

SUPPORT TO BANGUI PEDIATRIC UNIVERSITY HOSPITAL



PROJECT DESCRIPTION

Central African Republic has suffered severe instability in the years 2012-2013, which has weakened its already dysfunctional health system. Vulnerable groups such as under-five children and pregnant women have been affected the most. Indeed, **pediatric mortality and morbidity** are **very high** (child mortality <math><196/1.000</math>; child mortality <math><5139/1.000</math>). The **main diseases** are malaria, diarrhea diseases, acute respiratory infections, and malnutrition.

Bangui Pediatric University Hospital (*Complexe Hospitalier et Universitaire Pédiatrique de Bangui, CHUPB* hospital) is **the only pediatric hospital** of the country and **the main structure for specialized training** in pediatrics. Therefore, it works as a **reference hospital** for the whole nation and as a training center for new pediatricians and medical students in last years of course (4th, 5th and 7th year of medicine).

In this context, the Italian NGO Doctors with Africa CUAMM, upon invitation of the Holy See and in agreement with the Central African Republic Ministry of Health and the Hospital Director, has intervened to guarantee the continuity of the healthcare activities of the hospital.

Since **June 2018, CUAMM** has been providing support to **improve the health status of the population**, in particular of **vulnerable groups such as children**, by ensuring **access to quality health services in the Health Region 7 through capacity building of the hospital management team and staff**.



The action of CUAMM is in **continuity with the previous projects carried out in the hospital**, which have ensured the delivery of quality emergency care and have contributed to train different categories of health professionals.

The action aims to capitalize these results and maintain the same support to the hospital. However, it wants to highlight a **change in the approach**, towards the development of a global vision of the hospital, whereby the **hospital is a real decision maker and manager of its services**, with the support of the Central African Republic Ministry of Health and its technical partners.

As far as **service delivery is concerned**, the following results have been achieved in the first year of the project (1 July 2018 - 30 June 2019):

- **69,176 children** had access to the triage of the hospital;

- **37,728 children** were **examined** for medical emergencies and **26,985** for surgical emergencies (with 4,463 green codes who were referred to peripheral health facilities);
- **17,893 children** were **admitted** to the hospital, 1,579 in neonatology, 2,099 in intensive care, 20,302 in units A, B, C and D (according to their age);
- **1,593 children were admitted in surgery and 2,542 surgical operations** were performed, including 940 (37%) urgent cases;
- Mortality rate: 5.4% - Abandonment rate: 1.8% - Cure rate: 92.8% (out of total admitted children).

In terms of **training, 154 students** (13 medical residents in pediatrics, 34 medical interns, 107 interns from nursing institutes) have benefited from the theoretical training course and practice sessions, with a program of 20 lectures, and all the **256 qualified health professionals** of the hospital have benefited from a program of 23 lectures.



Moreover, five diagnosis and treatment protocols have been elaborated and put into action, thus resulting in a series of seminars organized with the doctors of the hospital (total 17 seminars). In particular, the protocols developed are:

- First type diabetes mellitus (ketoacidosis diabetes);
- Renal insufficiency;
- Electrolyte disorders (hypo/hyperkalemia, hypo/hyponatremia);
- Asthma crisis;
- Deep vein thrombosis.

Ensuring this level of care and training with continuity required a **considerable financial and human commitment**, in terms of service organization, process monitoring, activity planning, and management of human resources. This has been possible thanks to the **reactivation of the Hospital Management Committee** (four sessions) and of the **Medical, Administrative, and Financial Subcommittees** (which met 18, 12, and 3 times, respectively).

The **governance capacity of the hospital Direction improved**, as it managed to develop the **Annual Analytical Report for 2018**, which was the result of the implementation of an efficient information system in line with international standards. Project activities also included the **support to the management** of the hospital in terms of hygiene, infrastructure maintenance, biomedical equipment, pharmacy organization and supply of medicines and consumables. In detail:

- **In terms of logistics**, a plan for the **maintenance** of biomedical devices, fans, generators, cars, computer equipment, electrical, hydraulic and sewer systems was developed.
- **In the pharmacy, a management software** was introduced to improve planning, distribution, and storage of medicine supply. In addition, a **handbook of pharmaceutical** procedures was designed to ensure continuity in good management practices also at the end of the project.

As far as the management of human resources is concerned (401 people), a motivational bonus has been set up to integrate the staff' monthly salary. Hospital staff planning (Skill-mix) and the absence of a skills' development plan are still critical issues. For this purpose, stronger accompanying measures are planned in accordance with the elaboration of a human resources management manual.

Regarding the general strengthening of human resources capacity in terms of governance and hospital management, all **staff** were **included in the development of key documents** thanks to the facilitation of the technical assistance activity (mentorship), which has ensured the following results:

- Revision of the Hospital Health Management Information System (HMIS);
- The production of the **annual analytic report of the hospital** for the activities held in 2018;
- **Implementation of: a survey** on the **quality perceived** by patients and their caregivers, a survey on the **organizational well-being** of hospital staff, a survey on drugs prescription in the various departments, two surveys on **pharmaceutical and other biomedical materials consumption** in the various departments. These surveys were followed by meetings to discuss the results with the staff;
- **Review of the diagnosis system** in use, with the adoption of the international classification of IC-D9 diseases and production of an electronic register for hospitalized patient.
- Preparation of **new medical records** for all the departments of the hospital;
- Preparation of the **internal guidelines of surgery and medical departments**;
- Preparation of the Terms of Reference of the **Quality of Care Committee**.

With a perspective of sustainability, the hospital management should have an overall view of the financial resources situation and have the tools and capabilities to develop the budget or forecast the hospital's revenues and expenditure to ensure health service provision.

Currently, approximately 70% of the hospital income depends on donors and it is difficult to imagine that, without a greater future financial commitment by the State, it will be possible to guarantee the same activity volumes with the same quality as now. In this context, it is suggested to proceed with the reintroduction of patient fees for cost recovery, according to a fair system that does not penalize the most vulnerable groups.

RESULTS OF THE 1ST YEAR

As far as health service delivery is concerned, the results of the first year of the project are promising.

Admissions and consultations remain significantly high and **increased during 2018**. The hospital recorded a decrease in the overall mortality rate.

Chart 1 Admissions

	2017			2018			2019 (January - June)		
	Admissions	Deaths	% mortality	Admissions	Deaths	% mortality	Admissions	Deaths	% mortality
Total	15,239	919	6.0%	17,756	760	4.3%	9,093	394	4.3%
Intensive care	3,569	452	12.7%	2,400	344	14.3%	848	188	22.2%
Neonatology	1,454	265	18.2%	1,385	209	15.1%	899	115	12.8%
Surgery	902	43	4.8%	801	36	4.5%	785	22	2.8%
Unit D ²	1,848	148	8.0%	2,135	161	7.5%	1,125	54	4.8%
Units A, B, C	7,466	11	0.1%	11,035	10	0.1%	5,436	15	0.3%

Chart 2 Consultations

	2017	2018	2019 (January - June)
Total triage	61,974	71,413	33,939
Emergency medical consultations (new visits and follow up)	35,083	39,573	18,024
Surgical Emergency consultations (new visits and follow up)	30,010	30,883	14,776

1 Suivi des Objectifs du Millénaire pour le Développement, Ministry of Economy of the Central African Republic, Rapport OMD Final 2015 (Multiple Indicators Cluster Survey (MICS) of 2015)

2 Nutritional Therapy Unit