LES UNITÉS MOBILLES
DE SANTÉ
MOBILE HEALTH UNITS
METHODOLOGICAL APPROACH
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This paper is the outcome of the ICRC's field experience in mobile health units (MHUs). It was drafted by Stéphane Du Mortier, in cooperation with Marlène Michel, Ahmed Berzig and Pierre Perrin, based on first-hand accounts and evaluation reports. The paper was then sent out to the field for amendments and suggestions before being approved as an official document of the Health Unit.
For many years the ICRC has been deploying mobile health units (MHUs) in certain operational contexts.

In April 2004 the ICRC adopted an assistance policy which defines the organization’s main activities in various areas: water, habitat, economic security and health care. This policy is set out in Doctrine 49.

The ICRC decided to concentrate its efforts in the area of health care on emergency hospital treatment, hospital management, first aid, primary health care, support for the victims of sexual violence, health in detention and physical rehabilitation.

In acute crises the ICRC carries out emergency medical and health activities, while in more stable situations it favours a strategy of primary health care.

MHUs form part of a strategy involving the provision of occasional ambulatory health services. This strategy is often used in order to reach isolated population groups.

The experience gained over the past few years demonstrates the multiplicity of humanitarian agencies involved in running health programmes, an area in which the ICRC retains the leading position.

The present document sets out directives relating to the use of MHUs. It is based on lessons learned from analysis of past experience and from a review of the literature.

This paper is intended for staff in charge of medical programmes and for the decision-makers involved in the process of determining whether to set up MHUs.

We trust that these directives will help harmonize our operations for the benefit of the victims.

Dr Hervé Le Guillouzic
Head, Health Services Unit
MHUs form part of a strategy involving the provision of occasional ambulatory health services.

Whether motivated by a wish to maintain a “presence” in the field or otherwise, the MHU strategy must remain an exceptional strategy, to be used only as a last resort with the aim of providing health services to population groups which have no access to a health-care system.

MHUs may be considered for a short transition period, pending the reopening of fixed health facilities or access to such facilities.

In view of their intermittent presence in the field, MHUs suffer from intrinsic constraints which must be taken into account before a decision is made as to which services will be provided. The choice of services (vaccination, health promotion, preventive activities, transfer of patients, curative care, etc.) must be appropriate, and each activity must be carefully planned (mode of action, human and material resources, time frame and logistics). These activities must respond to priority pathologies, determined solely on the basis of mortality and morbidity rates.

There should always be a fixed health facility to which patients can be referred if necessary.
Within the scope of Doctrine 49 and on the basis of the document entitled “Primary Health-Care Services – Primary Level”, this paper aims to cover all the questions that must be asked before an operational strategy involving MHUs is adopted.

It draws on a large number of ICRC references (doctrines, official documents, etc.) and on the international literature to explain the procedure to be followed in the decision-making process relating to the MHU strategy.

First and foremost, three important references must be mentioned: the ICRC’s modes of action, the pyramid structure of a health system, and health services at the primary level.

“Governments have a responsibility for the health of their people which can be fulfilled only by the provision of adequate health and social measures.” The ICRC endeavours to ensure that government authorities discharge their responsibilities vis-à-vis populations affected by armed conflict.

“While circumstances may lead the ICRC to provide services for affected groups, it is not the organization’s role to relieve the authorities of their responsibilities. The ICRC will continue to urge them to ensure delivery of those services and fully meet their obligations.”

The different modes of action adopted by the ICRC are as follows:

**Persuasion: bilateral and confidential dialogue**

The purpose of persuasion is to convince the health authorities that they must discharge the obligations incumbent on them, that is, to preserve the life and health of the population.

**Mobilization: seeking the support of others**

Mobilization means seeking support from third parties who can exert some influence over the authorities we are trying to convince. This request for support may be made formally on the basis of Article 1 common to the four 1949 Geneva Conventions (obligation to “ensure respect”).

**Support: cooperation with ineffectual authorities**

Support activities are aimed at the authorities themselves, and are intended to help them to fulfil their responsibilities. Such support may be in many forms: material support and help with training activities, assistance in the areas of management and coordination, for example. It presupposes a relationship of trust with the authorities, the cooperation of those authorities, and previous agreement on the objectives to be achieved and the appropriate time frame.
**Substitution: direct provision of assistance in place of ineffectual authorities**

It often happens in situations of armed conflict or internal violence that the authorities lack the means or the will to meet the humanitarian needs in their countries. It sometimes happens that there are not, or no longer, any authorities at all.

In such cases the ICRC has to consider meeting needs in a direct manner; its activities then consist in providing assistance directly to the victims. These activities amount to substitution if the ICRC acts as a replacement for the authorities in charge.

**Denunciation: resorting to public condemnation**

Denunciation means issuing a public statement that facts observed amount to a violation of international humanitarian law or of fundamental rights. The public allegation of violations constitutes the final stage of the process. Resort to denunciation is governed by Doctrine 15, and in principle remains exceptional.

These modes of action are not mutually exclusive, as a combination of them is essential for implementation of the strategy selected. Indeed, support may enhance the effect of persuasion, and the aim of mobilization may be to obtain support.

The following diagram shows the ICRC’s different modes of action and the corresponding actors.

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*Guideline 2.5.*
Any health system may be represented by a health pyramid; the number of levels in the pyramid and the authorities concerned may vary from one country to another.

Specialized health facilities are at the apex of the pyramid, while the general health services, including primary health care (PHC), are at the base.

The strategy of using MHUs for vaccination, for example, is also at the base.

MHUs do not belong only to the area of primary health services; they may also represent more specialized levels of health care such as clinics performing ophthalmological surgery.

The most basic health facilities (health posts here, but in some countries these may be health centres or consultations given by a general practitioner) are responsible for all or part of the PHC spectrum.

PHC represents a whole range of activities and services which may be divided into several categories: food security, water and sanitation, health promotion, preventive activities, curative services, rehabilitation, and also social assistance.
The entire PHC spectrum is an ideal to be pursued. The conditions in which the ICRC works arise from armed conflict, which is a restrictive factor for the provision of all the PHC services required.

Among the wide range of PHC services, the selection of priority services in a given situation is therefore essential.
This section explains the concept of emergency medical and health operations as opposed to that of PHC, and sets out the stages to be gone through in order to implement such operations in conformity with the ICRC’s operational policy. It describes, step by step, the factors to be considered in working out a response appropriate to the needs of conflict victims.

The first two steps involve analysis:

- of the political situation
- of the health situation

Ongoing analysis of developments in the political situation and the health crisis is essential. To decide on appropriate action, we must assess the political situation on the one hand, and the health situation on the other.

Doctrine 49 gives a definition of a health crisis on the basis of the relationship between health needs and health services. It distinguishes between:

- emerging crisis and pre-crisis situations
- acute crisis
- chronic crisis
- post-crisis situations

The other factors are decisions:

- demographic decisions: what is our target population?
- institutional decisions: what modes of action should be opted for?
- strategic decisions: what strategy are we going to use (ranging from emergency medical and health activities to PHC)?
- operational decisions: what services are we actually going to provide?
- decisions relating to timing: for how long are we going to provide these services?

To these a further category will be added:

- decisions as to priorities: what activities shall we start with?

It is important to raise on a regular basis the question as to which mode of action should be adopted for each activity.
The report that refers to the levels of support provided by the ICRC in Colombia (2005) offers a good illustration of the various possible stages in cooperation between the Ministry of Health (Minisan) and the ICRC. In that situation the different modes of action are complementary.

- The ideal situation is obviously one in which the Ministry of Health takes complete responsibility for the country’s population.

- A first stage in the action taken (No. 1 in the figure) is the support given by the ICRC for a service which is entirely the responsibility of the Ministry of Health; the ICRC is there only for security reasons, following negotiations with the different armed groups.

- In some regions, however, the ICRC seconds its staff (usually at least one local doctor) to the Ministry of Health, and of course guarantees security – as in the previous stage (No. 2 in the figure).

- In the late 1990s and the beginning of the following decade the ICRC was the only humanitarian organization whose presence was accepted by the armed groups, and it therefore had to act as a substitute for the Ministry of Health. Since then, after months of persuasion, this mode of action is no longer necessary (No. 3 in the figure).

Comments:

- The only obstacle that prevents the Colombian Ministry of Health from providing the population with proper services is lack of security.

- Every activity and every mode of operation of an MHU must be carefully planned in order to avoid substitution, and to encourage independent action on the part of the Colombian Ministry of Health in rebel-held zones.
MHUs are a strategy (which is sometimes effective but rarely has lasting effects) to be used as a last resort to reach population groups cut off from health services.

The main objective of the use of MHUs is to improve the access of these population groups to the health system.\(^6\)

MHUs are popular and flexible.

They are deployed:
- on a temporary basis, before the opening (or reopening) of permanent health facilities (health posts or centres);
- to refer isolated population groups to existing health facilities.\(^9\)

There are virtually no articles in the literature relating to MHUs with broad fields of activity; on the other hand there are numerous articles devoted to specific “vertical” curative programmes (surgery,\(^10\) specific diseases such as leprosy,\(^11\) malaria,\(^12\) echinococcosis,\(^13\) etc.).

Many articles stress the importance of there being a fixed health facility\(^14,15\) on which the MHU can depend (for example, a health centre or a hospital offering specialized surgical services for conditions such as cataract or glaucoma).

This fixed facility has a dual role:\(^16\)
1. selection of patients;
2. follow-up of patients after the departure of the MHU.
Its personnel benefits from the training given by the mobile team.

All MHUs draw up detailed plans to ensure a regular presence in the field.

MHUs are described as being very useful for screening campaigns (breast cancer,\(^17-21\) uterine cancer,\(^22-23\) tuberculosis,\(^26-28\) schistosomiasis,\(^29,30\) etc.) and, more broadly, for health promotion and preventive activities.\(^31-34\)

The MHUs with the highest rate of efficiency are those treating certain pathologies during a single visit (cataract,\(^35-37\) dental problems\(^38\)).

MHUs must focus on serious pathologies which are slow to develop, such as leishmaniasis, onchocercosis, leprosy and trypanosomiasis, but also on screening for breast or cervical cancer and on dental care.\(^39\)

MHUs are often run by charities and rarely seek to adopt a public health approach.\(^40-44\)

The high cost of MHUs is stressed in many articles,\(^45-52\) while few report on their impact, except for those working in the areas of dentistry\(^54,57\) or eye care.\(^58,59\)

Many MHUs are set up to reduce the number of hospitalizations and thus related costs.\(^60,62\)

Articles on MHUs which are part of a PHC programme emphasize the importance of community involvement (organization of the site of consultations, schedule of visits, mobilization, etc.).\(^33-66\)

To encourage attendance at MHUs, the first services offered are those of greatest interest to the population (vaccination as part of a family planning programme,\(^67\) distribution of condoms in clinics dealing with sexually transmitted diseases or AIDS).\(^68,69\)

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\(^{6}\) The bibliography given at the end of this paper is a selection from 526 articles taken from Mobile Health Units and Mobile Clinics: A Revision of the Literature, Stéphane Du Mortier, Bogotá, Colombia, January 2005. See also BOG 05/653: “Elements to consider before starting an MHU: The Colombian experience”, Stéphane Du Mortier, April 2005.
The factors listed below are based on experiences in the field and those reported in the literature.

9.1 MHUs are a strategy to be used as a last resort to allow population groups which are cut off from health services easier access to the health system
In view of the intermittent nature of the services provided by an MHU, any other strategy for providing health services is to be preferred.

9.2 MHUs require highly trained human resources
The implications of triage, the limited range of services available, continuous analysis of problems, use of the intrinsic flexibility of MHUs, and the need to ensure that the operation is consistent with the ICRC’s objectives outside the area of health mean that staff working in MHUs must adhere to a strict and rational public health approach.

9.3 MHUs are a favoured strategy for vertical programmes
A programme is described as vertical when the health personnel involved are brought in from another facility (usually one on a higher level in the health hierarchy) to dispense specific treatment. For example, a health centre may receive specialists in leishmaniasis or malaria, or a hospital may receive an ophthalmological surgeon. These vertical programmes exist alongside the existing network of health centres and hospitals.
Some examples:
- The same applies to the dental and ophthalmological clinics in Sri Lanka in 1999. Initially they dispensed mainly curative treatment, but then gradually shifted towards preventive and health promotion activities.
- In Mali in 1996, the ICRC had two MHUs responsible for implementing the expanded programme on immunization (EPI) in the Timbuktu and Bourem health districts.

9.4 MHUs must focus on serious pathologies which are slow to develop and on preventive and health promotion activities
To have a chance of encountering a sick patient, in view of the intermittent nature of the services they provide, MHUs are a useful strategy for dealing (by screening, for example) with pathologies which are serious but slow to develop, and for preventive and health promotion activities (such as prenatal consultations and vaccinations).

9.5 MHUs are not appropriate for a public health approach
It is not possible to carry out a wide range of curative, preventive and health promotion activities on an intermittent basis. The simultaneous provision of all these services in a health facility is known as the horizontal or integrated approach.
Some examples:
- In Colombia, MHUs provide support for the PHC services in health promotion and preventive activities (vaccination, cytology). The authorities acknowledge that the MHUs represent a stopgap solution in regions where health posts have been abandoned owing to the conflict and where the MHUs are now the only health service available.
- In the Vanni region of Sri Lanka, MHUs initially provided curative services but gradually moved towards an educational function for community health workers. In Trincomalee, a Ministry of Health nurse joined the MHU team, giving prenatal consultations and administering vaccinations.

9.6 MHUs can be a strategy for emergency medical and health operations
Once the conditions to be treated have been selected and priorities set for the corresponding activities, and taking into account intrinsic (the MHUs) and extrinsic (the environment) constraints, MHUs may, for a limited period, constitute a strategy for providing treatment and other services.
They form part of a **dynamic process** of response to the problems encountered.

The **quality of the services** provided by an MHU depends largely on proper triage and a precise definition of priorities, and therefore of the activities to be conducted.

Some examples:
- In Myanmar, “vertical” MHUs giving vaccinations are deployed in zones where there are protection issues.
- In Rwanda in 1993 and 1994, the ICRC sent its MHUs into the disengagement zone between government troops and Rwandan Patriotic Front rebels. In Mali, the ICRC had two EPI vaccination MHUs in the Touareg-Maur zone.
- In Sierra Leone in 2001, MHUs provided curative services limited to the main pathologies. Vaccination and awareness-raising activities were conducted successfully for six months.

**9.7 MHUs must always be able to send patients to a referral facility and to carry out medical evacuations**

The reason for this is easy to understand:

MHUs are sent, as a last-resort strategy, into a zone whose population is cut off from health services. The population’s expectations far exceed what the MHU can offer.

Inability to transfer the most seriously ill patients to a more specialized facility would discredit us and jeopardize our presence in the zone.

In practice, few patients agree to be evacuated, as that involves leaving too heavy a social and family burden behind them. Furthermore, they worry about whether and how they will be able to return to their homes.

Some examples:
- In Rwanda, the MHUs in the buffer zone evacuated the most serious cases to Rutongo hospital by ambulance.
- In Colombia, arrangements have been made for primary and secondary level hospitals to receive patients sent to them by the ICRC, which pays the transport costs (no ambulance service).
- In Sri Lanka, patients who were seriously ill were transferred to three hospitals in the Vanni region.

**9.8 MHUs are not tools for assessing a health zone**

Any assessment generates considerable expectations among the potential beneficiaries. To avoid disappointing the population groups concerned (this might cause security problems), it is important not to confuse assessment with strategy for action.

MHUs are a strategy for responding to a health problem, and not an evaluation tool. An MHU is not set up to assess the needs of a population group, “to see who will turn up, and with what sort of problem”.

On the other hand, where there is a vaccination MHU it is a good idea to take advantage of our presence to assess more precisely the needs for protection and assistance in the health zone concerned.

**9.9 Health personnel are responsible for the ICRC’s MHUs**

The possibility of providing high-quality service, the short-term and long-term implications, the costs, the coherence of the programme, and above all its time frame, are factors that only the person in charge of the health team can assess.

The same person will be responsible for adapting the MHU strategy to changes in the political, health or security situation.

The MHU strategy is therefore not a political decision but one taken on the basis of the health situation, and the main criterion for that decision is the quality of the services that can be provided.

**9.10 MHUs are expensive to run**

Only very specialized services such as dentistry and ocular surgery have proved their efficiency.

**9.11 MHUs are often a “logistical nightmare”**

MHUs by definition set out to reach population groups isolated because of poor security or difficulty of access. The logistical aspect of their activities becomes a major constraint which must be taken into account (see Section 14: “Frequency, schedules and communications”).
According to “Primary health-care services”, the last question to be asked in the decision-making process should be this: What services are we actually going to provide in our emergency medical and health operations? Those services’ must constitute a response to the main pathologies encountered.

Here we go a step further in our reasoning and ask the following question: with what activities shall we begin?

While this question is a common denominator of any operation (in a fixed or a mobile health facility), it is of particular importance for mobile units because of their intrinsic constraints.

The choice of priority activities must be made on the basis of priority health problems.

However, the order of priority will depend largely, from one situation to another, on:

- the possibilities for implementation: local and expatriate human resources, logistical resources and, in the case of MHUs, the time to be spent on the spot, for example;
- how the population perceives the situation.

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**Example of the prioritization process for a given situation:**

1. In the case of vaccinations, when an epidemic breaks out social mobilization will take place very spontaneously as soon as information about the time and place of the vaccination campaign begins to circulate. When there is no epidemic, however, mobilization may take much more time and require more resources.

2. IEC (information, education, communication) sessions are rarely a priority in an emergency situation, but are an essential activity at all other times.

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7 A service is a set of activities. Thus there may be a curative service, a vaccination service, a preventive service, or a maternal and child health care service.
In the case of MHUs, the selection of priorities among activities is essential in view of the intermittent nature of the services provided. Careful thought must be given to any new activity.

The blue area illustrates the top priorities in a given situation. The main health problems are known (top line). The activities that need to be carried out are also known (boxes with dotted lines), but which should be chosen?

The question that has to be asked at this stage is: who is going to do what?

This takes us on to the modes of action.

Some examples:

1. If there are no health personnel on the spot: mode of action = substitution. For this we have to wait until our next visit.

2. If there are health personnel on the spot, we have to train them so that they can conduct health education sessions in our absence: mode of action = support.

3. If there is a local organization a few kilometres away: mode of action = mobilization.

4. If a Ministry of Health agent can be assigned to the health post from a centre or a hospital: mode of action = persuasion.

Each activity must be regularly reviewed in the light of the corresponding mode of action, bearing in mind that preference must be given to the mode of action that involves the least substitution possible.
MHUs are not an appropriate strategy for treating patients during the acute stage of their illness. This is made abundantly clear in the literature.

The literature demonstrates the value of the MHU strategy for vaccination or screening (for serious/fatal conditions which are slow to develop).

The various services provided by an MHU may be compared to a capsule. The outer casing is attractive and brightly coloured, and conceals the active principle. In our comparison, the active principle is vaccination and the whole range of health promotion and preventive activities.

The following four situations are frequently encountered in the field.

1. A thin curative “shell”, which deals with the main acute and chronic pathologies, surrounding a major component of health promotion and preventive activities, including vaccination. This is the ideal situation.
2. A vertical MHU conducting EPI activities.
3. Each delegate gives preference either to the curative component or to health promotion and preventive activities.
4. An exclusively curative MHU whose activities have little impact on the health of the population.

A very large number of MHUs tend to drift towards the curative option, but we have never seen one drift towards health promotion and preventive activities.
One feature common to any intermittent service is an influx of patients who expect the world of us, naturally including curative services. As our activities are limited in time, we must select the patients who are in the most serious condition and for whom something can be done. This is known as “triage”.

Failure to carry out triage creates confusion and jeopardizes our very presence, from the security as well as the qualitative viewpoint. Without proper triage there can be no efficient MHU. This stage, which at first sight appears to be a minor matter, is the most complex in the work of an MHU.

The basic principles of triage (both medical and surgical) are as follows.

1. We are limited by the means at our disposal (time, services, human resources, etc.). So we cannot do everything for everybody.
2. Our aim, therefore, is to achieve the best possible results for the greatest number of people.

These two points appear obvious, but they are real stumbling blocks in the field.

1. Health delegates find it difficult to leave aside the least serious cases.
2. The quality of care must be the highest possible taking account of local conditions, the number of patients and the time available.
3. The pressure exerted by armed groups may be tremendous.

We cannot set up an MHU without being aware of the killer diseases in the zone where we will be working. Drawing up a list of those diseases is an absolute priority.

**Strict triage criteria** must be decided on by general agreement before the team travels to the site where consultations will be given. These criteria must be explained to the community concerned.

They will depend on:
- local mortality and morbidity rates (high-priority pathologies);
- the activities considered to be priorities;
- the resources mobilized (personnel, limited list of drugs, minor surgery or none, etc.).

Patients will then be divided into **four categories**:

1. **Serious cases**: these patients need emergency attention but have a good chance of survival.
2. **Patients with secondary priority**: these patients need to be examined, but the need is not urgent; they are put on a waiting list. They are then given a consultation in order to direct them to the person who is best able to look after them. In practice, most patients belong to this category.
3. **Patients who do not require a consultation**: these form a fairly large group; they can receive effective help such as treatment for parasitic infestations or distribution of a three-months’ supply of ferrous sulfate for women of child bearing age.
4. **Patients with little chance of survival**: we ensure that these patients are given appropriative comfort care.

Triage must be perfectly well organized in logistical terms. Patients do not wait patiently behind a red line as we do in a bank, but try to force their way in. Thus the strongest patients and those with the least serious conditions will gain access to services, while the weakest will be left by the wayside.

Some examples:
- In Rwanda, in 1993-1994, the patients had to pass along aisles separated by tape; this was the only means of channelling such large numbers.
- In Colombia, one important factor has had to be taken into account for triage: the distance travelled by the patients to reach the consultation. Thus those who are examined first have time to return to their homes safely.
The greatest asset of ICRC operations is the complementarity between protection and assistance. Each of our activities must be viewed from these two angles in accordance with the ICRC’s mandate, which is to provide victims with both protection and assistance.

A strategy such as the use of MHUs must be clearly defined in relation to these two components. While we do not set up MHUs in a region for protection purposes, we must operate them in accordance with public health standards and strive to make an impact on health.

This endeavour to make an impact on health, as well as being of direct benefit to the health of the population, is vital if we want to gain the trust of warring parties by demonstrating our professionalism and neutrality. Once a relationship of trust has been established, a dialogue can be initiated and this will probably create an opportunity to raise matters such as alleged breaches of international humanitarian law.

The fact that protection activities show no quantifiable or visible results is not a sufficient reason for abandoning the indispensable dimension of protection in an ICRC operational approach of whatever nature. Every delegation must be constantly aware of the need to include a protection component in its activities, so as to take maximum advantage of the potential of a situation and thus deal as effectively as possible with problems of protection.

The first beneficiaries of ICRC protection are the Ministry of Health representatives who accompany us on MHU programmes in the field. Population groups who are vaccinated are protected from a whole range of diseases. Furthermore, during our missions in areas where the population is cut off from health services, we can collect allegations of abuse and may be able to make contact with armed groups.

In this context of complementarity with protection activities, ICRC medical teams are sometimes asked to carry out health activities in remote areas where the population is exposed to violations of humanitarian law.

- It is the responsibility of health personnel to comply with public health standards so as to ensure that health activities have a significant impact on the beneficiaries. They must insist that the delegation allows them an appropriate presence in the field. Indeed, a protection activity rarely takes place within the same time frame as a medical activity, which has to be completed.

- Health delegates must be well informed of both the health and the “protection” objectives of their work.

- Indeed, certain health activities, such as gathering information for an “epidemiological study of violations of humanitarian law”, may be important for protection purposes.

The MHU strategy remains our last option for providing health care, although to non-medical persons it may often seem to be the first option.

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8 Statutes of the Movement, Article 5.2, paras c and d.
9 In Côte d'Ivoire in 2003, only the ICRC had access to the buffer zone. The MHU strategy was used for a few months until health centres were reopened.
10 “Action may also be considered where:
- assistance activities can serve as a launching pad for protection;
- assistance activities facilitate the positioning and promote the acceptability of the ICRC. Should the ICRC decide to act on the basis of these parameters, it must take into account the possible long-term implications of the programme and consider only core activities. (Doctrine 49, 5.2.6: “Other parameters to be considered”).
11 It was decided that in 2004-2005 EPI vaccination MHUs would be set up in Myanmar in response to problems of protection. This programme is short-term (four vaccination sessions) and flexible (it can move from one place to another).
12 Vaccination cycles and educational programmes, for example, cannot be interrupted.
Do we have time to conduct our activities? Or should we abandon them?
If we go ahead, will we achieve any results?
Are we setting out to treat acute or chronic diseases?
Will the beneficiaries be free to attend? (Work in the fields, seasonal constraints, market days, etc.)

**The main intrinsic constraint affecting MHUs is the temporary nature of the care they dispense:**
“The mobile teams move on, the patient remains!”

Although evaluation of the zone enables us to document the causes of mortality and morbidity and therefore to determine the activities to be conducted, the feasibility of those activities depends on security and logistical factors. The distances to be travelled, the time required, the seasons, rises in water levels, agreements and problems of laissez-passer often restrict us to a very limited time frame.

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**Feasibility in logistic/security terms**

Mortality/morbidity rate ➔ Activities selected

Frequency and schedule of presence

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**The probability exercise shown below demonstrates the inadvisability of setting up curative MHUs:**

What is the probability of a patient suffering from pneumonia being examined by an MHU?

The probability of the patient having access to an MHU in time is equal to the ratio between the number of days that the MHU is present and the number of days in the year (formula expressed in unit of time for a given community).

Probability of a consultation: number of days that the MHU is in the village

number of days in the year

Therefore when we carry out vaccinations in a community on an annual basis, during four two-day sessions, the probability of the patient with acute pneumonia having access to treatment at the MHU is 2%.

With a weekly presence in the same village, the probability is only 14%.

In the case of a health centre, which is open every day, the probability is 100%.

<table>
<thead>
<tr>
<th>Presence</th>
<th>1 x / week</th>
<th>2 x / quarter</th>
<th>Every day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Probability of seeing the patient during the acute phase of his illness</td>
<td>14 / 100</td>
<td>2 / 100</td>
<td>100 / 100</td>
</tr>
</tbody>
</table>

It should be emphasized that these figures relate to an ideal situation!
If the patient cannot reach the place where consultations are given, for reasons of distance, physical condition, poor security, etc., these probabilities are lower still.

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^4 Example of an acute pathology: WHO considers that in a stable region (no epidemics), every member of the community will have a yearly episode of acute illness lasting seven days (average for the community).
FACTORS TO BE CONSIDERED IN DECIDING WHETHER TO SET UP A MOBILE HEALTH UNIT

To sum up, before deciding to establish an MHU we have to ask ourselves eight questions (the following text is taken from the *Handbook on War and Public Health,* with our comments in italics).

1. **What is happening?**
The raw data that flow in during a disaster are often imprecise and contradictory, and are certainly an inadequate basis for deciding whether action should be taken and, if so, in what form. The first requirement, then, is to make an initial assessment of the situation.

   *Mobile health units are not an assessment strategy, for assessments generate too many expectations on the part of the population.*
   *It is important to have thorough knowledge of the various actors involved, as it is they who will make it possible to apply modes of action other than substitution.*

2. **What is important?**
The initial assessment will bring into focus a set of problems, some of them more important than others. The task here is to identify the problems of highest priority.

   *In dealing with the various partners, actors and authorities, three questions must constantly be asked: what is known, what can be done and what will be done?*
   *Mortality and morbidity rates must be ascertained or calculated and an effort made to identify the causes.*

3. **What can be done?**
Pinpointing the most urgent problems does not mean they can be solved. At this point, the constraints of the situation help establish priorities for action.

   *A thorough study must be made of strengths and weaknesses, opportunities and threats (SWOT analysis).*
   *Choice of target population: displaced persons, children under five, etc.*
   *The major constraint leading to the use of mobile health units is a population group’s lack of access to the health system (poor security, destruction of health facilities, etc.). Study of human resources and logistical constraints.*

4. **What will be done?**
To decide what should be done, planners must take note of existing norms and the constraints of the situation. This will allow them to define the limits of what can realistically be attempted – in other words, to set objectives.

   *The decision to take action takes an analysis of the political and health situation (pre-crisis, acute crisis, chronic crisis or transition) into account. Mortality and morbidity rates have been ascertained by the assessment and are our first priority.*

5. **How will it be done?**
To achieve a particular objective, planners can choose between several types of activities. Initially, they must define all the activities that can be undertaken to accomplish a specific objective, and then decide which will actually be carried out and in what order – in short, determine a strategy.

   *At delegation level, it is essential to determine the modes of action (mobilization, support, substitution, etc.) to be applied.*

   *The strategy is a choice of activities and a combination of modes of action which make it possible to operate on different levels, while taking advantage of strong points and of the opportunities offered by the environment and trying to minimize weak points and to neutralize or circumvent external obstacles, in order to achieve the objectives set.*

   *MHUs are beset by a very large number of intrinsic constraints which must be considered at this stage. Here questions 4 and 5 must be combined so as to:*
   - determine the diseases to be dealt with;
   - ensure that the priority activities correspond to those pathologies;
   - ensure that the question as to the modes of action to be applied is asked again for each activity.*

We must reply to the following questions:
- Is any strategy possible other than a mobile clinic?
- For how long are we going to use that strategy?
- What activities are we going to carry out simultaneously in order to limit the duration of the strategy?
- Are we using the right mode of action? Are we leaning too far towards substitution? (In respect of the operation in general and of each activity?)

It is at this level that thought must be given to the integrated approach, until the specific activities to be conducted are determined.

6. With what will it be done?
Implementing the activities chosen will require the use of resources (human, material, financial, etc.), so resources must be planned.

The resources mobilized will depend on the activities planned (see question 5). They may be a limiting factor (human resources for medical and protection work, number of persons per vehicle, medicines, cold chain, etc.).

7. Implementation
The activities are carried out.

This is the stage for taking action, for implementing the decisions made, and for the conduct of activities, whether in the form of mobilization, support or substitution.

8. What was done?
The evaluation of what has been done should cover not only the quantities of resources used, but the entire planning process (quality of the services provided, impact on the victims' health, and so on). This is known as evaluation and surveillance.16


43 Firpo TH, Lewis DA. Family planning needs and services in nonmetropolitan areas. Fam Plann Perspect 1976; 8(5):231-240.


67 Morrison C. *India's mobile health teams set pace for progress in urban communities.* Popul Concern News 1996; (11): 3


70 *Sustainable Outreach Services*, WHO/V&B/00.37