The Academy of Medical Sciences

MHRA challenges and priorities for the next 5 years

October 2007

Introduction

1. The Academy of Medical Sciences welcomes the opportunity to contribute to the consultation on the challenges and priorities for the Medicines and Healthcare Regulatory Authority (MHRA) over the next five years. We support the overall strategy of the MHRA to combine efforts to safeguard public health while promoting healthcare innovation. In evaluating the specific objectives identified by the MHRA, we reiterate the points made recently by the UK Ministerial Industry Strategy Group in devising their long-term leadership strategy for regulation of pharmaceutical R&D:[1]
    - It is of the highest importance for industry and the Regulatory Authorities to work together to increase the level and quality of the scientific debate during the registration process for new medicines.
    - There is a particularly critical need for partnership to improve pharmacovigilance and safety reporting.
    - There must also be partnership between industry and the Regulatory Authorities to devise a set of core messages to improve communication and public understanding about the development of new medicines, their benefits and risks and mechanisms for monitoring safety.

2. The Academy recently held a meeting on '*Stratified Medicines'*, where new approaches to capitalise on advances in biomedical R&D in pursuit of innovative therapeutic and diagnostic products were discussed (see paragraph 8). A full report of this meeting will be available shortly. The Academy will also shortly be publishing a report '*Identifying the environmental causes of disease'*, which focuses on non-experimental research - a key mechanism for investigating inadvertent harms from medicines - and its conduct, communication and translation into policy and practice.[2] We would greatly welcome the opportunity to discuss further with the MHRA our findings in these areas, together with other points made in this response.

MHRA Objective - Safeguarding public health

3. As an Executive Agency of the Department of Health (DH), it is vital that MHRA activities help to take forward the Department's stated high level science and innovation goals[3]:
    1. to ensure that science and innovation lead to improved interventions for health and social care;

[1] http://www.dh.gov.uk/en/Policyandguidance/Medicinespharmacyandindustry/Industrybranch/DH_4113974
[2] http://www.acmedsci.ac.uk/p47prid50.html
[3] http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4009199

2. to ensure that the DH works with partners to sustain and develop the science base;
3. to ensure that policy and practice are based wherever possible on sound science and research;
4. to ensure that the rights, health and safety of the public and patients are protected and their interests reflected.

We judge that the MHRA strategic objectives do significantly help to achieve these goals and agree that the areas defined as the responsibility of the MHRA (paragraph 1.7 in the consultation) are appropriate.

4. In 2005 the Academy's FORUM - an active network that brings together scientists from industry and academia - published a major report, *'Safer Medicines'*.[4] The recommendations of this report identified the future activities in safety assessment needed from Regulatory Authorities in partnership with industry and academic researchers and are relevant to Questions 1 and 3 posed in the consultation. We view the key issues as:
    - Expediting the application of new technologies to safety assessment.
    - Developing international networks to investigate emergent clinical safety issues.
    - Building and using large databases of patient information to speed the detection of adverse reactions.
    - Addressing the decline in capacity in safety assessment (and the need to increase training in regulatory skills).
    - Engaging the public to reduce the risk of adverse drug reactions (see paragraph 7).

5. The question of defining *'the right balance on benefits, risks and informed choice'* (question 3 of the consultation) is challenging and was identified as a key area for further work by the *'Safer Medicines'* report. One recommendation of this report was to develop a concise, standardised system for presenting risks and benefits. We are currently exploring the options for communicating such a system through journal articles and anticipate further discussion with key stakeholders in the coming months. More broadly, we believe the Academy's FORUM represents a valuable resource to bring together the expertise and perspectives from industry, academia, regulators and other policymakers to consider these issues; we would welcome further discussion with the MHRA on how this resource can best be used, particularly in association with other current initiatives (in particular, the Regulatory Forum of the Ministerial Industry Strategy Group).

6. In clarifying the future programme for the MHRA, we wish to highlight three specific areas.

    1. The first relates to the adverse events resulting from the phase I trial of TGN1412, where the Academy published a position paper *'Testing Antibody Therapies'*.[5] This paper emphasised that the organisation of phase I trials should appropriately address the special risks associated with antibody

[4] See http://www.acmedsci.ac.uk/p99puid61.html.
[5] Details on http://www.acmedsci.ac.uk/download.php?file=/images/publication/TestingA.pdf.

therapies, particularly the importance of: involving specialist advisors during regulatory review; ensuring transparency; and creating a central repository of information about the treatment of adverse effects of antibody therapies.

2. The second is pandemic influenza, mentioned by the consultation (paragraph 2.16) as a potentially serious health threat. The Academy, together with the Royal Society published a report covering a wide range of issues for pandemic flu, including the opportunities and challenges for ensuring rapid availability of antiviral agents and vaccines.[6] The Academy and the Royal Society are reviewing recent activity in this area at a meeting in November as part of the broader consideration of progress in UK pandemic preparedness.
3. The third area in which the MHRA must continue to grow its regulatory contribution to public health is Complementary and Alternative Medicine (CAM). The Academy is currently reviewing issues for this area, including those relating to evaluation, surveillance, regulation and NHS provision. We welcome the regulatory framework measures introduced by the EU Directive on Traditional Herbal Medicines (2004), the MHRA measures (2005) to register traditional herbal medicines and the proposal to reform section 12 (1) of the 1968 Medicines Act to improve the regulation of unlicensed medicines. Further to these regulatory measures to improve the quality and safety of herbal medicines, the Academy considers that the labelling of herbal medicines should be strictly regulated to prevent false claims of efficacy and to list constituents, effective dosage and clinical indication clearly. The MHRA can also continue to make a valuable contribution to public health by increasing the promotion of the Yellow Card Scheme to encourage reporting of suspected adverse drug reactions by the general public.

MHRA Objective - Information and communication

7. The importance of public engagement in efforts to communicate the risk of adverse drug reactions is described at length in our report '*Safer Medicines'*. Here we emphasise three related points:
    - Public engagement is crucial to efforts to reduce, as well as to communicate, risk.
    - In addition to engaging the public-at-large, it is vital for health practitioners and policymakers to be aware of the benefits and risks associated with interventions, when making decisions about their use (see paragraph 5).
    - The Academy, together with the MRC and Wellcome Trust has highlighted the collective responsibility of all those who conduct, evaluate and use science to communicate more effectively the value of biomedical research and innovation to society.[7] The MHRA has a core role in helping to communicate the benefits as part of its responsibility to provide authoritative information (Question 6).

[6] Details on http://www.acmedsci.ac.uk/download.php?file=/images/publication/Pandemic.pdf.
[7] Further details are in the 2006 Report of the UK Evaluation Forum 'Medical research: assessing the benefits to society' on http://www.acmedsci.ac.uk/download.php?file=/images/publication/Medicalr.pdf.

MHRA Objective - Supporting research and innovation

8. We welcome the key objectives stated by the MHRA in paragraph 4.1 of the consultation and we agree that there will be challenges for the healthcare system in consequence of the new opportunities and practices in pharmaceutical company R&D. In answering Question 9, with particular regard to personalised medicines (paragraph 4.3 of the consultation), we draw on the outputs of our recent meeting on '*Stratified Medicines'*, held in partnership with Roche and GE Healthcare. Among the key issues are:

    - The role of GPRD (paragraph 2.7 of the consultation) and *Connecting for Health* in providing a resource to generate safety signals. This issue has also been addressed in the Academy's 2006 report *'Personal data for public good: using health information in medical research'*[8] and in our recent submission to the House of Commons Health Committee Inquiry into the Electronic Patient Record.[9]
    - The importance of taking a broader view of regulating both *in vivo* (molecular imaging) and *in vitro* diagnostic tests.
    - The need to take a lifecycle approach (paragraph 2.2 of the consultation) in company dialogue with regulatory agencies.
    - The need to provide new incentives to manufacturers to define clinical utility for targeted patient populations (perhaps, based on models of incentives developed to tackle other unmet medical needs (paragraph 2.16 of the consultation).
    - The need to support new dialogue between manufacturers, MHRA and NICE (paragraph 2.18 of the consultation) to agree the objectives and design of clinical programmes. However, as noted in the recent Academy FORUM response to Sir David Cooksey's Review of UK Health Research, it is essential that MHRA regulatory approval and NICE approval remain independent of each other.[10]
    - The importance of the recommendation from the Cooksey Review to introduce conditional approval for therapeutic agents (paragraph 4.4 of the consultation), a point that had been discussed earlier in '*Safer Medicines'*, to allow new drugs in NHS priority areas to be made available to NHS patients following preliminary safety studies and proof of efficacy.

9. When considering the MHRA objective of supporting research and innovation more widely, the Academy wishes to express its concern about the extent to which bureaucracy stifles research. The costs, including the opportunity costs, of existing and new regulatory regimes must be carefully considered

MHRA Objective - European and International Landscape

10. We welcome the efforts of the MHRA to provide leadership at the EU level. The Academy's work on '*Safer Medicines'* and '*Stratified Medicines'* has emphasised the importance of European partnership across a broad front. We agree that the EU Innovative Medicines Initiative is a very significant step forward (paragraph 4.5 of

[8] http://www.acmedsci.ac.uk/p48prid5.html
[9] http://www.acmedsci.ac.uk/p100puid111.html
[10] http://www.acmedsci.ac.uk/p100puid112.html

the consultation) and we urge the MHRA to become a proactive partner in this initiative.

11. In looking beyond Europe (paragraph 5.8 of the consultation), we endorse the MHRA objectives to build international regulatory cooperation. It was announced recently that the FDA and EMEA are expanding their current cooperative activities in terms of scientific dialogue, better regulation initiatives, and sharing of safety information.[11] The MHRA must work to ensure it is fully engaged in this regulatory cooperation.

12. We recognise that the desire to develop European and other international activities may be a challenge given the limited resources available to the MHRA (section 6 of the consultation) but the Academy considers that the wider leadership role is a critical function for the MHRA and one that can draw on excellence at the national level.

We are grateful to Dr Robin Fears for preparing this response.

The Academy of Medical Sciences

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The Academy seeks to play a pivotal role in determining the future of medical science in the UK, and the benefits that society will enjoy in years to come. We champion the UK's strengths in medical science, promote careers and capacity building, encourage the implementation of new ideas and solutions – often through novel partnerships – and help to remove barriers to progress.

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[11] 'Regulatory Cooperation Expanded', June 2007, on www.emea.europa.eu/pdfs/general/direct/pr/regcoopexpanded.pdf.