The EULAR points to consider for health professionals undertaking musculoskeletal ultrasound for rheumatic and musculoskeletal diseases

Musculoskeletal ultrasound has evolved into an important clinical decision-making tool by assisting in the diagnosis of inflammatory arthritis, monitoring disease activity and therapeutic response, and guiding interventions.1–7 The role of the non-medical health professional has advanced, with many undertaking training and using musculoskeletal ultrasound to improve patient care and in doing so, increasing their scope of practice. Health professionals with clinical expertise and experience using ultrasound are also providing training for colleagues and medical clinicians.

As previously described among rheumatologists,8 9 the use of musculoskeletal ultrasound and training undertaken varies significantly between different professional groups and across Europe. Guidelines to support training for rheumatologists have been formulated10 but currently there are no recommendations to support the education and training needs of non-medical health professionals using musculoskeletal ultrasound.

A European League Against Rheumatism (EULAR) task force was established to reach a consensus on the role of, and education and training needs of health professionals undertaking musculoskeletal ultrasound for the management of people with rheumatic and musculoskeletal diseases (RMDs).

The group comprising of 18 clinical and academic experts representing 10 European countries included rheumatologists, nurses, physiotherapists, an epidemiologist, methodologist, radiologist, radiographer and podiatrist, and people with RMDs, who defined the aims and formulated 14 research questions to guide a comprehensive systematic literature search (SLR). The results of the SLR were discussed and supported the formulation of points to consider and a research agenda.

Seven points to consider were formulated (table 1) encompassing the role and scope of health professionals using musculoskeletal ultrasound, including the application, feasibility and added value in daily practice, and the training and competencies required. The strength of the points to consider was rated D based on the category of evidence (3–4). A high level of agreement (range 9.0–9.7) was reached by the task force members. The task force agreed on seven topics for the research agenda (box 1).

Table 1 Points to consider for health professionals undertaking musculoskeletal ultrasound for rheumatic and musculoskeletal diseases

<table>
<thead>
<tr>
<th>Points to consider</th>
<th>Category of evidence</th>
<th>Strength of statement</th>
<th>Level of agreement mean (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role and scope</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Health professionals may use ultrasound to detect musculoskeletal abnormalities and contribute to clinical decision-making.</td>
<td>3–4</td>
<td>D</td>
<td>9.2 (8.8 to 9.7)</td>
</tr>
<tr>
<td>2. Health professionals may use musculoskeletal ultrasound as a tool for research including health professional-led studies.</td>
<td>3–4</td>
<td>D</td>
<td>9.3 (8.7 to 9.9)</td>
</tr>
<tr>
<td>Training and competency</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3. Health professionals must be appropriately trained and assessed for competency in musculoskeletal ultrasound before applying it in clinical practice.</td>
<td>4</td>
<td>D</td>
<td>9.7 (9.5 to 10.0)</td>
</tr>
<tr>
<td>4. The minimal competency requirements for performing musculoskeletal ultrasound must be the same for all ultrasound practitioners. Advanced training content may be adapted according to the needs of the health professionals.</td>
<td>3–4</td>
<td>D</td>
<td>9.6 (9.2 to 10.0)</td>
</tr>
<tr>
<td>5. Health professionals appropriately trained may teach musculoskeletal ultrasound according to a standardised and formalised training programme.</td>
<td>4</td>
<td>D</td>
<td>9.5 (9.1 to 9.9)</td>
</tr>
<tr>
<td>Application and feasibility</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>6. The use of musculoskeletal ultrasound by health professionals must be based on levels of competency and the individual’s role within their institution/department, as directed by local and national regulations.</td>
<td>3–4</td>
<td>D</td>
<td>9.6 (9.4 to 9.9)</td>
</tr>
<tr>
<td>Additional value</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>7. By using musculoskeletal ultrasound, health professionals may improve the clinical management of people with rheumatic and musculoskeletal diseases.</td>
<td>3–4</td>
<td>D</td>
<td>9.0 (8.3 to 9.7)</td>
</tr>
</tbody>
</table>
These are the first points to consider produced by a EULAR task force for health professionals using musculoskeletal ultrasound. The task force acknowledged that there is weak evidence supporting the points to consider, which were developed using a combination of research-based evidence and expert consensus.

The use of musculoskeletal ultrasound by health professionals in both clinical practice and for research does not differ significantly from that applying to rheumatologists, and therefore the training and competency levels should be the same for rheumatologists and health professionals using musculoskeletal ultrasound in clinical practice and for research.

A full description of the SLR and points to consider development are available at http://www.eular.org.

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16Page dimensions: 595.3x793.7

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Acknowledgements The authors thank Sue Oliver, OBE for her leadership in the conception of this project. The authors also thank Deidre Andre, Scholarly Communications and Research Skills Advisor, Leeds University Library for her support in conducting the systematic literature review.

Contributors HJS was the research fellow for the project, undertaking the SLR. RJW was the project convenor; PM, DA and TPVV provided epidemiology direction for the SLR and the project. HJS and RJW were responsible for drafting the manuscript. All those listed as authors were responsible for developing the points to consider and reading, commenting on, and approving the final manuscript. All contributors were independent from the study funders in conducting the research.

Funding This project was supported by the European League Against Rheumatism (EULAR). The research is supported by the National Institute for Health Research (NIHR) Leeds Musculoskeletal Biomedical Research Centre, UK. The views expressed are those of the authors and not necessarily those of the NHS, the NIHR or the Department of Health.

Competing interests None declared.

Provenance and peer review Not commissioned; externally peer reviewed.

To cite Siddle HJ, Mandl P, Aletaha D, et al. Ann Rheum Dis Published Online First: [please include Day Month Year] doi:10.1136/annrheumdis-2016-210741

Received 28 October 2016
Accepted 22 November 2016

Ann Rheum Dis 2016;0:1–2. doi:10.1136/annrheumdis-2016-210741

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