ScotPHN report

Health Care Needs Assessment of Services for Adults with Rheumatoid Arthritis

PART A: Executive Summary & Summary Table of Recommendations

Scottish Public Health Network - July 2012

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Preface

This report summarises the findings of a health care needs assessment (HCNA) of services for adults with rheumatoid arthritis (RA) in Scotland.

This report summarises the conclusions and recommendations from the HCNA and forms Part A of the report. The following reports are also available:

- Part B: which describes the epidemiology of RA in Scotland;
- Part C: which describes the corporate and comparative elements of the HCNA; and
- Part D: which considers the cost implications of developing RA services in Scotland.

Foreword

I am delighted to present this healthcare needs assessment of services for adults with rheumatoid arthritis. It is the product of many months hard work by many people who are acknowledged in Part C of this report.

Rheumatoid arthritis is an important major chronic disease in Scotland and causes considerable pain and disability, affecting many aspects of a person's life.

I and those involved in producing this report hope that the information and recommendations contained within it will contribute to the continuous improvement of services for those with rheumatoid arthritis, assisting them to become more person-centred, safe and effective and thereby improving the health and reducing the burden of disease for those affected.

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Project sponsor and chair

Executive Summary

1 Background

Rheumatoid arthritis (RA) is one of the major chronic diseases in Scotland and affects an estimated 37,000 Scots.[1] It can cause considerable pain and disability, affecting many aspects of a person's life. It is an important cause of work disability.

In 2002, the Public Health Institute for Scotland (PHIS) undertook a needs assessment of rheumatoid arthritis.[2] Since then the evidence base and policy context have changed considerably. Developments in RA treatment mean that better outcomes are now possible. Early, intensive treatment has made remission a realistic prospect for some and improved quality of life a reality for many. However, there is considerable variation within Scotland in the pattern and quality of care, dependent on local systems, pathways and resources.[3]

The Scottish Government therefore asked the Scottish Public Health Network (ScotPHN) to update the previous needs assessment to take account of the current epidemiology and recent advances in the understanding, treatment and care of people with rheumatoid arthritis. This report summarises the findings from the updated needs assessment.

2 Aim of HCNA

The aim of the updated health care needs assessment (HCNA) was to:

- review the epidemiology of rheumatoid arthritis in Scotland (including future trends);
- identify the views of stakeholders on current and future service provision;
- identify gaps in service provision and highlight priority areas for change; and
- make recommendations that will assist NHS Boards to plan and develop services for those with rheumatoid arthritis in their local area.

3 HCNA Methods

The HCNA was undertaken using the standard ScotPHN project methodology for health care needs assessment and involved considerable stakeholder involvement. It used elements of the following three approaches to needs assessment:

- *Epidemiological Needs Assessment:* describing the incidence and prevalence of the disease and baseline service activity (described in Part B);[1]
- *Corporate Needs Assessment:* reporting the views of interested parties and stakeholders, including professionals and service users and their carers (described in Part C);[4] and
- *Comparative Needs Assessment:* comparing and contrasting current RA services in Scotland with those provided elsewhere (described in Part C).[4]

The HCNA has also considered the cost implications of developing RA services in Scotland (described in Part D).[5]

4 Scope of HCNA

The HCNA covers adults (aged 16 years and over) only. It considers rheumatoid arthritis only (and not other rheumatological or musculoskeletal conditions).

5 Key Findings

The following key issues were identified:

- The need to shift practice towards early diagnosis and treatment;
- Ensuring the appropriate management of chronic disease;
- Access to the multidisciplinary team (MDT);
- Managing the cost pressures associated with RA drug prescribing;
- Reducing work disability due to RA;
- Meeting training and staffing needs; and
- Auditing and improving outcomes.

These issues are now discussed in turn.

A summary table listing the HCNA's recommendations (and their rationale) is provided in Appendix 1.

5.1 Early diagnosis and treatment of RA

5.1.1 Incidence of RA

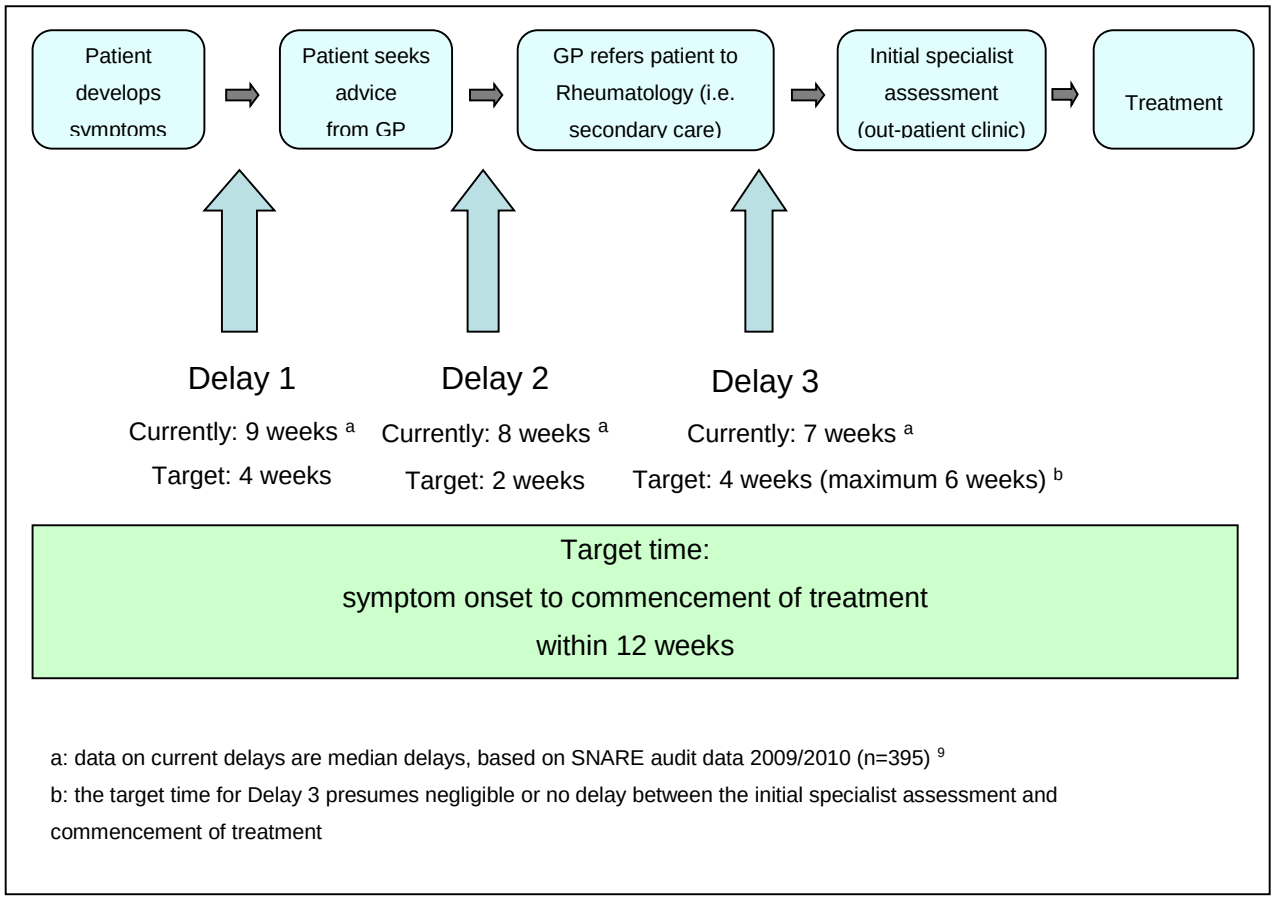
An estimated 1,851 people in Scotland develop RA every year.[1] RA can develop at any age, but has a peak incidence in the 5th and 6th decades of life (i.e. during a patient's 40s and 50s). RA is two to four times commoner in women than men.[6]

5.1.2 Delays in the time to diagnosis

There is currently good evidence to suggest that the early identification and treatment of RA significantly improves outcomes. During the first two years of RA, joint damage accrues rapidly. Early treatment is essential to reduce the activity of the disease and thereby reduce damage. The first 12 weeks of RA have therefore been termed a 'window of opportunity' in which early and aggressive therapy can result in long-term,

and in some, drug-free remission.[7;8] However, national audit data for Scotland shows that, despite improvements in recent years, considerable delay still occurs in the diagnosis of RA (Part C, section 4.2.2).[3;9] In 2009-10, the median time from symptom onset to assessment by a rheumatologist was 24 weeks, with only 25% of patients seen within 12 weeks of symptom onset (Figure 1).[9]

Figure 1: Delays in the diagnosis of RA



Public awareness of RA

The greatest delay in diagnosis occurs during the time between symptom onset and the patient's first presentation to their General Practitioner (GP).[3;9] The reasons patients delay seeking medical advice are multi-factorial [10] and this initial delay is the most challenging to address. However, the experience of other countries such as Norway (where large scale public health campaigns have occurred) suggests there is

potential to improve the time from symptom onset to presentation.[11] Raising public awareness of RA in Scotland (through local or national awareness campaigns, for example) should therefore be considered, but would need careful planning (Part C, section 4.2.3).

Delays within Primary and Secondary care

Delays in diagnosis also occur within primary and secondary care (Figure 1), but these are more likely to be amenable to change.

The initial presentation of early RA can be variable, making diagnosis difficult and GP awareness of referral guidelines for RA may be poor. Training and clear signposting is required. Referral guidelines with clear referral routes should therefore be agreed with GPs to facilitate the early referral of patients with possible RA to a specialist, ideally within 2 weeks of the patient presenting to primary care, in order to facilitate treatment commencing within 12 weeks of onset of symptoms.

There are also concerns that the recent development of new triage pathways (using a telephone based system) for musculoskeletal presentations may inadvertently lead to delays in the diagnosis of inflammatory diseases such as RA. As there is no examination of the patient involved initially, pathways will need to take account of the requirements to assess clinical synovitis. Robust training will be needed for all Allied Health Professionals (AHPs) in such pathways and direct rheumatology referrals will need to be possible for selected groups of patients, such as those with clinical synovitis, to ensure no retrograde steps occur in time to treatment (Part C, section 4.2.4).

5.1.3 The benefits of early treatment

Scotland needs to prioritise specialist early management of RA given the current evidence that this improves outcome.

Intensive early treatment, using a focus of treating to the target of remission, results in fewer erosions and less long-term disability.[12] Early, intensive management of those with newly diagnosed RA results in superior outcomes and is cost neutral in the short term, due to lower drug costs associated with earlier treatment, for example (Part C, section 4.6.3). Early RA clinics delivering 'intensive' management are being run in many, but not all, hospitals in Scotland. This needs to be addressed, with all Boards ensuring that Early RA clinics or similar service arrangements are in place to deliver 'intensive, treat to target' management of patients with newly diagnosed RA.

5.2 Chronic disease management

5.2.1 Management of established disease

Whilst there is a definite need to shift practice towards the early diagnosis and treatment of RA, it should be remembered that the majority of patients have established disease which has been present for many years. It is in this group of patients that there is an increased likelihood of complexity in drug therapy, requirement for advice from the multidisciplinary team (MDT) and financial support from disability benefits. Equally, many patients with established disease will have become very knowledgeable regarding self management of problems.

5.2.2 Prevalence of RA and the impact of the ageing population

An estimated 37,000 adults in Scotland have RA and the prevalence of RA increases considerably with age.[1] The ageing of the Scottish population will therefore have a considerable impact on the number of people with RA and the need for services, with the number of adults with RA in Scotland expected to rise to 42,505 by 2020 (a 13% increase over 10 years). This should be borne in mind when planning future services. Projected prevalence figures by Board area are provided in Part B of the report.[1]

5.2.3 Importance of the Primary-Secondary Care interface

For patients with stable established disease, most care can occur in primary care (Part C, section 4.4). However, primary care teams need support to manage issues such as 'flare ups' of disease, drug problems/toxicity and result interpretation. This

necessitates clarity regarding where, when and how such support is available - primary care teams need to be confident that they can access secondary care expertise when required and secondary care teams need to have the flexibility and capacity to be able to respond promptly.

5.3 Access to the multidisciplinary team

The effective management of both early and chronic RA requires access to a specialist multidisciplinary team, comprising specialist nursing, physiotherapy, occupational therapy, podiatry and pharmacy with access to psychology, dietetics and social work, as appropriate (Part C, section 4.5). Most rheumatology departments in Scotland now have at least some elements of a multidisciplinary team but provision is patchy and most units do not have all professions attached to their Unit.

5.4 RA drug prescribing

Considerable changes have occurred in the pharmacological therapy of RA since the previous needs assessment in 2002. In particular, the earlier use of Disease Modifying Anti-Rheumatic Drugs (DMARDs), including combination therapy, and the introduction of biologic therapies have made significant changes to the drug regimes used and current guidelines on drug therapy have been clearly set out by the National Institute for Health and Clinical Excellence (NICE) and the Scottish Intercollegiate Guidelines Network (SIGN).[6;13]

5.4.1 DMARD monitoring

DMARD therapy is the mainstay of drug treatment in RA, but issues are currently arising in many areas over the re-negotiation of contractual arrangements for DMARD monitoring remunerated through enhanced service agreements under the GP contract (Part C, section 4.6.3). The number of DMARD and biologic therapies has increased substantially and will continue to do so (including increased use of combination therapies) but many enhanced service agreements have failed to keep pace with this and continued testing can be variable depending on how far it has become embedded within local general practice. Each Board should have local

protocols in place for the monitoring of DMARDs, including parenteral methotrexate, by GPs.

5.4.2 Biologic drug cost pressures

Biologic therapy has revolutionised the treatment of RA over the past decade, leading to significant improvements in health-related quality of life, physical function and work productivity. However, the costs to the NHS are substantial with considerable cost pressures being felt by Boards. An estimated £22.5 million is spent in Scotland each year on biologic drugs for the treatment of RA (Part C, section 4.6.4) and Boards expect the budget to grow by around 10% per annum. While known to be clinically effective, there is limited data on current prescribing practice for biologic drugs which limits the ability to plan for the future. In view of the large expenditure, consideration should be given to developing a National Biologics Database to assist Boards to predict future spending and infrastructure requirements.

5.4.3 Infusion and day ward facilities

As the treatment of early RA has evolved, so has the need for year-round infusion facilities and day ward facilities, with patient care moving from in-patient assessment to largely out-patient management. However, capacity is an issue (Part C, section 4.6.4). For example, NICE recommends* the use of rituximab in patients who have failed to respond to initial anti-TNF therapy but most Boards have indicated that they do not believe they currently have sufficient capacity in pharmacy and day wards to implement this.[14] In some areas, the burden of acute medical admissions, particularly during winter months, can lead to infusion facilities being closed and used as acute medical beds, resulting in either delays in the treatment of those with RA or admission

* NICE recommendations do not have any formal status in Scotland. However, NHSQIS (now HIS) has endorsed the NICE Technology Appraisal Guidance No. 130 and NICE (Multiple) Technology Appraisal Guidance No. 195 for use in Scotland, as mentioned in SIGN Guideline 123.

of RA patients on a more costly in-patient basis, to ensure timely access to treatment. Year-round, consistent access to dedicated infusion facilities is required.

5.5 Reducing work disability due to RA

RA has an important impact on people's families, social roles, leisure time and participation in community life. Work disability is a common consequence of RA, with loss of employment often occurring early on in the disease process (Part C, section 4.7).[15;16] Of those working at the time of diagnosis, 1 in 3 will have stopped working within five years, due to their condition.[16] To prevent work disability, patients need to be screened regularly for work issues, particularly at diagnosis. Team based Vocational Rehabilitation and Occupational Therapy can then be effective at improving work outcomes.[17;18] However, current capacity for such interventions is limited. Clarification of referral routes to appropriate vocational rehabilitation, and audit of the process and outcome, is required.

5.6 Training and staffing needs

It was not the remit of the needs assessment to undertake a comprehensive staffing review of RA services. However, as staffing and needs are linked, some comment is required.

5.6.1 AHP & Clinical Nurse Specialist capacity, training and succession planning

The effective management of RA requires access to all members of the MDT. However, some rheumatology units do not currently have dedicated AHP support. There are also currently several barriers to specialist training for AHPs and nurses with an interest in rheumatology (Part C, section 4.9.4). RA services often rely on a small number of highly experienced staff (e.g. Clinical Nurse Specialists) who have 'learnt on the job', but without provision for training their successors. The lack of succession planning in some areas is a significant risk to the future resilience and sustainability of RA services and should be addressed urgently.

5.6.2 Consultant staffing levels

The British Society for Rheumatology (BSR) and Royal College of Physicians (RCP) have advised on a recommended ratio of one rheumatologist to 85,000 in the general population. To move towards this target there has been an expansion in the number of rheumatologists in Scotland over the last four years. However, the current Scottish average is of 1 rheumatologist per 128,000 population and a further 20 new WTE consultant posts would be required to meet the RCP/BSR recommendations.[4] The BSR/RCP recommended staffing ratios may well be difficult to achieve in the current difficult financial climate, remaining as an aspirational target only. However, there does appear to be variation in rheumatology consultant staffing levels across Scotland and this does require to be reviewed and addressed now, with some geographical regions having medical staffing shortages that would appear difficult to ameliorate simply by service reconfiguration (Part C, section 4.9.5). There are no anticipated rises in medical trainee rheumatologist numbers and limited succession planning. There is therefore also concern over the ability to fill future vacancies. A review of the adequacy of medical staffing levels should therefore be undertaken.

5.7 Audit and monitoring outcomes

Research and audit have an important role to play in improving clinical care for patients with RA (Part C, section 4.10). Many rheumatology units carry out local audit and there has been a coordinated system of national audit since 2006.[3;9] Recent audit results have shown considerable geographical variation in case mix and outcomes. With the evidence that a “treat to target” approach delivers better outcomes in early RA, the recent publication of several national standards of care and the imminent publication of NICE quality indicators for rheumatoid arthritis (due for publication in 2013),[19] there is an opportunity to build upon the existing network and strengthen national audit of outcomes in RA in Scotland and to use this as a tool to improve quality and reduce variation in clinical care.

5.8 Cost implications

The existing cost pressures associated with the current pattern of service are identified throughout the HCNA.[1;4] A formal analysis of the incremental costs in the main considered the potential, revenue cost implications of developing RA services in Scotland in relation to establishing multi-disciplinary teams; the costs associated with significant changes in disease management; and the cost of RA drug prescribing. In undertaking this work, ScotPHN has drawn on the formal costing work undertaken by NICE as part of its implementation programme for RA services.[6] However, as with all such analyses, there is a high degree of uncertainty which derives from both the quality of the data used and the underlying assumptions which have had to be made to generate cost estimates. A more formal cost analysis may be required once more robust data is available from the proposed National Biologics Database and the improved audit and monitoring arrangements recommended to establish the incremental costs and benefits which can be achieved on an "invest to save" basis.

6 Links with the NHS Scotland Quality Strategy

The recommendations of the HCNA (listed in Appendix 1) align closely with the three 'Healthcare Quality Ambitions' of NHS Scotland's *Quality Strategy* which seeks to provide care that is: person-centred; safe; and effective (Figure 2). The recommendations also align closely with the Institute of Medicine's six dimensions of quality (i.e. person-centred; safe; effective; efficient; equitable; and timely) which are central to NHS Scotland's approach to systems-based healthcare quality improvement.[20] For example, central to many of the HCNA's recommendations is the need to improve the early identification and treatment of those with RA. As well as delivering better outcomes for patients, this could bring benefits to the NHS (e.g. via reduced drug costs) and beyond (e.g. by reducing work disability), resulting in the more efficient use of resources. Similarly, for the many people with chronic disease, the HCNA highlights the need to support patients to manage their condition and help reduce the impact of RA on their daily lives, through promoting self-management and providing support from the multidisciplinary team, for example. The Quality Strategy

therefore provides a useful framework in which to take forward the development of RA services.

Figure 2: NHS Scotland Quality Strategy - Quality Ambitions [21]

- **Person-centred:** There will be mutually beneficial partnerships between patients, their families and those delivering healthcare services which respect individual needs and values and which demonstrate compassion, continuity, clear communication and shared decision-making.
- **Safe:** There will be no avoidable injury or harm to people from healthcare they receive, and an appropriate, clean and safe environment will be provided for the delivery of healthcare services at all times.
- **Effective:** The most appropriate treatments, interventions, support and services will be provided at the right time to everyone who will benefit, and wasteful or harmful variation will be eradicated.

The summary table in Appendix 1 illustrates in more detail how each of the HCNA's recommendations links to the Quality Ambitions.

7 Conclusions

Scotland needs to prioritise specialist early management of RA given the current evidence that this improves outcomes. This needs to be balanced with ensuring that the needs of those with ongoing chronic disease are met and ensuring that the needs of an ageing population are met. Whilst the costs of investing in the development of RA services can be seen as high, the current cost pressures are unlikely to be contained without the application of the 'invest to save' principle.

8 Next Steps

This report will now be fed back to the Scottish Government, who commissioned it, to discuss the necessary next steps in responding to this needs assessment.

Appendix 1: Summary Table of Recommendations

Recommendation	Rationale & report reference	*NHSScotland Quality Strategy* Quality Ambition addressed	Suggested level for implementation
1. Public awareness of rheumatoid arthritis should be raised in order to limit the delay in patients presenting to their General Practitioner (GP).	Early treatment of RA improves outcomes. However, Scottish audit data shows that considerable delays occur in the diagnosis of RA. The greatest delay in diagnosis occurs during the time between symptom onset and the patient's first presentation to their GP. Part C, Section 4.2.2 & 4.2.3	Quality Ambition: Effective care	National
2. Referral guidelines with clear referral routes should be agreed with GPs, encouraging urgent referral of patients with possible RA to a rheumatology specialist, ideally within 2 weeks of the patient presenting to primary care, in order to facilitate treatment commencing within 12 weeks of onset of symptoms.	Early treatment of RA improves outcomes but audit data shows that considerable delay occurs in the referral of patients from primary care to secondary care for specialist rheumatology assessment. The initial presentation of early RA can be variable, making diagnosis difficult and GP awareness of referral guidelines may be poor. Clear signposting is required. Part C, Section 4.2.4	Quality Ambition: Effective care	National / NHS Board

3. Protocols should be developed for physiotherapy triage services and other new models of care for musculoskeletal (MSK) conditions to facilitate the re-directing of patients with potential inflammatory joint disease. Regular auditing of time to specialist assessment should be undertaken to ensure no retrograde steps occur in time to treatment.	Concern was expressed during the corporate needs assessment that the recent development of new triage pathways (using telephone based systems) for musculoskeletal presentations may potentially inadvertently lead to delays in the assessment of those with early RA. Part C, Section 4.2.4	Quality Ambition: Safe, Effective care	National / NHS Board
4. Rheumatology departments should provide rapid access or urgent appointments for people with possible RA within 4 weeks of referral.	Early, intensive management of those with newly diagnosed RA results in superior outcomes and is cost neutral in the short term. Part C, Section 4.2.2	Quality Ambition: Effective care	National / NHS Board
5. Patients referred to rheumatology with a possible diagnosis of inflammatory arthritis should be seen by a rheumatology consultant on the specialist register, or a doctor with experience and expertise in the assessment and management of early RA but under the overall supervision and responsibility of a consultant rheumatologist.	Rheumatoid arthritis is a multi-system disease that requires experience and expertise to diagnose. There are no absolute diagnostic tests for RA - RA is a clinical diagnosis made on the basis of a number of findings. This requires considerable clinical expertise. Part C, Section 4.3	Quality Ambition: Effective care	NHS Board

6. Assessment tools should be applied from the outset to enable monitoring of progress and treatment to target. Examples of appropriate tools are: DAS; DAS28; HAQ; HAD; RA-WIS; and SDAI. The use of such tools should be regularly audited.	A number of scoring systems exist to quantify the degree of active RA disease at time of diagnosis. The most commonly used is the DAS-28. It is not known how extensively this scoring system is used in Scotland at time of diagnosis but there is evidence to show that using such an approach to target treatment improves outcomes. Part C, Section 4.3.3	Quality Ambition: Effective care	NHS Board
7. Imaging facilities for ultrasound examination by either a clinician or technician with experience and expertise in musculoskeletal ultrasound scanning of inflammatory arthritis should be available if required, preferably at the initial consultation.	The diagnosis of RA can be difficult. Ultrasound scanning (USS) can detect synovitis that cannot be detected clinically and can be useful in the diagnostic process. EULAR has recommended the use of ultrasound in the diagnostic process for those patients where there is diagnostic dubiety. Part C, Section 4.3.5	Quality Ambition: Effective care	NHS Board
8. A concerted effort should be made to facilitate training in ultrasound for trainee rheumatologists and AHPs. Recognised trainers in Scotland should be identified and a structured training programme based on the EULAR model or postgraduate certificate developed.	There is currently variability of access to ultrasound scanning in Scotland. Problems include a lack of skilled operators and a lack of skilled mentors. The use of USS is likely to be incorporated as a required skill for rheumatology trainees as advised by the British Society for Rheumatology (BSR). Part C, Section 4.3.5	Quality Ambition: Effective care	NHS Board

9. Smoking cessation should be part of the management plan of all RA patients who smoke.	Smoking increases the risk of developing RA. Smoking can also reduce the effectiveness of RA treatments including anti-TNF agents and DMARDs. A recent survey of RA patients in Fife, however, found that few patients were aware of the links between smoking and RA. Part C, Section 4.4.2 & Part C, Appendix 6	Quality Ambition: Person-centred, Effective care	National / NHS Board
10. A management plan should exist for addressing co-morbidities. This may take the form of a structured annual review assessment and should make clear the contributions of primary and secondary care, encouraging collaboration whilst minimising duplication of effort.	People with RA have increased cardiovascular risk and increased mortality compared to the general population. Although at increased risk of cardiovascular disease, they may not present with symptoms until late in the disease process as their exercise tolerance may be reduced, thus masking the disease until it declares itself on minimal exertion. GPs are remunerated under the Quality and Outcomes Framework to address such issues but may be less aware than rheumatologists regarding the adverse risk profile in RA and so the potential for undertreating exists. Part C, Section 4.4.3	Quality Ambition: Person-centred, Effective care	NHS Board

11. Informed self-management should be a cornerstone of chronic disease management in RA.	RA is a long term condition. Self-management, along with MDT support, is a key part of managing the condition. Part C, Section 4.4.5 & Part C, Appendix 7	Quality Ambition: Person-centred care	NHS Board
12. Patients and primary care teams should have easy access to the Rheumatology team between scheduled appointments when required for drug information and rapid assessment in event of flare in disease. People with RA should know how to access specialist care promptly, with rapid access for appropriate interventions available for persistent disease flares within 48 hours of first contact.	For patients with stable established disease, most care can occur in primary care. However, primary care teams need support to manage issues such as 'flare ups' of disease, drug problems/toxicity and result interpretation, for example. Primary care teams need to be confident that they can access secondary care expertise when required and secondary care teams need to have the flexibility and capacity to be able to respond promptly. Part C, Section 4.4.7	Quality Ambition: Person-centred, Effective care	NHS Board
13. Close working relationships should be developed between RA services and GPs/cardiovascular specialists/MCNs to ensure that the increased vascular risk among RA patients is appropriately managed.	People with RA are at increased risk of cardiovascular disease. RA is not currently captured within the ASSIGN cardiovascular risk score, however, and will therefore be 'missed' by ASSIGN. A close relationship with cardiovascular GPs/specialists/MCNs is needed to ensure vascular risk among RA patients is appropriately managed. Part C, section 4.4.3	Quality Ambition: Person-centred, Effective care	National / Regional / NHS Board

14. All patients with RA should have access to assessment by a full multi-disciplinary team (MDT), via clear referral pathways. The configuration of the MDT should take into account local circumstances (such as rurality) but members of the MDT must have specialist training in Rheumatology and should preferably be attached to the Rheumatology Unit.	The effective management of both early and chronic RA requires access to a specialist multidisciplinary team, comprising specialist nursing, physiotherapy, occupational therapy, podiatry and pharmacy with access to psychology, dietetics and social work, as appropriate. Most rheumatology departments in Scotland now have at least some elements of a multidisciplinary team but provision is patchy and most units do not have all professions attached to their Unit. Part C, Section 4.5	Quality Ambition: Person-centred, Effective care	NHS Board
15. All Boards should ensure that Early RA clinics or similar service arrangements are in place to deliver 'intensive, treat to target' management of patients with newly diagnosed RA.	Intensive early treatment, using a focus of treating to the target of remission, results in fewer erosions and less long-term disability. As well as delivering superior outcomes, early intensive management of RA is cost neutral in the short term (due to lower drug costs, for example). Early RA clinics delivering intensive management are being run in many, but not all, hospitals in Scotland. Part C, Section 4.6.3	Quality Ambition: Effective care	NHS Board

16. Each rheumatology unit should have access to an infusion facility, with adequate capacity, staffing, equipment and protected from seasonal closures.	Biologic therapy has revolutionised the treatment of RA over the past decade, leading to significant improvements in health-related quality of life, physical function and work productivity. Ensuring year-round infusion and day facilities for those who require this form of treatment and assessment has become essential, as patients have moved from in-patient to largely out-patient management. Capacity for administering drugs by infusion is currently an issue, however. Part C, Section 4.6.4	Quality Ambition: Effective care	NHS Board
17. Boards should ascertain the capacity of their day ward and pharmacy services to identify what resources (if any) would be required to expand them to accommodate a shift from community sub-cutaneous preparations to day ward intravenous therapies.	Most Boards indicated during the corporate needs assessment that they do not believe they currently have sufficient capacity in pharmacy and day wards to implement recent NICE guidance* on the use of rituximab in patients who have failed to respond to initial anti-TNF therapy. However, it is not known how robust this assessment is, nor what additional resources would be required to rectify the situation. Part C, Section 4.6.4 * NICE recommendations do not have any formal status in Scotland. However, NHSQIS (now HIS) has endorsed the NICE Technology Appraisal Guidance No. 130 and NICE (Multiple) Technology Appraisal Guidance No. 195 for use in Scotland, as mentioned in SIGN Guideline 123.	Quality Ambition: Effective care	NHS Board

18. Each Board should have local protocols in place for the monitoring of DMARDs, including parenteral methotrexate, by GPs.	DMARD therapy is the mainstay of drug treatment in RA, but issues are currently arising in many areas over the re-negotiation of contractual arrangements for DMARD monitoring remunerated through enhanced service agreements under the GP contract. The number of DMARD and biologic therapies has increased substantially and will continue to do so (including increased use of combination therapies) but many enhanced service agreements have failed to keep pace with this and continued testing can be variable depending on how far it has become embedded within local general practice. Part C, Section 4.6.3	Quality Ambition: Safe care	NHS Board
19. An annual review of drug therapy should take place in primary or secondary care. Where patients are receiving NSAIDs, the potential for stopping or reducing dose should be explored. Where this is not possible, a PPI should be co-prescribed.	Non-steroidal anti-inflammatory drugs (NSAIDs) are helpful in reducing pain and stiffness but can be associated with serious drug-related toxicity, including an increased risk of cardiovascular events and peptic ulceration. Current recommendations state that NSAIDs should be used in the lowest possible dose for the shortest duration of time but that, where long term use is required, patients with risk factors should be co-prescribed a proton pump inhibitor (PPI). National	Quality Ambition: Safe care	NHS Board

	audit data (CARA) indicates that a significant minority of RA patients receiving NSAIDs are not co-prescribed a PPI. Part C, Section 4.6.2		
20. Consideration should be given to developing a National Biologics Database to assist Boards to predict future spending and infrastructure requirements.	Biologic therapy has revolutionised the treatment of RA over the past decade. However, the costs to the NHS are substantial. National Procurement data indicates that approximately £22.5million is spent in Scotland each year on biologic drugs for the treatment of RA and Boards expect the budget to grow by around 10% per annum. Despite the large expenditure, information on biologic drug use is currently limited. Better information is required to assist Boards to predict future spending and infrastructure requirements. Part C, Section 4.6.4	Quality Ambition: Effective care	National
21. Early use of DMARD therapy should be employed to minimise work disability.	Work disability is a common consequence of RA, with loss of employment often occurring early on in the disease process. Early treatment is required to improve outcomes. Part C, Section 4.6 & 4.7	Quality Ambition: Effective care	NHS Board

22. All patients should be asked 'the work question' regularly by a healthcare professional and referred on for Vocational Rehabilitation/Occupational Therapy as necessary.	To prevent work disability, patients need to be screened regularly for work issues, particularly at diagnosis. Screening includes asking 'the work question' and using tools such as the Rheumatoid Arthritis Work Instability Scale (RA-WIS). Team based Vocational Rehabilitation and Occupational Therapy can then be used to improve work outcomes. Part C, Section 4.7.5	Quality Ambition: Person-centred, Effective care	NHS Board
23. A team approach is required to optimise employment outcomes and the impact of disease on other functional areas. Rheumatology units should have a pathway for referral to local employability networks or similar.	Voluntary agencies (such as Arthritis Care and NRAS) can provide a wealth of support to patients with RA and employment and social issues. Voluntary sector agencies play an important part of raising awareness and empowering patients to manage their employability and job retention problems. Part C, Section 4.7.7	Quality Ambition: Person-centred, Effective care	NHS Board
24. Avoidance of delay should take priority over attempting to provide services locally. Boards should assess whether peripherally or centrally provided early assessment clinics will provide the most secure and expeditious route to ensure early diagnosis	The early identification and treatment of RA is key to improving patient outcomes. Early assessment by a specialist should therefore take priority over attempting to provide services locally. Part C, Section 4.8	Quality Ambition: Effective care	Regional / NHS Board

of RA. This will vary according to local conditions.			
25. Boards should ensure they have sufficient provision of rheumatology in-patient beds to facilitate the appropriate assessment and early treatment of those with RA from remote and rural areas.	Particularly in the early stage of disease, regular assessment is crucial when aiming for remission. This may require more frequent blood monitoring, joint injection, therapy alterations including TNF blockade screening and use of ultrasonography, for example, all of which may require more centrally based services. Although there has been a trend for a reduction in in-patient bed requirements in rheumatology due to the delivery of therapeutic advances in recent years, having an in-patient facility in more rural areas remains important to avoid lengthy transportation issues and allow for a fuller assessment. Part C, Section 4.8	Quality Ambition: Effective care	Regional / NHS Board
26. The development of Rheumatology training programmes for Nurses and AHPs should be encouraged through links with Universities.	The RA AHP community in Scotland is relatively small and the availability of accredited courses for nurses and AHPs is limited in Scotland. Part C, Section 4.9.4	Quality Ambition: Effective care	National

27. The current and future staffing needs for AHPs should be determined. Succession planning for AHPs should be addressed as a matter of urgency.	The effective management of RA requires access to all members of the MDT. Some Scottish rheumatology units do not currently have dedicated AHP support, despite large catchment areas. RA services often rely on a small number of highly specialised staff who have 'learnt on the job', but with no provision for the training of their successors. The lack of AHP succession planning in some areas is a significant risk to the future resilience and sustainability of services. Part C, Section 4.9.4	Quality Ambition: Effective care	Regional / NHS Board
28. A review of the adequacy of medical staffing levels for RA services should be undertaken with the aim of addressing the apparent consultant shortfall in targeted areas.	There is considerable variation by Health Board in the provision of consultant rheumatologists per 100,000 population with some geographical regions having medical staffing shortages that would appear difficult to ameliorate simply by service reconfiguration. There are no anticipated rises in medical trainee rheumatologist numbers and limited succession planning. There is therefore concern over the ability to fill future vacancies. Part C, Section 4.9.5	Quality Ambition: Effective care	Regional / NHS Board

29. Key national agencies should support Scotland wide audit. This should focus on evidence based practice and the three domains in the NHSScotland Quality Strategy of person centredness, safety and effectiveness and be closely allied to SIGN Guideline 123.	There is an established network for national audit of RA services in Scotland, with data collection from most but not all units in Scotland. Recent audit results show considerable geographical variation in case mix and outcomes. With the evidence that a "treat to target" approach delivers better outcomes in early RA, the recent publication of several national standards of care and the imminent publication of NICE quality indicators for RA, there is an opportunity to build upon the existing network and strengthen national audit of outcomes in RA in Scotland and to use this as a tool to improve quality and reduce variation in clinical care. Part C, Section 4.10.2	Quality Ambition: Effective care	National
30. Rheumatology Units should collaborate on a national basis when developing local disease registers so that opportunities to facilitate audit, research and national data collection are maximised.	The imminent development of paperless and paper light systems of working allow for a change in rheumatology working practice. Some units in Scotland have used databases to collect and hold patient information; others are in the process of implementing new systems. Collaboration between units when developing local disease registers could provide greater opportunities for	Quality Ambition: Effective care	National / NHS Board

	audit and also act as a research tool (with patient consent), leading to better patient care. Part C, Section 4.10.3		

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