

# The Road to Recovery

## Hard to swallow

Dysphagia Following Acute Stroke

*A review of issues relevant to  
Allied Health Professionals  
and Nurses*



Scoping Report

January 2007

© NHS Quality Improvement Scotland 2007

First published January 2007

You can copy or reproduce the information in this document for use within NHSScotland and for educational purposes. You must not make a profit using information in this document. Commercial organisations must get our written permission before reproducing this document.

[www.nhshealthquality.org](http://www.nhshealthquality.org)

## **Contents**

<b>Executive Summary</b>	<b>1</b>
<b>1 Introduction</b>	<b>2</b>
<b>2 Background</b>	<b>3</b>
<b>3 Scoping process</b>	<b>5</b>
<b>4 Outcomes and Findings</b>	<b>7</b>
<b>Appendices</b>	
<b>1 Topic Specific Group Process</b>	<b>8</b>
<b>2 Allied Health Professions Network Members</b>	<b>9</b>
<b>3 Dysphagia Workshop Membership</b>	<b>10</b>
<b>4 Mind Map of SIGN Guideline</b>	<b>11</b>
<b>5 Bibliography</b>	<b>12</b>



## Executive Summary

The Allied Health Professions (AHPs) Clinical Effectiveness and Practice Development network was established in 2001 with the aim of promoting the use of evidence in practice, sharing best practice and building the confidence of AHPs to engage with the clinical effectiveness and clinical governance agenda.

To take this work forward, the NHS Quality Improvement Scotland Practice Development Unit (NHS QIS PDU) set up a process of engaging with AHPs to identify clinical improvement priorities within specific topic areas in June 2005 with stroke being one of the key topics. The first stroke specific project to be addressed by the network was dysphagia following acute stroke for the following reasons:

- Dysphagia (difficulty in swallowing), can be caused by many pathologies but it is a frequent and potentially serious complication of stroke.
- NHS QIS Stroke Services Standard (2004) specify a swallow screen on the day of admission as an essential criteria in the management of patients admitted to hospital with a diagnosis of stroke.
- The NHS QIS national review of stroke services in 2005 identified the swallowing screen criteria as a challenging area for a number of sites across Scotland, with the lack of documentation and audit data being a main factor.

A scoping process was designed to focus on the issues related to practice and use of evidence by AHPs in the area of dysphagia. This report describes the process and outcome of this work.

The consensus reached by workshop participants was that there was a considerable amount of evidence and guidance already available and that the area of greatest difficulty and requiring the most development related to the translation of this evidence into practice. In essence, the challenge is in giving AHPs the knowledge, skills, confidence and competency to use the evidence to improve and develop their practice. The development of further guidance was not recommended and the NHS QIS PDU will now focus on working with key stakeholders to develop and deliver a programme of practice development during 2007/08 aimed at improving the care of people with dysphagia following acute stroke.

## 1 Introduction

Stroke is the third most common cause of death and the most frequent cause of severe adult disability in Scotland. Over 70,000 individuals are living with stroke and its consequences, and each year there will be approximately 15,000 new diagnoses of stroke. Immediate mortality is high and approximately 20% of stroke patients die within 30 days.

Dysphagia (difficulty in swallowing) is a frequent and potentially serious complication of stroke. Dysphagia is categorised by “difficulty moving food or liquids from the mouth to the stomach without aspiration. It may also involve difficulty in oral preparation for the swallow, such as chewing and tongue movement”

It has been estimated that as many as 45% of all stroke patients suffer from dysphagia following a stroke and although this may resolve in a large number of patients, the associated risks and complications make this an area requiring early screening and intervention. The main diagnostic test used to identify people with dysphagia is known as the swallow screen. A swallow screen is a simple water test to check for difficulty in swallowing.

The NHS QIS Stroke Services Standard (2004) identified swallow screen on the day of admission as an essential criteria in the management of patients admitted to hospital.

The national review of stroke services in 2005 identified the swallowing screen criteria as a challenging area for a number of sites across Scotland, with the lack of documentation and audit data being a main factor.

## 2 Background

The Allied Health Professions (AHPs) Clinical Effectiveness and Practice Development network was established in 2001 with the aim of promoting the use of evidence in practice, sharing best practice and building the confidence of AHPs to engage with the clinical effectiveness and clinical governance agenda.

To take this work forward, the NHS Quality Improvement Scotland Practice Development Unit (NHS QIS PDU) set up a process of engaging with AHPs to identify clinical improvement priorities within specific topic areas in June 2005 and rehabilitation after stroke is now one of the key topics on which the network is focusing. The first stroke specific project to be addressed by the network was dysphagia following acute stroke for the following reasons:

- Dysphagia (difficulty in swallowing), can be caused by many pathologies but it is a frequent and potentially serious complication of stroke.
- NHS QIS Stroke Services Standard (2004) specify a swallow screen on the day of admission as an essential criteria in the management of patients admitted to hospital with a diagnosis of stroke.
- The NHS QIS national review of stroke service in 2005 identified the swallowing screen criteria as a challenging area for a number of sites across Scotland, with the lack of documentation and audit data being a main factor.

Working with nine of the allied health professions (Appendix 2), a scoping process in the area of stroke identified areas of AHP intervention which AHPs considered to be clinical improvement priorities. Priorities were identified in areas where there was a need for:

- audit or information gathering
- advice and guidance on effective treatment/intervention
- evidence about effectiveness of intervention
- sharing of best practice across Scotland
- evidence of impact of an initiative/change in practice
- consensus about best treatment or assessment tools.

The area of dysphagia following acute stroke was identified and agreed

by a multiprofessional AHP group as one of the topics which should be reviewed due to concerns raised in relation to:

- lack of a standardised approach in practice
- difficulties in achieving the SIGN guideline and QIS standards
- poor compliance with longer term follow up
- effective use of Speech and Language Therapist and Dietetic expertise
- nutritional issues in relation to supplements and nil by mouth
- lack of specific AHP guidance and best practice information.

### **Patient Focus Public Involvement**

The issue of engaging with patients and the public was raised as part of the initial topic specific group process in 2005. Following discussions with the NHS QIS public partnership co-ordinator it was agreed that the scoping processes being undertaken with the AHP network related directly to clinical practice at this stage and would not include consultation with patients. Any subsequent work undertaken as a result of the scoping process will include patient participation.

### 3 Scoping process

Mindful of the existing guidance and evidence in the area of dysphagia, a scoping process was designed to focus on the issues related to practice and use of evidence by AHPs.

A group of healthcare practitioners with expertise or interest in the topic were invited to attend a workshop in May 2006 (Appendix 3).

The scoping process was designed with the following aims to:

- reaffirm the level of existing evidence and guidance
- identify examples of good practice
- explore issues relating to current practice, identifying areas of concern
- identify what further actions, if any, were required to improve the management of dysphagia with particular reference to AHP interventions

SIGN had already completed a systematic review of evidence in 2004 and it was agreed that a further literature review was not required. SIGN 78 was, therefore, extrapolated into a 'mind-map' and used as a tool to aid discussion at the scoping workshop (Appendix 4).

#### **SIGN 78 topic areas discussed:**

- Screening (including dysphagia assessment, nutrition and medication)
- Interventions (Percutaneous Endoscopic Gastronomy(PEG) and Nasogastric(NG) and potential complications)
- Discharge (including community support, continuing evaluation, remote and rural settings)
- Ethics
- Therapy (diet modification, compensatory techniques, oral care)
- Patient and carer issues
- Potential complications
- Local initiatives
- Learning and knowledge
- Other factors (including smoking, co-morbidity, respiratory disease, immobility)

Workshop participants were asked a number of questions in relation to each topic area within the SIGN guideline.

- 1 Is there a problem in this area?
- 2 What is the scale of the problem?
- 3 Is there already national or local development work underway in this area of which you are aware?
- 4 If there is a problem in this area what might the solution or recommendation be?

The scoping process developed by the Practice Developed Unit was experimental and lessons learned from this workshop have been used to further develop scoping processes and skills for use in other topic areas. Practitioners views as to the value and benefit of undertaking this sort of scoping process are important and one participant commented after the event

"I think the scoping exercise has been excellent for pinpointing the actual issues. Very often the first reaction is to 'get more evidence' and I am pleased that we resisted that and were able to get to see what the true issues were."

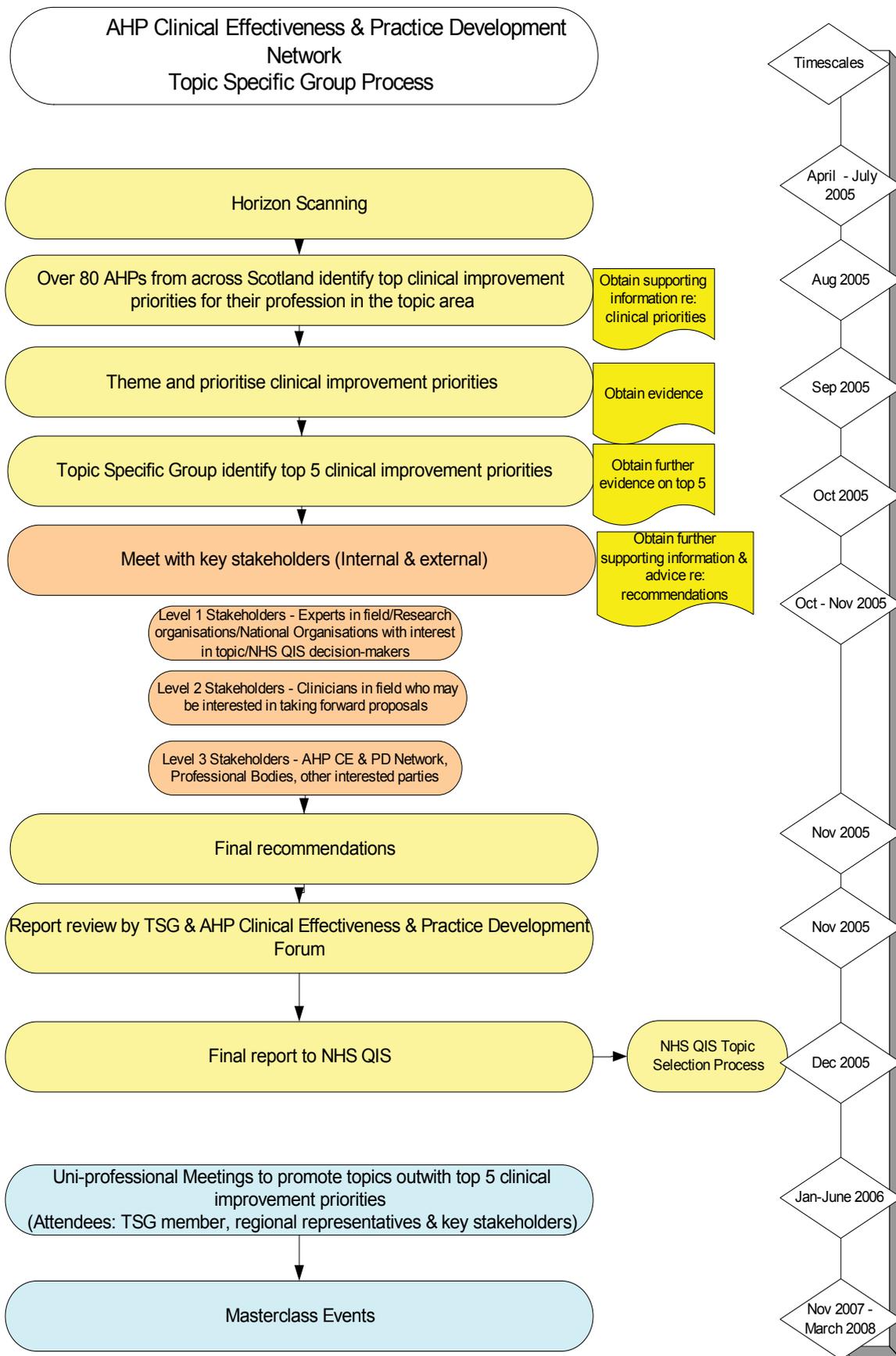
## 4 Outcomes and Findings

The discussion highlighted that, despite the evidence in relation to dysphagia management, this area continues to be a challenge and of concern for many practitioners. The consensus reached by participants was that there was a considerable amount of evidence and guidance already available, and the area of greatest difficulty and requiring the most development related to the translation of this evidence into practice. In essence, the challenge is in giving AHPs the knowledge, skills, confidence and competency to use the evidence to improve and develop their practice.

The development of further guidance was not recommended, and the NHS QIS PDU will now focus on working with key stakeholders to develop and deliver a programme of practice development during 2007/08 aimed at improving the care of people with dysphagia following acute stroke.

# Appendix 1

## Topic Specific Group Process



## Appendix 2

### Allied Health Professions Network Members

Arts Therapists	use music, art or drama as a therapeutic intervention to help people with physical, mental, social and emotional difficulties
Dietitians	translate the science of nutrition into practical information about food. They work with people to promote nutritional wellbeing, prevent food related problems and treat disease
Occupational Therapists	help people to overcome physical, psychological or social problems arising from illness or disability, by concentrating not on what they are unable to do, but on what they may be able to achieve
Orthoptists	assess and manage a range of eye problems, mainly those effecting the way the eyes move, such as squint (strabismus) and lazy eye (amblyopia)
Orthotists	provide braces, splints and special footwear to help patients with movement difficulties and to relieve discomfort
Prosthetists	design and fit artificial replacements or prostheses for upper and lower limbs
Podiatrists	specialise in the assessment, treatment and management of patients with foot and lower-limb disorders. They play a particularly important role in helping people to stay mobile and, therefore independent
Physiotherapists	treat the physical problems caused by accidents illness and ageing, particularly those that affect the muscles, bones, heart, circulation and lungs
Radiographers - Diagnostics	produce high-quality images of organs, limbs and other parts of the body so that disease and injuries can be assessed and diagnosed
Radiographers - Therapeutic	use high-energy radiation to treat cancer and other conditions
Speech and Language Therapists	work with people who have problems with communication, including speech defects, or with chewing or swallowing

## Appendix 3

### Dysphagia Workshop Membership

<b>Name</b>	<b>Title, organisation</b>
Sheena Borthwick	Speech & Language Therapist; Clinical Specialist in Stroke, NHS Lothian
Iris Clarke	Speech & Lanague Therapy Advisor for Adult Disorders, NHS Highland
Helen Davidson	Catering Review Dietitian, NHS Scotland Food and Nutrition Adviser, NHS Greater Glasgow & Clyde
Martin Dennis	Professor of Stroke Medicine, University of Edinburgh
Sheila Fettes	Specialist Practitioner in Home Enteral Nutrition, NHS Tayside
Rachel Haddock	Charge Nurse, NHS Tayside
Karen Krawczyk	Speech & Language Therapist, NHS Greater Glasgow & Clyde
Morag Ogilvie	Senior Dietitian, NHS Forth Valley
Rosemary Richardson	Clinical Effectiveness Professional Development Lead Dietetics, NHS Greater Glasgow & Clyde
Joanna Saunders	Acting Team Leader – Community Enteral Nutrition Team, NHS Lothian
Fiona Small	Senior I Physiotherapist – Acute Stroke Unit, NHS Lothian
Beatrice Wood	Speech & Language Therapist, NHS Highland

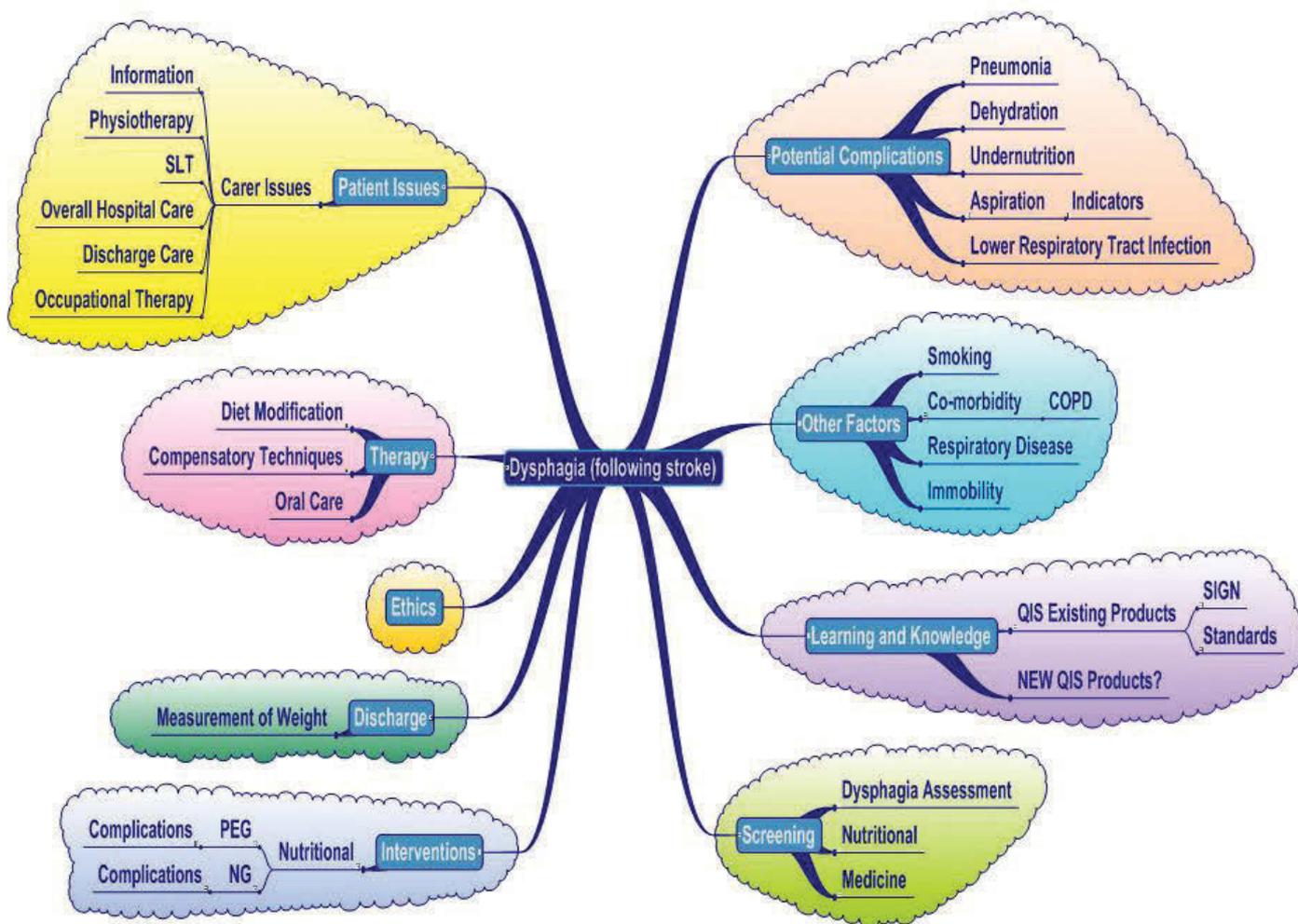
#### **NHS QIS Representatives**

June Wylie	Professional Practice Development Officer – AHPs
Penny Bond	Professional Practice Development Officer – Nurses
Michelle Richmond	Practice Development Project Co-ordinator
Rosemary Hector	Practice Development Project Co-ordinator
Richard McManus	Business Analyst

#### **Sponsor Director**

Jan Warner	Director of Performance Assessment & Practice Development
------------	---

# Appendix 4 Mind Map of SIGN Guideline



## Appendix 5

### Bibliography

American Stroke Association (2003), *Stroke, Poor Nutritional Status on Admission Predicts Poor Outcomes After Stroke: Observational Data From the FOOD Trial*

Boaden E E, Davies S R, Storey L and Watkins C L (2006), *Interprofessional Dysphagia Framework on behalf of the National Dysphagia Competence Steering Group*

Boaden E E, Davies S R, Storey L and Watkins C L (2006), *Executive Summary 2006. Development of a competence-based inter-professional consensus on the identification and management of swallowing difficulties (dysphagia)*

Boaden E E, Davies S R, Storey L and Watkins C L (2006), *Interim Summary. Development of a competence-based inter-professional consensus on the identification and management of swallowing difficulties (dysphagia)*

Borthwick S, Gardiner S, Paterson R, Phillips F, Small F, Taylor P (2005), *Screening for Dysphagia (An interactive training package)*. NHS Lothian. Edinburgh

Dennis M (2005), *The Food Trail (Feed or Ordinary Diet). A Multicentre Trial to Evaluate Various Feeding Policies in Patients Admitted to Hospital with a Recent Stroke*

Intercollegiate Stroke Working Party (2004), *National clinical guidelines for stroke - second edition*. Royal college of physicians.

NHS Education for Scotland (2002), *Coronary Heart and Stroke Strategy for Scotland*. Scottish Executive Health Department

NHS Quality Improvement Scotland (2006), *Together We Can*

NHS Quality Improvement Scotland (2004), *Stroke Services: care of the patient in the acute setting*. (Clinical Standards)

Ramritu P, Finlayson K, Mitchell A, & Croft G (2000), *Identification and Nursing Management of Dysphagia in Individuals with Neurological Impairment – Systematic Review*. The Joanna Briggs Institute for Evidence Based Nursing and Midwifery, :37-56,

Scottish Intercollegiate Guidelines Network (2004), *Management of patients with stroke: identification and management of dysphagia (A national clinical guideline)*

Scottish Intercollegiate Guidelines Network (2002), *Management of patients with stroke: Rehabilitation, Prevention and Management of Complications, and Discharge Planning (A national clinical guideline)*

Skills for Health (2006), *National Workforce Competences for Dysphagia*

## Notes





You can read and download this document from our website.  
We can also provide this information:

- by email
- in large print
- on audio tape or CD
- in Braille, and
- in community languages.

## **NHS Quality Improvement Scotland**

Glasgow Office  
Delta House  
50 West Nile Street  
Glasgow G1 2NP

Phone: 0141 225 6999  
Textphone: 0141 241 6316

Email: [comments@nhshealthquality.org](mailto:comments@nhshealthquality.org)  
Website: [www.nhshealthquality.org](http://www.nhshealthquality.org)

Edinburgh Office  
Elliott House  
8-10 Hillside Crescent  
Edinburgh EH7 5EA

Phone: 0131 623 4300  
Textphone: 0131 623 4383