NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Interventional Procedures Programme

Procedure Name:	Ultrasound-guided percutaneous radiofrequency ablation for thyroid nodules (1268/1)	
Name of Specialist Advisor:	Sebastian Aspinall	
Specialist Society:	British Association of Endocrine and Thyroid Surgeons	
Please complete and return to:	azeem.madari@nice.org.uk OR sally.compton@nice.org.uk	
1 Do you have adequate provide advice?	e knowledge of this procedure to	
X Yes.		
No – please return the form/	answer no more questions.	
1.1 Does the title used above de	escribe the procedure adequately?	
X Yes.		
No. If no, please enter any oth	ner titles below.	
Comments:		
2 Your involvement in the	ne procedure	
2.1 Is this procedure relevant to	your specialty?	
X Yes.		
Is there any kind of inter-spe	ecialty controversy over the procedure?	
No. If no, then answer no mo	ore questions, but please give any information o be doing the procedure.	
Comments:		

The next two questions are about whether you carry out the procedure, or refer patients for it. If you are in a specialty that normally carries out the procedure please answer question 2.2.1. If you are in a specialty that normally selects or refers patients for the procedure please answer question 2.2.2.

2.2.1	If you are in a specialty which does this procedure, please indicate your experience with it:
x	I have never performed this procedure.
	I have performed this procedure at least once.
	I perform this procedure regularly.
Comm	nents:
2.2.2	If your specialty is involved in patient selection or referral to another specialty for this procedure, please indicate your experience with it.
x	I have never taken part in the selection or referral of a patient for this procedure.
	I have taken part in patient selection or referred a patient for this procedure at least once.
	I take part in patient selection or refer patients for this procedure regularly.
Comm	nents:
	Please indicate your research experience relating to this procedure please choose one or more if relevant):
x	I have undertaken bibliographic research on this procedure.
	I have undertaken research on this procedure in laboratory settings (e.g. device-related research).
	I have undertaken clinical research on this procedure involving patients or healthy volunteers.
	I have had no involvement in research on this procedure.
	Other (please comment)

Comments:

3 Status of the procedure

3.1	Which of the following best describes the procedure (choose one):
x	Established practice and no longer new.
	A minor variation on an existing procedure, which is unlikely to alter that procedure's safety and efficacy.
	Definitely novel and of uncertain safety and efficacy.
	The first in a new class of procedure.
Com	ments:
3.2	What would be the comparator (standard practice) to this procedure? Surgery is standard practice to treat symptomatic thyroid nodules Alternative percutaneous techniques exist such as ethanol ablation, laser ablation, high frequency focused ultrasound and microwave ablation
3.3	Please estimate the proportion of doctors in your specialty who are performing this procedure (choose one):
	More than 50% of specialists engaged in this area of work.
	10% to 50% of specialists engaged in this area of work.
x	Fewer than 10% of specialists engaged in this area of work.
	Cannot give an estimate.
Com	ments:
4	Safety and efficacy
4.1	What are the adverse effects of the procedure?
	se list adverse events and major risks (even if uncommon) and, if possible, ate their incidence, as follows:
1. T	heoretical adverse events

Oesophageal / tracheal thermal injury

Cardiac arrthymia

Sympathetic or spinal nerve injury

Brachial plexus injury

- 2. Anecdotal adverse events (known from experience)
- 3. Adverse events reported in the literature (if possible please cite literature)

Pain

Voice change

Haematoma

Skin burn

Transient hyperthyroidism

Hypothyroidism

Nodule rupture

Transient cough / fever / vasovagal episode during ablation procedure

Overall a recent review found and incidence of 3.3% complications following RFA (1.4% major).

4.2 What are the key efficacy outcomes for this procedure?

Reduction in volume of benign thyroid nodules reported to be 33-58% at one month and 51-85% at 6 months in a recent review of RFA Improvement in compression symptoms or cosmesis for thyroid nodule

4.3 Are there uncertainties or concerns about the *efficacy* of this procedure? If so, what are they?

It reduces the size of nodules but does not remove them. Hence regrowth of the nodule can occur in the long-term. More than one RFA procedure may need to be

undertaken if the nodule persists after a single treatment. Certain characteristics of the nodule may increase risk of persistence / recurrence such as larger nodules, nodules with significant calcification / fibrosis, predominantly cystic nodules, nodules near to critical structures in the neck where caution is required with ablation dose ("danger triangle" – recurrent laryngeal nerve, oesophagus). If RFA is performed for autonomous functioning thyroid nodules then repeat treatments maybe required to achieve euthyroidism.

4.4 What training and facilities are required to undertake this procedure safely?

Usually undertaken by radiologist or specialist clinician with training and experience in thyroid ultrasound – I am not aware of any training courses for this procedure in the UK. Technique requires placement of an electrode inserted percutaneously through isthmus of thyroid gland into the thyroid nodule. Due to the small size of the thyroid and its proximity to critical structures in the neck a "moving shot" technique is described in which the electrode is placed sequentially into multiple ablation units in the nodule to decrease thermal injury. The procedure is undertaken under local anaesthesia +/- sedation.

4.5 Are there any major trials or registries of this procedure currently in progress? If so, please list.

I am not aware of any – the first RCT has been published in "Thyroid" earlier this year.

4.6 Are you aware of any abstracts that have been *recently* presented/ published on this procedure that may not be listed in a standard literature search, e.g. PUBMED? (This can include your own work). If yes, please list.

no

4.7 Is there controversy, or important uncertainty, about any aspect of the way in which this procedure is currently being done or disseminated?

Most of the literature is confined to case series so it hasn't really been tested rigorously in RCTs yet to my knowledge.

There is an issue in that we have to be sure the nodule is benign before carrying out RFA. Clearly we wouldn't want to perform RFA for a primary malignant nodule – though its use has been reported for recurrent thyroid cancer which is a different indication altogether really. From this point of view we need to bear in mind the false negative rate of FNAC and US for diagnosing thyroid nodules. For this reason the Korean Society of Thyroid Radiology has recommended at least 2 FNAC / CB to confirm that the nodule is benign before proceeding to RFA and to avoid RFA on nodules with any adverse US features. Note the current BTA guidelines do not recommend FNAC for U2 (i.e. benign thyroid nodules) so these would have to be amended to state that FNAC should be carried out on U2 nodules if planning to proceed to RFA.

I am not sure of the efficacy / safety of RFA versus other percutaneous techniques such as ethanol ablation, laser ablation etc. I am not aware that this has been tested rigorously in RCTs. Is one better than the others? Ethanol ablation seems more suited to small or cystic nodules.

The current practice in the UK of surgery for symptomatic or cosmetically unacceptable benign thyroid nodules is very acceptable in terms of safety, cosmesis and efficacy. It would seem that RFA is more useful in patients who are unfit for surgery. Though looking at the literature it seems that RFA is carried out in Asia and North America in young patients as perhaps an alternative to surgery. A trial of surgery versus RFA would be ideal though I don't think this has been done.

There is a concern in my opinion that if surgery is subsequently needed after RFA, perhaps because of regrowth of the nodule, or metachronous thyroid cancer, then this will be a lot more difficult (and so higher complication rate) due to destruction of tissue planes from thermal injury.

There is a concern about thermal injury with RFA to surrounding critical structures in the neck particularly the RLN and oesophagus in the "danger triangle". Does the dose need to be reduced in ablating nodules near to these structures?

5 Audit Criteria

Please suggest a minimum dataset of criteria by which this procedure could be audited.

Efficacy – short and longterm outcomes – reduction in volume of thyroid nodule, improvement in compression symptoms and / or cosmesis, restoration of euthyroidism for autonomous functioning nodules, quality of life

Pain during / following procedure

Haematoma Voice Change – pre and post-op laryngoscopy would Post op hyper / hypothyroidism Skin burn	d be ideal
5.1 Outcome measures of benefit (including coutcomes – both short and long-term; and qualit	
As above	
5.2 Adverse outcomes (including potential ea	rly and late complications):
As above	
6 Trajectory of the procedure	
6.1 In your opinion, what is the likely speed o	f diffusion of this procedure?
I don't think it would be rapidly adopted in the UK as option for these nodules. I think its main benefit woul unfit or unwilling to undergo surgery.	
6.2 This procedure, if safe and efficacious, is (choose one):	likely to be carried out in
Most or all district general hospitals.	

A minority of hospitals, but at least 10 in the UK.

x Fewer than 10 specialist centres in the UK.

	Cannot predict at present.
Comm	nents:
6.3 of pati	The potential impact of this procedure on the NHS, in terms of numbers ients eligible for treatment and use of resources, is:
	Major.
	Moderate.
x	Minor.
Comm	nents:

7 Other information

7.1 Is there any other information about this procedure that might assist NICE in assessing the possible need to investigate its use?

no

8 Data protection and conflicts of interest

8.1 Data protection statement

The Institute is committed to transparency. As part of this commitment your name and specialist society will be placed in the public domain, in future publications and on our website (www.nice.org.uk) and therefore viewable worldwide. This information may be passed to third parties connected with the work on interventional procedures.

A copy of the completed Specialist Adviser advice will be sent to the Specialist Society who nominated the Specialist Adviser.

Specialist Advisers should be aware that full implementation of the Freedom of Information Act 2000 may oblige us to release Specialist Advice from 2005. The Freedom of Information Act 2000 favours the disclosure of information however requests will be considered on a case by case basis. If information is made available, personal information will be removed in accordance with the Data Protection Act 1998. In light of this please ensure that you have not named or identified individuals in your comments.

8.2 Declarations of interest by Specialist Advisers advising the NICE Interventional Procedures Advisory Committee

Please state any potential conflicts of interest, or any involvements in disputes or complaints, relevant to this procedure. Please use the "Conflicts of Interest for Specialist Advisers" policy (attached) as a guide when declaring any conflicts of interest. Specialist Advisers should seek advice if required from the Associate Director – Interventional Procedures.

Do you or a member of your family¹ have a **personal pecuniary** interest? The main examples are as follows:

¹ 'Family members' refers to a spouse or partner living in the same residence as the member or employee, children for whom the member or employee is legally responsible, and adults for whom the member or employee is legally responsible (for example, an adult whose full power of attorney is held by the individual).

Consultancies or directorships attracting regular or or payments in cash or kind	occasional		YES
paymonto in eden of kind		X 	NO
Fee-paid work – any work commissioned by the health industry – this includes income earned in the course	e of private	_	YES
practice		x	NO
Shareholdings – any shareholding, or other beneficial shares of the healthcare industry			YES
·	ĺ	X	NO
Expenses and hospitality – any expenses provided be healthcare industry company beyond those reasonably for accommodation, meals and travel to attend meeting.	required		YES
for accommodation, meals and travel to attend meetings and conferences		X	NO
Investments – any funds which include investments in healthcare industry	the		YES
Ticultificate industry		X	NO
Do you have a personal non-pecuniary interest – eg made a public statement about the topic or do you hold	l an office in		YES
a professional organisation or advocacy group with a d	irect :	X	NO
interest in the topic?			
interest in the topic? Do you have a non-personal interest? The main exam			
•			
Do you have a non-personal interest? The main exam	ples are as fol	□ llows □ v	:
Do you have a non-personal interest? The main exame Fellowships endowed by the healthcare industry Support by the healthcare industry or NICE that ber	iples are as fol	□ llows □ x □	: YES
Do you have a non-personal interest? The main exame Fellowships endowed by the healthcare industry	ples are as fol	□ Ilows □ x □ □	: YES NO
Do you have a non-personal interest? The main exame Fellowships endowed by the healthcare industry Support by the healthcare industry or NICE that ber	ples are as fol	□ Illows □ x □ x □ □ x □ □ x □ x □ □ x □ □ x □	: YES NO YES
Do you have a non-personal interest? The main exame Fellowships endowed by the healthcare industry Support by the healthcare industry or NICE that been position or department, eg grants, sponsorship of posts If you have answered YES to any of the above state	ples are as fol	□ Illows □ x □ x □ □ x □ □ x □ x □ □ x □ □ x □	: YES NO YES
Do you have a non-personal interest? The main exame Fellowships endowed by the healthcare industry Support by the healthcare industry or NICE that been position or department, eg grants, sponsorship of posts of the describe the nature of the conflict(s) below.	ples are as fol	□ Illows □ x □ x □ □ x □ □ x □ x □ □ x □ □ x □	: YES NO YES
Do you have a non-personal interest? The main exame Fellowships endowed by the healthcare industry Support by the healthcare industry or NICE that been position or department, eg grants, sponsorship of posts of the describe the nature of the conflict(s) below.	ples are as fol	□ Illows □ x □ x □ □ x □ □ x □ x □ □ x □ □ x □	: YES NO YES
Do you have a non-personal interest? The main exame Fellowships endowed by the healthcare industry Support by the healthcare industry or NICE that been position or department, eg grants, sponsorship of posts of the describe the nature of the conflict(s) below.	ples are as fol	□ Illows □ x □ x □ □ x □ □ x □ x □ □ x □ □ x □	: YES NO YES

Committee

February 2010

Conflicts of Interest for Specialist Advisers

- 1 Declarations of interest by Specialist Advisers advising the NICE Interventional Procedures Advisory Committee
- 1.1 Any conflicts of interest set out below should be declared on the questionnaire the Specialist Adviser completes for the procedure.
- 1.2 Specialist Advisers should seek advice if required from the Associate Director Interventional Procedures.

2 Personal pecuniary interests

- 2.1 A personal pecuniary interest involves a current personal payment to a Specialist Adviser, which may either relate to the manufacturer or owner of a product or service being evaluated, in which case it is regarded as 'specific' or to the industry or sector from which the product or service comes, in which case it is regarded as 'non-specific'. The main examples are as follows.
- 2.1.1 **Consultancies** any consultancy, directorship, position in or work for the healthcare industry that attracts regular or occasional payments in cash or kind (this includes both those which have been undertaken in the 12 months preceding the point at which the declaration is made and which are planned but have not taken place).
- 2.1.2 **Fee-paid work** any work commissioned by the healthcare industry for which the member is paid in cash or in kind (this includes both those which have been undertaken in the 12 months preceding the point at which the declaration is made and which are planned but have not taken place).
- 2.1.3 **Shareholdings** any shareholding, or other beneficial interest, in shares of the healthcare industry that are either held by the individual or for which the individual has legal responsibility (for example, children, or relatives whose full Power of Attorney is held by the individual). This does not include shareholdings through unit trusts, pensions funds, or other similar arrangements where the member has no influence on financial management.
- 2.1.4 Expenses and hospitality any expenses provided by a healthcare industry company beyond that reasonably required for accommodation, meals and travel to attend meetings and conferences (this includes both those which have been undertaken in the 12 months preceding the point at which the declaration is made and which are planned but have not taken place.
- 2.1.5 **Investments** any funds which include investments in the healthcare industry that are held in a portfolio over which individuals have the ability to instruct the fund manager as to the composition of the fund.
- 2.2 No personal interest exists in the case of:
- 2.2.1 assets over which individuals have no financial control (for example, wide portfolio unit trusts and occupational pension funds) and where

- the fund manager has full discretion as to its composition (for example, the Universities Superannuation Scheme)
- 2.2.2 accrued pension rights from earlier employment in the healthcare industry.

3 **Personal family interest**

- 3.1 This relates to the personal interests of a family member and involves a **current payment** to the family member of the Specialist Adviser. The interest may relate to the manufacturer or owner of a product or service being evaluated, in which case it is regarded as '**specific**', or to the industry or sector from which the product or service comes, in which case it is regarded as '**non-specific**'. The main examples include the following.
- 3.1.1 Any consultancy, directorship, position in or work for a healthcare industry that attracts regular or occasional payments in cash or in kind.
- 3.1.2 Any fee-paid work commissioned by a healthcare industry for which the member is paid in cash or in kind.
- 3.1.3 Any shareholdings, or other beneficial interests, in a healthcare industry which are either held by the family member or for which an individual covered by this Code has legal responsibility (for example, children, or adults whose full Power of Attorney is held by the individual).
- 3.1.4 Expenses and hospitality provided by a healthcare industry company (except where they are provided to a general class of people such as attendees at an open conference)
- 3.1.5 Funds which include investments in the healthcare industry that are held in a portfolio over which individuals have the ability to instruct the fund manager as to the composition of the fund.
- 3.2 No personal family interest exists in the case of:
- 3.2.1 assets over which individuals have no financial control (for example, wide portfolio unit trusts and occupational pension funds) and where the fund manager has full discretion as to its composition (for example, the Universities Superannuation Scheme)
- 3.2.2 accrued pension rights from earlier employment in the healthcare industry.

4 Personal non-pecuniary interests

These might include, but are not limited to:

- 4.1 a clear opinion, reached as the conclusion of a research project, about the clinical and/or cost effectiveness of an intervention under review
- 4.2 a public statement in which an individual covered by this Code has expressed a clear opinion about the matter under consideration, which could reasonably be interpreted as prejudicial to an objective interpretation of the evidence

- 4.3 holding office in a professional organisation or advocacy group with a direct interest in the matter under consideration
- 4.4 other reputational risks in relation to an intervention under review.

5 Non-personal interests

- 5.1 A non-personal interest involves payment that benefits a department or organisation for which a Specialist Advisor is responsible, but that is not received by the Specialist Advisor personally. This may either relate to the product or service being evaluated, in which case it is regarded as 'specific,' or to the manufacturer or owner of the product or service, but is unrelated to the matter under consideration, in which case it is regarded as 'non-specific'. The main examples are as follows.
- 5.1.1 **Fellowships** the holding of a fellowship endowed by the healthcare industry.
- 5.1.2 **Support by the healthcare industry or NICE** any payment, or other support by the healthcare industry or by NICE that does not convey any pecuniary or material benefit to a member personally but that does benefit his/her position or department. For example:
- a grant from a company for the running of a unit or department for which a Specialist Advisor is responsible
- a grant, fellowship or other payment to sponsor a post or member of staff in the unit for which a Specialist Adviser is responsible. This does not include financial assistance for students
- the commissioning of research or other work by, or advice from, staff who work in a unit for which the specialist advisor is responsible
- one or more contracts with, or grants from, NICE.
- 5.2 Specialist Advisers are under no obligation to seek out knowledge of work done for, or on behalf of, the healthcare industry within departments for which they are responsible if they would not normally expect to be informed.

NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Interventional Procedures Programme

Proc	edure Name:	Ultrasound-guided percutaneous radiofrequency ablation for thyroid nodules (1268/1)
Nam	e of Specialist Advisor:	Simon McPherson
		British Society of Interventional Radiology
Plea	se complete and return to:	azeem.madari@nice.org.uk OR sally.compton@nice.org.uk
1	Do you have adequate provide advice?	knowledge of this procedure to
X	Yes.	
	No – please return the form/s	answer no more questions.
1.1	Does the title used above de	escribe the procedure adequately?
X	Yes.	
	No. If no, please enter any oth	ner titles below.
Comments:		
2	Your involvement in the	ne procedure
2.1	Is this procedure relevant to	your specialty?
X	Yes.	
no	Is there any kind of inter-spe	cialty controversy over the procedure?
	No. If no, then answer no mo	ore questions, but please give any information o be doing the procedure.
Com	ments:	

The next two questions are about whether you carry out the procedure, or refer patients for it. If you are in a specialty that normally carries out the procedure please answer question 2.2.1. If you are in a specialty that normally selects or refers patients for the procedure please answer question 2.2.2.

2.2.1	If you are in a specialty which does this procedure, please indicate your experience with it:
X	I have never performed this procedure.
	I have performed this procedure at least once.
	I perform this procedure regularly.
Comn	nents:
	e looking at introducing this but have not completed our assessment as a team mitted any application to our New Interventional Procedures committee yet.
2.2.2	If your specialty is involved in patient selection or referral to another specialty for this procedure, please indicate your experience with it.
X	I have never taken part in the selection or referral of a patient for this procedure.
	I have taken part in patient selection or referred a patient for this procedure at least once.
	I take part in patient selection or refer patients for this procedure regularly.
Comn	nents:
	Please indicate your research experience relating to this procedure (please choose one or more if relevant):
x	I have undertaken bibliographic research on this procedure.
	I have undertaken research on this procedure in laboratory settings (e.g. device-related research).
	I have undertaken clinical research on this procedure involving patients or healthy volunteers.
	I have had no involvement in research on this procedure.
	Other (please comment)

Comments:

3	Status of the procedure	
3.1	Which of the following best describes the procedure (choose one):	
	Established practice and no longer new.	
	A minor variation on an existing procedure, which is unlikely to alter that procedure's safety and efficacy.	
X	Definitely novel and of uncertain safety and efficacy.	
	The first in a new class of procedure.	
Com	ments:	
Currently unsuitable for complete ablation so it is only suitable for benign nodules or suspected malignant nodules for palliation but not cure. It is an OP procedure under local anaesthesia. Largest experience is in South Korea and Italy		
3.2	What would be the comparator (standard practice) to this procedure?	
Surg	ical excision	
3.3	Please estimate the proportion of doctors in your specialty who are performing this procedure (choose one):	
	More than 50% of specialists engaged in this area of work.	
	10% to 50% of specialists engaged in this area of work.	
X	Fewer than 10% of specialists engaged in this area of work.	
	Cannot give an estimate.	
Com	ments:	
I'm r	not aware of any UK hospitals performing this at the current time	
4	Safety and efficacy	
4.1	What are the adverse effects of the procedure?	
	se list adverse events and major risks (even if uncommon) and, if possible, nate their incidence, as follows:	
1. T	heoretical adverse events	

X – risk of damage to the recurrent laryngeal nerve or adjacent vascular procedures

2. A	necdotal adverse events (known from experience)
3. A	Adverse events reported in the literature (if possible please cite literature)
4.2	What are the key efficacy outcomes for this procedure?
Redu	uced mass effect symptoms e.g. stridor and dysphagia
4.3	Are there uncertainties or concerns about the <i>efficacy</i> of this procedure? If so, what are they?
Not f	rom current published data
4.4	What training and facilities are required to undertake this procedure safely?
US g RFA	uided procedure expertise, avoidance of recurrent laryngeal nerve injury. Use of if no previous operator experience [=industry and proctor support]
4.5	Are there any major trials or registries of this procedure currently in progress? If so, please list.
None	e I'm aware of

4.6	Are you aware of any abstracts that have been <i>recently</i> presented/ published on this procedure that may not be listed in a standard literature search, e.g. PUBMED? (This can include your own work). If yes, please list.
No	
4.7	Is there controversy, or important uncertainty, about any aspect of the way in which this procedure is currently being done or disseminated?
Place	e in malignant disease palliation
5 Pleas audit	Audit Criteria se suggest a minimum dataset of criteria by which this procedure could be ted.
5.1 outc	Outcome measures of benefit (including commonly used clinical omes – both short and long-term; and quality of life measures):
Qual	ity of life questionnaires
5.2	Adverse outcomes (including potential early and late complications):
Recu	irrent laryngeal nerve injury rate

6	Trajectory of the procedure
6.1	In your opinion, what is the likely speed of diffusion of this procedure?
Slow	
6.2 (choos	This procedure, if safe and efficacious, is likely to be carried out in se one):
	Most or all district general hospitals.
x	A minority of hospitals, but at least 10 in the UK.
	Fewer than 10 specialist centres in the UK.
	Cannot predict at present.
Comm	nents:
6.3 of pati	The potential impact of this procedure on the NHS, in terms of numbers ients eligible for treatment and use of resources, is:
	Major.
	Moderate.
X	Minor.
Comm	nents:
Depen	ds on contract arrangements for RFA consumables

7 Other information

7.1 Is there any other information about this procedure that might assist NICE in assessing the possible need to investigate its use?

Not that I'm aware of

8 Data protection and conflicts of interest

8.1 Data protection statement

The Institute is committed to transparency. As part of this commitment your name and specialist society will be placed in the public domain, in future publications and on our website (www.nice.org.uk) and therefore viewable worldwide. This information may be passed to third parties connected with the work on interventional procedures.

A copy of the completed Specialist Adviser advice will be sent to the Specialist Society who nominated the Specialist Adviser.

Specialist Advisers should be aware that full implementation of the Freedom of Information Act 2000 may oblige us to release Specialist Advice from 2005. The Freedom of Information Act 2000 favours the disclosure of information however requests will be considered on a case by case basis. If information is made available, personal information will be removed in accordance with the Data Protection Act 1998. In light of this please ensure that you have not named or identified individuals in your comments.

8.2 Declarations of interest by Specialist Advisers advising the NICE Interventional Procedures Advisory Committee

Please state any potential conflicts of interest, or any involvements in disputes or complaints, relevant to this procedure. Please use the "Conflicts of Interest for Specialist Advisers" policy (attached) as a guide when declaring any conflicts of interest. Specialist Advisers should seek advice if required from the Associate Director – Interventional Procedures.

Do you or a member of your family¹ have a **personal pecuniary** interest? The main examples are as follows:

¹ 'Family members' refers to a spouse or partner living in the same residence as the member or employee, children for whom the member or employee is legally responsible, and adults for whom the member or employee is legally responsible (for example, an adult whose full power of attorney is held by the individual).

payments in cash or kind			YES NO
Fee-paid work – any work commissioned by the healthcare industry – this includes income earned in the course of private		□ X	YES
practice			NO
Shareholdings – any shareholding, or other beneficial interest, in shares of the healthcare industry			YES NO
Expenses and hospitality – any expenses provided by a healthcare industry company beyond those reasonably required for accommodation, meals and travel to attend meetings and			YES
conferences			NO
Investments – any funds which include investments in the healthcare industry			YES NO
Do you have a personal non-pecuniary interest – eg have you made a public statement about the topic or do you hold an office in			YES
a professional organisation or advocacy group with a direct interest in the topic?			NO
Do you have a non-personal interest?	The main examples are as fo	ollows	s:
Fellowships endowed by the healthcare industry			YES
		X	NO
Support by the healthcare industry or NICE that benefits his/her			YES
position or department, eg grants, sponsorship of posts			
			NO
If you have answered YES to any of the above statements please describe the nature of the conflict(s) below.			
Comments:			
Thank you very much for your help.			
Professor Bruce Campbell, Chairman, Interventional Procedures Advisory Committee Professor Carole Longson, Directo Centre for Health Technology Evaluation.			tor,
February 2010			
February 2010			

Conflicts of Interest for Specialist Advisers

- 1 Declarations of interest by Specialist Advisers advising the NICE Interventional Procedures Advisory Committee
- 1.1 Any conflicts of interest set out below should be declared on the questionnaire the Specialist Adviser completes for the procedure.
- 1.2 Specialist Advisers should seek advice if required from the Associate Director Interventional Procedures.

2 Personal pecuniary interests

- 2.1 A personal pecuniary interest involves a current personal payment to a Specialist Adviser, which may either relate to the manufacturer or owner of a product or service being evaluated, in which case it is regarded as 'specific' or to the industry or sector from which the product or service comes, in which case it is regarded as 'non-specific'. The main examples are as follows.
- 2.1.1 **Consultancies** any consultancy, directorship, position in or work for the healthcare industry that attracts regular or occasional payments in cash or kind (this includes both those which have been undertaken in the 12 months preceding the point at which the declaration is made and which are planned but have not taken place).
- 2.1.2 **Fee-paid work** any work commissioned by the healthcare industry for which the member is paid in cash or in kind (this includes both those which have been undertaken in the 12 months preceding the point at which the declaration is made and which are planned but have not taken place).
- 2.1.3 **Shareholdings** any shareholding, or other beneficial interest, in shares of the healthcare industry that are either held by the individual or for which the individual has legal responsibility (for example, children, or relatives whose full Power of Attorney is held by the individual). This does not include shareholdings through unit trusts, pensions funds, or other similar arrangements where the member has no influence on financial management.
- 2.1.4 Expenses and hospitality any expenses provided by a healthcare industry company beyond that reasonably required for accommodation, meals and travel to attend meetings and conferences (this includes both those which have been undertaken in the 12 months preceding the point at which the declaration is made and which are planned but have not taken place.
- 2.1.5 **Investments** any funds which include investments in the healthcare industry that are held in a portfolio over which individuals have the ability to instruct the fund manager as to the composition of the fund.
- 2.2 No personal interest exists in the case of:
- 2.2.1 assets over which individuals have no financial control (for example, wide portfolio unit trusts and occupational pension funds) and where

- the fund manager has full discretion as to its composition (for example, the Universities Superannuation Scheme)
- 2.2.2 accrued pension rights from earlier employment in the healthcare industry.

3 **Personal family interest**

- 3.1 This relates to the personal interests of a family member and involves a **current payment** to the family member of the Specialist Adviser. The interest may relate to the manufacturer or owner of a product or service being evaluated, in which case it is regarded as '**specific**', or to the industry or sector from which the product or service comes, in which case it is regarded as '**non-specific**'. The main examples include the following.
- 3.1.1 Any consultancy, directorship, position in or work for a healthcare industry that attracts regular or occasional payments in cash or in kind.
- 3.1.2 Any fee-paid work commissioned by a healthcare industry for which the member is paid in cash or in kind.
- 3.1.3 Any shareholdings, or other beneficial interests, in a healthcare industry which are either held by the family member or for which an individual covered by this Code has legal responsibility (for example, children, or adults whose full Power of Attorney is held by the individual).
- 3.1.4 Expenses and hospitality provided by a healthcare industry company (except where they are provided to a general class of people such as attendees at an open conference)
- 3.1.5 Funds which include investments in the healthcare industry that are held in a portfolio over which individuals have the ability to instruct the fund manager as to the composition of the fund.
- 3.2 No personal family interest exists in the case of:
- 3.2.1 assets over which individuals have no financial control (for example, wide portfolio unit trusts and occupational pension funds) and where the fund manager has full discretion as to its composition (for example, the Universities Superannuation Scheme)
- 3.2.2 accrued pension rights from earlier employment in the healthcare industry.

4 Personal non-pecuniary interests

These might include, but are not limited to:

- 4.1 a clear opinion, reached as the conclusion of a research project, about the clinical and/or cost effectiveness of an intervention under review
- 4.2 a public statement in which an individual covered by this Code has expressed a clear opinion about the matter under consideration, which could reasonably be interpreted as prejudicial to an objective interpretation of the evidence

- 4.3 holding office in a professional organisation or advocacy group with a direct interest in the matter under consideration
- 4.4 other reputational risks in relation to an intervention under review.

5 Non-personal interests

- 5.1 A non-personal interest involves payment that benefits a department or organisation for which a Specialist Advisor is responsible, but that is not received by the Specialist Advisor personally. This may either relate to the product or service being evaluated, in which case it is regarded as 'specific,' or to the manufacturer or owner of the product or service, but is unrelated to the matter under consideration, in which case it is regarded as 'non-specific'. The main examples are as follows.
- 5.1.1 **Fellowships** the holding of a fellowship endowed by the healthcare industry.
- 5.1.2 **Support by the healthcare industry or NICE** any payment, or other support by the healthcare industry or by NICE that does not convey any pecuniary or material benefit to a member personally but that does benefit his/her position or department. For example:
- a grant from a company for the running of a unit or department for which a Specialist Advisor is responsible
- a grant, fellowship or other payment to sponsor a post or member of staff in the unit for which a Specialist Adviser is responsible. This does not include financial assistance for students
- the commissioning of research or other work by, or advice from, staff who work in a unit for which the specialist advisor is responsible
- one or more contracts with, or grants from, NICE.
- 5.2 Specialist Advisers are under no obligation to seek out knowledge of work done for, or on behalf of, the healthcare industry within departments for which they are responsible if they would not normally expect to be informed.