. As can be seen in table 1, the organisation of the CPOE categories was mainly receiver-based and not very practical for clinicians. In the new version grouping of CPOE orders was done in a sender-based way, with four main categories: diagnostics, treatment, follow-up and administration. All orders from the old system were placed into the new categories and some orders were adapted to make the other changes possible.

With the next change we included hyperlinks to local guidelines in the CPOE system. For example, the order on DMARD initiation now included a hyperlink to the guidelines on the DMARD preferential order and DMARD toxicity follow-up.

The third change comprised the development of an algorithm which automatically completed some of the CPOE orders, based on patient-specific information from the EHR and the local RA guideline. An example of this change was the follow-up order with the algorithm using clinical information from the EHR, user login and local guidelines to complete the three main components of the order. These components were:

1) follow-up duration (3 or 6 months based on disease duration, disease activity and DMARD use), 2) preferred provider of care (PA or rheumatologist based on provider of the current visit), and 3) referral to a specialised nurse for routine DAS28 and HAQ assessments. Clinicians not agreeing with the suggestions done by the CDSS could always change the answers on all components of the order before sending the order away.

The final change included the development of a reminder system to assist clinicians in keeping their correspondence with the general physician up to date. With this system a reminder was created every time a new visit was entered into the EHR by a rheumatologist, PA or resident. This reminder consisted of an order stating that a letter to the GP should be created. However, this reminder only became visible to the clinician after a certain period of time (2 weeks or 18 months depending on the type of letter needed) if the clinician had not created a GP letter himself in the meantime. In this way we prevented unnecessary reminders for rheumatologists who did not need them.

In Table II the relation between the CDSS changes and the guideline adherence indicators used in this study is stated.

Table I. Main order categories within the pre-intervention Computerized Physician Order Entry system.

Order category	Suborders included into the category	Receiver
Clinical admissions	Clinical admissions and surgery	Surgery and clinical admission planner
Multidisciplinary treatments	No suborders were included in this category, although the choices following this order also included ordering of infusion therapies such as rituximab or infliximab.	Multidisciplinary treatment planner
Order to rheumatologist	No suborders were included in this category. This order only contained a text field in which a remark or question to another rheumatologist could be entered (limited number of characters).	Rheumatologist as chosen by the sender of the order
Order to front office	15 suborders were included in this category, ranging from orders on follow-up appointments to routine laboratory checks in DMARD users. This order could only be used if a patient was present at the outpatient clinic.	Nurses or supportive staff at the front office at the rheumatology outpatient clinic
Order to outpatient clinic nurse	15 suborders were included in this category, ranging from blood pressure measurement to the preparation of intra-articular injections.	Nurse at the rheumatology outpatient clinic
Order to secretary	Several suborders were included in this category such as retrieving patient information from other hospitals.	Secretary of the rheumatology department
Correspondence	No suborders were included in this category. This order only included a choice on what of letter should be made (new or control patient) and a few text fields were additional information on the receiver (general practitioner, other specialist) or letter (attachments) could be entered.	Secretary of the rheumatology department
Order to archive	No suborders were included in this category. This order could only be used to retrieve old paper chart from the archive.	Archive
Order to myself	No suborders were included in this category. This order only included a text field were a remark or question could be entered. This order often acted as a reminder for the sender to perform certain actions for the patient in question (for example calling the GP to discuss the patient).	Sender of the order
Order to back office	No suborders were included in this category. This order only included a text field were a remark or question could be entered. This order served as a substitute for the 'front office order' if a patient was not present at the outpatient clinic. For example, if after a telephone call with a patient, a follow-up visit should be planned, this order had to be used.	Nurses or supportive staff at the back office at the rheumatology outpatient clinic
Consulting other specialists	No suborders were included in this category. This order only included text fields in which clinical information about the patient and questions for the consulting specialist could be entered. This order only applied to clinically admitted patients.	Internal medicine or gerontology specialist
Laboratory tests	No suborders were included in this category. All available laboratory tests at the study centre were included in this order and could be selected by clinicians.	Nurse at the rheumatology outpatient clinic

Table II. CDSS changes in relation to the guideline adherence indicators.

Guideline adherence indicator	Topic covered with CDSS			
	Regrouping CPOE	Hyperlink to guideline	Pre-fill orders	Reminders
DAS28 measurement	✓		✓	
Radiographs of hands, feet and thorax	✓			
Yearly assessment of functional status using the HAQ	✓		✓	
Prescription of conventional and biological DMARDs according to the preferential order	✓	✓		
Concomitant conventional DMARD in case of biological use	✓	✓		
Therapy change in case of active disease as measured with the DAS28	✓	✓		
Dose reduction or interval lengthening (dose optimisation) of biological DMARDs	✓	✓		
Referral of new RA patients to a specialised nurse	✓		✓	
Planned nurse led DAS28 assessment during the next regular outpatient clinic visit	✓		✓	
Referral to a PA	✓		✓	
Correct interval between the visit in the study period and the next planned regular outpatient clinic visit	✓		✓	
A letter to the general practitioner, sent within two weeks after diagnosis in case of a new RA patient	✓			✓
A letter to the general practitioner, sent once every 18 months (control patients)	✓			✓

Supplement 2: PowerPoint slides used during the educational meeting

Treatment principles in rheumatoid arthritis

A translation of the PowerPoint slides used during the educational meeting

Authors: Nienke Lesuis (resident of rheumatology; MD) and Alfons A den Broeder (rheumatologist-epidemiologist; MD, PhD)
Sint Maartenskliniek, Nijmegen, the Netherlands

Content

- Background
- Treatment principles in RA
- Current situation at our hospital
- Summary

Content

- **Background**
- Treatment principles in RA
- Current situation at our hospital
- Summary

Background

We would rather prevent than treat these hands, but…
treatment guidelines are not always followed optimally

Content

- Background
- **Treatment principles in RA**
- Current situation at our hospital
- Summary

Treatment principles in RA

- Many publications on effective RA treatments
- 'Treat to target', 'tight control' & 'hit hard, hit early' often mentioned

→ Cornerstone of ACR & EULAR RA guidelines

Treatment principles in RA

Tight control: 'frequent assessment of disease activity combined with an objective structured protocol to make treatment changes that maintain low disease activity or remission at an agreed target' *(Van't et al, Rheumatology 2001)*

Treat to target: 'the treatment aim was defined as remission with low disease activity being an alternative in patients with long-standing disease. Regular follow-up with appropriate therapeutic adaptation to reach the desired state within 3-6 months. Follow-up examinations ought to employ composite measures of disease activity which include joint counts. *(Smolen et al, Ann Rheum Dis 2010)*

Hit hard, hit early: 'early institution of DMARDs.' 'Window of opportunity'

Treatment principles in RA

Tight control: 'frequent assessment of disease activity combined with an objective structured protocol to make treatment changes that maintain low disease activity or remission at an agreed target' *(Van't et al, Rheumatology 2001)*

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Hit hard, hit early: 'early institution of DMARDs.' 'Window of opportunity'

Treatment principles in RA

"Yes, I agree with the general principle but…."

'*A number says nothing! I always look and listen to the patient, order an ESR and feel the joints*'

'*Patients don't want all those pills*'

'*My judgement is better than a composite measure, these numbers mean nothing to a patient*'

Treatment principles in RA

"Yes, I agree with the general principle but…."

DAS28 = 0.56 * sqrt(tender28) + 0.28 * sqrt(swollen28) + 0.70 * ln(ESR) + 0.014 * VAS *(http://www.das-score.nl/das28/nl/uitleg-das28/de-das28-score.html)*

In case of active disease, patients just want to get better. They only get worried about the number of pills later on. *(van Tuyl, Rheumatology 2008)*

A DAS28 <3.2 is associated with 50% less progression of radiographic damage and functional status (HAQ) is influenced by both active inflammation and radiographic damage. *(Fransen et al, Ann Rheum Dis 2005)*

Treatment principles in RA

Effect of a treatment strategy of tight control for rheumatoid arthritis (the TICORA study): a single-blind randomised controlled trial

Catriona Grigor, Hilary Capell, Anne Stirling, Alex D McMahon, Peter Lock, Ramsay Vallance, Wilma Kincaid, Duncan Porter *Lancet 2004; 364: 263–69*

- RCT: routine vs intensive management
- Inclusion criteria: diagnosis of RA <5 years; DAS >2.4
- Study assessment 1x/3 months (DAS etc) by blinded assessor
- Primary endpoints:
  - Mean fall in disease activity
  - % patients with an EULAR good response

Treatment principles in RA

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- Intensive management:
  - Monthly visits including DAS measurement
  - Corticosteroid injection of any swollen joint or depomedrol 120mg i.m. if DAS >2.4
  - Strict medication protocol: dose increase or cDMARD switch every 1-3 month if DAS >2.4
- Routine care:
  - 3-montly visits
  - No routine DAS measurement or strict medication protocol

Treatment principles in RA

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	Intensive group (n=55)	Routine group (n=55)	Odds ratio (95% CI)	p*
EULAR good response	45 (82%)	24 (44%)	5·8 (2·4–13·9)*	<0·0001
EULAR remission	36 (65%)	9 (16%)	9·7 (3·9–23·9)*	<0·0001
ACR 20 response	50 (91%)	35 (64%)	5·7 (1·9–16·7)*	<0·0001
ACR 50 response	46 (84%)	22 (40%)	6·1 (2·5–14·9)*	<0·0001
ACR 70 response	39 (71%)	10 (18%)	11 (4·5–27)*	<0·0001

Intention-to-treat analysis of all patients randomised, including those who died or withdrew from the study. Analysis of patients completing the study is very similar (data not shown). *Mantel-Haenszel procedure used.

Table 2: **Number of patients responding at 18-month assessment**

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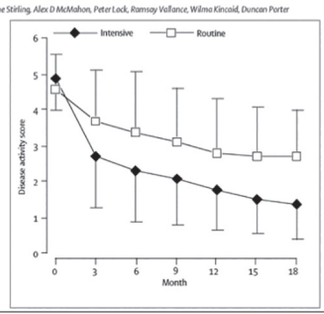

Treatment principles in RA

Effect of a treatment strategy of tight control for rheumatoid arthritis (the TICORA study): a single-blind randomised controlled trial

Catriona Grigor, Hilary Capell, Anne Stirling, Alex D McMahon, Peter Lock, Ramsay Vallance, Wilma Kincaid, Duncan Porter *Lancet 2004; 364: 263–69*

- Intensive management:
  - More corticosteroid injections (i.m./i.a.)
  - Higher doses of MTX
  - More frequent start of a new DMARD
  - Higher drug survival
  - Less medication side-effects

Conclusion: intensive treatment gives substantial improvement of disease activity

Treatment principles in RA

Effectiveness of systematic monitoring of rheumatoid arthritis disease activity in daily practice: a multicentre, cluster randomised controlled trial

J Fransen, H Bernelot Moens, I Speyer, P L C M van Riel

Ann Rheum Dis 2005;**64**:1294–1298. doi: 10.1136/ard.2004.030924

- Cluster RCT: monitoring DAS28 (12 centers) vs routine care (12 centers)
- DAS28 assessment by research nurse at 0 & 24 weeks
- Primary outcomes
  - % patients with DAS28 <3.2 (subgroup analysis due to organizational issues)
  - Changes in DMARD treatment (all patients)

Treatment principles in RA

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- Intervention centers
  - DAS28 measurement for clinical use at 0,4,12 & 24 weeks by treating rheumatologist
  - Study advice: change medication if DAS28 >3.2
- Control centers
  - Visit at week 0,4,12 & 24
  - No systematic monitoring or treatment advices

Treatment principles in RA

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- Baseline data
  - ± 70% women; 58 years; ± 80% RF positivity; disease duration 6 years
  - DAS28 4.5; 13% low disease activity

Of note, DAS28 only measured by research nurse in 142 patients (61 intervention group; 81 control group)

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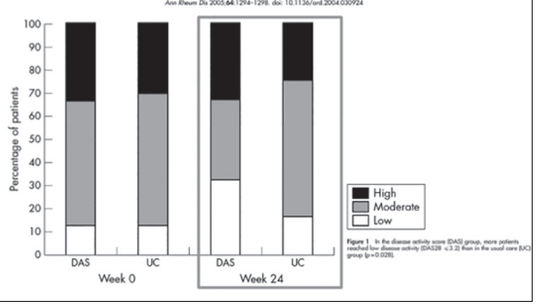

Figure 1 In the disease activity score (DAS) group, more patients reached low disease activity (DAS28 <3.2) than in the usual care (UC) group (p=0.028).

Treatment principles in RA

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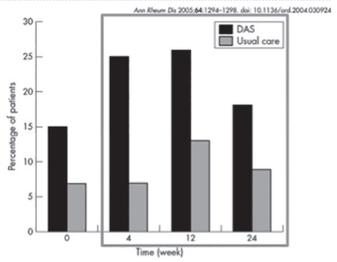

Figure 2 In the disease activity score (DAS) group, more changes in disease modifying antirheumatic drug (DMARD) treatment occurred during the course of the study (p = 0.013).

Treatment principles in RA

Effectiveness of systematic monitoring of rheumatoid arthritis disease activity in daily practice: a multicentre, cluster randomised controlled trial

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- No significant differences in mean MTX, sasp and prednisone dose
- No differences in side-effects
- Intervention group
  - DAS28 measured in 99% of the visits
  - 98% of patients in which medication was changed had a DAS28 >3.2
  - 20% of patients with a DAS28 >3.2 had their medication changed

Conclusion: standard monitoring of disease activity in daily practice, can lead to more DMARD-changes compared to usual care

Treatment principles in RA

Meta-analysis of tight control strategies in rheumatoid arthritis: protocolized treatment has additional value with respect to the clinical outcome

Lydia G. Schipper[1], Laura T. C. van Hulst[1], Richard Grol[2], Piet L. C. M. van Riel[1], Marlies E. J. L. Hulscher[2] and Jaap Fransen[1] Rheumatology 2010;49:2154–2164

- PubMed & Cochrane library 1995 – 2009: monitoring of disease activity combined with treatment protocols vs monitoring alone
- Inclusion: studies on routine care vs tight control
- Primary outcome
  - Mean change in DAS28 (year 0 vs 1)

Treatment principles in RA

Meta-analysis of tight control strategies in rheumatoid arthritis: protocolized treatment has additional value with respect to the clinical outcome

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- Included studies (n= 6)
  - 4 RCT, 2 CCT; study duration between 12 and 24 months
  - 3 studies monitoring + treatment protocol, 3 studies monitoring alone
  - 2 studies in early, DMARD-naive RA; others in early & late RA
- Baseline data
  - 110 to 435 pt per study; 60% to 70% female; 42% to 80% RF positive; DAS28 >3.2

Treatment principles in RA

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- Results clinical effectiveness tight control
  - In 5 studies tight control better than routine care
  - More medication changes, better physical functioning and less radiographic damage with tight control
  - Toxicity similar
- Results meta-analysis
  - Tight control vs usual care: tight control is more effective, 0.6 DAS28-point more decrease in DAS28
  - Within tight control studies, monitoring + protocol is more effective than monitoring alone: 0.66 DAS28-point more decrease in DAS28

Treatment principles in RA

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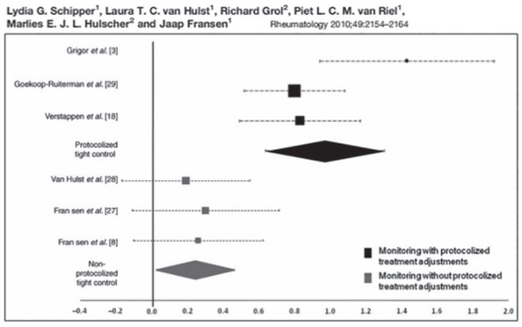

Treatment principles in RA

Meta-analysis of tight control strategies in rheumatoid arthritis: protocolized treatment has additional value with respect to the clinical outcome

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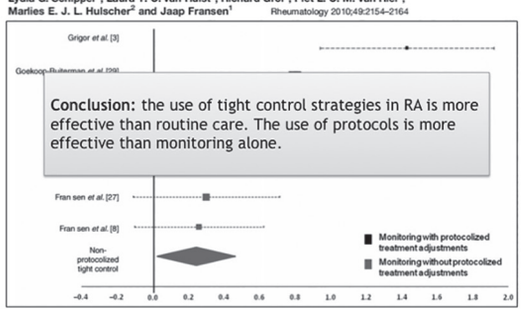

Conclusion: the use of tight control strategies in RA is more effective than routine care. The use of protocols is more effective than monitoring alone.

Treatment principles in RA

"Yes, but these are clinical trials. The effect in daily practice has not been proven."

Treatment principles in RA

"Yes, but these are clinical trials. The effect in daily practice has not been proven."

Effect of adherence to European treatment recommendations on early arthritis outcome: data from the ESPOIR cohort

Cécile Escalas, Marie Dalichampt, Bernard Combe, et al.
Ann Rheum Dis 2012 71: 1803-1808

Influence of guideline adherence on outcome in a randomised controlled trial on the efficacy of methotrexate with folate supplementation in rheumatoid arthritis

J Fransen, R F J M Laan, M A F J van der Laar, T W J Huizinga, P L C M van Riel

Ann Rheum Dis 2004;**63**:1222–1226. doi: 10.1136/ard.2003.018861

Treatment principles in RA

"Yes, but these are clinical trials. The effect in daily practice has not been proven."

ESPOIR study: less radiographic damage after 1 year and functional deterioration after 2 years (early RA).

MTX study: larger decrease in DAS28 after 48 weeks (established RA)

Influence of guideline adherence on outcome in a randomised controlled trial on the efficacy of methotrexate with folate supplementation in rheumatoid arthritis

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Ann Rheum Dis 2004;**63**:1222–1226. doi: 10.1136/ard.2003.018861

Treatment principles in RA

Summary:

Tight control gives better results and guideline adherence makes a difference to patients. However…

Treatment principles in RA

Cohort	Recommendation	Guideline adherence
ESPOIR (2002-2005)	First DMARD in early RA (EULAR)	54%
ERAN (2002-2007)	DMARD in early RA	Median time to DMARD start: 8 months (97% DMARD; 67% after 3 years DAS28 >3,2)
North-America (2002-2009)	DMARD in case of active RA (ACR)	25-50% (publication of updated ACR guideline no difference)
DREAM remission induction (2006)	DMARD in case of active RA	70% (98% DAS28 available)

Treatment principles in RA

Cohort	Recommendation	Guideline adherence
ESPOIR (2002-20		
ERAN (2002-200		e to DMARD nths 7% after 3 years
North-America (2002-2009)	DMARD in case of active RA (ACR)	25-50% (publication of updated ACR guideline no difference)
DREAM remission induction (2006)	DMARD in case of active RA	70% (98% DAS28 available)

Guideline adherence is not always optimal…

But how are things in our hospital?

Content

- Background
- Treatment principles in RA
- **Current situation at our hospital**
- Summary

Current situation at our hospital

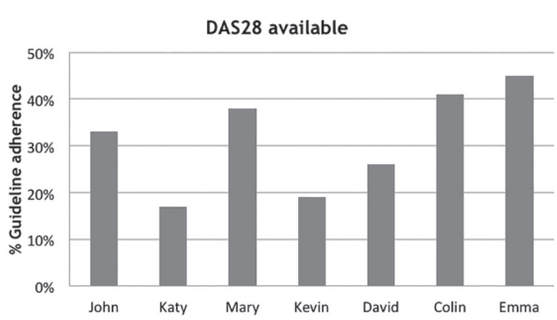
- Local RA treatment guideline available
  - Based on tight control: measuring DAS28, target based on disease duration, changing treatment if target is not reached, adequate follow-up
- Also in the guideline:
  - Shared care (nurses, PA)
  - Monitoring of functional damage
  - Other treatment modalities (physical therapy)
  - Risk management

Current situation at our hospital

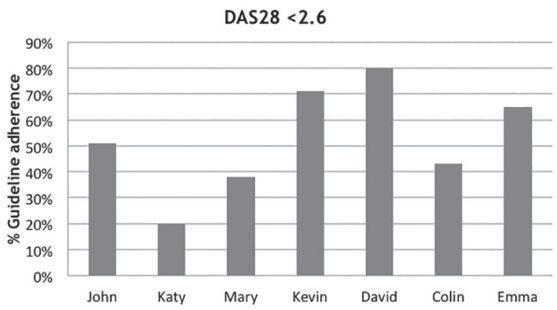
- Other guidelines on related themes also available
  - Preferential order of c/bDMARDs and NSAIDs
  - bDMARD dose optimization

Optimal RA care is more than tight control alone

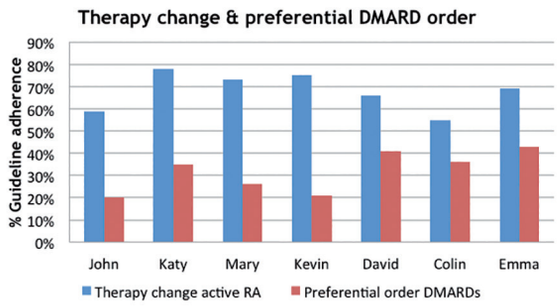
Current situation at our hospital



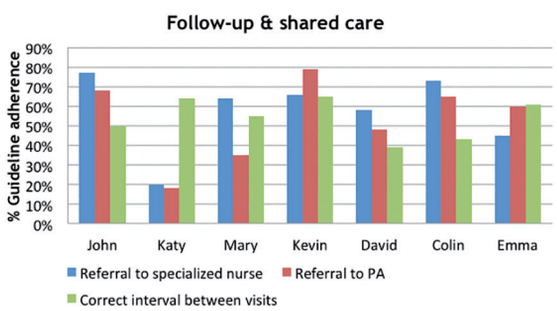
Current situation at our hospital



Current situation at our hospital



Current situation at our hospital



Current situation at our hospital

- Guideline adherence not always optimal
- Guideline adherence does not need to be 100%: deviations are allowed, but explain them!

Content

- Background
- Treatment principles in RA
- Current situation at our hospital
- **Summary**

Summary

- Treatment principles in RA
  - Tight control: important strategy that benefits our patients
  - Application in daily practice not yet optimal, but seems feasible
- RA treatment in this hospital
  - Improvement possible on many indicators

Supplement 3: Development of guideline indicators

Knowing how to describe quality of care is a prerequisite for its measurement. Often quality indicators are used to assess quality of care. A quality indicator is 'a measurable element of practice performance for which there is evidence or consensus that it can be used to assess the quality, and hence change the quality of care provided' (37). Quality indicators are often grouped into structure-, process- and outcome indicators. Outcome indicators reflect the result of the care that was provided by the healthcare provider, while process indicators reflect the actual care given to patients ('what is done'). Structure indicators, on the other hand, describe organisational aspects ('what is available') (38).

Different groups and organisations have developed indicator sets and for the purpose of this study we used the process indicators covering monitoring, drug treatment, follow-up and documentation from the Dutch national RA guideline (CBO indicators) (6). The Dutch set is selected because it bests reflects care provided at the study centre. Structure indicators are not taken into account because this will be a single centre study and as a consequence all structure indicators will be the same for all clinicians. The CBO indicators are not always very specific, therefore some indicators are modified as to better reflect the recommendations from the local RA guideline at the study centre. An overview of all indicators is given in Table I.

Besides adaptations of existing CBO indicators, extra indicators were added to the set used in our study. This concerned two indicators in the follow-up and referral domain (PA referral and nurse-led DAS28 assessments) and the two indicators in the domain on administration (new and control patient letters to the general physician).

The indicators on PA referral and nurse-led DAS28 assessments were added to cover specific shared care practices at the study centre. In this centre all RA patients should be seen by a nurse prior to the visit with the rheumatologist (nurse led DAS28 assessment). During this visit the DAS28 is done by a specialised rheumatology nurse, together with routine laboratory tests and assessment of current medication use. All information is provided to the rheumatologist. Furthermore RA patients can be treated by both a physician assistant (PA) and rheumatologist, with alternating visits between them. The PA is allowed to prescribe rheumatologic medication and make treatment decisions, but the final responsibility always lies with the rheumatologist.

Finally, a new group of indicators concerning administration was added. In the Dutch RA guideline no recommendations were given on correspondence with other relevant clinicians, especially the general physician (GP). We chose to add these indicators as it is of crucial importance that the GP knows if a patient uses DMARD or biological therapy because of potentially severe side effects or interactions with other commonly prescribed medication.

Table I. Indicators in national Dutch guideline and study.

Group of indicators	Indicators	
	Dutch national guideline (CBO)(6)	Study
Treatment and monitoring	*Monitoring of disease activity*	
	DAS28 measurement done at every visit by either the rheumatologist or another health care professional (HCP)	DAS28 measurement done at every outpatient clinic visit by either the rheumatologist or another health care professional
	Monitoring of structural damage	
	X-rays of hand and feet at moment of diagnosis and one year thereafter (year 0 and 1)	X-rays of hands, feet and thorax, done at the year 0, 1 and 3.
	X-rays of hand and feet done after a period of high disease activity (DAS28 >3.2 at two consecutive visits), if not done in the year before	
	Yearly assessment of functional status (Health Assessment Questionnaire) by either the rheumatologist of another health care professional	Yearly assessment of functional status (Health Assessment Questionnaire) by either the rheumatologist of another health care professional
	Treatment	
	Use of biological therapy	Prescription of conventional and biological DMARDs according to the preferential order* when initiating a new DMARD
	Use of methotrexate >20 mg/week	
	Use of prednisone >5 mg/day	N/A
	Intensification of medication by a rheumatologist in case of a DAS28>3.2 and an adequate period of previous therapy. Adaptation of treatment based on DAS28 scores unless co-morbidity, extra-articular disease and/or side-effects prevent this	Change in therapy† in case of active disease based on DAS28 score
	N/A	Use or prescription of a concomitant conventional DMARD in case of biological use
	N/A	Biological dose optimisation in case of low disease activity and stable biological use for the previous six months
Follow-up and referral	*Shared care*	
	Consultation with a specialised rheumatology nurse within one year after diagnosis	Referral to a specialised rheumatology nurse within two weeks after diagnosis
	N/A	Planned nurse led DAS28 assessment during the next regular outpatient clinic visit‡
	N/A	Referral to a physician assistant
	Follow-up	
	Planned visit with a rheumatologist within 3 months of the last visit if DAS28 > 2.6	Correct intervals between consecutive visits, based on disease activity and medication use as stated in the local RA guideline∏
	Planned visit with a rheumatologist or other relevant HCP within 6 months of the last visit if DAS28 < 2.6	
	Planned visit with a rheumatologist within one year after the last visit if DAS28 < 2.6	
Administration	*Correspondence*	
	N/A	A letter to the general physician, send within two weeks after diagnosis in case of a new RA patient (new patient letter)
		A letter to the general physician, send once every 18 months (control patient letter)

DAS28: Disease Activity Score based on 28 joints; DMARD: Disease-Modifying Anti-Rheumatic Drug.
*Preferred order in which DMARDs and biological should be prescribed, stated in the local RA guideline at the study centre. †The following options are seen as changes in therapy: intensifying DMARD therapy (dose increase, adding a new DMARD, switching to another DMARD and/or biological), starting or increasing prednisone dose and/or local corticosteroid injections. ‡Nurse led centre were RA patients are seen prior to the visit with the rheumatologist or physician assistant (PA) with measurement of the DAS28, routine laboratory assessments and asking about current medication use. All information is entered in the electronic patient record and therefore directly available to the rheumatologist or PA who sees the patient next.
∏Correct follow-up visit schedule is as follows: week 0 and 6; every 3 months during the first year of DMARD/biological therapy and once every six months thereafter. In case of DAS28 >3.2 a visit every 3 months, independent of medication use.