INTRODUCING NEW TECHNOLOGIES INTO THE NHS IN SCOTLAND

A PRACTICAL GUIDE FOR INDUSTRY
FOREWORD FROM THE CO-CHAIRS OF THE LIFE SCIENCES ADVISORY BOARD

Life Sciences is a key sector of the Scottish economy. We have one of the largest and fastest growing life sciences communities in Europe. Our national strategy for life sciences\(^1\) is to develop an environment where ingenuity and innovation can flourish, and to produce health benefits for Scotland and the global community.

The Scottish Government recognises the important role that the life sciences sector plays in improving Scotland’s economic performance in today’s knowledge-based economy, and its potential for growth and is working in partnership with its stakeholders to build on this success.

The NHS in Scotland has a number of key roles in the development and uptake of new technologies to improve and enhance the delivery of healthcare interventions. Not only is the NHS in Scotland a major customer in the market place through national and local procurement, it also provides clinical and research expertise in conjunction with the academic and the life sciences sectors. The ultimate aim of the recently launched Healthcare Quality Strategy for NHSScotland\(^2\) is to deliver the highest quality healthcare services to people in Scotland and through this to ensure that the NHS in Scotland is recognised as amongst the best in the world. This is intended to ensure that the NHS in Scotland provides the most appropriate treatments, interventions, support and services at the right time to everyone who will benefit, and that wasteful and harmful variation is eradicated. A major dimension in securing this ambition is having in place systems and processes to ensure that the NHS in Scotland can access new healthcare technologies. This means stimulating and supporting ideas for new technologies which result in better clinical care and patient outcomes. This is an important element of the Chief Scientist Office’s Strategy \textit{Investing in Research: Improving Health}\(^3\) which was launched in December 2009 and aims for a step change in translating research findings into health and economic benefits.

Stakeholders from industry, Scottish Government, Scottish Enterprise and the NHS worked together to design a practically focused guide in the context of broader strategic developments noted above.

\(^2\) [http://www.scotland.gov.uk/Publications/2010/05/10102307/0](http://www.scotland.gov.uk/Publications/2010/05/10102307/0)
\(^3\) [http://www.cso.scot.nhs.uk/](http://www.cso.scot.nhs.uk/)
For the purpose of this document medical technologies (MedTech) are defined as healthcare products used to prevent, diagnose, monitor and treat diseases in human beings. They aim to improve the quality of health care delivered and patient outcomes through earlier diagnosis, less invasive treatment options and reductions in hospital stays and rehabilitation times.

Pharmaceuticals and any products ingested by the body were specifically excluded. The Scottish Government has issued specific guidance on the introduction and uptake of new medicines in the NHS in Scotland\(^4\).

This guide provides contacts and information to help companies navigate the NHS in Scotland by knowing who to contact and at which points in the product development journey.

Further work is planned to review the way in which the NHS in Scotland considers new technologies in the wider strategic context. Accordingly this guide will continue to evolve in the light of experience and your participation would be welcomed.

Nicola Sturgeon, MSP  
Deputy First Minister and Cabinet Secretary for Health and Wellbeing  
Co-Chair, Life Sciences Advisory Board

Dr John Brown, FRSE  
Roslin Foundation  
Co-Chair, Life Sciences Advisory Board

INTRODUCTION

Purpose

The Life Sciences Advisory Board (LiSAB) signalled the importance of companies developing medical technologies (MedTech) in Scotland being able to work collaboratively with NHSScotland. This is to ensure that there are appropriate opportunities for the development and introduction of new products in Scotland, supported and informed by the clinical and service needs of the NHS.

This practical guide has been produced to assist companies to engage with the NHS in Scotland; to understand the opportunities for collaborative working; where to go to get help and support including trialling and testing; and ultimately to bring to the market products which are cost and clinically effective in meeting clinical and service needs.

Strategic Direction

While this guide is intended to be practically focused it comes at a time of significant strategic development both in the NHS in Scotland and in the Life Sciences Sector. Accordingly, it will be kept under review in light of ongoing developments.

How To Use This Guide

In essence, this guide provides a broad overview of NHS arrangements (with additional information from the sources listed) together with a number of key contacts for advice and support. Due to the inherent complexity of the system there is no simple or single route which can cover every circumstance. However, as far as possible the key contacts listed are well placed to identify appropriate access points in accordance with the specific nature of any enquiry or request – these are summarised in the form of ‘touchpoints’ with full contact details provided under relevant sections. A conceptual overview is provided at Annex A. Key contacts are organised under the following headings which are intended to reflect key stages development process:

- developing and scoping ideas
- testing and development in clinical and service settings
- assessment and evaluation
- adoption, ongoing assessment and displacement
- support and networking
Publication and Review

Following publication this guide will be reviewed and evaluated through practical application over 2010 – 2011 in conjunction with industry contacts and the NHS for comprehensiveness and effectiveness. This will provide an opportunity to ensure it evolves in line with practical experience, the broader strategic developments taking place across the NHS and the Life Sciences Sector, and increasingly to incorporate case studies and further guidance reflecting its use.

Monitoring

In order to demonstrate value it will be necessary to obtain qualitative feedback on the use and application of the guide as well as quantitative information on impact in terms of engagement between companies and the NHS.

This will include:

• approaches to NHS R & D
• number of studies (commercial/joint) planned
• number of studies (commercial/joint) undertaken
• feedback from the NHS and companies as to whether the guide has directly supported engagement
• level of substantive interest in new products
• number of health technology assessments scoped and undertaken
• number of approaches to the Health Procurement Development Group
Further Information

The following websites provide general background information:

- Life Sciences Scotland (www.lifesciencesscotland.com)
- SHOW (NHSScotland) (www.show.scot.nhs.uk); a list of all territorial NHS Boards is provided at Annex B
- National Procurement (NHSScotland) (http://www.nhsnss.org/pages/divisions/national_procurement.php)
- Chief Scientist Office (CSO) (http://www.cso.scot.nhs.uk/)
- Association of British Healthcare Industries (ABHI) (http://www.abhi.org.uk)
- The Bioindustry Association (BIA) (http://www.bioindustry.org)
- Scottish Health Innovations Limited (SHIL) (http://www.shil.co.uk)
- NEXXUS (http://www.nexxusscotland.com/)
- BioDundee (http://www.biodundee.co.uk)
- Scottish Stem Cell Network (http://www.sscn.co.uk)
- Scottish Bioinformatics Forum (http://www.sbforum.org)
TOP TIPS

The development of this guide has identified a number of key dimensions to support effective collaboration with the NHS. These are set out below and will be developed further in the light of practical experience:

• **Be Visible** – ensure that NHS organisations in Scotland are aware of your products and those under development.

• **Network** – there are many opportunities to engage formally and informally with colleagues through networks and organisations across industry, academia and the NHS.

• **Understand the System** – the NHS is inherently complex. In Scotland 14 territorial NHS Boards are responsible for the planning and provision of NHS services for their populations and are accountable to Scottish Ministers. In addition there are a number of NHS organisations operating at national level to deal with specific specialist services and to support territorial NHS Boards e.g. NHS Quality Improvement Scotland, NHS Education Scotland, National Services Scotland (including National Procurement). The Scottish Government sets national policy and direction for the NHS in Scotland and undertakes a number of key functions in relation to, for example, R&D through the Chief Scientists Office.

• **Enhance Care** – in supporting the drive to improve the quality of care in the NHS and to contribute to economic development more broadly, opportunities to demonstrate obsolescence and/or the potential for economies through disinvestment of existing technologies can help the drive for acceptance of a new technology.

• **Get the Evidence** – NHSScotland must demonstrate value for money. Accordingly in considering new technologies it is important that new products demonstrate clinical and cost effectiveness and that clinical and service needs are being met in accordance with NHS national and local priorities. There are established governance arrangements in NHS Boards which determine the nature and types of products which will be used within the NHS. Demonstrating clinical interest and having a business case can help to drive local adoption.

• **Provide Feedback** – Does this guide offer practical help; how could it be improved; can you share your experience; do you have a good story to tell? If so, this information will be invaluable in supporting the development of this guide in the future. Please send any comments to veronica.moffat@scotland.gsi.gov.uk.
**Example**

Antoxis [http://www.antoxis.com/](http://www.antoxis.com/) worked with the Scottish National Blood Transfusion Service to consider the potential of a new product. Having the right level of access at director level led to the involvement of senior managers and R&D colleagues, who were able to ensure rapid consideration and assessment. This meant that a quick response could be provided and a change in direction for the proposal resulting in a joint paper with the NHS which triggered engagement with a major pharmaceutical company. Further information is available from Scott Johnstone, Chief Executive Officer, Antoxis (asjohnstone@antoxis.com)
‘Touchpoints’

The feedback provided during the development of this guide underlined the importance of ‘touchpoints’ – key contacts within the system who can be approached at particular stages in the process. A summary is provided below.

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KEY STAGES

The introduction of new products in the NHS reflects various stages of development. The initial stages of finding an idea and testing it with a view to full development requires consideration of its functionality, the regulatory requirements, clinical application, together with manufacturability. It is clear that the NHS can drive innovation. The overall process can be considered under the following broad headings, acknowledging that there will be a degree of overlap and iteration.

Developing and Scoping Ideas

Clinicians and companies wishing to develop products for use within NHSScotland should seek advice about their ideas from NHS R & D Directors and National Procurement to check the wider needs of the NHSScotland at the instigation stage. It is recognised that companies will value clear signals at an early stage of the viability or otherwise of a new development.

NHS Research & Development

Individual R&D Directors at all Health Boards are available to provide support for single site clinical study requests.

Specifically, R&D Directors can assist by:

- facilitating links to clinicians who may be able to offer reality checks for ideas and clinical liaison for the development of potentially novel products;
- aiding in the design and set up of commercial clinical studies of new products and services;
- assisting in fulfilment of regulatory requirements;
- negotiating fair priced contracts for conduct of clinical studies;
- considering shared risk/shared reward arrangements in cases of limited funds.
Key Contacts

Professor Chris Packard, R&D Director, NHS Greater Glasgow and Clyde
Chris.j.packard@gmail.com

R&D Management Office
NHS Greater Glasgow and Clyde
The Tennent Institute
Western Infirmary
Church Street
Glasgow
G11 6NT

Professor Dave Newby, R&D Director, NHS Lothian
d.e.newby@ed.ac.uk

R&D Office
NHS Lothian
Royal Infirmary of Edinburgh
51 Little France Gardens
Edinburgh
EH16 4SA
Professor Alison Macleod, R&D Director, NHS Grampian
mmd175@abdn.ac.uk
R&D Office
Foresterhill House Annexe
Foresterhill
Aberdeen
AB25 2ZB

Prof Jill Belch, R&D Director, NHS Tayside
jj.belch@dundee.ac.uk

Tayside Academic Health Science Centre
R&D Office
Ninewells Hospital and Medical School
Residency Block B, Level 3
George Pirie Way
Dundee
DD1 9SY
National Procurement (within NHS National Services Scotland)

National Procurement can:

- horizon scan through Strategic Steering Groups and Commodity Advisory Panel (CAPs);
- provide early advice to companies to help them understand the NHS in Scotland and what its requirements will be at the time of potential procurement;
- provide guidance to companies based on the recommendations and requirements from their Strategic Steering Groups in particular fields;
- facilitate sources of advice/support.

Key Contacts
Contact: Jim Miller, Director of Strategic Sourcing, National Procurement
Email: j.miller5@nhs.net
Telephone: 01698 794450
Website: www.NHSScotlandProcurement.scot.nhs.uk

NHS National Procurement
Canderside
2 Swinhill Avenue
Larkhall
ML9 2QX
Testing and Development in Clinical and Service Settings

NHS Boards and NHS Research Scotland (NRS)

NHS Boards can:

- conduct clinical trials for innovative products; and
- facilitate sources of advice/support

Contact with NHS Boards for these purposes will be through the R&D Directors for single site studies and NHS Research Scotland for multi-site studies.

Key Contacts

NHS R&D Directors

Professor Chris Packard, R&D Director, NHS Greater Glasgow and Clyde
Chris.j.packard@gmail.com

Professor Dave Newby, R&D Director, NHS Lothian
d.e.newby@ed.ac.uk

Professor Alison Macleod, R&D Director, NHS Grampian
mmd175@abdn.ac.uk

Prof Jill Belch, R&D Director, NHS Tayside
jj.belch@dundee.ac.uk

See above for addresses
NHS Research Scotland (NRS) – Permissions Co-ordinating Centre

NHS Research Scotland (NRS) offers a portal for fast, efficient approval of multi-centre clinical research studies and a point of contact through which Scottish research expertise can be accessed by industry.

NRS works on the principle that a decision taken by one Health Board is accepted by all others. It removes duplication, minimises bureaucracy and enables R&D approvals and contracting to be undertaken quickly for multi-centre clinical studies taking place within NHSScotland. NRS operates through R&D Directors at the four medical sites in Scotland (NHS Grampian; NHS Greater Glasgow & Clyde; NHS Lothian; and NHS Tayside).

Key Contacts
Contact: NHS Research Scotland Permissions Coordinating Centre
Tel: 01224 552 690
Email: NHSG.NRSCC@nhs.net
Website: www.nhsgrampian.com/nrscc

Research & Development Office
Foresterhill House Annexe
Foresterhill
ABERDEEN
AB25 2ZB
Assessment & Evaluation

Scottish Health Technologies Group (SHTG)

The SHTG can consider referred health technology topics for:

• clinical effectiveness – e.g. is the health technology effective in standard NHS practice, producing outcomes which are of importance to patients?;
• cost effectiveness/economic evaluation – e.g. identifying the costs and benefits of using the technology?;
• patient issues – e.g. what are the psychological, social and ethical issues for patients, families and carers?; and
• organisational issues – e.g. are there any training, service reorganisation and equipment issues related to the technology?

Key Contacts
Contact: Doreen Pedlar
Email: doreen.pedlar@nhs.net
Telephone: 0141 225 6999
Website: http://shtg.nhshealthquality.org

NHS Quality Improvement Scotland
Delta House
50 West Nile Street
Glasgow
G1 2NP
Adoption, Ongoing Assessment and Displacement

Purchasing new products can take place through national and local procurement. National Procurement is responsible for securing contracts at national level. NHS Boards are responsible for local decisions with decisions taken at different levels depending on the nature of the product and who has authority to commit resources.

National Procurement Scotland

Once companies have a fully developed and tested product, National Procurement can:

- clarify potential for national procurement opportunities; and
- provide advice on national contracting arrangements.

Key Contacts
Contact: Andrew Marsden, Medical Adviser
Email: andrewmarsden@nhs.net
Telephone: 0131 275 7139
Website: www.NHSScotlandProcurement.scot.nhs.uk

Room 165
Gyle Square
1 South Gyle Crescent
Edinburgh
EH12 9EB
NHS Boards Procurement Specialists

Individual NHS Boards may consider uptake of new products, and consider where concomitant disinvestment can occur, taking advice from a variety of sources. Adoption of new technologies by NHS Boards could be facilitated by the local Heads of Procurement (HOPs) who come together within a national group co-ordinated by National Procurement (see above). Contact details for individual NHS Boards are provided on their websites (Annex B).

Making contact with local Heads of Procurement is most appropriately facilitated by the Health Procurement Development Group which is part of National Procurement.

Key Contacts
Contact: Jim Miller, Director of Strategic Sourcing, National Procurement
Email: j.miller5@nhs.net
Telephone: 01698 794450
Website: www.NHSScotlandProcurement.scot.nhs.uk

See above for address
Support and Networking

Guidance and support throughout the process can be provided by organisations with knowledge of what companies need, for example Scottish Enterprise and industry organisations such as the Bio Industries Association (BIA) and the Association of British Healthcare Industries (ABHI)

Scottish Enterprise

Scottish Enterprise can provide:

- international market intelligence e.g. healthcare systems, international market identification;
- innovation support service;
- access to national and international networks;
- investment opportunities;
- signposting to other possible sources of advice/support;
- promotion of the Innovations Pathway to MedTech companies;
- signposting SMEs to the appropriate part of the Pathway at each stage of the development of the product;
- market trend information to the MedTech community; and
- account management support to companies.

Key Contact
Contact: Ulrike Knies-Bamforth
Email: Ulrike.Knies-Bamforth@scotent.co.uk
Telephone: 0131 313 6011
Website: www.scottish-enterprise.com

Scottish Enterprise
Apex House
99 Haymarket Terrace
Edinburgh
EH12 5HD

BioIndustry Association Scotland
The strength of bioscience in Scotland and the BIA's commitment to serving members' interests in this important market is reflected in the BIA Scotland office, based in Edinburgh. Established in 2001, BIA Scotland represents over 60 members in the Scottish bioscience sector. Scottish members benefit from tailored services, events and representation to more closely meet the particular needs of those operating in Scotland.

Key Contacts
Contact: Scott Johnstone, Director
Email: sjohnstone@bioindustry.org
Telephone: Tel: +44 (0)131 523 0498
Fax: +44 (0)131 523 0491
Website: http://www.bioindustry.org

BIA Edinburgh Office
Crichton's House
4 Crichton's Close
Edinburgh
EH8 8DT
Association of British Healthcare Industries

ABHI’s purpose is to promote the rapid adoption of medical technologies to ensure optimum patient outcomes throughout the UK and in key global markets.

With over 200 company members ABHI is the voice of the medical technology sector, championing industry to the NHS, Government, regulators and stakeholders.

Key Contacts
Contact: Andy Taylor, Director of Healthcare Policy
Email: andy.taylor@abhi.org.uk
Telephone: +44 (0)20 7960 4360
Fax: +44 (0)20 7960 4361
Website: http://www.abhi.org.uk

111 Westminster Bridge Road
London
SE1 7HR
Annex A

**Innovation**

**Companies**
(with Academia/Clinicians)
Innovate; Develop; Respond to Calls for New Products

**Scottish Enterprise/BIA/ABHI**
Support; Advice; Networking; Market Intelligence; Investment Opportunities

**NHS**
R&D; Procurement; Health Technology Assessment; Clinical Testing/Trials; Service Planning and Needs Assessment; Planning and Provision of NHS Services

**Development**

**Adoption**

**Assessment and Evaluation**
Annex B
NHS Boards (Territorial)

NHS Ayrshire & Arran

NHS Borders
http://www.nhsborders.org.uk/

NHS Dumfries & Galloway
http://www.nhsdg.scot.nhs.uk/dumfries/CCC_FirstPage.jsp

NHS Fife
http://www.nhsfife.scot.nhs.uk/

NHS Forth Valley
http://www.nhsforthvalley.com/

NHS Grampian
http://www.nhsgrampian.org/nhsgrampian/gra_display_home.jsp?p_applic=CCC&p_service=Content.show&pContentID=71&

NHS Greater Glasgow & Clyde
http://www.nhsggc.org.uk/content/

NHS Highland
http://www.nhshighland.scot.nhs.uk/Pages/welcome.aspx

NHS Lanarkshire
http://www.nhslanarkshire.org.uk/Pages/default.aspx

NHS Lothian
http://www.nhslothian.scot.nhs.uk/

NHS Orkney
http://www.ohb.scot.nhs.uk/

NHS Shetland
http://www.shb.scot.nhs.uk/

NHS Tayside
http://www.nhstayside.scot.nhs.uk/

NHS Western Isles
http://www.wihb.scot.nhs.uk/