

Emerging Science and Bioethics Advisory Committee

ESBAC

Discussion paper by the Secretariat

**Horizon Scanning Steering Group
(HSSG)**

Background

1. The Committee considered how to engage in horizon scanning at its last meeting on the 24th of September. The Committee agreed to set up as a sub-group of ESBAC, the Horizon Scanning Steering Group (HSSG), chaired by Professor Peter Littlejohns.
2. The HSSG met for the first time on the 4th of December and agreed its terms of reference and ways of working, establishing the methodology to collect and assess horizon scanning intelligence. These are presented below for discussion and agreement at ESBAC's meeting on the 29th of January.
3. The approach suggested in this paper and subject to ESBAC's comments, will be presented at ESBAC's Forum with the view of further refining the approach and securing further engagement with stakeholders as potential contributors.

Terms of Reference and Membership

4. The Terms of reference, scope and membership for this Group are presented at Annex A. It is expected that all HSSG Members will also abide by ESBAC's Code of Practice.

Ways of Working

Horizon Scanning Methodology

5. The horizon scanning methodology is to be based on a referral system of emerging issues from existing horizon scanning centres as well as ESBAC itself to the HSSG. The HSSG will gather the information by asking these organisations and individuals filling in the draft pro-forma attached at

Annex D. It is envisaged that this process will be done approximately every 6 months – 1 year. The exact timing will vary upon the different organisations involved to minimise the burden of the request.

6. The pro-forma was derived from ESBAC's own topic selection criteria which was itself developed to ensure that topics proposed would fit in with ESBAC's remit.
7. The risk with this approach is that it is heavily reliant firstly on the external contributors and secondly on the quality of the information received, which is expected to vary significantly. Whilst the challenge will actually be to provide incentives for organisations to provide contributions.

Q. ESBAC Members are invited to consider mitigation strategies to the above risks and in particular, how does HSSG ensure collaboration from existing horizon scanners? What incentives/added value/selling point can ESBAC offer to these groups?

8. Equally in the interest of transparency and traceability, the HSSG and ESBAC will need to justify why certain topics/issues will not be taken forwards.

Horizon Scanning criteria

9. It should be possible to set a horizon scanning timescale for each of these topics as it is recognised that different topics will progress at different speeds.
10. Data collected will have to be evaluated for validity and relevance, trends will need to be monitored and priorities assessed, aided by scoring tools which will be developed by the group as appropriate, to make recommendations to ESBAC.

Data sources

11. No single existing horizon scanning activity has yet been found that would cover ESBAC's broad remit. It is therefore advisable to have a multi-pronged approach to ensure maximum coverage of the information being collected. Existing horizon scanning activities could assist ESBAC to gather the information it requires, but would not be sufficient on its own. A broad outline of the structure and mechanism to collect information is presented in Annex B.

12. Sources of horizon scanning information and other horizon scanning activities identified so far are presented at Annex C.

Communications with ESBAC

13. Communications between HSSG and ESBAC will be a two-way. A formal system does not seem necessary, and it is envisaged that the Chair will update the main Committee at each meeting and that other communication is mediated by the Secretariat.
14. However, when HSSG wishes to make recommendations for work to be taken forwards, or if ESBAC wishes to task the HSSG with a new topic, a more considerate approach is required, as set out in paragraph 5 via a pro-forma.

HORIZON SCANNING STEERING GROUP

Terms of Reference

Definition

The definition from the Chief Scientists Advisory Committee for horizon scanning is used: “the systematic examination of potential threats, opportunities and likely developments including but not restricted to those at the margins of current thinking and planning. Horizon scanning may explore novel and unexpected issues as well as persistent problems or trends.”

Purpose

To gather evidence, detect signals, cross cutting scientific issues and general trends and consider their implications in healthcare science to advise ESBAC on emerging developments and their ethical, legal, social and economic implications, relevant to ESBAC’s remit. This will provide strategic early warning to ESBAC, that will challenge and test current policy thinking by acknowledging future uncertainties.

Scope

The scope is to:

- Gather information, detect signals and trends to identify emerging technologies in healthcare that could have implications for the health system.
- Consider ethical, legal, social and economic implications of the technologies identified and gather further information as required.
- Identify any gaps or areas of duplicated effort.
- Participate in networks to gather intelligence.
- Report to ESBAC and make recommendations on emerging issues which could be of immediate, medium or long term interest.
- Review the effectiveness and purpose of the horizon scanning methodology.

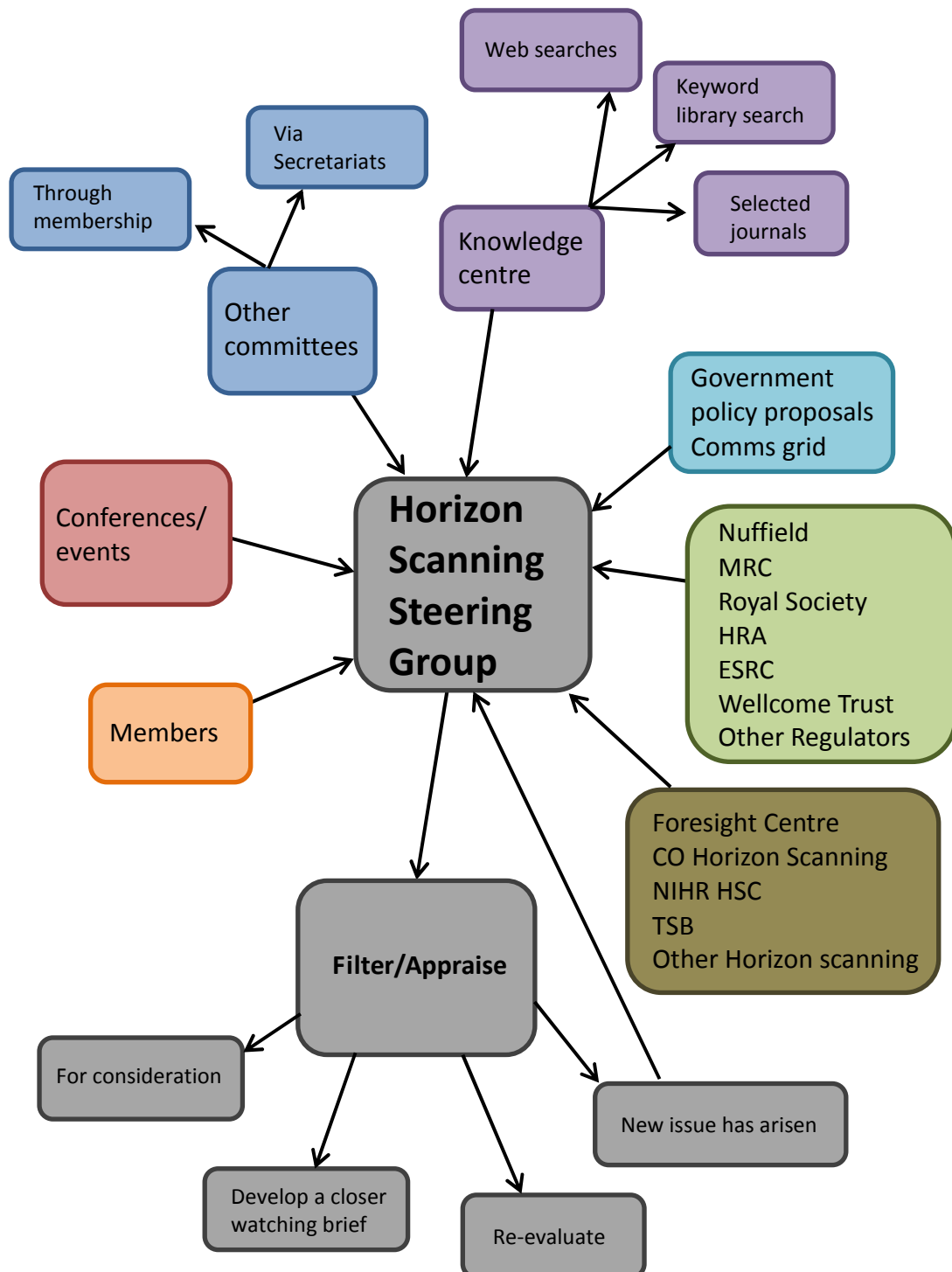
Meetings

Ideally, the HSSG should meet before every meeting of the ESBAC main Committee. This will therefore be 3/4 times a year.

Horizon Scanning Steering Group Membership

- Professor Peter Littlejohns (Chair and ESBAC Member)
- Professor Sir Alasdair Breckenridge (ESBAC Chair)
- Mr James Peach (ESBAC Member)
- Professor Joyce Tait (ESBAC Member)
- Dr Peter Mills (Nuffield Council on Bioethics)
- Mr Oliver Grant (Foresight Centre)
- Dr Claire Packer/ Dr Sue Simpson (NIHR Horizon Scanning Centre and EUROSCAN)
- Dr Neil Ebenezer (MHRA)
- Paul Mason (TSB)
- PHE (TBC once set up)
- Ideally each area of interest could be championed by a Member or external person, e.g. stems cells, legal framework, etc.
- International – TBC

Annex B



Annex C

Main Organisations for Horizon scanning activities

National Institute for Health and Clinical Excellence (NICE)
BBSRC
Association of Medical Research Charities
NHS Involve (patient engagement)
National Institute for Health Research (NIHR) Horizon Scanning Centre (HSC)
Information Commissioner
Parliamentary Committees at both UK and European level
European Group on Ethics
European Regulations Agency
US Food and Drug Administration (FDA)
Scottish Council on Human Bioethics
UK Medicines Information
UK PharamScan
National Prescribing Centre
Health and Safety Executive
Health Protection Agency- Rapid review panel
National Genetics Reference Laboratories
BIS Foresight Centre
International Information Network on New and Changing Health Technologies
The Centre for Science and Policy (CSaP) at the University of Cambridge
The Parliamentary Office of Science and Technology (POST)
The Science and Technology Facilities Council (STFC)
Scotland's Futures Forum
Finland's Committee for the Future
The Centre for Workforce Intelligence (CfWI)
International Network of Agencies for Health Technology Assessment
Health Technology Assessment Database
Health Technology Assessment International
Technology Strategy Board

Annex D

ESBAC Horizon Scanning DRAFT Pro-forma

[The pro-forma below, definitions and explanatory note will be refined further]

New advance			
Issue raised			
Likelihood of impact		Timeliness	
Scale of impact			
Impact on DH/NHS/ Government			
Suggested policy actions now			
Source			
ESBAC suggester		ESBAC reviewer	
Further details			
Uniqueness			
Realistic work (deliverable) and resources			

Please return the filled pro-forma to ESBAC secretariat at esbac@dh.gsi.gov.uk, and add the ESBAC suggester's initials and a unique number to the file name so we can tell each pro-forma apart e.g. "JP1", "DA7"

Notes to completing the ESBAC Horizon-Scanning Pro-forma

Areas identified should involve a new advance in health-related science and/or clinical application and raise a relevant ethical, legal, social or economic issue as set out in the ESBAC terms of reference, as well as being applicable to policy-making.

New Advance: This should be approximately 20 words long and should identify the area in which the change is happening (e.g. genomics, data access, stem cells), and what the change is (e.g. routine assessment of germline DNA, extraction and storage of pluripotent cells). It should make clear what the relevance is to the ESBAC terms of reference, if this is in doubt.

For this purpose, the term emerging technology can be defined as: [DN text to be further refined by the HSSG]

“An emerging technology is a technology that has only recently emerged, or is still emerging, from the science base. It allows something to be done that wasn’t previously possible or was possible only in theory. It creates a totally new value proposition, and consequently has the potential to disrupt existing markets. Emerging technologies might be adopted by existing businesses or new entrants.

By *recently emerged* it is intended recent relative to the anticipated lifetime of the technology - so something that will be in use for decades could be “only recently emerged” several years after the first early adopters picked it up, but a fast moving digital product might be well established in only a few months. By value proposition we were really thinking about commercial value – but in a healthcare context it could easily be taken to be value to patients or value to clinical practitioners, as well as to business.”

Issue raised: This should be approximately 30 words long and should identify the main area in which the issue is raised (e.g. ethical, legal, social or economic) and what the main issue is expected to be. If there is one, please identify which ESBAC sub-group or theme this fits into

Likelihood of impact: A percentage figure estimating to the nearest 20% how likely the impact is to happen, in the absence of any action from ESBAC on this topic

Timeliness: Will this impact happen in the: next year, 1-2 years, 2-5 years, 5-10 years?

Scale of impact: High – largest opportunity/threat over 5 years, Medium – largest opportunity/threat in any one year, Low – requires policy response

Impact on DH/NHS: No more than 20 words outlining what the impact is, any organisations or groups that are particularly affected, and any idea of scale. Impact can be positive or negative

Suggested policy actions now: No more than 20 words recommending what ESBAC could recommend to policymakers to maximise benefit and minimize risk from this issue. It should make clear what the relevance is to policy, if this is in doubt.

Source: Name and contact details (email or phone) of source (organisation, individual, ESBAC member)

ESBAC suggester: ESBAC member who has identified this issue and can describe it further to the committee

ESBAC reviewer: 2nd ESBAC member identified by suggester who is qualified to review and confirm the details in the pro-forma

Further details: Up to 100 words of extra information that would help an ESBAC member understand the issue – including website links if appropriate.

Uniqueness: Details of on-going work already answering this question (with contacts), or other organisations whose statutory remit this falls under.

Realistic work and resources: An idea of the work required to assess or review this issue and recommend a policy response. If this goes beyond discussion, group and individual work at ESBAC, what is the work required and what organisation can ESBAC realistically call on to do this?