16.3: Personnel issues

Field trials may involve a large number of personnel, often for considerable periods, working under difficult conditions, and the staffing arrangements must be well organized. Each person should know what they have to do and when they have to do it, to whom they should report, and when, where, and how they should do this. A job description should be prepared for each position, incorporating the tasks specified in the field manual. Preparing such job descriptions forces the investigator to work out in advance what each individual will do, and then inform each worker formally what is expected of him or her. The job descriptions specify not only the tasks to be undertaken, but also the workload (for example, the approximate number of thick and thin blood films to be collected per day) and the quality of work expected. The minimum educational levels and training required for each position should also be specified. Personnel for the posts should be recruited and trained for their specific tasks, based on their job descriptions. Training should include an overview of the objectives and flow of the study, research ethics, especially related to confidentiality and relationships with study participants, reporting and supervision systems, personal safety and security, and training on the specific tasks for that position. It may also need to include training related to teamwork and communication skills, and information technology skills (such as the use of laptops, PDAs, mobile phones, or tablet computers for data collection, or the use of GPS devices). Increasingly, it is expected or required that at least relatively senior personnel have received basic training and ideally have been certified in ‘GCP’ (see Section 7).

It may be beneficial to provide staff with initial training in more than one set of tasks, as this will allow easier transfer of staff between positions, if necessary. Managerial and supervisory activities, with appropriate hierarchical relationships and lines of authority, need to be established. An organizational chart illustrating the lines of authority may be useful. Each staff member should be broadly familiar with the responsibilities of other staff. Staff should be made aware of health and safety procedures, for example, what to do if there is a road traffic accident or an armed robbery or someone has a needle-stick injury (see Chapter 17, Section 8).

The composition of the field team should directly reflect the specific activities they must undertake. It might include, for
example, a driver, a registration clerk, one or more interviewers, an assistant to take temperatures and to measure heights and weights or to test eyes, a clinician for physical examinations and the application of any clinical intervention procedures, a laboratory technician to collect blood, urine, or stool specimens for laboratory tests, and a medical or pharmacy assistant or nurse for dispensing medications. A constraint on the size of a field team may be the number of persons who can be accommodated in the trial vehicle, along with the equipment they must use in the field. It will be useful to draw up an organizational plan outlining the activities and functions of the members of such a team, with a diagram showing how the team will operate in the field. This should include a careful, and if possible, pilot-tested, estimate of the average and range of times that each participant is expected to take at each step in the field survey. Ideally, these times should be approximately equal for each step to avoid bottlenecks developing. To achieve this, it may be necessary to have different numbers of workers at individual steps in the participant flow. For example, in a follow-up survey in an adolescent HIV prevention trial in Tanzania, the main survey team of 14 people included two drivers with their vehicles, a team leader, one registration clerk, two male and two female interviewers, a laboratory technician and laboratory assistant, a nurse who supervised young women taking self-administered vaginal swabs, two HIV testing counsellors, and a clinician (who also did dispensing).

Detailed descriptions of the procedures to be followed for each of the activities should be included in the field manual (for example, how the census form should be completed, how the items on the form should be checked, what should be done with the form at the end of the day).

Frequent and effective supervision of field activities is essential for ensuring the collection of high-quality data (see Section 7.2), but also for keeping the fieldwork moving, according to the timetable, for maintaining field team morale, and for preventing the escalation of any disputes or disagreements. Field team leaders have primary responsibility for the activities of their team, and they should regularly report progress and any problems or issues arising to the field supervisors. The field supervisors should, in turn, report to the project coordinator who monitors overall progress of the study and reports to the PIs, government officials, and funders.

Mobile phones are commonly used during supervision of field activities. For example, they might be used by field team leaders to provide supervisors with daily updates which include basic data on the number of participants seen, refusals, and any problems encountered via text messages or phone calls. Supervisors, in turn, can use mobile phones to advise and guide team leaders and to provide field teams with lists of participants or households to interview or re-interview. Prompt transfer and data entry of completed paper questionnaires can aid supervision through providing early and frequent feedback to field teams on data inconsistencies or errors. Wireless transfer of data collected in the field to the central data section, either via the Internet or mobile phones, is increasingly being used and offers increased opportunity for the early identification of problems with data collection or the interpretation of questions by participants. Such data transfer should be encrypted and password-protected to ensure it remains secure and confidential. Timely transfer of field data to the central or field trial office allows databases of the data collected to be kept up to date and delays or other problems can be acted on promptly.

It is essential that checks on data quality are incorporated into routine field procedures. Examples of these are given in Section 7. It is also important to keep a close check on the arrangements for laboratory specimen collection, storage, and shipment back from the field to the base laboratory (see Chapter 17).

As a general principle, the designer of fieldwork procedures should think carefully of everything that could realistically go wrong and put systems in place for what should be done in the event that these problems occur, for example, what
should be done if one or more team member falls ill, a vehicle or other piece of equipment, such as a centrifuge or freezer, breaks down, or if a national holiday is declared at short notice. Overcoming such problems may require staff being trained to be able to fill in for each other, there being two of each vital piece of equipment, or the potential for emergency repair or replacement of equipment. The details of what should be done will partly depend on the remoteness of the field work from the trial coordination centre.

Field teams that spend extended periods of time in the field can be prone to internal disputes and disagreements, and the importance of good team dynamics and team leadership should not be underestimated. In some circumstances, movement of staff between teams during the course of the trial can be beneficial, for example, to strengthen a weaker team or to improve team dynamics.

Good financial management is essential for staff morale. Salaries and allowances should be paid on time, and staff provided with medical insurance cover and legal protection against being sued in relation to their trial work. Petty cash should be available when required. A detailed record of expenditures should be kept together with receipts, as a senior staff member will have to account for all funds issued and spent. For large studies, it will be essential to employ an administrator to take care of these aspects, as they may be very time-consuming. Systems must be put in place to prevent fraud, and staff should be made aware of the policies regarding accountability when equipment or supplies go missing or are stolen (see Chapter 18).