GUIDELINES

Union Council Micro-planning for vaccination campaigns

Polio Eradication Initiative, Pakistan

November 2012

Guidelines for planning polio eradication campaigns at the Union Council level

1 Introduction

1.1 Polio situation globally and in Pakistan

As of November 2012, the Global Polio Eradication Initiative (GPEI) has made considerable progress. Of the four remaining endemic countries, India has made the greatest progress, with no wild poliovirus case reported since January 2011. Compared to 2009, Nigeria also reduced cases in 2010 by 95%, and cases also declined in Afghanistan. Unfortunately, the trend was reverse in Pakistan, where considerably more cases were reported in 2010 compared to 2009. In 2011 to date (mid-July), Pakistan reported twice as many cases (59) compared to the same period in 2010 (29 cases). The situation in Pakistan now represents one of the highest riskS to achieving polio eradication globally.

The Government of Pakistan, through the Ministry of Health, and in coordination with polio eradication partners, has reacted to this crisis by developing a National Emergency Action Plan for Polio Eradication (NEAP), which was launched by the President in early 2011.

1.2 High-risk districts, agencies (FATA) and towns, and quality gaps at the UC level

Monitoring and evaluation of polio campaigns has shown that campaign quality in a number of persistently infected high-risk districts, agencies (FATA) and towns of Karachi in Pakistan is too low and continues to leave thousands of children unvaccinated. Main reasons for this are the ongoing conflict situation in FATA and other areas of K.P. province, as well as managerial and operational problems reducing the quality of campaigns elsewhere, particularly in Karachi and the Quetta area of Balochistan.

The data also shows, however, that campaign quality is not low throughout the entire high risk district / agency / town, but that quality gaps are persisting at the sub-district level (agency, town) level in only a limited number of Union Councils (UCs). As a result, the NEAP has strongly emphasized the need to strengthen polio campaign quality directly at the UC level, and has made a number of practical suggestions on how this should be accomplished.

1.3 Purpose of this guideline

This guideline is intended to give practical guidance to both district and UC level polio teams on how to optimally plan and prepare for a polio campaign at the UC level. It is here, directly at the operational level, where changes and improvements need to occur and will show immediate results. Focus of this guideline is on the pre-campaign period.

The best way to assure a successful polio campaign is to thoroughly prepare the campaign at the UC level, through:

- high-quality micro-planning and systematic revision and adjustment of existing micro-plans, and through
- Information, mobilization and engagement of the community.

The guideline is particularly important for polio teams in those UCs that have been designated as 'high risk' (see section 7). District polio teams have been requested to prepare detailed polio eradication action plans for all 'high risk' UCs. These action plans identify the specific set of problems and obstacles encountered in the UC, and propose specific interventions and activities to overcome these problems.

Good UC-level planning will be especially important in these high-risk UCs to assure that action plans are fully implemented.

2 The Union Council Polio Eradication Committee (UPEC)

2.1 Why are UPECs needed?

The UC represents the 'grassroots' level where polio activities are actually implemented. Health and government workers, as well as other community members, have played important roles in UC level implementation from the beginning of the polio eradication initiative. However, the NEAP has now requested an even greater 'inter-sectoral' involvement in polio eradication than before, from health and other government staff and from communities.

The NEAP called for the creation of Union Council Polio Eradication Committees (UPECs) in all Union Councils. Similar to the existing DPECs (District Polio Eradication Committees), the UPECs should include members representing the health sector, other departments of government and religious and other local leaders.

UPECs are expected to closely oversee and control polio activities in the UC. Because of their position and role in the local community, UPEC members should best understand the specific obstacles and problems that exist in the UC; they should also be able to play a major role in solving these problems.

2.2 The UPEC: main tasks and membership

Following national guidelines, and in close coordination with the district polio eradication teams, the UPEC should plan and coordinate and review polio vaccination campaign activities at the UC level, in order to reach and vaccinate every child in every campaign.

The following lists UC level persons who are expected to be members of the UPEC, and summarizes their role and the contributions they should make:

- *UC Medical Officer (or senior paramedic in the absence of a MO)*
  - chairs UPEC meetings; reports to and is accountable to the district health management team (DHMT) for all polio work done in the UC
- *UC secretary* (or 'Patwari', or other senior government official from a department other than health)
  - represents the district government (DCO) in the UC
  - facilitates linkages to and support from other government departments

- should play a prominent role in the UC-level inauguration of the campaigns and
- should be fully involved in the field supervision / monitoring the campaign activities, and chair the evening review meetings during polio campaigns

- *Polio campaign field supervisors, or 'area-in-charges' – AICs*
    - depending on the size of the UC there will be one or more AICs, who are usually EPI vaccinators, paramedics, Lady Health Workers (LHWs) or Lady Health Supervisors (LHSs)
    - all AICs who are working in one UC are members of the UPEC; AICs are directly responsible for planning, organizing and implementing polio campaigns in their assigned areas
    - in large UCs, a Zonal Supervisor (ZS) may also be a member of the UPEC
- *Lady Health Supervisor (LHS)*
    - should assure the full participation of all LHWs in polio campaigns; the NEAP calls for the full involvement of the National Lady Health Workers Programme in all polio campaigns
- *UC level education supervisor or school heads*
    - facilitates the participation of teachers as vaccination team members
    - helps to raise awareness of and participation in polio campaigns in households through sensitizing students (i.e. through the daily school morning assembly)
    - can help to channel feedback from households, through students, on whether or not immunization teams came and younger siblings were vaccinated
- *Religious leader(s)* - the locally known religious leaders, representing the religious sects in the UC
    - provide linkage to the other mullahs and imams in the UC
    - facilitates announcements on polio campaigns through mosque loudspeakers and during the Friday prayers
    - help to organize meetings and jirgas to inform the community about polio eradication and upcoming polio campaigns
    - play an important role as 'influencer' in convincing families who refuse vaccination

- *UC level WHO Polio Workers and UNICEF Polio Communication Officers (FROM FALL 2011 ONWARDS; in UCs designated as 'high risk', WHO and UNICEF will designate full-time polio eradication* support staff)
    - these staff are expected to play a main role in all aspects of polio campaign preparation and implementation and should have a good understanding of the geographical, socio-cultural and religious profile of the local area and community
    - the WHO 'UC Polio Workers' will mainly concentrate on campaign planning, resource requirements, team selection and training, implementation and monitoring
    - the UNICEF 'UC Communication Officer' will focus on working with and engaging communities, social mapping, organizing special events, training of teams in inter-

personal communication (IPC), distribution of IEC materials, and on identifying key 'influencers' to help with convincing 'refusal' families to accept vaccine
- however, both WHO and UNICEF UC-level staff will need to have a good understanding of each other's work areas, and should complement and assist each other, if necessary

The main UPEC meeting should be scheduled 2 weeks before each polio campaign. The UPEC has overall responsibility for campaign micro-planning, the activity which is most critical for the quality of polio campaigns.

The actual micro-planning is done not by the full UPEC but through a technical sub-group (Medical Officer, AICs and ZSs, LHS, and soon to be appointed WHO and UNICEF support persons, see also Section 7).

2.3 Coordination between district and UC level

The district level polio eradication team plays a very important role to assure the quality of UC-level campaign work through regular monitoring and supervision of UCs, particularly of designated high-risk UCs.

The existing supervisory and administrative links between district and UC level should be used to monitor and influence the quality of work at the UC level. These links exist:

- between the district administrative head (DCO) and the UC secretary and 'Patwari' and
- between the DHMT and the Medical Officer (or senior paramedic if there is no MO) at the UC level BHU/ health facility

For optimal coordination, both levels need to maintain a link of regular communication and feedback. Examples for this would be that the UC polio team needs to inform the district team if and when the UPEC meeting has happened before a campaign; the UC team should also send a brief report about the outcome of the meeting, and a short 'campaign readiness report' a few days before the campaign.

The district health team should compile and review all updated UC level campaign plans in time before the round. This should bring problems and gaps in campaign preparation at the UC level to the attention of the district team in a timely manner, so that corrective action can be taken successfully.

3 Persisting problems with microplanning at the UC level

For many years, several known, persistent problems and pitfalls have affected the quality and usefulness of polio campaign microplanning at the UC and area level.

8.1 Known problems with microplanning

It is important to be aware of them in order to improve the quality of planning:

- campaign microplanning updates at the UC and area level are either not done or incomplete
    - a new title page is produced to reflect the name and dates of the new campaign, but the content of the previous microplan is either re-copied unchanged, or with only minor modifications (change names of some team members)
    - microplans cannot be found at the area level
- absence of written logistics distribution, training and supervisory plans
- field supervisors (AICs) are not involved in updating the microplan (i.e. updates are not done 'bottoms up' but by ZSs or at higher level)
- improper selection of field workers (both teams and AICs)
    - relatives and friends; under-age team members; no efforts made to recruit females; appearance of untrained teams in the middle of the campaign
- microplans do not highlight areas with problems during previous round (i.e. missed / poorly covered areas)
- microplans do not highlight the presence of high-risk groups (i.e. nomads, IDPs etc.)
- actual field implementation of the campaign is not following the microplan:
- unannounced last-minute switch of team members – appearance of new, untrained and inexperienced team members on the 1st day during the campaign
- unannounced last-minute minor or major changes in day-team-area assignments, with resulting confusion and decreased 'control' and supervision, making monitoring difficult or impossible;
    - frequent reason given for microplan deviation is 'shortage of teams', but real background is often that AIC use fewer teams than agreed in microplan

3.2 Updating vs. making a new microplan

While there may be some review and updating of microplans before each round, microplans are seldom, if ever, completely 'redone'.

A thorough in-depth review of the microplan, or re-planning exercise, is time-consuming. However, in some cases, making a new microplan 'from scratch' is necessary and will give much better results. This is true particularly in areas with constant changes in the number and distribution of the target population, or with high high turn-over of vaccination team members, such as in the large peri-urban areas of big cities.

In accordance with the NEAP for polio eradication, and to assure that campaign microplans are of good quality and sufficiently updated for each round, UC level polio teams should therefore:

- make sure that the process of updating microplans consists of more than changing the date on the old plan, but is sufficiently thorough and results in making and documenting all necessary changes to the plan;

- perform a more in-depth review of UC-level microplans 2 or 3 times each year, particularly in high-risk UCs, to assess if the plan's team area and workload assignments are still appropriate and match with the reality on the ground
- there may have been considerable changes in population distribution, particularly in urban areas

Depending on the number of problems detected in the existing microplan, the UC level polio team should make a decision on if and when the microplan should be fully 're-done', rather than just updated. That decision should be made taking into account the risk status of the UC, and in close coordination with the district polio team.

4 Timeline: campaign preparation at UC level

To allow enough time for preparing the campaign, including for corrective action which may become necessary if problems and gaps are found, the NEAP suggests that the preparations for a new campaign should start in the UC at least two weeks before the new campaign.

4.1 Two weeks before the campaign: update micro-plan and conduct UPEC meeting

At that time (14 days before the campaign) two important pre-campaign activities should be scheduled on one day:

- A meeting of the technical UPEC sub-committee (MO or lead paramedic, AIC(s), LHS, WHO and UNICEF UC polio staff) in the morning to review and update the UC campaign micro-plan,
- Followed by a meeting of the full UPEC in the afternoon.

The advantage of updating (or newly developing) the UC micro-plan just before the UPEC meeting is that the UPEC can be informed in detail about any necessary changes and additional resources required.

These might include requests for additional team(s) or other campaign logistics, including transportation / cars, or a request for support with campaign inauguration, community mobilization, or information of schools or campaign announcements from mosques.

Figure 1: Timing of critical activities at Union-Council level before the start of the polio campaign

Activities	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T
	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	1	2	3	4	5	6	7	8	9	10	11
UPEC meeting / review meeting																									
Meeting with notables/influentials																									
Revision of the micro-plans																									
Training of the team members																									
Social mobilization material distribution																									
Logistics distribution																									
Campaign inauguration																									
Polio Walk																									
Mosque announcements/mega phone																									
[illegible]																									

4.2 Other critical pre-campaign activities at UC level

Other important pre-campaign activities (see Figure...) include:

- Distribution of IEC material (9 days before)
- Training of team members (7 to 5 days before)
- Submission of UC 'readiness' report to district (4 days before)
- Campaign inauguration, other advocacy activity (3 to 2 days before) and start of mosque announcements (3 days before)

5 Micro-planning for a polio campaign at the UC level

Polio campaigns are very large and logistically challenging activities. In order to reach all children aged <5 in an area, the campaign needs to be prepared using thorough and detailed planning. Campaign planning has a strong impact on the quality and outcome of the campaign. Good and meticulous planning will result in high coverage and interrupt virus circulation; continued virus transmission indicates low quality of campaigns which were badly prepared and planned.

5.1 Main elements of a UC micro-plan

Campaign micro-plans for a UC consist of the following main elements, listed together with the prerequisites and information that is needed to develop the component:

- *Operational micro-plans*, prepared for each 'area' in the UC; an area is covered by an Area-in-Charge (AIC) and his 4 to 6 teams, the operational plan lists all required resources, including vaccination teams, by team area and campaign day
  - Prerequisites: target population figures by area, maps / geographical information , availability of vaccination teams (LHWs, volunteers)
- High risk areas/population plan

The high risk areas / populations in all the UCs need to be mapped. The operational plans for these high risk areas/populations should be developed in line with the guidelines and strategies.

- *map*s - a UC 'base map', showing all areas in the UC, plus one map for each AIC's area, showing the boundaries of areas covered by each team each day, as well as simple maps for each team showing their area of assignment (see also 4.3)
  - Prerequisites: a base map of the UC, often already available at the BHU / health center; for densely populated urban and peri-urban areas, printouts of GOOGLE maps can be very helpful
- *pre-campaign training plan*
  - Prerequisites: list of all team members and supervisors who are to be trained; availability of appropriate trainers, proper methodology to be followed.

- *communication and social mobilization plan*
    - Prerequisites: knowledge about the distribution of ethnic groups and religious sects or other minorities in the UC, a list of community and religious / tribal leaders and other 'notables', coordination with district level to obtain SocMob materials in time

- *logistics distribution plan*
    - Prerequisites: knowledge of the UC's needs (as per operational area microplan update) for vaccine, vitamin A, and all other campaign-related logistics

- *supervisory plan*
    - Prerequisites: knowing which AICs and ZSs will be active in the UC during the campaign, and requesting them to submit detailed day-by-day activity plans

5.2 Estimation of target population and developing an operational area micro-plan

The starting point for a micro-plan is the number of target-age children estimated to live in an area. These important ‘planning target’ figures are estimated using the number of children vaccinated in previous campaigns in that area.

- The number of children vaccinated in an area may increase or decrease depending on temporary population movements in and out of an area (example: local wedding - increase, festival elsewhere - decrease).
    - To avoid using falsely high or low population figures, campaign planning targets in Pakistan are calculated using the average no. of children vaccinated during the last 3 rounds of the previous calendar year to start with.
    - Onwards, targets will be updated before every round according to the actual field target depending on the population movement and new settlements (if any).

Once numbers of target children have been estimated, a micro-planning spreadsheet is used to calculate all necessary resources to vaccinate all children in the area, including:

- The number of vaccine (and Vitamin A) doses needed by each team each day
- The amount of other materials and logistics that is needed for each team each day, such as nail marker pens, chalk, tally sheets, vaccine carriers, small plastic bags, scissors to open Vitamin A capsules etc, and
- The number of mobile *(house-to-house) vaccination teams* which are needed to cover the area in three days.
- The number of transit teams and fixed sites to support vaccination for missed and moving children (if appropriate).

Calculating the number of teams needed takes into account whether the team works in densely or sparsely populated areas, and how many h-h visits can be made, and children vaccinated, in that area in one day.

- Based on experience in the GPEI in Pakistan and elsewhere, one vaccination team can vaccinate, on average:
    - Around 200 children < 5 per day in densely populated urban areas (G1 areas),

- Around 150 children / day in peri-urban and easily reachable rural areas (G2 areas)
- Around 100 children / day in more remote, harder to reach rural areas (G3 areas).

Once the number of required mobile teams has been calculated for an area and for sub-areas, each team is listed on the operational micro-planning sheet, together with an exact description of the assigned area to be covered by the team on day 1, day 2 and day 3 of the campaign. Replacing of teams on daily basis to cover day wise distributed areas in the same UC is not allowed (example; putting 5 teams to cover one third of the UC target on day 1, replacing new 5 teams on day 2 to cover next days' target and so on)

It is important that the vaccination team is not given the planning target figure for their daily assigned areas, but that the team is requested to vaccinate 'all children < 5 years in the assigned geographical area'.

5.3 Developing maps for the UC micro-plan

Maps are an important component of the UC micro-plan. The following hand-drawn simple maps should be produced at the UC level:

- *a base map of the UC* (often available at the health center), into which the boundaries of each AIC's area are drawn; the UC maps should also show;
  - locations with important settlements or presence of groups at higher risk of being missed by the campaign (slum areas, nomads, seasonal migrants, IDPs, brick kilns, religious or ethnic minority groups, areas with clusters of 'chronic refusal' families or insecure areas);
  - main permanent landmarks, such as schools, mosques, main roads, towns, villages, rivers, and mountains, and health facilities, marking the location of fixed sites and team support centers (TSCs, most of which serve as fixed site), transit teams and roaming teams, but also location of community 'influencers'
- *separate maps for each AICs area*, showing within each area (corresponding to operational micro-plan) the boundaries of each team assignment area, divided into 3 campaign days (labeled 'Team 1 - Day 1', 'Team 1 - Day 2' etc.);
- and *small sketch maps showing each team area*, divided into 3 campaign days.

The existing UC and area polio campaign maps are often not of very good quality. During more in-depth reviews of micro-plans in high-risk UC s (see section 7), UC polio teams should consider re-drawing and improving maps. The best way to do this is for AICs and ZSs to do a thorough 'walk-through' of the area, to note and map all relevant information (see above).

In densely populated peri-urban or urban areas, teams should consider using base maps of the UC printed from freely available internet resources, such as 'GOOGLE earth' or 'GOOGLE maps'.

5.4 Producing a pre-campaign training plan

The NEAP's emphasis on improving the quality of polio work at the UC level will require that planning for field worker training needs to be even more closely coordinated between the district and UC polio teams:

- the most capable trainers in the district should be identified and used in the most high risk UCs, even if that means that trainers are not from the local area

Training and orientation sessions start one week before the beginning of the campaign and are scheduled separately for AICs (1 day), followed by training of the vaccination teams (3 to 4 days).

- In addition to improving knowledge, the sessions should also be used to explain why high quality polio campaigns are still needed, and to motivate field workers.

Main issues to consider in planning field worker pre-campaign training are:

- to prepare a clear time plan for training sessions at least one weeks before the campaign, in coordination with the district team; plans should include dates, venue, facilitators and list of trainees
- for the district team to assure that the best available trainers will be available for the highest risk areas and UCs (such as the 'master trainers' who passed through the 3-day polio 'training of trainers' conducted by CHIP in 2009 and 2010; list of names available with UNICEF/WHO Islamabad)
- to work with the UPEC and others in the community to assure that appropriate venues as well as other materials (black boards, flip charts, chalk, nail markers, training booklets) are available for the training sessions
- that the newly recruited WHO UC 'polio workers' and UNICEF UC 'polio communication workers' are fully involved in training sessions
- keeping a complete attendance record, with signatures, to assure that teams who did not attend the training can be identified later, and that only trained team members will be working in the field

Lastly, training sessions should be used, if necessary, as opportunities to fine-tune micro-plans, and arrangements for cold chain, vaccine supply and logistics (supervisors), and to start discussing the assignment of teams to their areas, i.e. the exact boundaries of areas to cover daily, before these assignments are finalized in the field on the morning of the first campaign day.

5.5 Plan for Social Mobilization and Communication activities

Communication plans are critical and integral components of any comprehensive micro-plan. This is especially true at UC level, closest to the targeted communities. Campaign micro-planning is a dynamic process which is adaptive and responsive to the changing needs of the local environment at each moment. The micro-plans will need constant updating and modifications as the campaign approaches and proceeds and the details of the activities and events are finalized. Therefore, the actual micro-plans are working documents. Communication plans are critical and integral components of any comprehensive micro-plan.

This is especially true at UC level as it the closest level to the targeted communities and is supposed to address the specific needs and challenges of that community.

In high risk Union Councils, special UC Communication Officers (UCO), supported by UNICEF, will support local government and national teams in developing, planning and implementing communication and social mobilization activities targeting under-served and high risk areas and populations. Additionally, UCOs will also provide support in mapping out stakeholders and building local partnerships.

In high-risk UCs, UC Communication Officers (UC-COs) will provide support to local polio teams in developing, planning and implementing communication and social mobilization activities; they will also try to develop local polio support networks and partnerships.

The communication component of the UC micro-plans, which should address the specific needs and challenges of the community, include the following:

- **Social maps**: It is important that the social maps include the location and movement routes of high risk and under-served populations and areas (*define these groups: see section on high risk groups and migratory populations*). These populations must be listed and identified on all maps including the team and supervisors map. Special activities will be targeting these areas/populations to ensure community engagement; buy-in and acceptance of the campaign (see Events, below). Social maps should also include key areas where social mobilization activities and interventions, can take place including mosques, schools, madrassas, health centres, railway or bus stations etc. They should identify where social mobilization staff are in place, and where influencers or partners are located.
- **Social Mobilizers:** Some high risk areas within the UC will have social mobilizers identified from the communities and involved in activities prior and during the campaign. The names of these social mobilizers should be updated for each round and incorporated into the micro-plans within the daily work plans of the team. The micro-plans should also include the training plans for these social mobilizers.
- **Partners**: a list of trusted and influential non-governmental organizations, civil society organizations, religious institutions and madrassas along with a resource mapping for these partners to identify how best they can support the PEI activities.
- **Events**: a list of planned social mobilization and community events and meetings that would be conducted prior to and during the campaign. The primary target of these events and meetings are the high risk groups (refusals, brick kilns, nomads, migrants, minorities, etc). Each meeting should have clear objectives, identified location and time, required resources and targeted audience. Some of these meetings can be conducted in between rounds, while others will be conducted in conjunction to and immediately prior to the campaigns. Successful planning and preparations for these events and meetings using the available resources would ensure attendance of the targeted communities and achieving the objectives of these meetings.
- **Congregations** (weddings, religious festivals, *haj/umra congrats*): Special activities and interventions should be planned to address these opportunities during the campaign. It needs to be clear how weddings and religious festivals will be handled between rounds.

- **Influencers:** a list of key influencers including religious leaders, imams, community elders, teachers, paediatricians, etc should be identified and included in micro-plans to help convert specific types of refusals and non-compliance (including access issues).Different influencers will be required for different kinds of non-compliance, and it should be noted which influencers should be used for which communities and issues. Influencers should be informed when the teams are conducting revisits to convert refusals, and should travel with teams to support these conversions. The location of influencers should also be reflected on the social maps included in the micro-plans and used by the teams.
- **Informers**: list of reliable informers with contact details of incoming migrants/labourers, nomads, temporary slum dwellers, etc identified by village and community and incorporated into the vaccination teams work plans.
- **Calendar for UC level Social Mobilization Working Group meetings** with proposed attendance, objectives and location. This could also be part of the UPEC meeting which already takes place. These meeting would help finalize details related to inauguration activities which should be incorporated into the micro-plans.
- **IEC materials:** Detailed plan for IEC requirements and distribution plans including the person responsible for dissemination and pasting, locations and deadlines for dissemination.
- **Refusals**: In areas where refusals, non-compliance and children missed due to sleeping, sickness, or newborns is an issue, a considerable amount of work should be done to address these issues in between the rounds. During the rounds, there should be a list of all chronic and remaining refusals (covert or overt) by location and reason for refusal incorporated on the maps and daily team work plans. These areas and households should be prioritized for influencer-accompanied visits, together with the vaccination team and social mobilizers. These plans need to be reflected in the micro-plans with the names of the influencers and social mobilizers. *Polio 'Information-Education-Communication' (IEC) materials*: the microplanning update meeting should be used to derive the required amounts of IEC material, to be included in the Social Mobilization/Communications plan, which should specific also when, how and by whom materials should be distributed.
- ***Reducing non-compliance / 'refusals'***: where refusal of vaccination is a problem, the plan should contain a plan and schedule of activities to engage and convince non-compliant families, both during and between campaigns. Areas where non-compliance or refusal is a persisting ('chronic') problem should be listed on maps and in the daily team operational plans of teams; teams should be accompanied by social mobilizers and/or key 'influencers'.

5.6 Logistics distribution plan

As for training and supervision, the distribution of OPV vaccines (and Vitamin A), of all other materials (tally sheets, chalk, nail markers etc.) and of social mobilization materials, in appropriate amounts, is coordinated mainly at the district level.

It is the responsibility of the UC polio team to calculate the requirement of the logistics according to the operations plan and the spreadsheet, and communicate the requirements to the district polio team well before the campaign to assure that vaccine and all other materials arrive at the UC level in time for the polio campaign.

5.7 Supervisory plan

Similar to training, a detailed time-plan for field supervisory activities needs to be prepared in the pre-campaign period. UC level planning for supervision, as for training, needs close coordination with the district team. Depending on the risk status of the UC, there may be a need for cross-assigning qualified staff, particularly ZSs, but also AICs, from other parts of the district to a high-risk UC.

A supervisory ‘master plan’ will continue to be made at the district level. However, it will be the responsibility of the UC polio team to produce its own supervisory plan, following coordination with the district team.

The supervisory plan should specify:

- for each AIC and day of the campaign, the estimated time at which the AIC expects to visit a particular team (his 'tour plan')
- Likewise, each ZS should provide a written 'tour plan' in which he or she specifies, for each campaign day, which AIC to visit at which time and
- for the district polio team, which areas UCs to be supervised / monitored to be monitored by whom on which day of the campaign

6 Vaccination teams: selection, composition and types of teams

The selection of appropriately qualified vaccination team members is a critical activity for which the AICs have been traditionally responsible, while the ZS identifies and selects new AICs.

Particularly in large cities, there have been chronic problems in recruiting a sufficient number of 'accountable' team members (govt. worker, instead of community volunteers), for a number of different reasons (see section 8).

The NEAP highlights that team selection should not be done just by the AIC but that this is a responsibility of the whole UC polio team.

The following are different categories of vaccination teams used during polio campaigns:

- *'mobile H-H teams'*, consisting of two team members who move from house to house to identify and vaccinate all children aged < 5 in their assigned area

Children < 5 who are out of the house during the team's house visit are targeted by

- '*transit teams*' operating at busy transit sites, bus terminals or railroad stations, by
- *'roaming teams'* moving around in busy market areas as well as large hospitals, MCH departments, children parks etc., and by

- '*fixed site teams'* at active EPI centers in health facilities, who offer OPV to all children < 5 coming to the facility for any reason during the campaign period.

6.1 Mobile teams - desired profile of team members

To assure that house-to-house teams reach and vaccinate all eligible children, team members should be selected using the following important criteria:

- *accountability and experience:* at least one of the two team members should be a government employee, preferably from the health department, and have previous polio campaign experience; this person is designated as the 'team Leader';
- *female team members:* at least one team member should be female, to assure easy access into houses and households
  - it is therefore essential that all available LHWs, LHVs or 'dais' are involved
  - in culturally conservative areas it is essential to have females on the team, but it may not be safe for two females to walk on the street; here, the (female or male) team member should be accompanied by a family member of the opposite sex
- *teams from the local area:* at least one team member should belong to the local area currently covered by the team (i.e. best if same ethnic, tribal or religious background, same language)
- a '*third team member'* - village elder or adolescent boy - can be recruited locally to access homes in areas where female teams cannot operate because of strict cultural norms.

6.2 Mobile teams: implementing house-to-house vaccination

This guideline focuses mainly on planning issues during the campaign preparation phase. However, the quality of house-to-house immunization is critical to the success of the campaign, and the following section includes the most critical points mobile teams and supervisors should focus on in order not to miss any child; for more detailed implementation guidelines see the comprehensive SIA field guide.

Mobile teams should work between 8 am and 2 pm, or at hours as instructed by the district health team. The daily workload (no. of households in the assigned area) should be adjusted to allow the team to finish covering the area around 2 pm, to allow to revisit houses where previously absent children may have returned.

- *importance of multi- family compounds - the 'micro census'*:
  - in all rural areas, but also in peri-urban and urban areas, multi-family houses or compounds are common; over the last few years, 2/3 of reported polio cases were from multi-family dwellings

  - these compounds, together with the strict reclusive cultural norms of 'purdah' in conservative communities, create special obstacles for teams to access, find and vaccinate all < 5 year old children
  - teams who cannot enter a house, or the compound (all-male teams) are very likely to miss some children , particularly the very young who cannot walk yet - newborns and infants
  - however, experience has shown that even female team members miss children in multi-family compounds because they are not thorough enough in establishing a complete 'baseline' count of all mothers and children < 5 living in the compound
  - supervisors should emphasize in the team training and in the field that, in multi-family compounds, teams should first conduct a systematic 'microcensus' ("how many mothers live here?", "how many children < 5 per mother?", etc.) before starting to vaccinate children, even if this takes some time
- *complete documentation of all absent ('non-available') children:*
  - mobile teams must list those children on the back of the tally sheet who reside in a house but are absent (non-available, or N/A) during the team visit, for later follow-up
  - it is still a common mistake that teams fail to ask for and document 'absent children' - the concept of asking for children 'who are not there' is either not understood, or not applied
  - post-campaign monitoring shows that 'non-availability' is the most common reason for a child not to have received vaccine - showing that the child was either not listed as 'N/A' and not followed up, or that follow-up was unsuccessful
  - the new house-based tally sheet allows supervisors and monitors to quickly gauge whether or not a team properly documents and follows up N/A children; detecting and correcting this problem should be high priority for field supervisors
- *same day revisit to houses where children were absent:*
  - daily workloads are intentionally kept low enough to allow sufficient time for teams to revisit houses with 'N/A' children once finished covering their assigned area in the afternoon, while they are still in the vicinity
  - most children are absent from home for short periods and there is a more than 50% chance to find and vaccinate a child if a revisit is made on the same day
  - failure to follow this critical rule is still very common, and 'pushing' teams for better compliance should be high priority for supervisors and monitors

- *how to respond to non-compliance / refusals*
  - in general, numbers of children not vaccinated due to refusal are low, and not increasing; failures and mistakes during h-h immunization, particularly lack of documentation and follow-up of absent children, contributes a much larger proportion of 'finally missed' children
  - refusals are still an issue in some areas, including some 'chronic refusal families who reject OPV during every round. It is critical to understand the reasons for refusals

and document and track this information including the maintenance of a detailed refusal log book.

  - however, teams in most areas can rely on supervisors, social mobilizers or other community members and 'influencers' to be available quickly to help resolve the problem. Therefore, it is critical to include information on influencers available in each area and plan on getting their support in visiting refusal families during the campaigns.
  - Considerable work should be done in addressing refusals in between the rounds through appropriate social mobilization and communication initiatives and activities. These approaches relay on local influencers and social mobilizers.
  - in general, numbers of children not vaccinated due to refusal are low, and not increasing; failures and mistakes during h-h immunization, particularly lack of documentation and follow-up of absent children, contributes a much larger proportion of 'finally missed' children
- *Screening for zero-routine infants*
  - in addition to informing families about the need for routine immunization, the team members should inquire about the routine immunization status of the children < 1 yr of age;
  - any infant who has never been vaccinated other than with OPV ('zero dose routine') should be noted on the tally sheet and reported to the local EPI vaccinator, for later follow-up

6.3 Teams at transit sites and roaming teams

The objective for both transit and roaming teams is to identify and vaccinate children who are moving outside the house during the campaign, i.e. those who should be documented as 'non-available' by mobile (house-to-house) vaccination teams.

Transit-site teams:

- pre-campaign planning should include the selection of those 'transit points / sites' (entry and exit points, transportation terminals) where enough families with small children pass through to justify the placement of one or more transit teams
- Teams working at busy transit points and in transportation terminals should be energetic, pro-active, and keep moving around to seek out and vaccinate children < 5.
- At the busiest road transit points, it may be necessary to request from the UC or district administration, through the UPEC meeting, that a police officer be deputed to assist the vaccination teams by stopping buses or cars, or by keeping buses from leaving as long as a team member is still inside the bus vaccinating.

Roaming teams:

- Roaming, or 'floating' teams, should be assigned to work in those public places at a time when large numbers of families and children are passing through.
- Sites that may need roaming teams includes bazaars, street markets or parks, but also busy MCH clinics and pediatric outpatient departments' at large hospitals, at times

when there is a large patient flow. It is important to select the most pro-active, energetic vaccinators for this task.

6.4 Teams at fixed sites

'Fixed sites' are established during the campaign in most health facilities, including in all functional EPI centers; fixed sites are staffed with a trained EPI worker. All target-age children visiting the facility are given OPV, and functional EPI centers continue to offer other routine EPI vaccines. It is important to highlight that at the fixed sites established at functional EPI centers, tOPV is given to all the children regardless of the type of vaccine being used during the campaign. These sites remain open from 8 am to 5 pm for five days.

All health facilities serving as 'team support centers' (dispatching of teams, storage of vaccines and other logistics) are also campaign 'fixed sites' and vaccinate all children visiting the health centers with OPV.

7 Micro-planning for high-risk populations and areas

In each UC, but particularly in those designated as 'high risk', there are smaller or larger areas where high-risk population groups live, either permanently or temporarily. These groups are designated as 'high risk' mainly because their children are at risk of being missed by both routine and supplementary immunization. The presence of increased numbers of children who are not immune against polio puts the area at risk of continued virus circulation.

7.1 Categories of high-risk groups and areas

These high-risk groups include:

- mobile and migratory groups, including nomads, seasonal migrants and brick kiln workers, and Internally Displaced Populations (IDPs) and refugees
- inhabitants of slum areas, ethnic and religious minority populations, clusters of 'chronic refusal' families, populations living in insecure or physically remote, hard to access areas (i.e. many riverine areas along the Indus) or those living in conservative communities not allowing vaccinators into the village (vaccinators sits in guest room: 'utaq / hujra vaccination')

Of particular concern are situations where population groups fit into more than one of these categories, for example culturally conservative ethnic minorities who are also migrating to and from polio-infected areas.

7.2 Overall micro-planning approach to high risk groups

For UC polio campaign planning, the most important factor influencing the quality of the campaign is that:

- *All high risk groups and areas in the UC are identified* and documented in the operational micro-plan and on the area map,
- *Special efforts are made in campaign planning and implementation to reach children belonging to high risk groups*,
- *Special supervisory / monitoring plan for the teams covering these populations.*
  - if there are only few smaller 'pockets' of high-risk groups in the UC, it is sufficient to insert 'alerts' to these groups in the existing micro-plan; for larger high-risk settlements, separate micro-plans should be made
  - UC level campaign planners should assign the most experience supervisors and teams to work in the high-risk areas

7.3 Special strategies for mobile and migratory populations

Mobile and migrant populations are more important for the success of the polio programme in Pakistan than in any other remaining polio-endemic country.

Children in these groups represent a high risk for the programme because:

- they are much less likely to receive either routine or campaign vaccine doses, have low levels of immunity, and become infected with WPV
- their high mobility between infected and uninfected areas also means that they facilitate the long-distance transmission of WPV nationally and between Pakistan and Afghanistan.

Recognizing the risks associated with migrant groups, the national polio eradication program has developed a specific plan to ensure immunization of mobile / migratory children.

The implementation of the national strategy to ensure immunization of mobile groups should be prioritized everywhere, but particularly in the high risk districts and UCs.

Key elements of the migrant strategy include:

- mapping and listing of migrant communities and settlements and their inclusion in campaign micro-plans
  - at the district and province level, health teams also need to document and consider movement patterns of mobile groups within and outside the district and province
  - assuring specially recruited and well trained vaccination teams that are acceptable to the migrant community, including members from that community
  - enhanced supervision of teams covering mobile communities
  - special targeted communication and social mobilization strategies appropriate to the community.

More specific campaign strategy elements to target mobile and migrant groups include:

- adjusting the timing of the campaign activity for mobile and migrant groups according to their lifestyle and availability
- develop and use special communication strategies (advocacy efforts, jirgas, meetings, inaugurations) to reach mobile and migrant group, which includes working with community leaders or other ‘influentials’ linked to the groups
- establishing special immunization sites at the travel route of mobile groups and nomads, particularly at the known ‘choke points’ where two or more traditional migratory routes merge.

8 Updating the UC micro-plan

UC-level polio campaign micro-plans have been used for many years and already exist everywhere. They are not newly developed for each round, but reviewed, and updated, if necessary (i.e. addition of teams, change in area allocated to teams, or change of team members). However, micro-plans are seldom thoroughly reviewed or completely’ re-done'.

As discussed earlier, the UC polio team (health team members: MOH, AICs, LHSs, ZS) should conduct a micro-planning meeting about 2 weeks before the campaign begins, just before the meeting of the UPEC.

7.1 Activities in advance of the micro-planning meeting

Several important pieces of information will need to be collected before the micro-planning meeting, in order to finalize the micro-plan update:

- *full list of team members:* all AICs should have contacted their group of vaccination team members, and should have filled possible gaps with newly recruited team members. Likewise, in large UCs, the ZSs should have identified new AICs, if necessary;
- *walk-through the area:* For AICs who are newly assigned to an area, or if a decision is made to completely re-do the microplan (including re-drawing of the area map), the AICs and/or ZS should also *walk through* and inspect his or her assigned area, to document any changes or necessary updates to be made (i.e. new slum or IDP settlement, newly built houses etc.) before the microplanning meeting.

7.2 Activities at the UC 'microplanning' meeting

The meeting to update the UC microplan should be chaired by the chairperson of the UPEC (either the UC MO or a senior paramedic) and attended by all ZSs and AICs and, where available, by the WHO and UNICEF UC support persons.

Since microplans are area-based, participants could split up in smaller groups working on one area microplan update each; in large UCs with more than one NID 'zone', the microplan review may be done in parallel by two or more groups each consisting of the ZS and AICs of one zone.

The following are important activities during the microplan update meeting:

- updating the list of team members / names to assure that a complete workforce is available at the time of the SIA
- reviewing the UC's performance during the last campaign and the period since then, particularly if there were indications that one or more additional teams were needed for the upcoming round (i.e. in-migration of mobile groups etc.)
- highlighting main problems that occurred during the previous campaign, such as where areas were missed or poorly covered, with possible implications for assigning teams etc.
- assuring that important information about the movement of high-risk groups (nomads, migrant population etc.) in and out of the UC since the last SIA is noted in the microplan, and, if appropriate, is marked in the UC-level maps
- updating, if necessary, the 'social map' of the UC (each zone)
- verifying the functioning and availability of cold chain equipment in the main UC health facilities and team support centers (ILRs, vaccine carriers, icepacks, cold boxes etc.)
- reviewing plans for distribution of vaccine and logistics, for pre-campaign training, and for social mobilization / information activities
- establishing whether any changes made (i.e. additional teams) will increase the UC's resource requirements (vaccine, nail marker, chalk, forms etc.), and assuring that the district team was informed about this soon.