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## **Implications for the NHS of inward and outward Medical Tourism**

**Chief investigator: Dr Neil Lunt**

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(insert protocol content)

# Implications for the NHS of inward and outward Medical Tourism

## 1. Aims/Objectives

The overarching aim is to provide a better understanding of patient flows and the implications for the NHS of inward and outward Medical Tourism. Specific objectives include:

- 1) A comprehensive documentary review of: a) relevant policy and legislation b) professional guidance and frameworks governing inward and outward flows of Medical Tourists with respect to the UK.
- 2) To better understand the information, marketing and advertising practices used in Medical Tourism, within both the UK and provider countries of Europe and beyond (and the benefits and drawbacks of them).
- 3) To examine the economic and health consequences of inward and outward Medical Tourism for the NHS.
- 4) To understand how decision-making frames, assessments of risk, and associated factors shapes health treatments for patients, including how prospective Medical Tourists assess provider reputation and risk, and to collect evidence on the role of intermediaries and brokers in facilitating Medical Tourism.
- 5) To better understand treatment experience, continuity of care and post-operative recovery for inward and outward flows of Medical Tourists.
- 6) To examine the views of professionals and key stakeholder groups and organisations with a legitimate interest in Medical Tourism (exploring patient choice, benefit, safety, harm and liability).
- 7) To map out the Medical Tourism industry and its development within the UK, and assess the likely future significance for the NHS.

## 2. Background

The impact of globalisation in health and health care has paralleled emerging trends towards increased reliance upon individualised healthcare provision and 'consumer'-led access to 'health-related' information. Wider system developments include the growth of cross-border supply of health-related goods and services, greater overseas investment in domestic provision, increased movement of professionals and health providers, as well as trends towards consumption of health care abroad and discounted travel incentives included as part of medical assessment and treatment packages (Smith, 2004; Holden, 2005; Blouin et al 2005; Smith, 2009a; Smith and Lee, 2009; Smith et al 2009). One increasingly popular form of consumer expenditure is what has become commonly known as 'Medical Tourism' a type of patient or 'consumer' mobility in which individuals travel outside their own country of

residence for the consumption of health care services abroad (Bridge, 2007; Hussain, 2007; Britten 2008; Leafe, 2008; Moore 2009).

Medical Tourism takes place when individuals opt to travel overseas with the *primary intention* of receiving medical (usually elective surgery) treatments. These journeys may be long-distance and intercontinental, for example, from Europe and North America to Asia, and covers a range of treatments including dental care, cosmetic surgery, elective surgery, and IVF (Connell, 2006; Horowitz et al, 2007; Ehrbeck et al, 2008). Medical Tourism is said to be a \$60 billion industry internationally (Crone, 2008).

A Medical Tourist may be defined in two ways depending on the type of health system and how it is funded. First, there are Medical Tourists who can be categorised as ‘consumers’ because they use purchasing power expressed through the market to access a range of dental, cosmetic and elective medical treatment. There are related questions about access to insurance, the portability of insurance, and whether voluntary insurance systems extend to the choice of overseas services or whether or not specialised products are warranted. Within the United States, for example, several domestic private insurers have looked towards purchasing services overseas. In addition, there are also increasing numbers of under-insured consumers who need to pay out of pocket for treatments (Milstein and Smith, 2006; Repasky, 2006; Herrick, 2007; Deloitte, 2008).

Second, at a European level, Medical Tourism may involve exercising citizenship rights in order to receive medical treatment in another EU member state (better known as cross-border care) and request their national purchaser to reimburse the cost of treatment (see European Court of Justice judgements including Case C-372/04 (The Watt case, 2005); also Case C-158/96 (The Kohll Case, 1998); and Case C-120/95 (Decker Case, 1998)).

However, whilst current knowledge of the demand and supply of cross-border healthcare is growing at European and national levels (Exworthy et al 2001; Lowson, 2001; Burge et al, 2004; Bertinato et al, 2005), there are no comprehensive data on inward and outward out-of-pocket flows and their health and economic impact (Smith et al, 2009). This study therefore contributes to further understanding of patient mobility and its implications for the NHS (Rosenmüller et al, 2006; Cortez, 2008; Smith et al, 2009). The study is particularly timely given the current global financial context and the likely implications for health expenditure and national health budgets (Smith, 2009b; Ham, 2009).

A number of factors have possibly contributed towards the growth in Medical Tourism. These include improved disposable incomes, increased willingness of individuals to travel for health services, lower cost air travel, and the expansion of internet marketing – which is a major platform of information for those seeking and providing such treatments. Why do ‘patients’ choose to travel overseas for such treatments when evidence suggests that the majority of patients prefer to be treated closer to home (cf. Fotaki et al, 2005; Exworthy and Peckham, 2006)? Reasons are likely to include cost (e.g. dentistry), availability of treatment, privacy, perceived quality, and for the purposes of combining treatment with an overseas vacation (especially for diaspora populations). For instance, UK patients may have to wait to meet NHS criteria on age or circumstance before being offered some treatments, or may be ineligible according to the current criteria (e.g. IVF, gender reassignment surgery, renal transplantation) and private treatment in the UK may be costly and not offer the range of preferred techniques and technology. Conversely, the reputation of private providers in the UK, and the perceived or actual quality of care in many countries, means that in some areas of medical activity there is a desire for foreign nationals to seek treatment in the UK. It is also the case that the provision of free care in the UK may encourage more implicit Medical Tourism by populations from poorer countries. (In earlier usage health ‘tourism’ was used as

a pejorative term to signal the UK as a welfare magnet in much the same way as benefit tourists were said to defraud the UK social security system, see Borman, 2004).

Currently, Medical Tourism for the UK is limited to the private, out-of-pocket, sector. However, there are important implications for a publicly funded and provided system such as the NHS. For instance, there may be a range of beneficial and detrimental implications, such as cost savings from those voluntarily seeking care abroad, costs of follow-up care for those who have been treated overseas, and costs associated with unofficial Medical Tourists to the UK. There will also be a range of associated health impacts.

### **3. Need**

Aside from anecdotal reports and media speculation relatively little is known about implications for the NHS of inward and outward out-of-pocket Medical Tourism. This is despite such flows having major implications for the NHS given around 50,000 UK residents travel overseas for treatment annually and there are overseas patients using the NHS and private facilities. The study provides insights for NHS policy-makers, regulators, providers, clinicians and consumer interests and will illuminate macro and local issues: costs, quality, administrative and legal dimensions, decision-making, and unintended consequences for the NHS.

### **4. Methods: a. Setting b. Design and Data Collection d. Data Analysis**

#### **a. Settings**

- The study will collect qualitative and quantitative information from Medical Tourists who have been treated and returned to the UK, and those treated in the UK.
- The study will collect qualitative (and where applicable numbers of cost and flows) from NHS organisations – purchasers and providers
- The study will collect qualitative (and where applicable numbers of cost and flows) from overseas provider organisations
- The study will collect qualitative information from relevant professional and industry stakeholders.

#### **b. Design and data collection**

The study is combines primary and secondary data. The study is organised around 4 streams of work.

\*Stream 1 (Economic) estimates the economic impact of Medical Tourism to the NHS from four elements of trade flow: (i) inward flows of foreign nationals seeking NHS care (ii) inward flows for private care, but with follow-on/complications picked up by the NHS (iii) outward flows who then return with complications which are picked up by NHS (iv) outward flows who then provide system benefits (e.g. relieving pressure for NHS treatments). Primary data collection entails survey and interviews with 6 key groups in the UK and one overseas: a) Individuals who have sought and experienced care overseas, encompassing good and bad experiences. We have already a cohort of UK Indian residents who have provided information for a current project, and will supplement this with 4 other groups. Semi-structured interviews collect a mix of quantitative and qualitative information. It would be desirable to do a similar survey of those foreign nationals seeking care within the UK. b) Health providers and purchasers, to identify the indicative magnitude and key issues surrounding follow-up

care to those who have undertaken Medical Tourism from the UK, and to those foreign nationals who have experienced care within the UK. Again, a small cohort London has contributed to a current project, and we would seek to re-interview them and expand the network to cover other areas (again, a mix of quantitative and qualitative data). c) Foreign health providers to UK individuals. Professor Smith, a named investigator, has good relationships with institutions in India and Thailand, both of whom experience UK treatment inflows of 100,000 annually. These institutions collect basic data on individuals treated and will allow use of aggregated data for this project. In addition, interviews with key members of these institutions will highlight foreign care provider perspectives of UK Medical Tourism (inward but also outward). Secondary data analysis provides information on the number of patient movements, inward and outward, and any associated economic flows.

\* Streams 2 & 3 (Decision-making and Quality): draw on data from the /consumer/patient interviews (5 UK-based groups) outlined in Stream 1. (Streams 1, 2 & 3 share data sources).

\* Stream 4 (Industry): data from professionals and industry stakeholders: 15 professionals (BAPRAS, BDA, BMA, Picker); 15 from Medical Tourism industry (marketers, brokers, insurers, providers).

### c. Data analysis

Data analysis will outline findings relating to Medical Tourism as an overall development. The data will then be subject to more focussed case study analysis where data contributes towards 5 depth industry case studies of inward and outward flows (from across dental, elective, cosmetic and IVF). Each case includes: 10 consumer/patient interviews to illuminate decision-making and treatment experiences; website/ analysis; and interview data from industry and clinical interests.

### *Summary of data sources*

METHOD STREAM	Interviews	Review of web sites	Review of quality & safety accreditation	Secondary data analysis
Economic	<ul style="list-style-type: none"> <li>✓ Consumers/patients (5 groups, n=50)</li> <li>✓ Health providers (n=20)</li> <li>✓ Overseas providers (n=10)</li> </ul>	✓		✓
Decision-making	✓ Consumer/Patient (5 groups)	✓		
Quality, safety, risk	✓ Consumer/Patient (5 groups)	✓	✓	
Industry	✓ Stakeholders (n=30)			

### 5. Contribution to existing research

Analysis will build upon and expand current work by Professor Smith, funded by the British Council (UKIERI Research Award, 2008). It will also build on work being developed by Dr Lunt around industry development and individual decision-making (Carrera and Lunt, 2010;

Lunt et al 2010). It will be cognisant of emergent themes from earlier work exploring cross-border choice: waiting lists and waiting times; quality and choice; patients' willingness to travel and ease of access; service coordination; and financial costs (Exworthy et al, 2001). It will examine decision making and informed choice (Bekker et al, 1999; Charles et al, 1999; Brezis et al, 2008) and digital marketing of health treatments. The study identifies new boundaries of patient/consumer identity, broadening our understanding of how health is marketized and commodified. It contributes to understanding perceptions of quality and risk taking within health care decision-making (Edwards et al, 2001; Lloyd, 2001). The British Association of Plastic, Reconstructive and Aesthetic Surgeons argue that rising numbers of Medical Tourists are subsequently being treated by the NHS for complications arising from treatment abroad (208 cases reported by members in 2007), with over 25% requiring emergency surgery (Jeevan and Armstrong, 2008). Fertility tourism by health providers in Europe provides 20-25,000 treatment cycles (McKelvey et al, 2009) and potentially contributes toward increased NHS costs as a result of multiple births. Research in the United States has reported linked cases of infection arising from Medical Tourism excursions to Central America (Newman et al, 2006). As the first detailed empirical examination of Medical Tourism the study is strongly multidisciplinary and will provide new evidence of benefit to NHS policy-makers and managers. The work will be embedded in a review of both national and European legislative and policy contexts. The study will advance knowledge of treatment experience and contribute towards better understanding of how choice, risk and safety are managed at both the level of the consumer, and at the organisational level of broker, intermediary and clinical provider. Our work will contribute towards understanding quality, administrative and legal dimensions, and unintended consequences. The study will be of interest to those working within and making decisions about the NHS. The study provides insights for NHS policy-makers, regulators, providers, clinicians and consumer organisations. The study will be of interest to a range of NHS and HSR stakeholders, and complements emerging national policy discussions about cross-border care (NHS, 2008; House of Lords, 2009; Scottish NHS 2009). Outputs will include seminars and conferences presentations, professional journals, and refereed articles.

## 6. Plan of Investigation



Activity	Personnel	11/2010 - 01/2011	06/2011 - 04/2011	05/2011 - 08/2011	09/2011 11/2011	01/2012 02/2012	03/2012 04/2012
Governance	Team	Finalise work programme and complete Ethics Review					WRITING AND REPORT
	Team	1 <sup>st</sup> Steering Group/ Team meet		Team meet	Team meet	2 <sup>nd</sup> Steering Group/ Team meet	
Scoping	NL/RS/SG	Press release and contact making				Case study	
Desk-based activity	NL/R.A.	Website review and analysis			Write up Web analysis		
	RS/RA	Systematic review		Write up systematic review			
Stream 1 Economics	RS/RA NL/ R.A.		Sample recruitment Individuals n=50 Health provider n=20 Overseas provider n=10		2ndry Data Analysis		
	R.A.		Interviews (allowing for reflexivity around sample and issues as interviews progress)				
	RS				Preliminary Economic Analysis		
	RS		Explore self complete survey		Analyse survey		
Stream 2 Decisions & Consumers			Sample recruitment Individuals n=50 (as Stream 1)				
			Interviews (as Stream 1)				
	NL/ R.A. ME				Preliminary Analysis on Decision/Choice		
Stream 3 Quality, Safety, Risk			Sample recruitment Individuals n=50 (as Stream 1)				
			Interviews (as Stream 1)				
	RM/SG R.A.				Preliminary Analysis Q S R		
	SG		Accreditation analysis				
Stream 4 Industry		Sample recruit for Stakeholders interviews N=30					
	R.A./ NL		Interviews of stakeholders		Preliminary Analysis of Stakeholders & Informants		

**WRITING AND REPORT**



NL= Neil Lunt  
RS= Richard Smith  
RA= Research assistants  
RM= Russell Mannion

SG= Stephen Green  
ME= Mark Exworthy

## **7. Project Management**

The core applicants will maintain an overview of all aspects of the project but will also assume particular responsibilities for streams of activity and analysis:

- Dr Neil Lunt (Decision-making; industry development) (25%)
- Professor Richard Smith (Economics) (10%)
- Professor Russell Mannion (Decision-making; quality, safety and risk) (5%)
- Professor Stephen Green (Quality, safety and risk, and relevant clinical-related issues) (12 days)
- Dr Mark Exworthy (Advice on analysis and writing) (8 days)

Dr Neil Lunt will be responsible for the overall leadership of the project. He will be an active participant in all aspects of the research, overseeing, coordinating and participating in the fieldwork and analysis, ensuring integration across the various Streams of the study. The research team will meet at regular points throughout the life of the project and would operate with the support of the Steering Group as proposed below.

## **8. Service users/public involvement**

The study will convene a Steering Group including both lay members and academics skilled in studying sensitive topics in health and society, and ethics and law. PPI involvement is likely to include patients/consumer of Medical Tourism and patient representatives and advocates. It will meet twice during the project to inform the fieldwork stage (to review the acceptability of ethics and data collection procedures) and to help shape the preliminary analysis. We will use networking and approaching national interest and consumer groups to identify membership of the Steering Group.

## **9. References**

Bekker, H. et al. (1999) *Informed Decision-Making: Bibliography and systematic review*, Southampton, NCHTA.

Bertinato, L., Busse, R., Fahy, N., Legido-Quigley, H., McKee, M., Palm, W., Passarani, I., and Ronfini, F. (2005) Cross-Border Health Care in Europe. *Policy Brief*, WHO on behalf of the European Observatory on Health Systems and Policies, Denmark.

Blouin, C., Drager, N., and Smith, R. (Eds.)(2005) *International Trade in Health Services: Debates on the GATS*, Washington D.C.: World Bank.

Borman, E. (2004) 'Health tourism', *BMJ*, 328: 60-61.

Brezis, M. et al (2008) 'Quality of informed consent for invasive procedures', *International Journal for Quality in Health Care*, 20, 5, 352-357.

Bridge, M. (2007) 'Medical tourism; the pros and cons', *The Times*, October 13.

Britten, N. (2008) 'Patients go abroad as dentists' fees soar', *Telegraph*, 11<sup>th</sup> January.



Burge P., Devlin N. and Appleby J. et al (2004) 'Do patients always prefer quicker treatment? A discrete choice analysis of patients' stated preferences in the London patient choice project', *Applied Health Economics and Health Policy*, 3, 183-94.

Carrera, P. and Lunt, N. (2010) 'A European perspective on medical tourism: the need for a knowledge base', *International Journal of Health Services*, 40, 3, 469-484.

Charles, C. et al. (1999) 'Decision-making in the physician–patient encounter: revisiting the shared treatment decision-making model', *Social Science & Medicine*, 49, 5, 651-661.

Connell, J. (2006) 'Medical tourism: sea, sun, sand, and ... surgery', *Tourism Management*, 27, 6, 1093-1100.

Cortez, N. (2008) 'Patients without borders: The emerging global market for patients and the evolution of modern health care', *Indiana Law Journal*, 83, 71, 71-132.

Crone, R.K. (2008) 'Flat medicine? exploring trends in the globalization of health care', *Academic Medicine*, 83, 2, 117-121.

Deloitte (2008) *Medical Tourism; Consumers in search of value*, Deloitte, Deloitte Center for Health Solutions.

Edwards, A. et al (2001) 'Presenting risk information: a review of the effects of framing and other manipulations on patient outcomes', *Journal of Health Communication*, 6, 1, 61-82.

Ehrbeck, T., Guevara, C. and Mango, P.D. (2008) *Mapping the Market for Medical Tourism*, *The McKinsey Quarterly*, May, 1-11.

Exworthy, M. and Peckham, S. (2006) 'Access, choice and travel: the implications for health policy', *Social Policy and Administration*, 40, 3, 267-287.

Exworthy, M., Kanavos, P. and Khondoker, F. (2001) *Cross-border patient flows for health care in Europe: a feasibility study*, A report for the Department of Health Volumes I and II Final report, December.

Fotaki, M., Boyd, A., McDonald, R., Smith, L., Roland, M, Edwards, A, Elwyn, G, Sheaff, R (2005) 'Patient Choice and the Organisation and Delivery of Health Services: Scoping Review', Department of Health, NCCSDO, Manchester Business School.

Ham, C. (2009) *Health in a Cold Climate: Developing an intelligent response to the financial challenges facing the NHS*, Nuffield Trust, Briefing Paper June 2009.

Herrick, D.M. (2007) *Medical Tourism: Global Competition in Health Care*, National Center for Policy Analysis, Texas.

Holden, C. (2005) 'The Internationalization of corporate healthcare: extent and emerging trends', *Competition & Change*, 9, 2, 185-203.

House of Lords (2009) *Healthcare Across EU Borders: a safe framework*, European Union Committee, 4th Report of Session 2008-9, Vol 1 Report.

Hussain, A. (2007) 'In search of sun, sand and surgery', *The Sunday Times*, August 26<sup>th</sup>.

Horowitz, M.D. Rosensweig, J. and Jones, C.A. (2007) 'Medical tourism: Globalization of the healthcare marketplace', *Mindscape General Medicine*, 9, 4, 33.

Jeevan, R. and Armstrong, A. (2008) 'Cosmetic Tourism and the burden on the NHS', *Journal of Plastic, Reconstructive & Aesthetic Surgery*, 61, 12, 1423-1424.

- Leafe, D. (2008) 'Health tourism: have your eyes done, then see the fjords', *Telegraph*, 20th October.
- Lloyd, A.J. (2001) 'The extent of patients' understanding of the risks of treatments', *Quality in Health Care*, 10, i14-i18.
- Lowson, K., et al. (2002) *Evaluation of Patients Travelling Overseas: Final Report*, York: YHEC.
- Lunt, N., Hardey, M. and Mannion R. (2010) 'Nip, Tuck and Click: Medical tourism and the emergence of web-based health information', *Open Medical Informatics Journal*, 4, 1-11.
- McKelvey, A., David, A., Shenfield, F. and Jauniaux, E. (2009) 'The impact of cross-border reproductive care or 'fertility tourism' on NHS maternity services', *BJOG: An International Journal of Obstetrics & Gynaecology*, 116, 11, 1520-1523.
- Milstein, A. and Smith, M. (2006) 'America's new refugees - seeking affordable surgery offshore', *New England Medical Journal*, 355, 16, 1637-40.
- Moore, A. (2009) 'Health tourism: don't forget your toothbrush', *Health Service Journal*, 12 January.
- Newman, M.I., Camberson, A.E. and Ascherman, J. (2005) 'Mycobacteria abscessus outbreak in US patients linked to offshore surgicenter', *Annals of Plastic Surgery*, 55, 1, 107-110.
- NHS (2008) Consultation on the European Commissions's Proposals for a Directive on the Application of Patients' Rights in Cross-Border healthcare, Department of Health.
- NHS Scotland (2009) Consultation on the European Commission's Proposals for a Directive on the Application of Patients' Rights in Cross-Border Healthcare, Healthcare Policy and Strategy Directorate, Scottish Government.
- Repasky, M. (2006) A cut below: Americans look abroad for health care  
<http://abcnews.go.com/Business/IndustryInfo/story?id=2320839&page=1>. (August 29, 2006, doi).
- Rosenmøller, M, McKee, M. and Baeten, R. (Eds.) (2006) *Patient Mobility in the European Union: Learning from experience*. Copenhagen, Denmark, European Observatory on Health Systems and Policies.
- Smith, R.D. (2004) 'Foreign direct investment and trade in health services: a review of the literature', *Social Science & Medicine*, 59, 11, 2313-23.
- Smith R.D. and Lee, K. (2009) 'Trade and health: an agenda for action', *The Lancet*, 373: 768-773.
- Smith, R.D. (2009a) Trade and health - the role and impact of the private sector. Prince Mahidol Award Conference, Bangkok, 30 January 2009.
- Smith, R.D. (2009b) The Crisis in Global Finance and Trade: What are the Implications for Health? Symposium for UCL Institute for Global Health, University College London, 21 January 2009.
- Smith, R.D., Chanda, R. and Tangcharoensathien V. (2009) 'Trade in health-related services', *The Lancet*, 373, 9663, 593-601.

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