

## Appendix F

### Assistive devices

During STEP training, the use of assistive devices, particularly for positioning, was emphasised. However, design and supply were problematic at some sites. Delays in issuing assistive devices was met with frustration by both fieldworkers and families. The primary impacts on time frames were availability of funds and accessing central workshops to make and deliver devices.

Three primary issues arise when considering assistive devices as part of STEP over and above funding and availability:

#### Design and adaptation for neurological disabilities

Workshops that fabricate assistive devices still do so from a largely orthopaedic perspective and additional support may be necessary in order to design and manufacture devices for children with neurological disabilities.

#### Local manufacture and repair

Devices that are imported may not be suitable for the terrain in rural contexts and tend to break more frequently. This requires spare parts that may not be locally available, and artisans may feel less confident in making repairs with their available materials and skills. Locally produced wheelchairs, such as those manufactured at the KCH workshop, have benefits in that they are made from locally sourced materials and are therefore cheaper and easier to repair than imported chairs, potentially have a more reliable availability than those which are donated or sourced internationally and above all are context- and terrain- appropriate.

#### Selection and in-home adaptation

Most fieldworkers were able to identify appropriate needs for assistive devices but did have limitations in the design choices and adaptations. Seating principles are complex especially in cases of severe deformity and therefore problem-solving around the needs and adaptations may need to be supported by skilled therapists. This support is available in some settings, but not all. Doing an audit of assistive devices already available for the child may be beneficial, in order to prevent duplication of services (*NRC3*), and where STEP could rather adjust existing devices where possible, before issuing a new one. This would save costs as well as reduce the burden of storage of devices for families. The most frequently used assistive devices were CP chairs, wheelchairs and commodes.

CP chairs were widely made, either at established workshops (i.e. KCH or APDK), by local artisans or by the families themselves. Many Cameroonian families expressed a willingness to access the resources needed to build their own chairs provided they had information on the design best suited to their child's needs. Several caregivers had in fact, built chairs from locally available materials. This has a number of advantages; there is ownership from the caregiver to be the one providing the assistance to the child, understanding of the design principles allows them to make new chairs as the child grows and as it is self-made from locally sourced materials, it is easy to modify or repair and families do not need to feel 'precious' about it and thus avoid repairs.



Commodes were issued in Uganda and Kenya and were highlighted as a big need by families and fieldworkers. Caregivers, paid aides or alternative caregivers did not want to manage faeces and as most children were unable to squat or sit on a bucket, they needed high levels of assistance with regards to toileting. Commodes made the caregiving burden easier and more acceptable.

There remains a high demand for wheelchairs across all three countries; as a means of mobility within the home and community, to protect the caregivers' back from frequent carrying especially as the child gets heavier and to allow for participation of the child and caregiver in different environments.

Where used, either locally made or hand made by families, the assistive devices in most homes had made a significant difference to the Makes huge difference to the function and participation of the children and their caregivers. Fieldworkers should also be encouraged to consider and problem-solve around the need for smaller assistive devices, such as feeding tools, play and stimulation activities or devices to assist in ADLs.