



Travel health nursing:
career and competence development

RCN guidance





Royal College
of Nursing

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Endorsements

The following bodies have endorsed this document

The Faculty of Travel Medicine of the Royal College of Physicians and Surgeons of Glasgow

Health Protection Scotland

The National Travel Health Network and Centre



ROYAL COLLEGE OF
PHYSICIANS AND
SURGEONS OF GLASGOW

TRAVEL MEDICINE



Health
Protection
Scotland

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National Travel Health Network and Centre

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Foreword

Travel health is a relatively new but fast growing field of medicine, and in the UK, nurses provide the majority of advice to travellers.

Travellers cross all boundaries, including age and ethnic background, which makes this field of practice increasingly more complex. Government organisations and agencies are improving directional guidance and advice to travellers; this is a welcome move in setting standards for the care of travellers.

Trends are changing in the UK, with increasing numbers of people travelling to exotic and remote destinations seeking adventure and new experiences. Imported communicable diseases and the health of migrants within the UK populations are areas of increasing concern, both for the indigenous population and for non-UK born travellers returning to their country of origin to visit friends and relatives.

As the Government's 2010 white paper *Healthy lives, healthy people: our strategy for public health in England* highlights, such situations are important in relation to public health and in 2012 the RCN's Public Health Forum 2012 published *Going upstream: nursing's contribution to public health*, which includes a commentary on travel health as related to all four UK countries.

This updated publication contains information on the current guidelines and standards for the care of travellers by appropriately registered health care professionals. It builds on the original *Competencies: an integrated career and competency framework for nurses working in travel health medicine* (RCN, 2007), which contained the first published guidelines and standards in the field of travel health medicine.

This revised publication also aims to define the standard that would be expected for a competent nurse, experienced/proficient nurse and a senior practitioner/expert nurse. While there is a strong focus on the work of a registered nurse, the field of travel medicine is truly multi-disciplinary and much of the information provided in this publication is equally applicable to other registered health care professionals, including doctors and pharmacists who provide travel health services.

Following the introduction of formal training and qualifications in the UK in 1995, the contribution of nursing to the travel health agenda has become

increasingly prominent. So much so that in 2006 the Royal College of Physicians and Surgeons of Glasgow established its Faculty of Travel Medicine (FTM), to which nurses were admitted on their own merits as founder Associates, Members and Fellows. It is anticipated that expert nurses, as described in this document, should have the qualifications and experience sufficient to aspire to be admitted to this Royal College Faculty.

The FTM publication *Recommendations for the Practice of Travel Medicine* can be used in conjunction with this document. These documents are complementary and together will support nurses, doctors and pharmacists in achieving optimum practice in protecting their patients when delivering travel health services.

Pre-travel risk assessment and risk management underpin the travel health consultation. For this reason, and in order to create a wider understanding for the thousands of health care professionals who undertake travel health consultations and provide care, the authors felt it both essential and useful to give a detailed description of the concept of travel risk assessment.

In this updated publication a section outlining the practice of travel medicine in the UK today has been added, and focuses particularly on the complexity of the many issues related to the service provided in primary care.

We hope that this document is not only informative, but also serves as a useful aid to your practice in the exciting field of travel medicine.

Sandra Grieve
Chair, RCN Public Health Forum

See Appendix 3 and References for further details on the papers mentioned here.

Introduction

Competence can be defined as: “The state of having the knowledge, judgement, skills, energy, experience and motivation required to respond adequately to the demands of one’s professional responsibilities.” (Roach, 1992).

This integrated career and competency framework for travel health is an important step forward for travel health nursing. It addresses a number of political and professional issues and initiatives, including:

- Agenda for Change (DH, 1999)
- need for leadership in specialist nursing
- need for development of standards
- NHS Plan (DH, 2000) and its equivalent in Scotland, Wales and Northern Ireland
- increased focus on work-based and lifelong learning plus supervision
- changing focus towards professional rather than academic accreditation.

This edition has been updated to take account of the final version of the *NHS Knowledge and Skills Framework*, which was first published by the Department of Health in October 2004, and the Royal College of Nursing’s *Integrated Core Career and Competency Framework*, which was published in 2010.

Agenda for Change

Agenda for Change (AfC) was implemented in the NHS across the UK in December 2004. It was the biggest overhaul of NHS-wide pay, terms and conditions in more than 50 years. It applies to all NHS organisations and therefore sets a UK framework for pay, terms and conditions of employment.

The AfC and its knowledge and skills framework (KSF) means that all staff will have clear and consistent development objectives; can develop in such a way that they can apply the knowledge and skills appropriate to their level of responsibility; and are helped to identify and develop knowledge and skills that will support their career progression.

Under AfC jobs are evaluated using a bespoke NHS job evaluation scheme. This gives each job a weighting that

then determines where each job slots into the new pay bands. Common job profiles continue to be developed and are applicable across the UK, and where a job fits a profile it is possible to place it straight onto an appropriate new pay band. For the relatively few jobs that don't automatically fit a profile, trained job evaluators drawn from management and staff side carry out the evaluation using a job analysis questionnaire (JAQ). Each pay band has a number of pay points. Staff below the maximum point can expect to progress to the next point each year.

There are two points on each pay band called gateways where staff knowledge and skills are assessed using the knowledge and skills framework. Pay progression at the gateways is linked to the demonstration of applied knowledge and skills to support continuing professional development. The presumption in the KSF is that staff will pass through these gateways unless there are reasons as to why they shouldn't.

For more comprehensive information on the AfC, please refer to www.rcn.org.uk/agendaforchange. This site is your guide to the ins and outs of the pay, terms and conditions for the NHS. It will help you to understand AfC, how it was developed, what you can expect in relation to pay, terms and conditions and how you can make the most of the system, particularly the KSF. To ask questions and debate issues use the RCN's Discussion Zone on the members-only area.

1

How to use the framework

Nurses operating in the field of travel health practice work in a variety of settings, including primary care, occupational health, NHS clinics in secondary care, private travel clinics, the armed services, universities and schools. The scope of practice depends on a variety of factors, which vary between settings and the different requirements for the NHS or the private sector, for example. Therefore, while the broadest spectrum of practice has been included in the descriptors and levels of practice, some elements may not be covered in the actual role of the practitioner. However, the descriptors and levels do provide an indication of the expected ability to function at that level if the situation arises.

As you move from the level of competence to experienced and on to expert practice levels, you build on the previous set of skills and knowledge. So, as an expert nurse you would be able to function across the entire range of descriptors for practice. This guidance should be used in conjunction with the following publications:

- *Agenda for Change – a guide to the new pay, terms and conditions in the NHS* (RCN, 2004)
- *Agenda for Change and nurses employed outside of the NHS* (RCN, 2005).

Competency levels

The RCN competency framework mirrors the career frameworks designed around the core functions of the consultant nurse and the career benchmarks of the AfC and the *NHS knowledge and skills framework (NHS KSF) and the development and review process* (DH, 2004).

The AfC generic competencies expected of all health care professionals are captured by the NHS KSF.

The six core competencies are:

1. communication
2. personal and people development
3. health, safety and security
4. service improvement
5. quality
6. equality and diversity.

The 24 specific competencies are grouped into the following themes:

- health and wellbeing (HW)
- estates and facilities (EF)
- information and knowledge (IK)
- general (G).

Every competency or dimension is subdivided into four levels, each of which is given a level descriptor. Level 1 represents basic knowledge and skills, through to Level 4 which represents the highest level of knowledge and skills.

“Every NHS KSF post outline must include an appropriate level from each of the six Core dimensions to which will be added a number of specific dimensions. There is no limit to the number of specific dimensions which can be included, but it would be unusual for a post to need more than seven. The specific dimensions should reflect critical aspects of the post.” (DH, 2004)

Producing evidence

You are responsible for developing your own portfolios of evidence for each competency in order to demonstrate that you have achieved it at the identified/desirable level. Forms of evidence that you can use include case histories, self-appraisal via a reflective diary, 360-degree feedback, verification of practice and structured observation of practice.

So, when you gather evidence it is important to consider the following:

- ensure you understand what the competency statement is asking of you
- review any existing work that could be used
- identify whether the existing evidence is appropriate. For example, if you attend a study day in preparation for carrying out a particular intervention but you have not practised the skill in a clinical setting, your certificate of attendance is not evidence of competence and you will have to consider making arrangements for supervised practice. However, if you have undergone

training and have evidence of supervised practice and use new knowledge and skills on a regular basis the evidence should be enough

- consider what else you may need to do in developing evidence, such as feedback on your practice; if you have further development needs, are they recorded in a personal development plan?
- think about using evidence that covers several competencies; one case study may demonstrate that you have used a variety of knowledge and skills in caring for a person.

Using the framework flexibly

While the framework provides comprehensive guidance for nurses in travel health, it should be used flexibly in conjunction with the RCN publications that we have already mentioned. This will help you to determine the scope of actual posts, individual development needs, and pay banding. It should also take account of developing roles as you expand in line with the changing needs and developments in the field of travel health.

2

Travel medicine services in the UK

Introduction

People travel abroad for a variety of reasons, including business trips, holidays and visits to friends and relatives. During the first decade of the new millennium the number of visits overseas made by UK residents peaked at nearly 70 million, and in 2006 over 9 million trips to areas outside Europe and North America were taken. While the recent global and domestic economic recession means these numbers have declined in recent years (see Table 1), the overall UK figures for overseas travel have more than tripled since 1981 (ONS, 2010) and it is projected that global international arrivals are expected to reach 1.6 billion by 2020 (WHO, 2011). While some travellers seek travel health advice before they leave the UK, surveys indicate that a significant number still do not see a health care professional before departure (HPA, 2008).

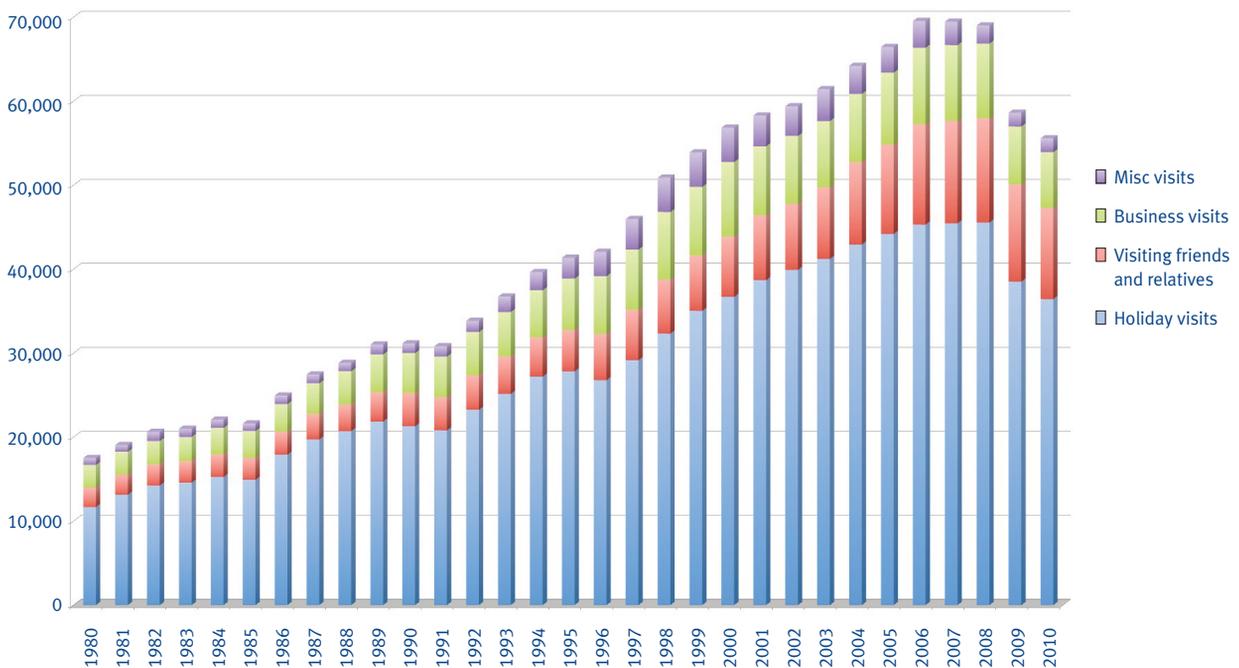
Disseminating the message that people need to go for advice in a reasonable timescale before they travel to high risk destinations is crucial to the longer term efficient and effective delivery of travel health risk management. Reports published by the Health Protection Agency (HPA) indicate that far greater attention needs to be given to recording travel histories from patients who contract

infectious diseases following foreign holidays and trips abroad. This data would help advisers give better advice to travellers (HPA, 2007; HPA, 2010a).

Clearly, it is essential to make a thorough assessment of the traveller and provide appropriate advice. However, there is ample evidence that inadequate advice is being given to travellers by health care professionals who are not sufficiently trained – including malaria prevention advice (Chiodini, 2009) – and this is having serious consequences for the morbidity and mortality of travellers (Checkley et al, 2012). It is also essential that travel consultations centre on the health education of the individual traveller (Field et al., 2010). Behaviour changes, together with the correct administration of vaccines and malaria chemoprophylaxis, are often necessary to prevent health problems when travelling abroad.

While travel advice is mostly given in primary care settings, it is increasingly taking place in private travel clinics, the occupational health sector, military settings, universities and schools. Recently large pharmacy chain outlets have also become involved, offering out-of-hours provision that is more acceptable to an increasingly demand-led service.

Table 1: Visits abroad by UK residents



Demands on travel health advisers' time could increase yet further if more travellers were aware of the need to seek advice prior to departure. Those who travel to visit friends and relatives (VFRs) in their country of origin are the second largest group of UK travellers abroad, and predominantly visit resource-poor countries. Evidence shows this group presents late, if at all, tend to travel for longer periods, and live as part of the local community when abroad which can increase their risk of exposure to infectious diseases. VFRs often underestimate the risk to their health. Also, late deals at the travel agent and on the Internet have created a newer group of travellers that may ask for last minute advice.

Overview of the development of travel medicine in the UK

Education and professional support

Formal education in travel medicine commenced in 1995 when Dr Cameron Lockie, a GP from Stratford-upon-Avon, researched the concept of a training course which was then developed by the Public Health Department of the University of Glasgow with support from a team at the Scottish Centre for Infection and Environmental Health (now Health Protection Scotland). From this time forward, postgraduate diploma and masters degree courses became available to study.

In 2003 Health Protection Scotland (HPS) took full managerial and administrative control of the courses from the University of Glasgow, in conjunction with the Royal College of Physicians and Surgeons of Glasgow (RCPSG), which conducted exams and awarded the diploma. The master's degree course was discontinued by the university, so did not transfer over. During this period, diploma and MSc courses were also developed by the Royal Free Academic Unit of Travel Medicine and Vaccines at University College London Medical School, and by the University of Sheffield. Sadly, due to lack of demand, both these centres have stopped running these courses. In 2011, RCPSG took over responsibility for providing the foundation and diploma courses in travel medicine and in 2012 the College signed an agreement with Norway, Finland and Sweden to permit the Nordic Initiative in Travel Medicine (NITME) to use the Glasgow Foundation Course material in the NITME Foundation Course.

Today, other short courses are available around the UK (see the National Travel Health Network and Centre (NaTHNaC) and TRAVAX for the most up-to-date information), but the diploma course offered by the RCPSG remains the only

registered qualification and entitles the holder to then be admitted as an Associate of the Faculty of Travel Medicine of the Royal College of Physicians and Surgeons of Glasgow. This body was formed in 2006 and nurses earned the enormous privilege to be admitted into a Medical Royal College to Fellow, Member and Associate status, depending on their qualifications and experience.

Nurses have been at the forefront of travel health care in the UK since the early 1990s and the RCN was amongst the first bodies to recognise travel health nursing as a specialist area of practice. In 1994 the RCN Travel Health Group – which subsequently became a special interest group and then a forum from 2000, began to produce newsletters and hold conferences for nurses working in the field. Membership of the group exceeded over 5,000 members at its height, and was highly active in the support of education and standards of nurses working in the field. In 2010 the Travel Health Forum was merged into the RCN's Public Health Forum.

The provision of travel medicine services in the UK

Contracting an infectious disease during a visit abroad represents a public health risk to the population back at home in the UK. For this reason the decision was taken in the 1966 contract to provide certain vaccines to travellers on the NHS. A list of potentially infectious diseases were named under the General Practitioner (GP) Statement of fees and allowances payable – commonly known as the 'Red Book' – which included infectious hepatitis (now called hepatitis A), diphtheria, polio, paratyphoid, typhoid and smallpox.

When the new General Medical Services (GMS) contract was negotiated in 2004 it was hoped this information would be updated to reflect the current diseases and modern vaccines. For example, the global eradication of smallpox was certified in December 1979 and subsequently endorsed by the World Health Assembly in 1980 (WHO, 2001) so vaccination is no longer required. Unfortunately, however, this didn't happen and so confusion regarding the complex issue of charging has been perpetuated. This has led to inequality of care in what should have been an NHS service, with some deliberately manipulating the guidance to charge in situations when this was clearly not allowed.

From May 2012 new regulations have been put into force regarding what travel vaccines are included in the money that GPs already receive, that is those that are included in NHS services. They specifically recognise that smallpox vaccine is not available for use by GP practices and that a vaccine for paratyphoid currently does not exist. They also

refer to Hepatitis A being available on the NHS where the risk is high and propose a link to the advice given by NaTHNaC. For further details see Annex BA of the Statement of Financial Entitlements (SFE) at http://www.dh.gov.uk/prod_consum_dh/groups/dh_digital_assets/@dh/@en/documents/digitalasset/dh_134302.pdf The equivalent legislation in Scotland is currently being updated (Annex J of the SFE) at [http://www.sehd.scot.nhs.uk/pca/PCA2008\(M\)09SFE.pdf](http://www.sehd.scot.nhs.uk/pca/PCA2008(M)09SFE.pdf) In the revision, individuals who provide immunisations for travel will be directed to refer to advice on TRAVAX (Health Protection Scotland) to help determine country-specific, vaccine preventable disease risk and for clinical indications to the Green Book.

In December 2011 the British Medical Association (BMA) published its guidance *Focus on travel immunisations – guidance for GPs*. Subsequently updated in March 2012 (GPC, 2012b), this guidance (issued by the General Practitioner Committee (GPC) of the BMA which deals with all matters affecting NHS general practitioners) describes clearly what can and cannot be charged for. Further guidance from the BMA *Focus on vaccines and Immunisations* (GPC, 2012d) also published in July 2012 following changes to the Regulations – *Focus on travel immunisations – guidance for GPs* was also updated in July 2012 to reflect the new regulations (GPC, 2012c).

Since 2004 the provision of vaccinations and immunisations (all necessary vaccines and immunisations as set out in Annex BA of the Statement of Financial Entitlements (SFE)⁵, published on 30 April 2012) has been an additional service within a primary care setting. A surgery can 'opt out' from providing the service but if it does so then 2% of the global sum is deducted and arrangements must be made with another provider (reimbursed for this work) to provide a travel service to practice patients requiring advice. Therefore, GP practices are contractually obliged to see patients for NHS travel requirements and should do so within a reasonable time of that appointment being requested, particularly with reference to their departure date (where practicable). Thus an appointment and relevant immunisations should be offered to patients who are travelling – one that is within a reasonable and clinically appropriate timescale.

Misunderstanding over travel vaccine charging is thought to be rooted in available guidance. The Department of Health's Immunisation against infectious disease, commonly known as the 'Green Book', is regularly updated and advises clinically what to give and when. But while the Red Book advised which services were funded by the NHS, as previously explained this has not been updated and as a result, if an immunisation is in the Green Book and not the

Red Book, some organisations assumed they could charge. This is not the case.

There are three categories for travel vaccines:

1. **Vaccines that must always be given as part of NHS provision** through GMS additional services are:
 - hepatitis A (all doses)
 - combination hepatitis A+B (all doses)
 - typhoid (both injectable and oral preparations)
 - combined hepatitis A and typhoid
 - polio (which is only available in the combined tetanus, polio and diphtheria vaccine)
 - cholera.
2. **Vaccines that cannot be given as an NHS service** and are therefore private service vaccines are:
 - yellow fever
 - Japanese encephalitis
 - tick-borne encephalitis
 - rabies for travel purposes.
3. **Those that can be given as either an NHS or private service** are
 - hepatitis B
 - meningitis ACWY.

It is up to the individual practice as to whether a charge is made or not; the regulations do not impose any circumstances or conditions as to when these immunisations should be given either on the NHS or privately. The decision lies entirely with the practice as the regulations state that they *may* charge not that they *must* charge. The updated guidance, issued in March 2012, acknowledged that general practices should take into account local policies especially if they had been negotiated with or agreed to by their local representative organisation – the Local Medical Committee (LMC)

However, while the GPC guidance document states such policy should be considered, it endorses the fact that ultimately the decision still resides with the practice. For example, monovalent hepatitis B vaccine can still be given as an NHS vaccine to travellers where clinically indicated (or alternatively combined hepatitis A+B vaccine where suitable), but if given in this way, a charge for its administration cannot be made. Alternatively, monovalent hepatitis B vaccine can be provided as a totally private service for travel, in which case the cost of the vaccine plus a fee for administration of the vaccine can be charged.

There is no funding in GMS for hepatitis B for travel purposes; the vaccine can be provided on the NHS but the practice cannot charge the traveller for administering it.

In addition, advice must be provided as part of the NHS service and cannot be charged for. Further useful information can be found in the Focus on travel immunisations – guidance for GPs document, which can be downloaded from the BMA's website at www.bma.org.uk. Hepatitis B provides a particular challenge not only for travel and the issues regarding charging, but also in an occupational health situation. Readers are strongly recommended to read recent BMA guidance also published on this subject. (GPC, 2012d)

Vaccines provided within a private setting – such as a private travel clinic or within an occupational health setting – would not be subject to these charging issues.

Prescribing travel vaccines

The prescribing of travel vaccines is another area of great confusion. The following information provides a basic outline, but further reading is recommended (see Resources section of this document).

- In an NHS setting travel vaccines can be prescribed either under a Patient Group Direction (PGD) for just the NHS travel vaccines or a Patient Specific Direction (PSD), or prescribed by a medical or non-medical prescriber for all travel vaccines including the private travel vaccines.

- Private travel clinics must be registered under the Care Quality Commission (CQC) in England. For example, a private clinic registered with the CQC before 30 September 2010 can develop its own PGDs (MHRA, 2010) and can administer all travel vaccines in this way. Those registering after this time need to enter into an arrangement with an NHS body to supply and administer medicines under a PGD as part of an NHS funded service (MHRA, 2010). There are plans to introduce registration in Scotland with Healthcare Improvement Scotland (HIS), but at the time of publication no definite date had been determined for this. In Wales private clinics are registered with the Healthcare Inspectorate Wales [HIW] as private health care providers. The Regulation and Quality Improvement Authority in Northern Ireland [RQIA] had no requirement for registration at the time of publication. RQIA however indicated that although they currently had no private travel clinics in Northern Ireland, an individual application would be dealt with on its own merit.
- A new development from the Department of Health expects GP practices to be registered with the CQC in England from April 2013 (DH, 2011).
- Travel vaccines given within an occupational health setting are exempt from this regulation but must operate under their own developed Standing Orders (MHRA, 2011).

Table 2: Options for prescribing travel vaccines (based on setting). Please note, the information for a private clinic is only relevant in England at the current time.

Setting	PGD	PSD	Medical or non medical prescribing	Other
NHS setting for example, GP surgery	YES for the NHS vaccines NO for the non NHS vaccines	YES if no PGD for the NHS vaccines YES for the non NHS vaccines	YES for any vaccines	N/A
Private clinic registered with the CQC (before 30 September 2010)	YES for all vaccines	YES if no PGDs available (although this is less practical)	YES	N/A
Occupational health setting	Not required	Not required	YES if needed	Under the Standing Orders written within the setting

A project to review UK medicines legislation has been ongoing for some time and it is expected that this consolidated legislation will come into force in 2012 (MHRA, 2012). For further details go to www.mhra.gov.uk

National Minimum Standards and Core Curriculum for Immunisation Training of Healthcare Support Workers (HCSWs) has recently been published by the HPA for the administration of influenza and pneumococcal vaccines. It is not current practice for HCSWs to administer childhood, travel or other vaccines in the UK. (HPA 2012) http://www.hpa.org.uk/webc/HPAwebFile/HPAweb_C/1317134415868.

3

Pre-travel risk assessment and risk management

Introduction

This section introduces the concept of pre-travel risk assessment, its importance in the task of evaluating and managing the advice required to minimise the traveller's risk, the structure and reasons for performing assessments, and the practical aspects of essential documentation.

National online databases should always be consulted for the latest information on the country specific risks – to help inform recommended vaccines and additional information, for example disease outbreaks. In addition in the UK the principal resource for travel health professionals is the *Health information for overseas travel* (the 'Yellow Book'), published by NaTHNaC. All practitioners should have access to these important resources as well as the latest versions of the Green Book (see www.dh.gov.uk/greenbook) and the UK Malaria Guidelines (see www.malaria-reference.co.uk).

The learning objectives of this section are:

- understand what pre-travel risk assessment is and its importance for the care of a traveller
- understand the contents and reasoning of a pre-travel risk assessment
- be aware of the appropriate use of information collected during the assessment to decide travel risk management advice required, including relevant travel immunisations and malaria prevention advice
- have greater insight into the practical aspects of pre-travel risk assessment, including documentation of the process
- understand the importance of using the latest versions of national guidance, online databases, the Yellow Book, the Green Book and the UK Malaria Guidelines (see resources in Appendix 3)
- have the ability to evaluate the sources of travel information and use other appropriate up-to-date resources in the travel health consultation.

What is pre-travel risk assessment?

A pre-travel risk assessment entails collection of information regarding the traveller and the nature of the trip (see below). You will find a sample pre-travel risk assessment form in Appendix 2 that you can adapt as necessary.

Information about the traveller:

- age and sex
- medical history
 - past and present
 - relevant family history
 - current health status including pregnancy status, actual or planned
- medication
- any known allergies
- previous experience travelling
- current knowledge and interest in health risks
- previous vaccine history
- any special needs.

Information about the traveller's itinerary

- destination(s)
- departure date
- length of stay
- mode of transport
- purpose of trip and planned activities
- quality of accommodation
- financial budget
- health care standards at destination
- relevant comprehensive insurance provision.

Reasons for asking questions

It is essential to ask a traveller questions on the topics detailed above. Responses will influence many things, some of which are detailed below. This knowledge will help you to assess the risk factors and then manage that risk by selecting appropriate health advice, vaccinations, malaria prevention measures and advice. The following section looks at some examples of what you should consider in a pre-travel risk assessment.

Age and sex

Young travellers

This relates particularly to children under five years old:

- road traffic accidents and drowning incidents are the leading causes of death in child travellers (Field et al., 2010)
- risk of illness such as malaria, or travellers' diarrhoea, which can be more severe
- small, mobile and inquisitive toddlers, who have limited hygiene awareness – put fingers in mouths, touch everything – which leads to increased risk of faecal orally transmitted illnesses and dehydration
- rabies is more common in children than adults (Warrell, 2012)
- increased risk of other hazards such as sunburn and heat exposure; careful supervision is needed
- restrictions on some choices for travel vaccines and malaria chemoprophylaxis.

Older travellers

- immune systems reduced, more at risk of infection and serious sequelae
- senses reduced, more at risk of accidents
- pre-existing medical conditions such as diabetes, coronary heart disease often lead to complications
- primary immunisation may not have been administered because born prior to implementation of national programmes
- increasing risk of sexually transmitted diseases in the over 50 year old age group in today's society (HPA, 2010b)
- increased risk of serious adverse events following a first dose of yellow fever vaccine in those over 60 years (Khromava et al., 2005)

- mortality from malaria increases with age in the UK, elderly travellers need to be targeted for pre-travel advice (Checkley et al., 2012).

Female travellers

- security risk possibly increased if travelling alone
- need to be culturally sensitive in personal dress
- if of child bearing age, need to determine that there is no possibility of being pregnant at time of travel vaccination administration; problems associated with contraception; travelling while managing menstruation and so on.

Male travellers

- risk of accidents higher in males 20 to 29 years old (McInnes, 2002).

Medical history

Past and present medical history and current health status

- previous medical history may have impact on choice of trip; for example, a person who has had spleen removed would be at increased risk of severe illness if travelling to destination where malaria, particularly *P.falciparum*, is endemic (Chiodini et al., 2007)
- those with ongoing medical problems may require specialist advice; for example, those with severe renal or liver disease would need advice regarding malaria chemoprophylaxis
- people who are immuno-suppressed; some live vaccines may be contra-indicated and other vaccines may be less effective (Salisbury et al., 2006)
- people with pre-existing conditions such as diabetes and coronary heart disease may have higher risk if illness occurs at destination, increasing their risk of needing medical attention that may be of variable quality (the most common cause of death abroad in UK travellers is due to coronary heart disease) (HPA, 2007)
- people with epilepsy or psoriasis have reduced choice of chemoprophylaxis for malarious endemic regions (Chiodini et al., 2007)
- people with a family history of relevant illness; for example, the condition of epilepsy in a first degree relative may influence the choice of the malarial chemoprophylactic drug selected (Chiodini et al., 2007)

- recent surgery or long term medical problem such as respiratory disease may impact on travel and a fitness to fly examination may be required (Aviation Health Unit, 2012)
- physical disability may impact on type of trip, limit activities, and have an increased need for medical care, which may be of variable quality
- HIV-infected people may be denied entry into some countries (The Global Database); if they are not denied entry, their immune status will need to be known prior to administration of some vaccines and for the purpose of tailoring advice
- psychiatric history may have impact on long term travel or expatriate lifestyle; for example, mefloquine for malaria chemoprophylaxis is contraindicated (Chiodini et al., 2007)
- pregnancy increases risk from malaria; if complications occur in the pregnancy medical intervention may be required but reliable medical care may not be available at the destination; deep vein thrombosis (DVT) following a long haul flight is a greater risk in pregnancy; the early scan should be performed ideally before travel ; antenatal records should always be taken on the trip; tour operators will set individual restrictions on a pregnant woman flying in the third trimester of the pregnancy (Aviation Health Unit, 2012)
- breastfeeding presents some restrictions on choice of malaria chemoprophylaxis, some restrictions regarding administration of live vaccines need to be assessed
- determine wellbeing at the time of vaccination, afebrile, feeling well and fit to receive vaccinations, no possibility of pregnancy as mentioned above.

Medication

- some prescribed medication could contraindicate malaria chemoprophylaxis or live vaccines (BNF; Chiodini et al., 2007)
- a woman on the oral contraceptive pill could lose contraceptive efficacy if she suffers travellers' diarrhoea (Field et al., 2010) specialist advice is required for those on medication such as insulin
- safe storage of drugs in transit, particularly for drugs that need refrigeration
- problems generally taking sufficient supplies of medication for an entire trip is recommended due to

problems of counterfeit medicines found abroad

- problems can occur when taking drugs into other countries, the legal status of some drugs in other countries may be different to the UK and restrictions are in place regarding controlled drugs; correct paperwork, including a doctor's letter or prescription and any relevant licence can be helpful at the point of entry to a country
- elderly people on regular medication need to be aware of the importance of continuing regular administration despite crossing time zones, inconvenience of diuretics and resulting diuresis
- be aware of restrictions for carrying medication and medical equipment on aircraft and at immigration such as needles.

Allergies to drugs or food/reaction to vaccination

- establish true anaphylactic reaction to vaccines previously administered to avoid similar event – it should be noted that anaphylactic reaction to vaccines is extremely rare (Salisbury et al., 2006)
- allergy to foods, any specific drugs or latex; for example, establish if there is a true anaphylactic reaction to eggs in which some of the vaccines are manufactured
- provide specific advice to minimise problems to severe reactions to insect bites
- establish previous severe adverse reactions/events to malaria chemoprophylaxis
- consider arrangements for the traveller to carry with them a supply of epinephrine (adrenaline) for emergency use where there is a history of severe allergic reaction to an agent
- to establish a history of, or the possibility of fainting, enquire before administering vaccines. Fainting is more common than anaphylaxis and practitioners need to know the difference between the two.

Previous travelling experience

- establish previous travel experience to identify any problems in the past; for example, difficulty in compliance with any malaria chemoprophylaxis, whether more prone to travellers' diarrhoea, insect bites and so forth

- deliver advice in an appropriate way so that it is more likely to be accepted by traveller.

Current knowledge and interest in health risks

- establish the level of knowledge and concept of health risks of the traveller so that appropriate travel health advice can be given
- consider traveller's attitude – for example, a risk taker or risk averse
- establish general interest and response to advice that may be given to encourage self-learning; for example, suggest well regarded Internet sites to increase knowledge further.

Travellers visiting friends and relatives (VFRs)

- VFR travellers have a different risk profile to other types of travellers – tending to travel for longer, live as part of the local community, may not seek advice prior to travel, underestimate their health risks
- data suggests that travellers visiting friends and relatives are less likely than other travellers visiting Africa to take anti-malarial prophylaxis; this is possibly because they underestimate the risk of acquiring malaria, and do not appreciate that natural immunity will wane after migrating to the UK; second generation family members will have no clinically relevant immunity to malaria (Chiodini et al., 2007)
- those visiting friends and relatives in countries with endemic malaria make up the majority of cases of falciparum malaria in the UK, but the risks of this group dying from malaria are much smaller than for other travellers, with most deaths occurring in tourists (Checkley et al., 2012)
- consultation with VFRs should explore their values and beliefs and the practitioner should deliver advice accordingly; the importance of health risks should be stressed such as how essential it is to take appropriate chemoprophylaxis when travelling to areas where malaria is endemic (Neave et al., 2011)
- migrants from countries with high rates of female genital mutilation (FGM) may return to visit friends and relatives intending their children to undergo FGM;

it is illegal to take girls who are British nationals or permanent residents of the UK abroad for FGM whether or not it is lawful in that country; suspicion of such behaviour should be reported to the Foreign and Commonwealth Office (FCO) (see the HPA's *Migrant health guide*). Also see the RCN's *Female genital mutilation: an educational resource*.

Previous vaccination history

- having accurate information of previous vaccine history status will ensure duplication of vaccines does not occur and makes it possible to plan appropriate schedules within the time limit prior to departure
- gather information about primary immunisation status to ensure complete courses were given
- travellers should be advised to safely keep documentation of their own vaccination record cards, particularly if they get vaccines from different sources, such as GPs and private travel clinics.

Special needs

- identify any specific needs so that plans can be made to ensure travel arrangements are as smooth and convenient as possible
- identify groups and associations that will inform and protect travellers with special needs, such as travellers with a disability.

Destinations

- establish the exact destination location to determine the disease risks; for example, yellow fever is restricted to Africa and South America (NaTHNaC, 2010)
- establish a specific location in a country; for example, malaria is rarely present in Nairobi in Kenya, but it is a high risk in other parts of the country, for example Mombasa (NaTHNaC, 2010)
- record stopovers in case the destination may have impact on the risk assessment regarding immigration requirements
- rural areas may be of greater risk than urban, particularly for diseases such as malaria and Japanese B encephalitis; in an emergency situation, especially in more remote areas, it may be difficult to reach medical help e.g. in the event of a potentially rabid wound

- location may also impact on other risks such as road accidents; developing countries may have inadequately constructed roads, limited road safety rules and poorly maintained vehicles
- accidents may be a greater risk and poor standards in health care facilities may mean an inadequate provision of care and an inability to cope with injuries
- consider the political and cultural issues at the destination and observe any UK Foreign Office travel restrictions (see the Foreign Commonwealth Office)
- areas at high altitude may have unknown effects on travellers who have not been at altitude before; this is particularly a concern for people with pre-existing medical conditions; specialist referral may be required (Field et al., 2010).

Departure date

- departure date will affect the time for giving advice and the timing of vaccine schedules
- seasonality of certain diseases will affect advice to travellers; for example, Japanese B encephalitis has a seasonal risk from May to October in northern areas of South East Asia, and influenza may be endemic in the southern hemisphere during UK summer months
- travellers who attend a travel advice consultation very late may not have time to receive optimum pre-travel advice or protection; however, it is never too late to commence some vaccine protection or provide malaria chemoprophylaxis and receive appropriate advice to take additional precautions – for example, food, water and personal hygiene advice.

Length of stay

- generally the longer the duration of stay, the greater the travel health risks (Field et al., 2010)
- longer stays may run into seasons where risk is either higher or lower for certain diseases
- travellers are sometimes less cautious on a long stay, and this may increase the personal health risk; for example, relaxing adherence to malaria chemoprophylaxis
- advice on the use of malaria chemoprophylaxis is different for long-stay travellers and the practitioner may need specialist knowledge (Field et al., 2010).

Transport mode

- long haul travel is most commonly by air, but travel by sea and overland journeys should also be taken into account when assessing individual risk
- risk of travel-associated complications due to prolonged periods of immobility while travelling, such as DVT should be considered for travellers who have any pre-disposing factors (Field et al., 2010)
- any pre-existing medical condition or situation may raise concerns about fitness to travel, and an examination prior to the trip may be necessary; for example, following a myocardial infarction (as long as there are no complications) travel is not advised for 7-10 days. (Civil Aviation Authority 2012). Individual airlines may vary on required intervals.
- cruise ship travel is increasingly popular, particularly with older people; issues for consideration could include: yellow fever vaccination for entry into some countries; risk of disease outbreaks such as influenza and norovirus; and physical problems such as sea sickness (Field et al., 2010).

Purpose of trip and planned activities

- people travel for many reasons and it is important to establish the reason because this impacts on the risks and type of pre-travel health advice given
- holiday makers may take risks that they would not at home because they are relaxed and want to enjoy the experience without always considering the risks involved; package tours generally provide a reasonable amount of security, and that can lead to excessive complacency or over indulgence; this is particularly true for all-inclusive holidays that are aimed at younger age groups where limitless alcohol is available for consumption (Hughes et al., 2011)
- backpackers and people undertaking more adventurous travel or expeditions may travel for longer periods of time and venture to areas where tourism is less well-developed; they may undertake risky activities such as camping in areas where malaria is a high risk, and where other mosquito-borne diseases are transmitted in the daytime such as yellow fever and dengue fever; they also often take part in activities that can be hazardous such as scuba diving, water sports like white water rafting, bungee jumping, and trekking; facilities may not be designed to the same standards as

those in the UK, and the quality of equipment and supervision may not be adequate (Field et al., 2010)

- those travelling for the purpose of a pilgrimage for example, Umrah and Hajj, are at greater risk of diseases resulting from close association such as respiratory disease and meningococcal meningitis; certificate of proof of vaccination for ACW135 and Y will be required by these pilgrims to obtain a country entry visa
<http://www.hajinformation.com/main/p10.htm>
- people working abroad face special risks depending on their type of work; for example, medical personnel working in disaster areas, or security workers going to war zones will be at greater risk of disease of close association and the blood borne infections (Field et al., 2010)
- business travellers under great pressure, making frequent short term and/or long haul trips can experience loneliness, isolation, and a cultural divide; this group of travellers can be at risk from excessive alcohol use and casual sex (Patel, 2011)
- expatriate travellers can also have similar experiences; they miss family, have difficulties with language barriers and suffer psychological stress (Patel, 2011)
- people travelling to visit friends and relations are at greatest risk from diseases such as malaria because they don't fully understand the risks; they have incorrect, pre-conceived ideas that they have natural protection against the disease, and may stay longer at hazardous locations such as rural areas (Field et al., 2010)
- travellers are more adventurous today and advice must emphasise and focus on, for example, risk of accidents, environmental hazards and STIs.

Social activities

- forced marriage is an abuse of human rights, a form of violence against women and men, where it affects children, child abuse and where it affects those with disabilities abuse of vulnerable people (FCO, 2011); of cases referred to the Forced Marriage Unit, 85 per cent involve women, although men can also be victims and should be given the same assistance and respect when they seek help (HM Government, 2009).

Medical tourism

- a growth area in recent years, with people travelling for many types of surgery including dental treatment, cosmetic surgery, elective surgery and infertility treatment; in 2008 an estimated 52,500 UK residents travelled abroad for medical treatment (NHS, 2011a); the most common problems travellers experience when travelling abroad for treatment result from undertaking limited initial research, booking treatment without a proper consultation, aftercare, travel risks (for example, deep vein thrombosis and pulmonary embolism), lack of insurance, and poor communication and language difficulties (NHS, 2011b); guidance is available from the NHS Choices and the Foreign and Commonwealth Office websites (FCO, 2012).

Quality of accommodation

- good quality air conditioned hotels will reduce some health risks, but travellers should be advised not to be complacent about hygiene standards especially for food preparation
- screened accommodation gives better protection than none in an area with malaria, but travellers should be advised about other personal protection bite-prevention measures for night-time and daytime
- camping and living fairly rough will increase travel health risks.

Financial budget

- budget often dictates the quality of eating places, but food hygiene is not always guaranteed in an expensive venue
- generally, travellers should be advised not to eat food from street vendors because of hygiene standards and the quality and storage of the food used; however, sometimes the reverse is true if it is possible to observe the thorough cooking of fresh food at high temperatures
- backpackers often have to manage their trip within a tight budget and need to be aware of the increased risk of using cheaper forms of transport, living in poorer accommodation, and having less money for medical help
- all travellers should make it a priority to buy comprehensive travel insurance before travelling, and always carry details of policy documents with them;

special attention should be given to the pregnant traveller's insurance including cover of the foetus for situations such as premature delivery and subsequent care of the baby

- practitioners need to be flexible and provide sufficient information to help the traveller to prioritise in situations where limited time or finances mean that the optimum recommendations cannot be followed.

Health care standards at destination

- where health care standards are in any way in doubt at a destination, it is essential not only to take out travel health insurance but cover for medical repatriation as well
- people with a pre-existing medical condition, particularly if it is serious, should consider the suitability of destinations where standards of health care are poor and sparse; check that travel insurance will cover in such situations, and, if possible, check medical facilities in advance
- people travelling to an area where facilities may be inadequate should consider travelling with a first aid kit and sterile needle pack.

Performing risk assessments

Performing risk assessments are dependent on the individual practitioner, their facilities and how comprehensive the service is. The main consideration is to allocate sufficient time to perform the risk assessment and deliver appropriate travel risk management advice. It would be unsafe to allow only 10 minutes for a new travel appointment. A minimum of a 20-minute consultation appointment per person should be allowed to exercise best practice. Travellers with more complex needs – such as backpackers, or individuals requiring malaria prevention advice relevant to their destination – may need a longer consultation time. The Nursing and Midwifery Council 'Code' is about being professional, about being accountable and about being able to justify your decisions; employers need to respect the complexity of a travel consultation and appreciate that sufficient time must be allowed for a nurse to abide by the Code.

Face-to-face contact with the traveller is the preferable way to undertake a travel risk assessment and provide advice. In general, providing advice via a telephone or e-mail is

controversial, time-consuming, and may make practitioners vulnerable to litigation (Genton and Behrens, 1994).

How to conduct a risk assessment

It is better to carry out a risk assessment using one of the methods below rather than trying to recall the necessary questions from memory. With practise, risk assessment information collection can be carried out effectively without taking excessive time. Interpretation of the information and applying advice and recommendations appropriate to the individual risk assessment is the time consuming part of the consultation.

1. Ask the traveller to complete a form prior to the consultation that can then be reviewed by the travel health adviser before the appointment and used to identify any potential problems. This may save time in a consultation, and identify availability of vaccines which may require ordering in advance or preparation of a patient specific direction. However, within the consultation the nurse still needs to review the completed form to ensure the traveller has understood the questions asked and confirm the information provided by the traveller is accurate, which will include reviewing the medical records if available. This may not be as time saving as originally thought, but it does give the traveller some idea of the depth of information required about the trip and helps to make the nurse feel more prepared. Information can be collected on paper for scanning into the computer system, or within an online form on a website accessible to the general public, for example, a general practice surgery website.
2. Complete the risk assessment form with the traveller at the consultation, identifying any foreseeable problems and issues which may require further questioning. The travel health adviser will be assessing the risk with no prior knowledge of the trip details, which can be more time consuming. It is therefore helpful to collect information about the traveller's destination, date of departure and duration of stay when the appointment is initially booked to support this method. Again, the risk assessment can be done on paper and subsequently scanned into the computer system, although designing a computer template for the process may be more helpful and ultimately time efficient.
3. A risk assessment could be performed by following a checklist to ensure all information is collected and the detail is fully documented on the traveller record. However this method is less reliable or efficient, is very time consuming, and great care needs to be taken to ensure all the information is documented.

Steps to follow after a risk assessment

Once a risk assessment has been undertaken and in conjunction with reference to an online national travel health database (plus other resources outlined in Appendix 3) it is possible to ascertain:

- the disease risks that may be a potential threat to the traveller
- the non-disease related risks the traveller may be exposed to, such as accidents
- which vaccine-preventable diseases the traveller may need protection against
- which vaccines should be given and which schedules are most appropriate
- identification of any contra-indications to vaccination and the relevant information to be given to the traveller about the vaccines including efficacy, length of protection, schedule, side-effects and cost implications; details of clinical information can be obtained from the Summary of Product Characteristics (SPC) in the Electronic Medicines Compendium
- if malaria prevention advice is required; if it is and if chemoprophylaxis is recommended then the appropriate information about the available choices, efficacy, side-effects and cost need to be incorporated into the advice given; details of clinical information can be obtained SPC in the Electronic Medicines Compendium
- the most appropriate general travel health advice that should be given
- the necessary special travel health advice that should be given, tailored to the traveller's individual needs; for example, if the traveller has diabetes
- if certain travellers should be advised against travelling to a destination because of extreme health risk; for example, pregnant women, infants and young children travelling to a destination with a high risk of malaria and where there is chloroquine drug resistance to *Plasmodium falciparum* malaria
- the additional information sources which could be given to the traveller to aid self-directed learning; travellers should take on a degree of responsibility for self-education, and it would be ideal if some of the health risk review occurred prior to the travel health consultation (see the FCO's *Know Before You Go* campaign)
- if the traveller understands the information given to obtain informed consent to vaccination (Salisbury et al., 2006)

Documentation to accompany the travel consultation

- the NMC's *Standards for medicines management* (NMC, 2010) and *Guidance for record keeping for nurses and midwives* (NMC, 2009) should be followed at all times
- the nurse is responsible for undertaking and evaluating the risk assessment, and thoroughly documenting it in a professional manner and keeping records secure
- a risk management form is provided in Appendix 2 to highlight the information that could be documented during the travel health consultation; while it may be considered necessary to adapt this content to suit your individual workplace, please note items included are indicative of best practice. For example, the form suggests that in addition to discussing potential side effects from the vaccines, the Patient Information Leaflet (PIL) from the packaging or from www.medicines.org.uk/emc/ could be given. Guidance from the National Prescribing Centre (NPC, 2009) identifies that a medicine supplied via a PGD must legally be accompanied by the statutory PIL. When a medicine is administered via a PGD it is good practice to provide the PIL to the patient at the time of administration, although this is not a legal requirement. Please study the information on the risk management form carefully
- information about vaccine administration should be well documented in full and records held for 10 years for an adult and 25 years for a child or eight years following a child's death (NaTHNaC, 2010). Records should include the name of the drug, batch number, expiry date, site of administration and name of the administrator. The details of the administration of yellow fever vaccination must be kept for a minimum of 10 years, and if a yellow fever centre ceases to operate, then arrangements must be made for the records to still be available for 10 years after registration ceases
- provide a written record of vaccinations administered, and advise the traveller to keep the documentation safe and take to any future travel health consultations; these records will help travel health advisers and aid future decisions on vaccine requirements

- it may be useful to write a protocol documenting the process of a travel consultation setting out items such as aims and objectives, key resources to be used, roles of staff involved, description of the process of booking appointments, the travel consultation, planned audit, and so forth.

Conclusion

No travel health consultation should take place without conducting a travel risk assessment and documenting the information. The assessment forms the basis of all subsequent decisions, advice given, vaccines administered and the malaria prophylaxis advice that is offered. This takes time to perform correctly, and for best practice practitioners should leave sufficient time as described.

4

The competency framework for travel health nurses

Core competency 1: General standards expected of all nurses working in travel health

Competent nurse (level 5)	Experienced/proficient nurse (level 6)	Senior practitioner/expert nurse (level 7)
Fulfils points at this level	Fulfils points at level 5 as well	Fulfils points at levels 5 and 6 as well
<ol style="list-style-type: none"> Acts in accordance with the NMC Code as a registered nurse. Keeps up-to-date and is aware of relevant nursing issues. Applies evidence-based research to clinical practice. Works to established protocols. Works with access to supervision to make clinical judgements for routine travel health scenarios. Works effectively as a team member. Maintains authentic records of advice and procedures. Provides accurate and consistent advice to travellers. Knows where and how to access information and seek further advice. Recognises and act on any inability to cope or lack of knowledge or skills. Refers to a more specialist service as and when appropriate, using appropriate mechanisms. Works with the patient group directions (PGDs) patient specific directions (PSDs) prescription from a medical or non medical prescriber or standing orders (in the occupational health setting). 	<ol style="list-style-type: none"> Revises and updates established protocols Makes clinical decisions in more complex scenarios. For example, patient over 60 years-of-age travelling to a country endemic for yellow fever. Participates in the revision and updating of established PGDs / PSDs or standing orders. 	<ol style="list-style-type: none"> Oversees effective implementation of protocols and make recommendations. Works independently to make clinical judgements and decisions. Refers to more specialist services in unusual circumstances. Oversees effective implementation of the PGDs/PSDs standing orders.
<p>Applicable KSF dimensions</p> <ol style="list-style-type: none"> CORE 1, CORE 5 CORE 2 CORE 5 CORE 5 CORE 5, HWB2, HWB6, HWB7 CORE 5 CORE 1, CORE 5 CORE 1, CORE 5, CORE 6, HWB1, HWB4 CORE 5, IK3 CORE 2 CORE 5, HWB2, HWB6 CORE 3, CORE 5, HWB2, HWB5 	<p>Applicable KSF dimensions</p> <ol style="list-style-type: none"> CORE 4, CORE 5 HWB1, HWB2, HWB4, HWB7 CORE 4, CORE 5, IK3 	<p>Applicable KSF dimensions</p> <ol style="list-style-type: none"> CORE 4, CORE 5 HWB1, HWB2, HWB4, HWB7, IK2 CORE 1, CORE 5, HWB2, HWB6 CORE 3, CORE 4, CORE 5

Core competency 2: Travel health consultations

Competent nurse (level 5)	Experienced/proficient nurse (level 6)	Senior practitioner /expert nurse (level 7)
Fulfil points at this level	Fulfil points at level 5 as well	Fulfil points at levels 5 and 6 as well
<ol style="list-style-type: none"> 1. Demonstrates good geographical knowledge and know how to access further information regarding global destinations including use of an up-to-date atlas and accessing the Internet for such resources. 2. Performs a comprehensive risk assessment and know how to carry out risk assessment effectively. 3. Interprets the risk assessment and accesses the latest recommendations for travel health advice, immunisations required and malaria chemoprophylaxis appropriate to the risk assessment for the journey. 4. Recognises complex issues beyond personal scope and knows who to contact for further information, support and advice. 5. Checks if UK childhood immunisation schedules are up-to-date and acts appropriately if not. 6. Demonstrates knowledge of the common travel related illnesses for example, travellers' diarrhoea, hepatitis A, hepatitis B, typhoid, malaria and dengue fever (consider MMR, flu and pneumococcal disease in relation to travel) and other travel-related hazards. 7. Provides individual advice to the traveller regarding: <ul style="list-style-type: none"> • accident prevention and the importance of adequate travel insurance • safe food, water and personal hygiene protective measures • prevention of blood-borne and sexually transmitted diseases • general insect bite prevention • prevention of animal bites particularly rabies including wound management • prevention of sun and heat complications • personal safety and security • malaria-awareness, bite prevention, appropriate chemoprophylaxis and the importance of compliance and symptoms of malaria to quickly diagnose and treat a traveller with the disease. 8. Communicates information effectively to explain the disease and other travel-related risks, vaccine recommendations and malaria prevention advice appropriate to the risk assessment. 9. Prioritises appropriately in situations where a patient's time or financial situation does not allow the optimum recommendations. 10. Assesses anxieties, especially to vaccination, and acts appropriately. 11. Demonstrates an excellent vaccine administration technique. 12. Completes patient and administrative records after vaccination. 	<ol style="list-style-type: none"> 2. Supports and educates other team members in the process of risk assessment. 3. Selects or develops appropriate risk assessment tools. 4a. Provides support and advice to inexperienced colleagues in complex problems. 4b. Interprets risk assessment where advice is not straight-forward. 4c. Manages some more complex issues independently but refers when necessary. For example, travellers with serious underlying medical conditions. 6. Disseminates their knowledge of travel-related diseases such as rabies, Japanese encephalitis, tick borne encephalitis, yellow fever, schistosomiasis, West Nile virus, tuberculosis. 7a. Advises travellers with complex travel and special needs. For example, the pregnant traveller, the traveller with diabetes, immunosuppression, cardiac or respiratory disease, those who have experienced previous severe adverse reactions to a vaccine. 7b. Advises travellers on more complex health issues. For example, emergency standby malaria medication, post-exposure prophylaxis following blood-borne virus exposure such as medical electives, management of altitude sickness. 7c. Meets the standards required for administration of yellow fever vaccine and complies with national regulations as a Yellow Fever Vaccination Centre, which is under the administration of National Travel Health Network and Centre (NaTHNaC) in England, Wales and Northern Ireland and Health Protection Scotland (HPS) in Scotland. 8. Provides specialist advice to travellers with more complex itineraries that may also require the prescription, provision and administration of more unusual vaccines such as Japanese B encephalitis, rabies, tick-borne encephalitis and BCG. 9. Demonstrates involvement in the financial governance of travel including vaccine administration, which vaccines are provided privately and their cost, and which vaccines are reimbursable under the NHS. This would also include the provision of malaria chemoprophylaxis, medication in anticipation of illness abroad and travel health products such as mosquito nets. 11. Administers intradermal vaccinations if required. 	<ol style="list-style-type: none"> 2. Develops protocols encompassing risk assessment. For example, for travel health consultations, malaria prevention advice, vaccine storage. 3. Interprets risk assessment in unusual or special circumstances. 4. Accepts referrals for more complex issues. 7. Writes appropriate travel-related advice sheets on all topics of travel health advice, where advice sheets are not readily available 8. Provides advice on more complex issues at a national/board/strategic level.

Applicable KSF dimensions	Applicable KSF dimensions	Applicable KSF dimensions
1 CORE 2, CORE 5, IK3 2 CORE 2, CORE 3, HWB2, HWB6 3 CORE 3, CORE 5, HWB3, IK2 4 CORE 2, IK3 5 CORE 3, CORE 5, HWB2, HWB5, HWB6, HWB7, IK2 6 CORE 2, CORE 5, IK2 7 CORE 2, CORE 5, IK2 8 CORE 1, CORE 2 9 CORE 3, CORE 5, HWB1, HWB2, HWB3, 10 CORE 6, HWB1, HWB2, HWB4 11 CORE 3, CORE 5, HWB5 12 CORE 1	2 CORE 2 3 CORE 3, CORE 4 4A CORE 1, CORE 2 4B IK2 4C CORE 3, CORE 5 6 CORE 2 7A CORE 1, CORE 3, CORE 5, HWB1, HWB4 7B CORE 1, CORE 3, CORE 5, HWB1, HWB4 7C CORE 2, CORE 5 8 CORE 1, CORE 3, CORE 5, HWB1, HWB2, HWB3, HWB4, HWB5, HWB7, IK2 9 CORE 4, CORE 5, CORE 6 11 HWB5	2 CORE 4, CORE 5, HWB1 3 CORE 3, IK2 4 CORE 1, CORE 4, CORE 5 7 CORE 1, CORE 5, HWB1, HWB4, IK3 8 CORE 4

Core competency 3: Professional responsibilities for nurses working in travel health

Competent nurse (level 5)	Experienced/proficient nurse (level 6)	Senior practitioner /expert nurse (level 7)
Fulfils points at this level	Fulfils points at level 5 as well	Fulfils points at levels 5 and 6 as well
<ol style="list-style-type: none"> 1. Attends annual training session on immunisation as specified in the Health Protection Agency national curriculum programme. 2. Attends annual update on anaphylaxis and CPR training. 3. Understands the issues of informed consent and acts accordingly. 4. Ensures that travel health knowledge is always up-to-date. 5. Evaluates own care practices against accepted standards and guidance. 6. Attends an annual travel health update study session/conference at a local, national or international event. 7. Uses recognised online databases on a frequent and regular basis to ensure the latest national recommendations are always followed and read the update information to ensure awareness of issues such as disease outbreaks. 8. Demonstrates awareness of and uses a variety of other recognised travel health resources online (see appendix 3). 9. Joins an organisation that provides regular travel health information and contact for example, the RCN Public Health Forum, Affiliate membership of the Faculty of Travel Medicine of the Royal College of Physicians and Surgeons of Glasgow or the British Global and Travel Health Association. 10. Demonstrates evidence of learning to apply skills and knowledge in the field of travel medicine. For example, minimum of 15 hours of relevant learning plus mentorship in clinical skills before undertaking a travel consultation alone. 11. Insists on adequate time to perform the travel consultation and negotiating sufficient time if this has not been permitted. 12. Demonstrate adherence to the principles of vaccine storage, administration and related theory. 13. Ensures adequate vaccine stock control, ordering or delegating this process to ensure sufficient stock is available at all times as per local protocols. 14. Is involved in the choice of vaccine products used in relation to clinical evidence and best practice and does not necessarily accept the decision of non-clinicians ordering products based on cost and profit margins alone. 15. Works effectively with non-clinical staff who are involved in the travel consultation process. 16. Complies with audit procedures and policy changes. 	<ol style="list-style-type: none"> 5. Evaluates own care and acts as a resource to other nurses in ensuring their care is evaluated against accepted standards and guidelines. 9. Considers joining the International Society of Travel Medicine (ISTM), and/or Associate Membership of the Faculty of Travel Medicine of the Royal College of Physicians and Surgeons of Glasgow. 10a. Considers formal travel medicine training at post graduate level. 10b. Acts as a mentor to competent nurse Level 5. 11. Negotiates the provision of travel to be managed in a clinic setting but with the availability of some additional appointments as well. 14. Takes responsibility for deciding which vaccines are to be used. 15. Manages non-clinical staff in a clinic setting. 16. Assists in the collation and development of audit in travel health clinical practice. 	<ol style="list-style-type: none"> 5a. Uses expert knowledge to inform protocol development and guide others in this process. 5b. Audits documentation to ensure appropriate standards and guidance is maintained. 5c. Appraises individuals on progress as required. 6a. Educates nurses working in the field of travel health. 6b. Speaks/presents research at travel medicine educational events at a national level/international level. 7. Uses international databases to ensure awareness of global issues in travel health. 9. Is involved at national and international level in travel health, including committee membership of relevant forums. Aspires to becoming a Member or Fellow of the Faculty of Travel Medicine of the Royal College of Physicians and Surgeons of Glasgow. 10a. Demonstrates highly developed specialist knowledge of the whole range of topics in travel medicine. 10b. Acts as a mentor to competent nurse Level 5 and Experienced/proficient nurse level 6. 10c. Contributes to the evidence base for travel health nursing practice to support and promote travel health nurses. 10d. Identifies areas for further research. 16. Undertakes clinical audit in travel health practice and acts on findings to develop and improve standards of care.

Applicable KSF dimensions	Applicable KSF dimensions	Applicable KSF dimensions
1 CORE 2, CORE 5	5 CORE 2, CORE 4, CORE 5	5A CORE 2, CORE 4, CORE 5
2 CORE 2, CORE 5	9 CORE 2, CORE 5	5B CORE 5
3 CORE 5	10 CORE 2, CORE 5	5C CORE 1, CORE 2, CORE 4, CORE 5, G6
4 CORE 2, CORE 5, IK2	11 CORE 1, CORE 4, CORE 5, G5	6A CORE 2
5 CORE 2, CORE 5	14 CORE 3, CORE 5, G3(3)	6B CORE 1, CORE 2, CORE 4
6 CORE 2, CORE 5		7 CORE 2, CORE 4, CORE 5, IK2, IK3
7 CORE 2, CORE 5, IK3	15 CORE 1, CORE 2, CORE 4, CORE 5, G5, G6	9 CORE 1, CORE 2, CORE 4
8 CORE 2, CORE 5, IK3	16 CORE 4, CORE 5	10A CORE 1, CORE 2, CORE 3, CORE 4, CORE 5, HWB1, HWB2, HWB3, HWB4, HWB5, HWB6, HWB7, HWB10
9 CORE 2, CORE 5		10B CORE 2, CORE 4, CORE 5
10 CORE 2, CORE 5		10C CORE 4
11 CORE 3, CORE 4, CORE 5		16 CORE 1, CORE 4, CORE 5, G5
12 CORE 2, CORE 3, CORE 5		
13 CORE 5, G3(3)		
14 CORE 5, IK2, G3(3)		
15 CORE 1, CORE 5		
16 CORE 4, CORE 5		

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6

Appendices

Appendix 1: KSF dimensions compared to RCN *Core competences*

The NHS knowledge and skills framework dimensions compared to the RCN *Core competences* levels for travel health specialist competences.

NHS knowledge and skills framework dimension		Level 5 competent nurse	Level 6 experienced/ proficient nurse	Level 7 senior practitioner/ expert nurse
Core 1	Communication	3	3	4
Core 2	Personal and people development	3	3	4
Core 3	Health, safety and security	2	3	4
Core 4	Service improvement	2	2	4
				(level higher than identified in RCN <i>Core competences</i>)
Core 5	Quality	2	3	3
Core 6	Equality and diversity	3	3	4
Specialist dimensions				
HWB1	Promotion of health and wellbeing and prevention of adverse effects to health and wellbeing	1	3	3
HWB2	Assessment and care planning to meet people's health and wellbeing needs	3	3	4
HWB3	Protection of health and wellbeing	1	2	3
HWB4	Ability to address health and wellbeing needs	2	3	4
HWB5	Provision of care to meet health and wellbeing needs	3	3	4
HWB6	Assessment and treatment planning	3	3	4
HWB7	Interventions and treatments	3	3	4
IK2	Information collection and analysis	2	2	3
IK3	Knowledge and information resources	2	3	4
G3	Procurement and commissioning	3	3	2
	(dimension not identified for competent nurses RCN <i>Core competences</i>)		(level higher than identified in RCN <i>Core competences</i>)	
G5	Services and project management	-	3	3
G6	People management	-	3	4
			(level higher than identified in RCN <i>Core competences</i>)	

Appendix 2: Sample travel risk assessment and travel risk management forms

Travel risk assessment (form A) – to be completed by traveller prior to appointment.

Name:	Date of birth		
Address:	<input type="checkbox"/> Male <input type="checkbox"/> Female		
	Telephone number:		
Email:	Mobile number:		
Please supply information about your trip in the sections below			
Date of departure:	Total length of trip:		
Country to be visited	Exact location or region	City or rural	Length of stay
1.			
2.			
3.			
Have you taken out travel insurance for this trip? Do you plan to travel abroad again in the future?			
Type of travel and purpose of trip – please tick all that apply			
<input type="checkbox"/> Holiday	<input type="checkbox"/> Staying in hotel	<input type="checkbox"/> Backpacking	Additional information
<input type="checkbox"/> Business trip	<input type="checkbox"/> Cruise ship trip	<input type="checkbox"/> Camping/hostels	
<input type="checkbox"/> Expatriate	<input type="checkbox"/> Safari	<input type="checkbox"/> Adventure	
<input type="checkbox"/> Volunteer work	<input type="checkbox"/> Pilgrimage	<input type="checkbox"/> Diving	
<input type="checkbox"/> Healthcare worker	<input type="checkbox"/> Medical tourism	<input type="checkbox"/> Visiting friends/family	
Please supply details of your personal medical history			
	Yes	No	Details
Are you fit and well today			
Any allergies including food, latex, medication			
Severe reaction to a vaccine before			
Tendency to faint with injections			
Any surgical operations in the past, including e.g. your spleen or thymus gland removed			
Recent chemotherapy/radiotherapy/organ transplant			
Anaemia			
Bleeding /clotting disorders (including history of DVT)			
Heart disease (e.g. angina, high blood pressure)			
Diabetes			
Disability			
Epilepsy/seizures			
Gastrointestinal (stomach) complaints			
Liver and or kidney problems			
HIV/AIDS			
Immune system condition			

	Yes	No	Details
Mental health issues (including anxiety, depression)			
Neurological (nervous system) illness			
Respiratory (lung) disease			
Rheumatology (joint) conditions			
Spleen problems			
Any other conditions?			
Women only			
Are you pregnant?			
Are you breast feeding?			
Are you planning pregnancy while away?			

Are you currently taking any medication (including prescribed, purchased or a contraceptive pill)?

--

Please supply information on any vaccines or malaria tablets taken in the past

Tetanus/polio/diphtheria	MMR	Influenza
Typhoid	Hepatitis A	Pneumococcal
Cholera	Hepatitis B	Meningitis
Rabies	Japanese Encephalitis	Tick Borne Encephalitis
Yellow fever	BCG	Other
Malaria tablets		

Any additional information

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Travel risk assessment form devised in conjunction with resources below.

1. Chiodini J, Boyne L, Grieve S, Jordan A. (2007) *Competencies: An Integrated Career and Competency Framework for Nurses in Travel Health Medicine*. RCN, London. www.rcn.org.uk
2. Field VK, Ford L, Hill DR, eds. (2010) *Health Information for Overseas Travel*. National Travel Health Network and Centre, London, UK. www.nathnac.org

Travel risk management (form B)

For health professional use only in conjunction with travel risk assessment Form A					
Patient name:			Date of birth:		
Childhood immunisation history checked:					
Additional information:					
National database consulted for travel vaccines recommended for this trip and malaria chemoprophylaxis (if required):					
NaTHNaC:		TRAVAX:		Other:	
Disease protection advised	Yes	Disease protection advised	Yes	Malaria Chemoprophylaxis Recommendation	Yes
BCG/Mantoux		Influenza		Atovaquone/proguanil	
Cholera		Meningitis ACWY		Chloroquine only	
Dip/tetanus/polio		MMR		Chloroquine and proguanil	
Hepatitis A		Rabies		Doxycycline	
Hepatitis B		TBE		Mefloquine	
Hepatitis A+B		Typhoid		Proguanil only	
Hepatitis A + Typhoid		Yellow fever		Emergency standby	
Japanese Encephalitis		Other		Weight of child:	
Vaccine and General Travel Advice required/provided					
Potential side effects of vaccines discussed					
Patient Information Leaflet (PIL) from packaging or from www.medicines.org.uk/emc/ given					
Patient consent for vaccination obtained: <input type="checkbox"/> verbal <input type="checkbox"/> written					
Post vaccination advice given: <input type="checkbox"/> verbal <input type="checkbox"/> written					
General travel advice leaflet given (all topics below in the surgery/clinic advice leaflet) and patient asked to read entire leaflet due to insufficient time to advise verbally on every topic:					Yes / No
Items ticked below indicate topics discussed specifically within the consultation:					
Prevention of accidents		Mosquito bite prevention			
Personal safety and security		Malaria prevention advice			
Food and water borne risks		Medical preparation			
Travellers' diarrhoea advice		Sun and heat advice			
Sexual health & blood borne virus risk		Journey/transport advice			
Rabies specific advice		Insurance advice			
Other specific specialised advice / information given on:					
e.g. smoking advice for a long haul flight; altitude advice; prevention of schistosomiasis etc.					
Source of advice used for further information: NaTHNaC TRAVAX Other					
OR no additional specialised advice given <input type="checkbox"/>					

Additional patient management or advice taken following risk assessment – for example

- Vaccine(s) patient declined following recommendation, and reason why
- Telephoned NaTHNaC or TRAVAX for advice or used Malaria Reference Laboratory fax service
- Contacted hospital consultant for specific information in respect of a complex medical condition
- Identified specific nature/purpose of VFR travel

Authorisation for a Patient Specific Direction (PSD)

Following the completion of a travel risk assessment, the below named vaccines may be administered under this PSD to

Name

dob:

Name of Vaccine	Dose and schedule	Post vaccine records	
		Batch number	Site given
			RA LA RL LL

Signature of Prescriber	Date

Post Vaccination administration

Vaccine details recorded on patient computer record (vaccine name, batch no., stage, site, etc.)	Y / N
SMS vaccines reminder or post card reminder service set up	Y / N
Travel record card supplied or updated	Y / N
Travel risk management consultation performed by: (sign name and date)	

Appendix 3: Summary of travel health-related information sources

Essential guidance documents

Atlas

All practitioners providing a travel health service should use an up-to-date atlas, either hard copy or online (for example, <http://maps.google.co.uk/>).

The 'Green Book'

Department of Health (2007) *Immunisation against infectious disease – 'The Green Book' – 2006 updated edition*, Salisbury D, Ramsay M and Noakes K (editors), London: DH. Updated chapters available from: www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_079917.

UK immunisation policy

Health Protection Agency (2011) *Routine childhood immunisation schedule* (2012). Available online from: www.hpa.org.uk/web/HPAweb&Page&HPAwebAutoListDate/Page/1204031508623.

Health Protection Agency (2010) *Vaccination of individuals with uncertain or incomplete immunisation status*. Available online from: www.hpa.org.uk/webc/HPAwebFile/HPAweb_C/1194947406156.

World Health Organization – WHO Vaccine Preventable Disease Monitoring Systems. Use the country profile selection centre to view the international vaccination schedule. Database is available from: http://apps.who.int/immunization_monitoring/en/global_summary/ScheduleSelect.cfm.

Immunization Action Coalition (IAC). You can download or view the IAC's *Quick chart of vaccine-preventable disease terms in multiple languages* from: www.immunize.org/catg.d/p5122.pdf.

The UK Yellow Book

National Travel Health Network and Centre (2010) Field VK, Ford L and Hill DR (editors), *Health information for overseas travel – 'The UK Yellow Book'*, London: NaTHNaC. Available from: www.nathnac.org/yellow_book/YBmainpage.htm.

The UK Malaria prevention guidelines

Chiodini P, Hill D, Laloo D, Lea G, Walker E and Whitty C (2007) *Guidelines for malaria prevention for travellers from the United Kingdom*, London: HPA. Available from: www.hpa.org.uk/Publications/InfectiousDiseases/TravelHealth/0701MalariapreventionfortravellersfromtheUK

National immunisation training guidelines

Health Protection Agency immunisation training resources, available at: <http://www.hpa.org.uk/EventsProfessionalTraining>

Recommendations for the practice of travel medicine

Chiodini JH, Anderson E, Driver C, Field VK, Flaherty GT, Grieve AM, Green AD, Jones ME, Marra FJ, McDonald AC, Riley SE, Simons H, Smith CC, Chiodini PL. Recommendations for the practice of travel medicine, *Travel Medicine and Infectious Disease*, 10, pp. 108-128, London: Elsevier.

International guidance

The US Yellow Book

Centers for Disease Control and Prevention (2012) *CDC Health Information for International Travel 2012*, New York: OUP. Available from: www.wnc.cdc.gov/travel/page/yellowbook-2012-home.htm

World Health Organization

World Health Organization (2012) *International travel and health 2012*, Geneva: WHO. The current edition is available from: www.who.int/ith/en/index.html.

Telephone advice lines and databases for health professionals

Malaria Reference Laboratory

- Download a risk assessment form from: www.malaria-reference.co.uk.
- Complete and return by fax to 020 7636 0248.
- Receive a faxed reply within three working days.

National Travel Health Network and Centre (NaTHNaC)

Telephone advice line 0845 602 6712
available 9am-12 noon and 2pm-4pm weekdays
www.nathnac.org

TRAVAX

Telephone advice line 0141 300 1130
available from 2-4pm Monday and Wednesday,
9.30-11.30am Friday. www.travax.nhs.uk

Useful websites

British National Formulary (BNF) www.bnf.org

Centers for Disease Control and Prevention, USA (CDC)
www.cdc.gov/travel

Department of Health (DH) Green Book
www.dh.gov.uk/greenbook

Electronic Medicines Compendium (EMC)
www.medicines.org.uk/emc

Fit for Travel www.fitfortravel.nhs.uk

Foreign and Commonwealth Office (FCO) www.fco.gov.uk

Health Protection Agency (HPA) www.hpa.org.uk

HPA Malaria Reference Laboratory (MRL)
www.malaria-reference.co.uk

MASTA www.masta.org

National Travel Health Network and Centre (NaTHNaC)
www.nathnac.org

NHS Choices www.nhs.uk

ProMED Mail (the global reporting system for reporting outbreaks of infectious diseases)
<http://apex.oracle.com/pls/otn/f?p=2400:1000>

TRAVAX www.travax.nhs.uk

World Health Organization (WHO) www.who.int/ith

World Health Organization (WHO) Disease Outbreak News www.who.int/csr/don/en/

Travel-related organisations

British Global and Travel Health Association (BGTHA)
www.bgtha.org

Faculty of Travel Medicine of the Royal College of Physicians and Surgeons of Glasgow www.rcpsg.ac.uk

International Society of Travel Medicine (ISTM)
www.istm.org

Royal College of Nursing Public Health Forum (RCNPHF)
www.rcn.org.uk

Travel health training and education

For a comprehensive up-to-date list of courses from basic to diploma and a variety of study days, conferences and recommended reading, go to:

www.nathnac.org and look on Health Professionals homepage for 'Training and conferences'

www.rcn.org.uk and look on the Public Health Forum Community

www.travax.nhs.uk and look in Resources

<http://www.rcpsg.ac.uk/travel-medicine/about-ftm.aspx>
Diploma and foundation distance learning courses for UK and overseas students.



The RCN represents nurses and nursing, promotes excellence in practice and shapes health policies

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RCN Online
www.rcn.org.uk

RCN Direct
www.rcn.org.uk/direct
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