NOTES FOR TREKKING TEAM MEDICAL OFFICERS

This document is intended to provide each trekking team Medical Officer with a resource to aid decision-making before and during the Medex Manaslu 2015 expedition. We are aware that some of you have previous experience of practising expedition medicine and that consequently you will probably have developed your own strategy for pre-venture preparation and delivery of care whilst in the field. If you have any questions or suggestions regarding any of the below, please contact Suzanne Hale (suzanne.hale@doctors.org.uk) and Isla Wormald (islawormald@doctors.org.uk).

Pre-expedition medical screening

All expedition participants will be asked to complete an online pre-expedition medical questionnaire that will be available following the Medex annual dinner on 22/11/2014. Each individual's questionnaire will be anonymised and allocated a code so that each of you can access the details relevant to your trekking team. Using this method we hope to ensure confidentiality and minimise paper trails. You may wish to store information pertaining to your potential "patients" in some other form for use during the expedition since it will be unwise to rely on being able to access the information in an electronic format whilst in the field.

We would ask each of you to review the medical questionnaires belonging to your trekking team to ascertain pre-existing problems and to contact paticipants' GPs and/or specialists should you think it necessary. We have asked that participants inform their GPs of their consent to share information regarding their previous medical history. However, we have not requested that their GPs check the accuracy of the information provided. Having gathered information regarding the health of your trekking team members, you may wish to conduct an "interview" with each individual prior to departure. This may be via the telephone or at one of the expedition data collecting weekends. Simon Currin, Suzanne Hale and Isla Wormald will also have access to all the pre-expedition medical questionnaires and will provide support and guidance should you have any concerns or queries. We would wish to be informed if, based on your findings, there are specific items you wish to be included in your trekking team medical kit.

Pre-expedition health advice for participants

We are aware that there will be many expedition team members who have previous experience of travelling in developing countries and trekking and/or mountaineering at high altitude. However, we are also aware that there will be some team members for whom this is a new experience. Everybody will be provided with the free Medex "Travel at High Altitude" booklet and documents entitled "Expedition health advice" and "Recommended

immunisations" will be made available on-line. You may decide that a verbal briefing for your trekking team is also appropriate. Please note that whilst Acetazolamide (Diamox) can be used in the prevention of AMS in "at risk" individuals and in its treatment, its use would adversely affect the results of the research being conducted on our expedition and the ascent profile has been planned to allow adequate time for acclimatisation. We would, therefore, request that the use of prophylactic Acetazolamide is avoided. However, if a member of our expedition team feels strongly that they wish to take it, they should discuss this with the lead researcher and notify yourselves.

Packing medical supplies

Your help will be needed when packing the medical supplies prior to their shipment to Nepal. The date of the packing weekend is yet to be confirmed. The contents of each individual trekking team's medical kit will be determined by Suzanne Hale and Isla Wormald in liaison with Simon Currin and yourselves. It is anticipated that the contents of these kits will be supplied by the dispensing pharmacy attached to Montgomery Medical Practice. It is proposed that controlled drugs, medical oxygen and hyperbaric bag(s) will be procured in country. If any of you are keen to help further with the procurement of medical supplies please let Suzanne Hale and Isla Wormald know since we think there is scope to gain sponsorship e.g. donation of copies of the Cicerone pocket guide to "First aid and wilderness medicine". You will need to consider what diagnostic equipment you wish to use in your role as trekking team Medical Officer (e.g. pulse oximeter, stethoscope, opthalmoscope) and will need to provide these. We envisage that medical supplies for each team will be packed in barrels and that each barrel will contain an inventory of its contents.

GMC licence to practice outside of an Approved Practice Setting (APS)

In the past it has been the responsibility of doctors involved in event medicine, expedition medicine and prehospital care to ensure that they have applied to the GMC for a licence to practice outside of an APS. Only those individuals who had held full registration with a licence to practice for a year (usually following FY2), were eligible to do so. Now, however, we are automatically granted a licence to practice outside of an APS at the time deemed appropriate by the GMC. The GMC summarises this as follows: "From 3 December 2012, all UK and International Medical Graduate doctors granted full registration for the first time, and all doctors returning to full registration after a prolonged period out of UK practice, are restricted to practising only in an APS. We automatically remove this restriction from a doctor's registration when they revalidate for the first time after joining, or returning to, the register."

However, the GMC also states that "The APS requirement only applies to your practice in the UK. Your work overseas will be subject to local regulatory requirements."

The above paragraph and further information are available via the following links:

- http://www.gmc-uk.org/doctors/before_you_apply/approved_practice_settings.asp
- http://www.theadventuremedic.com/features/updated-guide-gmc-approved-practice-setting-aps-rules/

Please read this information.

Medical indemnity insurance

It will be essential to ensure that you have medical indemnity insurance for the duration of the trip, not just for the trek itself. Currently, defense organisations e.g. the MPS and MDU are revising their approach to providing medical indemnity insurance for participants in expeditions such as this. Frequently, an additional fee is even levied for voluntary work in both the UK and abroad. GPs and consultant specialists who pay in excess of £1000 annually for their medical indemnity insurance may be exempt from such additional costs, but should still discuss their planned adventures with their defense organisation. MPS have a standard rate/day for those "working" abroad, which is less per person if you are not the sole medical officer taking responsibility for the trip (as will be the case with this expedition). However, the MDU have been known to provide free cover for trips but have also been known to refuse to provide cover at all. When contacting your defense organization, it is usually beneficial to mention that you will be a volunteer providing medical cover for an expedition organized by a charity. You may be asked if there will be any paediatric "patients" or non-UK citizens in your care. We are not expecting you to have to paediatric advanced wilderness life support, but will let you know of any non-UK participants asap!

There are some potential problems regarding the treatment of American and Canadian citizens. The MPS have produced a document outlining their indemnity cover. In summary it states that you do have some legal protection. You would be covered if an American or Canadian citizen attempted to start legal proceedings against you in the country where the alleged malpractice occurred i.e. Nepal or in the UK. If proceedings were started in the patient's country of origin, the MPS would provide financial assistance to help ensure that such proceedings were transferred to the UK and would subsequently cover your legal expenses within the UK.

Those medical professionals who are expedition team members but not designated medical officers will not require additional medical indemnity insurance since any medical care they provide will be covered by the "Good Samaritan Act", although usually the defense organisations prefer to be informed of planned trips such as large expeditions to remote locations.

Please speak with your defense organisation as soon as possible. They should provide you with preliminary advice and a quote for the indemnity you require. Finally, once you have organized the requisite cover, it is wise to request that your defense organization send you proof of indemnity.

Medical care on expedition

Upon arriving in Kathmandu, it will be necessary for a member of the advanced party to ensure the safe arrival of all medical barrels and their contents! S/he will also be asked to be responsible for obtaining the controlled drugs, medical oxygen and hyperbaric bag(s) required for the expedition. This individual will also be involved in the

organization of the medical tent at basecamp! Each individual using prescription medications should give the appropriate trekking team Medical Officer his/her spare set of medication (carried in its original packaging in a waterproof bag or pouch e.g. a zip lock bag, clearly labelled with his/her name) for transport in the medical barrel. They should also carry a set of their regular medication on their person at all times. Each trekking team Medical Officer will have a medical barrel and medical oxygen at his/her disposal and will be assigned an "ambulance porter" who will be responsible for transporting them. Befriending these men/women can prove an expedition highlight and they will be an ally in any emergency. However, you should be aware that they can travel at the speed of light (with your medical supplies) and it has hence been known for medical supplies to be unavailable when required! When undertaking a primary survey using the mnemonics ABCDExposure or MARCHypo/hyperthermia, please remember that you can shelter your casualty from the elements using the fly sheet of the tent being carried by your sirdar (as you would use a group shelter). Of note, the sirdar will also be carrying a sleeping bag for his own use. It is envisaged that one hyperbaric bag will be transported to basecamp with the advanced party so that should it be required by any trekking team it can be brought down to lower altitudes. We also propose to assemble a light weight medical kit for use during attempts on Larkya Peak.

You can choose how you wish to deliver medical care whilst in the field. You may wish to consider operating a buddy system so that each team member has one "buddy" who will "keep an eye" on them with regard to their health and welfare (e.g. a team member may not realise that they are beginning to suffer with hypothermia but their changed behaviour may be obvious to their "buddy"). You might decide to undertake a morning "round" of every team member to ascertain any problems before beginning the day's activities and hold an "evening clinic" for anyone who has a medical problem that they would like to discuss. However you choose to organize the provision of medical care within your trekking team, we would ask that you document each medical intervention that takes place (for all individuals including locals) (casualty report and critical incident forms will be provided). Lastly, it has been suggested that a doctor should accompany each team attempting Larkya Peak and that those medical officers not involved should remain at basecamp to staff the medical tent and receive any casualties upon their descent.

Treating our porters, cooks, sherpas and sirdars etc.

Each of our in-country staff members should be considered members of our team and should, therefore, receive the same level of care and attention as all participants. It is beneficial to remind the sirdar of this at the beginning of the trip, and to ask him to inform you should any of his staff become ill/injured. Nepalese porters are unlikely to seek your help directly due to cultural differences, the language barrier and fear of being dismissed and hence losing income. If you need to examine a local staff member, please do so in a sensitive manner bearing in mind the cultural differences. They may expect you to feel their pulse or look at their tongue, rather than auscultate their chest or palpate their abdomen. Sherpa Brothers Treks and Expedition Pvt. Ltd. are under a legal obligation to carry their own medical kit in addition to ours, so please feel free to utilise this as appropriate.

Porter welfare

Medex has paid an additional sum to Sherpa Brothers Treks and Expedition Pvt. Ltd. to ensure that local staff (especially porters) are provided with appropriate clothing for protection from cold, rain and snow e.g. windproof jacket and trousers, fleece jacket, long johns, suitable footwear (boots in snow), socks, hat, gloves and sunglasses. We ask that every team member remains vigilant and identifies any member of local staff who appears to be inadequately equipped. It may be that they have lost or sold such items or prefer to wear flip flops! Please inform your sirdar of any concerns since it is his responsibility to resolve such problems. If any expedition participant is asked directly to donate his/her possessions, please do not feel obliged to do so and inform your sirdar.

Treating locals

During previous expeditions, Medex has found that a large group of "foreign doctors" attracts a lot of attention from local people near and far. Sometimes, providing medical care is the correct thing to do (e.g. in an emergency), and the actions of all doctors will be covered by the "Good Samaritan Act". However, setting up transient "clinics" or encouraging people to visit you should be avoided. The casualty evacuation plan will provide a list of Nepali clinics and where possible and appropriate, local people should be directed to one of these.

Treating other expedition teams

Medex Medical Officers have previously been asked to treat ill/injured trekkers and in-country staff members from other groups, including larger commercial expeditions who almost certainly have their own resources to deal with such problems. Please follow these guidelines where possible:

- When asked to treat in-country staff members from other groups (e.g. porters, cooks, sherpas) you should remind the trekkers and sirdar that should descent be required it is their responsibility to ensure that it occurs safely. They have a duty of care to their team. If you need to provide emergency care for such an individual for whom the trekking group has refused responsibility, it would be pertinent to request payment for the resources required and a stern reprimand is warranted.
- Remind groups of trekkers of the dangers of continued ascent when someone has symptoms and signs of AMS, especially if your advice has been sought. However, don't be surprised if you are ignored!
- Where possible, use the medical supplies belonging to the other group.
- Never compromise the safety of your own team members.

Communications

A hand-held portable VHF radio will be carried by each trekking team. This is to be switched on only when required to preserve battery life. The VHF radio at basecamp will be permanently switched on to receive messages. It is proposed that each day at 07:00 and 19:00 hours each trekking team (or a representative from each) will be required to make contact with basecamp to deliver a situation report e.g. information regarding location, activities undertaken, weather, planned activities, problems, requests. Should help/advice/information be required at any other time, you should attempt to communicate with base camp. Please be aware that, whilst there are no longer

problems with Maoists in the mountainous regions, radios may be seen as both a political threat and a valuable resource. To protect your own safety (and that of the radios!) we ask you to use them discretely, especially at lower altitudes.

Casualty evacuation guidance

An expedition risk assessment has been undertaken (we would appreciate anyone's feedback) and a casualty evacuation plan produced. Determining the need for an evacuation and organising this can be extremely stressful. Remember that as a trekking team Medical Officer, your priority is the assessment and treatment of your casualty. You should delegate initiation of an evacuation to your fellow trekking team members. If possible, radio contact should be made with basecamp and Simon Currin (who will be in possession of a satellite phone) should be informed of the need for evacuation at the earliest opportunity. It might be possible to establish communication with basecamp, Simon Currin or another trekking team using your mobile phone. You will be asked to provide information about your location, the type of incident, hazards, access to and egress from the incident scene, the illness/injury and the personnel and equipment present and required. To assist you, the completion of casualty and critical incident report forms should be delegated to another member of your trekking team. These forms should accompany the casualty being evacuated since they will be of use to medical personnel receiving the evacuee. You should assess the risk/benefit of your proposed means of casualty evacuation before it is initiated. Evacuations for in-country staff members should be organized in the same manner. No individual (local staff included) should ever descend alone. They should be accompanied by someone who speaks their language and understands their problem. If it is possible that an evacuee will meet another of our trekking teams as they ascend, please request the Medical Officer to re-assess the casualty. Lastly, please be aware that local staff leaving the expedition still need tipping appropriately. You may wish to collect money from your trekking team in advance to provide tips in this eventuality.

Organising helicopter evacuations can pose problems. The sirdar of each trekking team will be the most appropriate person to organise a helicopter evacuation. Problems can arise if local people offer their help since a percentage commission is often given to the organiser. Many factors (e.g. adverse weather conditions, difficult access to and egress from the incident scene, darkness) can render a helicopter evacuation impossible. It is unlikely that your fellow trekkers will expect that a helicopter rescue is always possible. However, should you be required to provide assistance to another expedition, you may need to remind them that it might not always be possible to evacuate someone immediately by helicopter and help them to consider alternative options. Please consider the helicopter pilots who may be willing to fly in unsuitable conditions. Pilot deaths have occurred despite an overland evacuation being possible.

Annabel Nickol will assume the role of UK-based liaison officer. She will:

- contact next of kin if serious illness/injury occurs during the expedition

- be able to provide in-country medical professionals with further information regarding casualties if required since she will have access to every participant's pre-expedition medical questionnaire whilst we are in the field
- liaise with Sherpa Brothers Treks and Expedition Pvt. Ltd., insurance companies +/- the British Embassy in the event of evacuation, hospitalisation +/- repatriation being required

Post expedition

Upon our return to the UK, you will need to notify your patients' GPs of any health problems encountered whilst abroad. Your input will be invaluable when writing the expedition medical report!