

- **RBFREPORT2019**

### **DRAFT FOR A REPORT OF THE FIRST YEAR OF THE PEDIATRIC RBF PROJECT**

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#### **OVERALL CONSIDERATIONS**

##### QUANTITY OF C.W. ADMISSIONS

Both hospitals admitted every month considerably less children than planned in the original RBF plan. Lacor averaged 750 admissions per month and Kalongo 330 compared to the planned total of 100 and 500 each.

The reduction of admissions is independent by the hospital, which do admit all cases requiring an hospital admission, but it is related to:

- decrease of malaria and malnutrition and , especially,
- better filter at the Outpatient Department, which does meet the highest demand of care.
- more attention to severe and complicated cases

For this reasons the two hospitals cannot be heavily penalized by these positive developments.

Having met all stakeholders in Kalongo as well as in Lacor, I propose the following amendments to correctly compute the quantity of admissions.

1. Add to the monthly admission at the C.W. all children aged 0 to 14 years admitted in the other wards of the hospital (isolation, surgery, HIV etc)
2. Compute the length of stay of each admitted child and divide them into:
  - a. Length of stay 1 to 5 days
  - b. Length of stay more than 5 days

Since the length of stay is an indirect, but efficient, estimate of the severity of the child and requirement of resources.

3. Compute the total admissions according to :  
Total = N.of cases with 1-5 days length of stay + (N of cases with > 5 days length of stay x 1.5)

We simply add a weight of severity of 50% more to the cases staying 6 or more days.

This will give a more reliable picture of the workload of the hospital for the care of children.

#### **St MARY'S HOSPITAL LACOR**

Substantial changes took place in the period from March 2018 to February 2019, starting from the important problem of bed and equipment sharing for the intensive care children. Now a new system of Oxygen distribution has been installed and there is no more the need to share oxygen concentrators. Much attention was paid to the emergency preparedness, to the safety, to the waste disposal, to latrines.

One critical point which does require more action and surveillance is generally record keeping either to register admission, as well to keep record books for materials, drugs, etc.

Specifically:

1. **Basic Infrastructure:**beds and mattress are ok, weighing scales are available, the ward is clean and electrical sockets and main have been covered and protected. Still some misunderstanding of waste disposal by mothers has been reported. Occasionally there is still bed sharing, but not in the intensive care, as it was last year. Infusion pumps are required. No problems with drugs,

but some misunderstanding with lab has been reported. X ray is overwhelmed and under staffed.

2. **Hygiene:** Cleaning is ok but stock management needs surveillance. Beds are ok, as well as trash bins (which were inadequate last year). Latrines and shower are mostly functioning and clean. Sterilization is ok.
3. **Clinical and Nursing:** much work was done in this field, but the very frequent turnover of interns and doctors required continuous repetition of guidelines to the newcomers. Occasional misunderstanding between prescription and actual provision of treatment was reported. The medical and nursing staff deal with quite severe cases every day and they share their problems and decision in a morning meeting. Pressure on the staff is very strong, due to the very high demand by the community. Death review is exemplary: they developed an 'ad hoc' form which allows a critical revision of events.
4. **Emergency:** the cupboard is well organized in appropriate and tidy shelves with the basic equipment and also with cannulation and intubation materials. Protocols have still to be diffused regularly.
5. **Training:** of nurses is going well: they receive appropriate supervision and take on progressive responsibility by the 'learning-by-doing' approach. Medical students were often absent; when they are there they are actively involved and respond enthusiastically. Training objectives for III and Vth years Medical Students are clearly pictured on the main wall.

**Critical Point:** Record Keeping and Data registration have to be improved by continuous surveillance on the registration of patients, book keeping, storage of materials etc.

**Perspective:** One critical issue at Lacor hospital is neonatal care. The mortality for small for date neonates is still quite high, despite the efforts of the staff. Unfortunately, Neonatology is located in very inadequate spaces (2 rooms) packed with mothers and premature infants. All the efforts to reduce infection and cross contamination are completely vanished by the lack of spaces. Mother, protected with mask, gowns, shoes, lay on the floor and we measured 9 people in one room at the same time.

Finally a plan to set up a new large Neonatology area has been approved by the Management and action is going to develop a sustainable plan to develop 4 areas of care:

1. 6 cots area for out-borne neonates requiring high level of care
2. 12 cots for neonates Adequate for Gestational Age and Kangaroo procedures
3. 6 monitored thermal cots for Sub-Intensive (and Small for Gestational Age) premature
4. 4 monitored thermal cots for Isolation of sub-intensive cases

The total of 28 cots will be equipped with O2, aspiration, power and appropriate equipment

A 'Mothers' Pavillon' will be built in the open air area behind the ward.

### **'AMBROSOLI HOSPITAL' - KALONGO**

The overall picture of the hospital significantly changed compared to March 2018, despite the critical lack of human resources.

Since at the first RBF evaluation they scored very low, they received a bonus so small that they collectively took the decision not to distribute the financial benefit to the staff, but to save it to pay for the substantial changes in the Children's Ward and surroundings, that might have improved the situation. So they invested all the bonus money to fit meshes to windows, increase safety and hygiene etc, in order to expect a better performance and a larger bonus in subsequent RBF evaluations.

The Children's ward is now clean, with windows protected by mesh, washing hands is in place, litter is disposed appropriately, beds are clean, toilet working.

The new Neonatology is very effective, modern, very well spaced and organized, quite well managed and staffed, with 3 modern incubators and several new equipments. It is a real example of a major and effective change in the most critical sector of children's care (the premature and the sick newborn).

One critical point which does require more action and surveillance is record keeping especially to register admission, to register the day of dismissal from the hospital in order to compute the length of stay, as well to keep record books for materials, drugs, etc. This point requires immediate action, to avoid misreporting at the next evaluation.

As far as the single items of the checklist I observed:

1. **Basic infrastructure:** windows protected, beds and mattress ok. The weight scale is inappropriate in CW (hanging), very good in neonatology
2. Hygiene: new trash bins everywhere
3. Safety: electrical socket have been displaced at higher level, drugs ok
4. Infections: wash hands now available, less cross-contamination, much reduced in neonatology
5. Equipment: no infusion pumps, other ok
6. Drugs: occasionally antibiotics not available, stock card not well kept
7. LAB: very good
8. Rx: lack of staff

**Hygiene:** generally significantly improved, much trash bins etc. No showers (delete from plan)  
Sterilization functioning

**Clinical and Nursing Procedures:** despite the lack of specialist, medical officers, under the supervision of the Director and Superintendent apparently per form quite satisfactorily in the clinical procedures. We revised several cases controlling the appropriateness of the management and were quite pleased to verify the correct application of standard protocols of children's care.

Prescriptions were appropriate and the administration by nursing procedure quite good. Fluid charts and drug administration were correct.

More effort should be done to check that mothers give the required ORS solution to dehydrated children overnight.

Neonatal care improved at higher levels.

Death review occasionally in place: they have to get the 'ad hoc' form from Lacor.

**Supervision** is an issue for the lack of specialist: it should be regularly carried out by senior officers (Directors, Superintendent)

**Emergency** was quite OK: 8 Ambu bags were quite dusty.

**Training** for Nurses and Midwives is good. The Midwifery school is very well kept.

**Critical Point:** It was observed that on the admission book at the data registration office, very often the day the child was discharged from the ward is not reported. This is a very serious failure, since the computing of admissions will require, from now onward, to calculate the length of stay of each child, in order to be classified as 'simple' = less= 5 days or 'severe' = 6 or more days.

Record Keeping and Data registration have to be improved by continuous surveillance on the registration of patients, book keeping, storage of materials etc.

**Perspectives:** A Pediatrician is expected to come in few months.

A plan to reconstruct and enlarge the whole Pediatric Department is in place. According to my experience this is a very nice and effective plan, able to bring unexpected improvements in the children's care as well as in the staff motivation. It appears to make the best and rationale use of the spaces and to provide a human and nice environment to children and their mothers. The Isolation ward merit great appreciation for the smart and human use of the required separation among several infections, which is rarely found in any western hospital. The required budget appears surprisingly contained also.