

# **Comprehensive Rehabilitation Services for People with Disability in Uganda**



## **Program Handbook**

**“Enhancing disability social inclusion through  
the provision of specialized and top-quality surgical  
and rehabilitation services”**

**CoRSU Program Handbook**

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© Comprehensive Rehabilitation Services for People with Disability in Uganda (CoRSU)

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## List of Acronyms

BoD	Board of Directors
CBID	Community Based Inclusive Development
CBM	Christian Blind Mission
CBR	Community Based Rehabilitation
CEO	Chief Executive Officer
CoRSU	Comprehensive Rehabilitation Services in Uganda
SMT	Senior Management Team
STGs	Sustainable Development Goals
WHO	World Health Organization
VHTs	Village Health Teams

## 1. Introduction.

We are pleased to present to you the 2018 CoRSU Program Handbook (CoPH) and to highlight the value that CoRSU brings to the disability arena within Uganda and East Africa.

The CoRSU Program Handbook (CoPH) is the result of rigorous internal and external consultations and needs assessments concerning CoRSU's key thematic areas of intervention.

The CoPH proposes an interesting array of concept notes and describes funded and ongoing projects. This is to ensure transparency about initiatives already supported by several donors and partner organizations.

Essentially, the CoPH can be utilized as a tool to navigate the work being done by CoRSU, with focus on areas for strengthening and further development.

The proposals and concept notes included in the CoPH examine the standard of CoRSU work (i.e. service delivery) as well as specific initiatives, in terms of, innovative solutions, infrastructural development, staff capacity development, advocacy, disability mainstreaming, and much more. In addition, Section three is dedicated to *Research & studies*, a growing sector within CoRSU's operating model.

As mentioned, all concept notes are needs-based and can be further developed, merged and reviewed following context changes, availability of funds and strategic directions of investors and donors. Ultimately, CoPH is a living document which will be updated at least annually to ensure relevance and contextualization of needs, information and plans.

We wish all those involved in the noble effort of supporting persons with disability to continue their commitment to promote rehabilitation services geared towards building a disability inclusive society.

## 2. CoRSU BACKGROUND

### a. Profile of CoRSU

CoRSU is a specialised Rehabilitation Hospital registered as an NGO (S.5914/6411) and a *Company Limited by Guarantee* (#83070) which offers medical services to Persons with Disability especially children in Uganda.

CoRSU was established in 2006 as a private, non-profit, non-governmental organization in Uganda. It is a Ugandan initiative, which was encouraged and supported by Christian Blind Mission (CBM) with the main aim of expanding and improving the comprehensive rehabilitation services for children with disability in Uganda and within the East Africa region.

CoRSU's core mandate is to *mitigate the debilitating effects of disabling physical conditions, by ensuring accessibility and availability of quality, preventative, curative, rehabilitative and educational services for children with physical impairments.*

**Vision:** People with disability in Uganda are able to access rehabilitation services that improve their quality of life and that they are fully integrated in society.

**Mission:** CoRSU aims to be a centre of excellence in Uganda providing orthopaedic and plastic surgery and comprehensive rehabilitation services for people with disabilities prioritizing children.

CoRSU Rehabilitation Hospital is governed by a Board of Directors (BoD) and managed by a senior management team (SMT) headed by the Chief Executive Officer (CEO).

Overall, CoRSU operates with a team of competent national and international staff, who are directly responsible for the supervision and implementation of all activities and services.

CoRSU has adopted and complies with best practices for financial monitoring and control through regular internal and external auditing exercises. Risk Management was introduced in 2018 together with a stronger Policy for Anti-bribery and Anti-corruption practices.

Finally, CoRSU is determined to grow into a Centre of Excellence whereby clients receive accessible and high-quality services, and where children and adults are treated and rehabilitated in a safe and conducive environment.

## **b. Services Provided by CoRSU Rehabilitation Hospital**

CoRSU aims to ensure accessibility and availability of quality preventative, curative and, rehabilitative services for people with disability in Uganda and neighbouring countries. Children with physical impairments continues to be CoRSU's main focus.

CoRSU operates through a wide range of specialized services which are both hospital and community-based as listed below:

- Hospital-based: Orthopaedic Surgery, Plastic Reconstructive Surgery, Therapy Services, specialized Nursing services, Nutrition Rehabilitation, Prosthetics and Orthotics Workshop, Social services/counselling and Dental services.
- Community-Based Inclusive Development (CBID), which includes a number of activities such as identification, screening and referral of cases, awareness activities, re-integration, home clinics and follow-up of cases, etc.

## **c. CoRSU Performance at a Glance<sup>1</sup>.**

In the year 2017, CoRSU performed over **5,300** surgical procedures which represent a 6.2% increment compared to the previous year.

The hospital also performed several therapy sessions (**over 12,000**) including physiotherapy, occupational therapy, speech and language therapy, clinical psychology and counselling, and play therapy.

In addition, CoRSU has continuously supported persons with disability through the manufacture of prostheses, orthoses, and supportive devices. In 2017, a total of **153** high quality prostheses and **921** orthoses were produced. Also, **19** positioning devices were issued and **1605** walkers dispensed.

During the same period, the hospital provided nutritional support to **1,167** children with moderate malnutrition and 937 children with severe malnutrition.

It is important to mention that all these services are provided in a concerted manner and they are pivotal in the process of comprehensive rehabilitation and restoration of functionality and hope for Children with Disability.

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<sup>1</sup> More detailed information and data are available in the Annual Report 2016 and Annual Report 2017.



#### **d. Financial and Costing.**

CoRSU Hospital operates with an average annual budget ranging between 11 to 12 billion Ugx. The income budget (years 2016- 2017) is roughly divided into 35-40% from internal revenue, and the remaining is from donors and philanthropic organisations. Over 50% of the expenditure budget is utilised to cover human resource costs<sup>2</sup>, while the remaining budget is spent to cover administrative and operational costs (including procurement of drugs and medical supplies).

CoRSU carries out over **5,000** surgical procedures per year out of which about 80% target children. CBM and Smile Train contribute towards the cost of circa **2,500** and **300** surgical procedures annually respectively. For the remaining cases, partner organisations cover only the cost for accommodation with sporadic contributions towards surgeries/treatments.

About **2,000** surgeries for children are subsidised by CoRSU<sup>3</sup> annually. While this is of great benefit to the children from disadvantaged families, it impacts heavily on CoRSU's finances, draining resources and affecting the financial sustainability of the organisation.

In August 2018, CoRSU successfully completed a detailed *costing exercise* for each service provided by the hospital. The outcome of this exercise<sup>4</sup> clearly showed that CoRSU delivers several services which are under-priced or not priced at all. The results of the exercise triggered a few actions, including the review of the operating model (age threshold for subsidised services, etc.) and the updating of the current price-list.

Finally, the costing exercise provided a breakdown of all costs (HR, supplies, administrative/operational, etc.) for each procedure and service. CoRSU believes that such analysis will improve the understanding, transparency and accountability about how CoRSU allocates and utilises its resources, this will result in more accurate budgeting and financial planning.

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<sup>2</sup> I.e. Salaries, taxes, social security and medical insurance for dependents.

<sup>3</sup> This is done using CoRSU internal resources and this practice has been ongoing for years.

<sup>4</sup> More details are available upon request.

### **3. DISABILITY IN UGANDA**

According to the World Report on Disability (World Health Organization and the World Bank - 2011)<sup>5</sup> estimates of over 1 billion people (about 15% of the world's population) live with some form of disability, of these, 2-4% experience significant difficulties in functioning. Approximately 80% of the world's Persons with disabilities live in sub Saharan Africa. Persons with disabilities usually belong to the most vulnerable and marginalized groups within a society. They often face stigma, unemployment, and poverty.

The World Report on Disability further highlights that the number of persons with disabilities is growing worldwide. This is attributable to ageing populations – older people have a higher risk of disability – and to the global increase in chronic health conditions associated with disability, such as diabetes, cardiovascular diseases, and mental illness. Chronic diseases are estimated to account for 66.5% of all years lived with disability in low-income and middle-income countries. Patterns of disability in a particular country are influenced by trends in health conditions and trends in environmental and other factors – such as road traffic accidents, natural disasters, conflict, inadequate diet, and substance abuse.

Increasing evidence suggests that persons with disabilities experience poorer levels of health than the general population. Depending on the group and setting, persons with disabilities may experience greater susceptibility to preventable secondary conditions, co-morbidities, and age-related conditions. Some studies have also indicated that persons with disabilities have higher rates of risky behaviours such as smoking, poor diet and physical inactivity. persons with disabilities also have a higher risk of being exposed to abuse and violence.

According to the Uganda Health Sector Strategic Improvement Plan of 2010/11 – 2014/15, Uganda has a fast-growing economy that has the potential to lift its citizens out of the poverty trap if well utilized. However, the country is still riddled with a multitude of problems that hinder the translation of economic growth into improvement of the lives of its citizens.

These challenges include the insufficient health financing as only 9 - 10% of the country's budget is allocated towards the health sector. Uganda spends US\$33 per capita on health, lower than what is reported in other countries in the region and as a result, the Government cannot deliver the Uganda minimum health care package. Public health financing is estimated at only 22.6% out of which 34% is external donor contribution.

Additionally, like in other sub Saharan African countries, Uganda is experiencing a double burden of communicable and non - communicable diseases. As such, MOH has included the need to develop strategies for the treatment of these diseases as outlined within MOH strategic priorities and Health Sector Strategic and Investment

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<sup>5</sup> World Report on Disability (2011) World Health Organization (WHO) and the World Bank Group

Plan (2010)<sup>6</sup>. Under these priorities there is also the provision of orthopaedic services, which was one of the reasons for the establishment of CoRSU in Uganda.

In a survey conducted by the African Child Policy Forum titled "Children with Disabilities in Uganda: the hidden reality" (2010)<sup>7</sup>, it was found that poverty still thrives in Uganda affecting persons and in particular children with disability.

The survey findings reveal that in spite of increasing awareness about the rights of disabled children among family, community members and the children themselves, negative and non-supportive attitudes remain a challenge – both for social integration and participation. The study revealed that disabled children encounter physical and emotional abuse inside and outside home, in the community and at the workplace.

The Uganda Bureau of Statistics (UBOS) 2014 census report, '*Uganda National Population and Housing census*' showed that 12.5% of the population had at least one form of disability. 92% of the burden of disability relates to people with conditions that are treatable, and 80% of the disability amongst children in Uganda could be treated if and once specialized services are accessible and affordable.

The mentioned studies also outline that unmet needs for rehabilitation services (including assistive devices) can result in poor outcomes for persons with disabilities including deterioration in general health status, activity limitation, restricted participation within society and reduced quality of life.

It is within this context that CoRSU, together with line ministries including Ministry of Health and Ministry of Gender Labour and Social Development and various organisations and institutions, strive to increase access to rehabilitation services whilst improving the quality of the services provided.

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<sup>6</sup> Ministry of Health strategic and investment plan (2010)

<sup>7</sup> African Child Policy Forum: children with disabilities in Uganda: the hidden reality (2010)

#### 4. COPH - Concept Notes.

The CoPH concept note template describes basic project elements such as:

- Project description;
- Objectives;
- Targeted beneficiaries;
- Planned activities;
- Expected outcomes;
- Summary budget (in EURO, USD\$ and Ugandan shillings UGX);

CoRSU Program Handbook (CoPH) is divided into three sections:

- *Section one: Not Funded*

This section includes all concept notes not yet funded by donors.

The concept notes are not displayed in any specific order and they are all equally relevant to the organisation.

Various concept notes also include ongoing service-delivery activities (surgeries, rehabilitation services, etc.) which constantly need support and contributions to address the financial constraints mentioned in *chapter 1, section d* (finance and costing).

- *Section two: Research and studies*

CoRSU decided to dedicate a full section to this growing and important sector of work. Section two includes both proposed (concept notes) and ongoing (list) studies.

- *Section Three: Ongoing and funded*

This chapter includes all ongoing and funded grants (major and minor ones). All grants are described using the same template utilised in *section one*. A final table also indicates the contributions provided by philanthropic organisations and or individuals.

**SECTION ONE: NOT FUNDED**

## I. Improving the quality of life for children with disability in Uganda

<b>PROJECT TITLE:</b>	Improving the quality of life for children with disability in Uganda
<b>Location:</b>	CoRSU Hospital
<b>Project Budget:</b>	USD 109,675
<b>Sectors of Work</b>	Surgery and Medical Rehabilitation
<b>Targeted Beneficiaries</b>	120 Children With Disability
<b>Donor</b>	None
<b>Project Duration</b>	One year
<b>Project Status</b>	Not funded
<b>Project Code:</b>	NA

### a. Project Description

CoRSU conducts over **5,000** surgical procedures annually with a primary focus on children with disabilities who represent 80% of CoRSU patients. In the year 2017, the hospital performed **5,305** above the set annual target of 5,000. This represents an increment of 6.2% basing on the CoRSU Strategic Plan 2016 – 2019. In addition to Orthopaedic and Reconstructive Surgery, CoRSU provides a wide range of related services including: medical rehabilitation services such as physiotherapy, speech and language therapy, counselling and occupational therapy, nutritional rehabilitation, orthopaedic workshop for the production of assistive devices, and Vesico vaginal fistula surgery (VVF). It should be noted that the average cost of surgical procedures performed at CoRSU ranges from **200USD** to over **2,000USD**. Although the hospital generates internal revenue oscillating between 35% - 40% of the annual budget mainly through in-patient care, it is worth noting that the need is growing by the day and CoRSU requires more support from development partners to meet her strategic objectives.

Furthermore, CoRSU needs to invest in medical infrastructure to enhance efficiency and effectiveness in the delivery of rehabilitation services (Syringe Pumps for use in Theatre and wards, Video laryngoscope, Sommerlad mouth gag, and a microsurgery instrument set).

This concept note is designed to support surgery and rehabilitation of children with disabilities, and procure the medical equipment and supplies required to increase efficiency in service delivery at the hospital.

### b. General Objective

To increase access to rehabilitation services for children with disabilities through provision of specialized medical rehabilitation services aimed at improving their quality of life.

### c. Specific Objectives

- To provide high quality surgeries to contain and treat disabling conditions for children with disabilities.

- To support the Procurement of medical equipment and supplies to increase efficacy in service delivery at CoRSU hospital.
- To promote community awareness on disability in the targeted districts.

#### **d. Activities**

- Mobilization, assessment, and screening of Children with disabilities in at least 3 districts of Central Region of Uganda (Mubende, Masaka and Lwengo)
- Provision of pre/post-surgical rehabilitation for 120 children
- Procure medical equipment and supplies (Syringe Pumps for use in Theatre and wards, Video laryngoscope, Sommerlad mouth gag, and a microsurgery instrument set)
- Conduct 6 radio talk shows on Disability prevention (2 for each targeted district)
- Conduct refresher training for 30 VHTs in each targeted district on Disability Prevention and Early Detection

#### **e. Expected Results/Outcomes**

- Increased level of awareness on disability in the communities.
- Sustained increase in the number of needy children with disabilities receiving corrective surgeries and rehabilitation services at CoRSU hospital.
- Increased efficiency in surgery and rehabilitation
- Increased visibility of CoRSU and partners
- Increased capacity of Community Based rehabilitation workers to monitor existing initiatives in supporting children with disabilities by duty bearers.
- Improved quality of health service delivery at CoRSU Rehabilitation hospital.

#### **f. Estimated Budget Summary**

<b>S/N</b>	<b>Item Description</b>	<b>USD</b>
1	Provision of lifesaving surgeries for 120 Children with disabilities	60,000
2	Procurement of medical Equipment and supplies	40,000
3	Community awareness on disability	2,500
4	10% Administrative costs	7,175
	<b>Grand Total</b>	<b>109,675</b>

## II. Upgrade of the High Dependency Unit

<b>PROJECT TITLE:</b>	Upgrade of the High Dependency Unit and procurement of medical equipment for improvement in quality of care for Children with Disabilities at CoRSU
<b>Location:</b>	CoRSU, Kisubi (Uganda)
<b>Project Budget:</b>	104,170 EURO
<b>Sectors of Work</b>	<ul style="list-style-type: none"><li>▪ Infrastructure</li><li>▪ Equipment</li><li>▪ Service Delivery</li></ul>
<b>Targeted Beneficiaries</b>	Persons with disability and in particular Children
<b>Donor</b>	None
<b>Project Duration</b>	One year
<b>Project Status</b>	Not funded
<b>Project Code:</b>	NA

### a. Project Description

Since CoRSU opened in 2009, the complexity and the number of surgeries have been increasing and there has been a steady escalation in the number of patients requiring more intensive post-operative care. The latter is usually provided in a special area, the High Dependency Unit (HDU) which is located within the patients' General Ward. The current HDU at CoRSU is a basic 4-bedded Unit equipped with piped oxygen, one suction machine and 4 vital signs monitors. Records shows that on average, at least 4 patients require HDU/ ICU services per day with a length of stay ranging between 1 to 6 days.

In previous years, CoRSU had to refer a few cases of infants and very young children with both pre and post-operative respiratory<sup>8</sup> distress to better equipped centres and the condition often settled over 48hours with nasal CPAP<sup>9</sup>.

It is worth noting that lack of a fully capacitated HDU/ ICU leaves transferring an unstable patient to an ICU as the only option which may lead to disastrous outcomes on the patient's life. In addition to this, the cost for referring patients to ICU<sup>10</sup> services ranges from **1.7** million shillings (approx. **485** euro) to **13.4** million shillings (approx. 3,825 euro) per person which is very high.

Alongside the upgrading of the existing HDU, this proposal intends to address the need of procuring specific and missing medical equipment such as the CPAP machine, the Video Laryngoscope which is used in the operating theatre and in the ICU for patients with complex airways. The equipment will also be central in the field of anaesthesia and resuscitation during emergencies.

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<sup>8</sup> Infants are always referred to International Hospital Kampala (IHK) for ICU services

<sup>9</sup> CPAP refers to Continuous Positive Airway Pressure

<sup>10</sup> ICU refers to Intensive Care Unit



### **b. Target population and number of beneficiaries**

The activities considered in this proposal will allow for the establishment of an HDU/ICU and further equipping of the theatre at CoRSU Hospital. The project will be implemented through Hospital based activities and the targeted geographical area will be patients from all walks of life including both within the country and other neighboring countries like South Sudan, Tanzania, Rwanda, Congo among others. CoRSU Hospital performs a total of over **5,000** surgical procedures annually. Out of these, a total of over **480** children & adults will be admitted at the HDU/ICU annually.

### **c. Main Objective**

To expand, equip and maintain the existing hospital Infrastructure to enable CoRSU Rehabilitation Hospital to deliver quality health care.

### **d. Main Activities**

- To carry out infrastructural works that would lead to refurbishment of the HDU and ICU.
- Procurement of Medical equipment for the HDU and ICU.

### **e. Budget summary**

<b>S/N</b>	<b>Items</b>	<b>EURO</b>
1	Supporting infrastructural development in terms of upgrading the HDU and ICU (Elevating walls, fixing windows, sockets, painting, extractor fans among others)	15,210
2	Procuring medical equipment for the HDU and ICU at CoRSU.	64,000
3	Procurement of Video laryngoscope for the theatre – C Mac	20,000
4	CoRSU Adm Cost 5%	4,960
5	<b>Total</b>	<b>104,170</b>

### **f. Expected results and outcomes.**

- Upgrade of the existing mini HDU to a fully functional HDU/ICU wing with a provision of 6 beds.
- Acquisition of following equipment; (a system for piped oxygen and air (6), emergency trolley (1), Defibrillator (1), syringe pumps (18), suction machines (6), oxygen cylinders (4), Air Cylinders (4), CPAP machine (2), Static HDU Monitors (2) to be used in the HDU and ICU.
- Acquisition of one Video laryngoscope for the theatre.

Overall the project will directly contribute towards the improvement in the quality of post-operative care given to both children and adults with co-morbidities.

### III. Construction of the New Rehabilitation Centre

<b>PROJECT TITLE:</b>	Scaling-up rehabilitation services in Uganda through the construction and set up of a new Rehabilitation Centre at CoRSU
<b>Project Objective:</b>	To improve access and quality of rehabilitation services in Uganda and border countries.
<b>Location:</b>	CoRSU, Kisubi (Uganda)
<b>Project Budget:</b>	3,247,250 EURO
<b>Sectors of Work</b>	<ul style="list-style-type: none"><li>▪ Infrastructural Development</li><li>▪ Provision and set up of specialised equipment</li><li>▪ Training of staff</li><li>▪ Service Delivery</li><li>▪ Sports Medicine</li><li>▪ Disability Awareness and Social Inclusion</li></ul>
<b>Targeted Beneficiaries</b>	Persons With Disability with a focus on children
<b>Donor</b>	None
<b>Project Duration</b>	4 years (not less than 3 years)
<b>Project Status</b>	Not funded
<b>Project Code:</b>	CoRSU/Rehab/1

#### a. Project Description

During the course of the past nine years, CoRSU hospital has become a key referral centre for specialized and rehabilitative treatments for persons with disability. CoRSU is well known for its high quality and effective surgical and rehabilitation care to children with complex physical impairments in East Africa.

There are numerous publications as well as practical experiences about the importance of integrated team work both for patients undergoing surgery and for those requiring P&O and therapy services. For this reason, CoRSU promotes tirelessly a sophisticated understanding of medical rehabilitation, exemplified by the adoption and implementation of a holistic rehabilitation approach and interdisciplinary work. It is important to mention that CoRSU has also become a training base for students from universities in Uganda, and an elective training site for overseas therapy students (PT, S&L, etc.).

The comprehensive nature of the work accomplished at CoRSU provides a fertile ground for research and development in the field of medical rehabilitation. A number of studies and initiatives are currently ongoing within the Rehabilitation Department including:

- 3D Printing (P&O), supported by NIA Technology and CBM Canada<sup>11</sup>;
- Cerebral Palsy, Hip Displacement Surveillance (not yet funded);

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<sup>11</sup> CBM Canada (2018); Hope and Healing International (2019 onwards)

- Sports Medicine (this is an initiative supported and developed with Rebalance MD, a team of specialized physicians and therapists from Canada).
- A number of theses and studies from final year students (PTs and P&O).

In terms of service delivery, over **4,000** clients receive physical, occupational and speech therapy services and over **2,500** P&O items are produced and distributed every year. This impressive outcome is achieved despite having inadequate space to respond to the increasing demand for rehabilitation services both for subsidised (mostly children) and private (fully-paying) clients.

Overall CoRSU is currently experiencing a mismatch between the ever increasing demand for services and the existing infrastructural limitations which affects treatment of patients (both children and adults). In addition, the demand for services also includes a demand for more advanced and sophisticated rehabilitation services which require upgrading/training of the staff. The latter applies to both medical rehabilitation services (e.g. hydrotherapy, sports-medicine, neuro-development techniques) and prosthetic & orthotics technologies (advanced Ottobock and lamination technologies, 3D printing, gait-lab/analysis, etc.).

The current infrastructural set up of the Rehabilitation Department is limiting the quality of the work due to a number of constraints such as:

- space available for therapy and P&O work is insufficient and the units are working in congested rooms;
- Storage capacity for material and equipment is inadequate.
- The Therapy and P&O Unit are located in different areas of the hospital hampering smooth collaboration (assessment, training and follow-up of patients, etc.) between the 2 teams.
- Total lack of equipped areas for gait training, sensory stimulation and other key activities.
- Total lack of sports-courts and gymnasium for boosting-up sports medicine and also disability-sport social inclusion activities.
- lack of space for the Rehabilitation team to conduct departmental meetings, combined studies and research.
- Area/space for counselling of patients.

Considering the above, and the already mentioned existing limitations, there is a clear need for constructing an entire new work space (Rehabilitation Centre) in order to connect the different Therapy and P&O services.

The construction of the centre also needs to be supported and aligned with a number of other activities equally important which include:

- Provision of equipment, tools and furniture.
- Training of P&O staff: this will look into the upgrading of P&O staff on various technologies (including Ottobock).
- Training of the therapy team: this will entail exchange visits with other Rehabilitation centres and also upgrading in specialised areas including, but not limited to sports medicine and rehabilitation, hydrotherapy, disability

and sport, neurodevelopmental techniques for both adult and children patients.

- Training on prescription, fabrication/assembling and adaptation of wheelchairs and other devices for daily routine activities/mobility and also for sport activities.
- Creation of awareness on medical rehabilitation, sports medicine and disability inclusiveness with a focus on sport and recreational activities.
- Organisation of meetings and events to further advocate on disability inclusion, sport & disability and the importance of integrated medical rehabilitation services.
- Support of service Delivery (treatment of patients)

*NB: The addition of the Hydrotherapy pool (first of its kind in Uganda) will be a great addition to the array of therapies provided by CoRSU. Such a facility will require training for CoRSU Staff and it will be utilized in the rehabilitation of both children (aquatic-gait training, floating & coordination, breathing exercises, sensory stimulation, etc.) and adults (orthopaedic cases, hip/knee implants, etc.).*

It is important to mention that during the course of the past years, CoRSU hospital acquired a sizable piece of land adjacent to the existing Hospital premises. This is the land on which CoRSU is planning to build the new Centre. The proposal of building and setting up a new Rehabilitation Centre within CoRSU has already been discussed with a number of stakeholders and with the CoRSU Executive Board registering a strong consensus and approval.

Furthermore, the proposed program is not contemplating to increase the number of staff working in the rehabilitation department.

The main purpose of the program is to strengthen the quality of rehabilitation services by providing a larger and better structure, specialized training and new (up-to-date) equipment (when required). About the latter, all existing equipment (e.g. therapy and P&O) will be relocated from the existing units to the new ones so as to minimize the cost and optimize the use of existing resources.

The new Centre will also become a reference structure for the training and treatment of professional and non-professional athletes within several sporting and para-sporting disciplines. This will provide a great opportunity in terms of networking (e.g. Uganda Olympic Committee, National Council of Sports of Uganda, etc.) and most importantly to continuously advocate and promote disability inclusion at all levels.

## **b. General objective**

To improve access and quality of rehabilitation services in Uganda and border countries.

## **c. Specific Objective**

To scale-up rehabilitation services at CoRSU within three years.

#### **d. Result areas and Activities**

**Result 1:** The new Rehabilitation Centre is realized, equipped and functioning

- Finalization of the call for tender and selection of the construction company for the construction of the new Rehabilitation Centre.
- Construction of the new Rehabilitation Centre
- Provision of equipment, tools and furniture supply and construction testing.

**Result 2:** The new Rehabilitation Centre provides appropriate and quality services.

- Training for the technical staff
- Service provision to patients of the new Rehabilitation Centre

**Result 3:** Improved collaboration and networking amongst national and international stakeholders, and creation of awareness on disability inclusiveness and rehabilitation

- Organization of annual meetings amongst stakeholders on medical rehabilitation and appropriate treatments
- Community Awareness Campaigns on Disability and Medical Rehabilitation.
- Implementation of a launch event for the promotion of the new Rehabilitation Centre.
- Organization of Annual CoRSU Sports Event.

#### **e. Budget summary**

<b>S/N</b>	<b>Items</b>	<b>EURO</b>
1	Construction of the New Rehabilitation Centre	2,658,000
2	Training of staff	35,000
3	Service Delivery (treatment of 1,000 cases)	300,000
4	Annual Stakeholders Meetings (3)	15,000
5	Awareness campaigns on disability (several locations)	10,000
6	Official opening of the building	5,000
7	CoRSU Sports events	20,000
8	Human resource Costs	50,000
9	Administrative Cost 5%	154,650
	<b>Total</b>	<b>3,247,650</b>

#### IV. Establishment of a Surgical Skills Lab at CoRSU

<b>PROJECT TITLE:</b>	Establishment of Surgical Skills Laboratory at CoRSU
<b>Location:</b>	CoRSU, Kisubi (Uganda)
<b>Project Budget:</b>	759,900 EURO
<b>Sectors of Work</b>	<ul style="list-style-type: none"> <li>• Infrastructural Development</li> <li>• Financial Sustainability</li> <li>• Environment</li> <li>• Service Delivery</li> </ul>
<b>Targeted Beneficiaries</b>	<ul style="list-style-type: none"> <li>• CoRSU staff (Surgeons, Students, Anaesthesia, Nurses)</li> <li>• Medical Students and Surgeons from around the region.</li> </ul>
<b>Donor</b>	None
<b>Project Duration</b>	2 year for construction and the setup of the system
<b>Project Status</b>	Not funded
<b>Project Code:</b>	NA

##### a. Project Description:

Learning clinical skills on 'real patients' not only jeopardizes patient's safety but also raises many ethical concerns. The medical field is rapidly learning from the aviation industry and adopting simulation training for the acquisition of many clinical skills which is an important bridge between gaining procedural knowledge and clinical competence. Skills laboratories offer a 'mistake forgiving' training environment and studies have shown that such training improves procedural skills not only in novices but also in experts. It also enhances the management of emergencies which occur infrequently but if mismanaged have devastating consequences.

Currently CoRSU hospital is a centre for training of many students, residents and visiting surgeons, the biggest and most successful of which is the Residency MMed training in Plastic and Reconstructive Surgery in affiliation with Mbarara University of Science and Technology. The majority of students acquire these skills through observation and hands on surgical experience, which in itself is limiting in terms of gaining experience.

In addition, CoRSU spends about **60 million** UGX (**15,000** Euros) on trainings that are either in house or through staff that have travelled either in the country or outside the country to acquire skills. Once set up, CoRSU stands to be a centre for training in terms of surgical skills and the revenue generated from this project will be used to reduce the burden of donor funding to the institution enabling it to become a more self-sustaining institution.

In conclusion, with all the changes in the medical education and the fast pace of technological development, skills labs have become an essential part of the educational environment for the acquisition of clinical skills and the management of emergencies. Many clinical skills can be learned and taught in these labs, which also provide the ideal environment for assessment. However, the skills lab will not replace, but rather complement bedside and theatre teaching.

## **b. Overall Objective**

A skills lab will improve the quality of care to our patients by enhancing the surgical skills of the hospital team. The skills lab would enhance CoRSU hospital's potential in becoming a training center of excellence in the region. The hospital will use the centre as a source of revenue by hosting surgical skills workshops and simulator training for other medical disciplines from external sources and the funds generated would help in subsidizing the costs of surgery for children at the hospital.

## **c. Specific Objectives**

- To set up a surgical-skills laboratory.
- Equipping the skills lab with the relevant equipment and staffing.
- Marketing of the facility to enable it work as an income generating activity for the hospital.

## **d. Main Activities**

- Design the structure and specifications of the skills lab
- Construct or modify an existing structure to house the lab.
- Advertise the availability of the skills lab.
- Equip the skills lab
- Training of CoRSU staff that will be running the lab.
- Operationalize the lab.
- Establish partnerships to enable other institutions to access the lab

## **e. Budget summary:**

<b>Items</b>	<b>EURO</b>
1   Set up of the skills lab (infrastructure)	200,000
2   Equipping the lab	500,000
3   Capacity building of the staff over 1 year	20,000
4   CoRSU Admin Cost (7%)	39,900
5   <b>Total</b>	<b>759,900</b>

## **f. Overall expected results**

- Functional skills lab for use by CoRSU staff and external students
- Staff trained on use and maintenance of the lab
- Funds raised over time used to support other CoRSU activities like funding for children's surgeries and procurement of equipment.
- Cheaper on-site training with multipurpose training facilities.

## **g. Exit strategy & way forward**

This is a multiple stage contribution with a long-term impact for CoRSU and the country.

## Establishment of a Solar Power System at CoRSU

<b>PROJECT TITLE:</b>	Establishment of Solar Power System at CoRSU
<b>Location:</b>	CoRSU, Kisubi (Uganda)
<b>Project Budget:</b>	128,400 EURO
<b>Sectors of Work</b>	Infrastructural Development Financial Sustainability Environment Service Delivery
<b>Targeted Beneficiaries</b>	Persons With Disability
<b>Donor</b>	None
<b>Project Duration</b>	4 months for the setup of the system
<b>Project Status</b>	Not funded
<b>Project Code:</b>	NA

### a. Project Description:

CoRSU is currently spending an average of **14 million** Uganda shillings (about **3,800 USD or 3,000EURO**) monthly on electricity bills. This cost has a heavy impact on CoRSU's annual budget, with detrimental effects on the medium and long term financial sustainability. The aim of the planned Solar Power System is to cover a range from 50 to the 70% of electrical-power needs of the hospital including all Wards and Departments except the X-Ray, Laundry and other units.

In addition, Uganda is still affected by frequent power cuts and voltage fluctuations, which impact negatively on the smooth implementation of the day-to-day work. The generator currently represents the only alternative source of energy within the hospital and the average cost for fuel and maintenance of the generator is about **2.5 million (650USD or 500 EURO)** per month. The setup of a Solar Power System will provide an efficient and sustainable solution not just in terms of day to day usage but also in terms of power back-up.

The investment of the project (about **120,000 EURO**) will be recovered in about 36 months or less, considering the ever-increasing costs of electricity and fuel in Uganda. Finally, the utilization of "green" & alternative source of energy represents a vital organizational step forward, improving CoRSU's environmental resource management.

### b. Overall Objective

Quality of service delivery is improved by establishing sustainable, reliable and environmental-friendly electric power.

### h. Specific Objectives

- To set up a Solar Power System.
- Reallocation of saved funds (about **3,500EURO** monthly) towards the treatment of about 4 children monthly, for a total of 136 children within the period of 34 months.

### i. Main Activities



- Define the required specifications and set up of the Solar Power system
- Conduct the Bidding Exercise
- Contracting the supplier & set up of the Solar System
- Training of CoRSU Technical Staff on Maintenance.
- Final Technical and operational report.
- Support the treatment of 136 children within a period of 34 months

**j. Budget summary:**

<b>Items</b>		<b>EURO</b>
1	Set up of the Solar Power System (all costs)	120,000
2	CoRSU Adm Cost (7%)	8,400
3	<b>Total</b>	<b>128,400</b>

**k. Overall expected results**

- Solar Power System set up and functioning
- Staff trained on system maintenance
- 136 children treated over a period of 34 months with recovered funds.

**l. Exit strategy & way forward**

This is a one-off contribution with a long term impact.

## V. Construction of a sustainable Oxygen Plant at CoRSU:

<b>PROJECT TITLE:</b>	Construction of sustainable Oxygen Plant at CoRSU
<b>Location:</b>	CoRSU, Kisubi (Uganda)
<b>Project Budget:</b>	USD 106,054
<b>Sectors of Work</b>	<ul style="list-style-type: none"><li>▪ Infrastructural Development</li><li>▪ Service Delivery</li></ul>
<b>Targeted Beneficiaries</b>	Persons With Disability (PWD)
<b>Donor</b>	None
<b>Project Duration</b>	1 year
<b>Project Status</b>	Not funded
<b>Project Code:</b>	NA

### a. Project Description.

Every year, CoRSU's target is to perform **5,000** surgical procedures which require oxygen and medical air to support patients' respiration during and after surgery. On average CoRSU uses 20 oxygen cylinders and three medical air cylinders per week at the purchasing rate of **40,000 Ugx** for oxygen per cylinder and **200,000 UGX** air per cylinder amounting to **1,400,000 Ugx** every week. Within a year CoRSU Hospital spends **38,400,000 Ugx** on oxygen and **28,800,000 UGX** on medical air. It is worth noting that this expenditure only covers the Theatre and General Ward out of the three wards run at CoRSU Rehabilitation Hospital but if every ward were to be piped and connected to oxygen, the expenditure would be significantly higher especially if the HDU was fully developed

For effective planning, CoRSU needs to purchase an oxygen processing machine that makes five oxygen cylinders per hour which amounts to circa **120 cylinders** in 24 hours. This would help CoRSU produce enough oxygen for all the wards but also enough for commercial use by selling the extra oxygen produced to nearby hospitals

### b. General Objective

To increase sufficient and sustainable access to oxygen to the patients under our care and boost quality service delivery at the hospital.

### c. Specific Objectives

- To increase access to oxygen to all the wards
- To mitigate risks encountered when the oxygen suppliers are unable to deliver oxygen which limits the hospital's capacity to perform surgery
- To reduce the financial cost met when procuring oxygen

### d. Activities

- Describe the specifications of the oxygen plant
- Procurement of the oxygen plant and installation
- Training of CoRSU Technical Staff on operation and maintenance of the plant.

**Expected Outcomes**

- Oxygen Plant Installed
- Self-sufficiency in oxygen supply
- Staff trained on operation and maintenance of oxygen plant

**e. Budget Summary**

<b>S/N</b>	<b>Items</b>	<b>USD</b>
1	Hybrid Medical Gas Plant	83,000
2	Oxygen Cylinder Filler	23,000
3	Oxygen Piping	54
	<b>Grand Total</b>	<b>106,054</b>

**f. Exit strategy or way forward**

This is a one-off contribution with a long term impact.

## VI. Improving the Nutrition of children with disability at CoRSU Rehabilitation Hospital

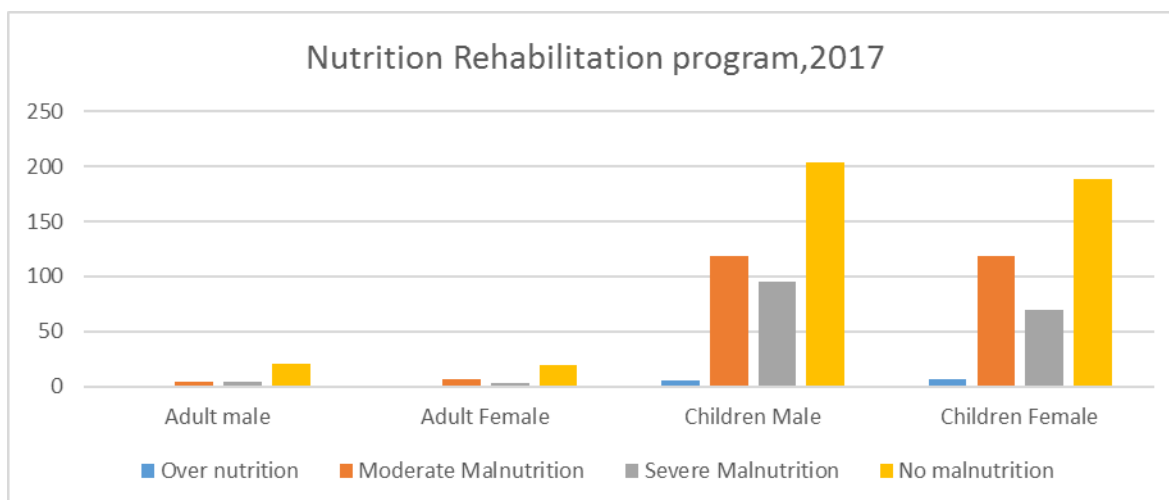
<b>PROJECT TITLE:</b>	Nutrition program for CoRSU patients aged 6 months-2 years (Kitobero)
<b>Location:</b>	CoRSU, Kisubi (Uganda)
<b>Project Budget:</b>	Euro 4,749
<b>Sectors of Work</b>	Nutrition, Medical
<b>Targeted Beneficiaries</b>	Children With Disability
<b>Donor</b>	None
<b>Project Duration</b>	One year
<b>Project Status</b>	Not funded
<b>Project Code:</b>	NA

### a. Project Description

CoRSU Rehabilitation Hospital specializes in plastic and orthopaedic surgery and medical rehabilitation with over 93% of all admitted patients being children below 18 years; and of which 70% are less than 12 years and 50% are between 0-5 years. According to the 2017 CoRSU annual report, the nutrition unit treated a total of **864** patients, of which **805** were children (Male children: 422, female children: 383)

Malnutrition and disability are both major global health problems. It is estimated that one billion people worldwide are living with a disability of which **93 million** are children aged below 14 years (WHO, World Bank (2011) World Report on Disability. Malnutrition remains a major cause of child mortality, with the latest estimates suggesting that under nutrition causes 3.1 million child deaths annually; 45% of all child deaths (FAO 2012). At present, although malnutrition and disability are rarely linked in policy or programming, there is increasing awareness of the interrelationships between the two as malnutrition can lead to disability and disability can also lead to malnutrition. Therefore, an effective Nutrition Rehabilitation Program is a key milestone needed to support children with disabilities in order to address their nutritional needs, reduce morbidity and mortality and improve recovery. Between 50% -80% of children with a disability are at a greater risk of malnutrition and have to undergo at least one operation while others undergo prolonged and complex surgeries, suffer from chronic and debilitating diseases and a few may have severe medical and surgical complications. Other pertinent factors which include; food insecurity, lack of nutrition education, socio-economic factors, negligence, poor policies underpin the importance of nutrition and the observed effects leading to disability if not addressed (Nutrition report 2017). All these factors are pre-disposing risk factors to malnutrition prior to and after surgery.

The hospital has an effective Nutrition Unit which ensures an adequate Nutrition status of patients enrolled on the Nutrition Rehabilitation Program, before and after surgery. However, if further supported, the program can extend to all patients who are nutritionally vulnerable and these include in particular children between 6-24 months of age. The Nutrition Unit is in the process of designing a menu that meets the nutrition requirements of infants and toddlers who are not malnourished but have a greater risk of becoming malnourished during their hospital stay.



The information obtained from CoRSU hospital data base offers the following background and prevailing statistics with regard to nutrition.

The Nutrition Report 2017 and available documentation reveal the statistics below with regard to the occurrence of undernutrition:

To ensure effective Nutrition management in 2017, the Nutrition department carried out different Nutrition interventions which included; Nutrition Assessment and diagnosis, Inpatient and Outpatient therapeutic care, Nutrition Education and Counselling, Capacity Building and training, Back yard garden demonstrations, OPD clinics (Cerebral palsy and Dysphagia).

Nutrition Activity	Number of patients/caretakers
Nutrition education and counselling	504
Focus group discussions (25 FGDs)	200
IEC trainings (12 trainings)	287
CP/Dysphagia clinics	38

### b. General objective

To obtain appropriate complementary foods needed to meet the nutrition requirements for admitted children below 2 years (malnourished and not malnourished).

### c. Specific Objectives

- To analyze and document pre-screening nutritional requirements of children and follow up status at discharge.
- To engage and train child caretakers in regard to proper nutrition requirements and follow up post training program.
- To meet the daily energy and protein requirements for all pre-screened admitted children below 2 years.

#### d. Main Activities

Daily preparation of a mixture of food from different food groups (Kitobero). (Kitobero refers to a highly balanced nutritious meal offered to weaning children) A child is required to take two good sources of protein in any of the following combinations:

- Two-plant protein sources (e.g. combination of beans and groundnuts)
- A plant protein source and an animal product for example, a combination of eggs and groundnuts are usually prepared.
- Two animal foods e.g. eggs and meat together and enriched porridge with high energy milk to every admitted child below 2 years.
- Nutrition education through cooking sessions and food demonstrations of the Kitobero meals and enriched porridge to caretakers with children below 2 years.
- Conducting training and capacity building of the Kitchen staff and mothers about the importance of adequate nutrition to children below 2 years of age.
- Procuring of items needed to implement the project such as cooking equipment (saucepans, ladles, charcoal stoves, food mixers/ blenders, baby plates and cups and spoons)

#### e. Budget summary

S/N	Items	EURO
1	Items and food supplements (1056 children)	2,409
2	Salary for staff (2 cooks)	1,642
3	Gas and charcoal	469
4	Equipment needed to prepare kitobero	229
5	<b>Total</b>	<b>4,749</b>

#### f. Overall expected results

- Improved diet of children (**1056**) with disabilities aged 6-24months at CoRSU hospital.
- Reduced number of children aged (6-24months) susceptible to malnutrition as result of prolonged hospital stay.

## VII. Improving classrooms and Hostels at CoRSU Hospital

<b>PROJECT TITLE:</b>	Improvement of child safeguarding through the strengthening of recreational and education activities at CoRSU Hospital
<b>Location:</b>	CoRSU, Kisubi (Uganda)
<b>Project Budget:</b>	39,900 EURO
<b>Sectors of Work</b>	<ul style="list-style-type: none"> <li>▪ Child Safeguarding</li> <li>▪ Extracurricular activities</li> <li>▪ Infrastructural Development</li> <li>▪ Service Delivery</li> </ul>
<b>Targeted Beneficiaries</b>	Persons With Disability (PWD)
<b>Donor</b>	None
<b>Project Duration</b>	6 months
<b>Project Status</b>	Not funded
<b>Project Code:</b>	NA

### a. Project Description:

CoRSU Rehabilitation hospital provides quality curative, preventive rehabilitative and educational services for persons with disabilities in Uganda and neighbouring countries with a focus on children with disabilities who represent about 80% of CoRSU beneficiaries. In line with the Uganda National action plan for children with disabilities 2016/17 – 2020/21, Sustainable Development Goals (SDGs), and the Uganda National development Plan, discrimination for Children with disability was singled out as a factor that needed attention. On average, 20 to 30 children with disabilities are admitted to CoRSU on a daily basis. These and other patients are then provided with the educational services as “catch-up” classes for those in school and for rehabilitation for the others. In addition, the team provides a number of recreational activities and play therapy overseen by a teacher and by the child safeguarding officer at CoRSU. All activities are aimed at rehabilitating the individual as a person, re-building self-confidence, promoting the concept of child safeguarding (also with the parents and guardians of children) and ultimately to ensure a comprehensive therapeutic approach for each individual. This is done through a number of activities such as class work, active listening and counselling, creation of awareness on disability inclusion, art and craft, drawing competitions and play therapy (indoor and outdoor).

The rationale of this proposal is based on a number of justifications and programmatic elements:

- Due to the increased demand for an improved rehabilitation process, there is need to expand the existing classroom with a library , store room for the raw materials used for art and crafts<sup>12</sup>;
- There is need for improving the safety and sanitation of the areas surrounding the classroom, painting of walls, covering trenches, etc.
- The program will also support the purchase of material utilised for educational and recreational activities.

<sup>12</sup> Currently all material is stored in the classroom and this hampers the smooth running of some activities.

- Furthermore, the program intends to strengthen CoRSU's compliance towards child safeguarding through various initiatives:
  - set up of "talking compounds" (using the different vernacular languages spoken in Uganda) and resting areas (e.g. benches and simple hut-like shelters located within the hospital premises) with key messages on child safeguarding and disability inclusion;
  - carry out mentoring and awareness events on child safeguarding and disability inclusion. The events will target staff and partner organisations.
  - change the Medical staff outlook from the classic "white-coat" uniforms to child friendly designs and fabrics. This will have a direct and immediate positive impact on the response of children while being assessed and treated. It will also have a great overall impact on the outlook of the hospital in which every medical staff will indirectly promote child-safe and child friendly messages.
- In addition, the program will also look into innovative modes to create awareness on child safeguarding and disability inclusion. This will be done by supporting the newly established *CoRSU drama-group*<sup>13</sup>. The group is composed of CoRSU Staff working on a voluntary basis to set up shows and activities together with children.

Such initiatives will aim at promoting and reinforcing healing messages portraying some of the aspect of the life within and outside the hospital. The drama group will perform on simple stages in the hospital (for other CoRSU Staff, patients, visitors, etc.) or/and in the General wards, entertaining and engaging children that (due to their treatments and conditions) cannot move out of their beds. The group will also take into consideration performing at community level as a second step, once the quality of the shows is refined and consolidated.

For all the above reasons, through this proposed set of actions, CoRSU will consolidate and improve rehabilitation and healing practices for children which includes educational, recreational activities and play therapy. In this way children can develop a different understanding about their functions and roles within the community and society, boosting their self-confidence and directly mitigating social discrimination.

#### **b. Overall Objective**

To strengthen child safeguarding by improving the quality of educational and recreational activities at CoRSU through establishment of spacious, clean, safe and enabling environments.

#### **c. Specific Objectives and activities.**

1. To expand the classroom block with a library and storage facilities

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<sup>13</sup> We are still deciding the final name of the group.



2. To improve sanitation and hygiene facilities in the areas surrounding the Classroom.
  - Contract the supplier of the materials for construction and renovation following existing procedures. All areas will be disability friendly, and will facilitate use and access for children with disability with a focus on gender and type of devices and mobility aids utilized.
3. To set up a learners' talking compound with educative messages.
  - To design the messages in a child-friendly manner and to display them in common areas accessible to children.
4. To strengthen life skills through art and crafts skills training, outside and in door games, hygiene training, music dance and drama
  - Purchase of reading and learning materials
  - Purchase drawing and craft material
  - Conduct mentoring session to staff, children and attendants
  - To support the CoRSU drama group by procuring material for costumes and scenography. A well-established *community drama group* (Rafiki Theatre) will be engaged to mentor and guide the CoRSU drama group during the inception period.
5. To provide Child-friendly uniforms to CoRSU Staff.
  - To identify the contractor through existing procurement processes. The design and fabric will be selected with user departments (medical staff).

**d. Budget summary:**

Items		EURO
1	Construction of the classroom block with library and storage facility (all costs) and improved sanitation and hygiene facilities	€ 21,000
2	Talking Compound, and resting areas	€ 2,000
3	Purchase of reading and arts and craft materials	€ 3,000
4	Mentoring sessions to staff and partner organizations on child Safe-guard.	€ 1,000
5	Support to CoRSU Drama Group	€ 3,000
6	Medical Staff Child – Friendly Uniforms (180 staff, 2 uniforms each)	€ 8,000
7	CoRSU Adm Cost (5%)	€ 1,900
<b>Total</b>		<b>€ 39,900</b>

**e. Overall expected results**

- A spacious classroom block with library and storage facility constructed to completion and under use;
- At least 4 drama shows conducted;
- 180 staff equipped with child-friendly uniforms;

- 10 talking compounds and 5 resting areas set up and improved;
- Material available for education and recreational activities;
- Overall Child safeguarding understanding and compliance increased.

## **SECTION TWO: RESEARCH & STUDIES**

## VIII. Nosocomial Infection Rate at CoRSU Rehabilitation Hospital

<b>PROJECT TITLE:</b>	Nosocomial Infection Rate at CoRSU Rehabilitation Hospital, Uganda
<b>Location:</b>	CoRSU, Kisubi (Uganda)
<b>Project Budget:</b>	USD 3,500
<b>Sectors of Work</b>	Research – Rehabilitation
<b>Targeted Beneficiaries</b>	CoRSU Inpatients
<b>Donor</b>	None
<b>Project Duration</b>	1 month
<b>Project Status</b>	Planning phase - Not funded
<b>Project Code:</b>	NA

### a) Project Description

Nosocomial infections also known as healthcare associated infections (HAIs) or hospital acquired infections (HAIs) present a significant burden in many healthcare facilities globally. HAIs are however preventable if interventions are put in place to mitigate this problem.

### b) General Objective

The general objective of this study is to determine the nosocomial infection rate at CoRSU Rehabilitation Hospital.

### c) Specific Objectives

1. To discover the types of nosocomial infections acquired by patients at CoRSU Rehabilitation Hospital.
2. To find out the nosocomial infection rate at CoRSU Rehabilitation Hospital.

### d) Research Question

What is the nosocomial infection rate at CoRSU Rehabilitation Hospital?

### e) Methodology

This is a prospective study of quantitative design.

### f) Proposed Source of Data

Study data-sheets

### g) Sample Size

All patients who are admitted to the CoRSU wards and hostel during the study period (1 month) and only those who consent to participation will be included.

### h) Methods of Data Collection

A datasheet will be used to collect information about the participants of this study. Data collected will include date, age, sex, residence, condition, date of admission, surgery date, hospital section, infection event, type of infection, site of infection, type of nosocomial pathogen, duration of infection, antibiotics prescribed, discharge date. Uninfected patients will be identified from the patient database at CoRSU

Rehabilitation Hospital. Identified uninfected patients will then be approached by research assistants and informed about the study. Uninfected patients who agree to participate in this study will be given consent forms to sign and their demographic information will be collected using a datasheet which will be stored in a color-coded file. Wound sites will be inspected visually preoperatively, intraoperatively and postoperatively to determine whether they are infected or not during wound dressing procedures. Wound sites suspected to have acquired infections will be swabbed for culture and sensitivity tests. Swabs will be taken from wound sites while the patient is in general or private ward and hostel. Culture and sensitivity results will be used to confirm infection and identify the type of infection acquired by selected patients. The results will be documented in the data sheet prepared for this study.

**i) Data Analysis**

Data will be analyzed using SPSS. Chi square tests will be used to compare infection rates within the wards and hostel. Confidence intervals will be calculated for infection rates.

**j) Expected Outcomes**

1. Knowledge of infection rate of nosocomial infections at CoRSU Rehabilitation Hospital.
2. Improved infection control measures will be implemented.
3. Infection control guidelines will be developed.
4. Evidence base for further research topics to be generated in this field.

**k) Budget Summary**

S/N	Items	Total USD
1	Administrative Costs -IRB Approval -UNCST Research Clearance -HR Cost -Coordination	\$300 \$300 \$150 \$100
2	Culture & Sensitivity costs (estimated 500 participants)	\$2000
3	IT cost -SPSS Software	\$150
4	Dissemination costs (publication & conference presentations)	\$500
	<b>Grand Total</b>	<b>\$3,500</b>

**l) Exit strategy or way forward**

Manuscripts developed from this study will be submitted to scientific journals for publication and abstracts submitted to symposia for presentation. Results of this study will be presented in a CME (Continuous Medical Education) session at CoRSU Rehabilitation Hospital. A research report will be submitted to the Research Office at CoRSU.

**IX. Outcomes of using Vascularized Free Fibula Flap for Reconstructions at CoRSU Rehabilitation Hospital: A Prospective Research Study**

<b>PROJECT TITLE:</b>	Outcomes of using Vascularized Free Fibula Flap for Reconstructions at CoRSU Rehabilitation Hospital: A Prospective Research Study
<b>Location:</b>	CoRSU, Kisubi (Uganda)
<b>Project Budget:</b>	USD 69,427.3
<b>Sectors of Work</b>	Research – Orthopaedic
<b>Targeted Beneficiaries</b>	Children With Disability - CoRSU patients
<b>Donor</b>	None
<b>Project Duration</b>	2 years
<b>Project Status</b>	Planning phase - Not funded
<b>Project Code:</b>	NA

**a. Project Description**

The vascularized free fibula flap surgical procedure is becoming common-place for large bone defects at CoRSU hospital with more consistent and successful results. It is used for the reconstruction of large bone defects resulting from osteomyelitis, pseudarthrosis and also for mandibular and maxillary reconstruction. Surgical time is generally long and costly, on average taking between 5 to 8 hours; requiring both Orthopaedic and Plastic-Reconstructive surgical teams working together. The outcomes of the use of the vascularized free fibula flap are presently not determined nor measured. Complications following the raising of the free fibula flap have been reported from the donor leg (from which the flap was removed) however, the overall success and complication rate is not known either generally or for each specific condition treated with this procedure.

The number of Vascularized free Fibula Flap reconstructive surgeries performed at CoRSU are indicated in the table below;

<b>Year</b>	<b>Osteomyelitis</b>	<b>Mandible</b>	<b>Trauma</b>	<b>Pseudo-arthrosis</b>	<b>Total</b>
2016	16	11	1	3	31
2017	17	5	1	10	33
2018 (5 months: Jan-May)	7	1	0	5	13

This study will examine and determine the general outcomes following utilization of vascularized free fibula flaps in patients undergoing reconstructions for large segmental bone defects.

## **b. General Objective**

To discover the aesthetic and functional outcomes of using the vascularized fibula flap for reconstruction at CoRSU Rehabilitation Hospital.

## **c. Specific Objectives**

- To determine the aesthetic and functional outcomes of using the free fibula flap.
- To determine the suitability of the free fibula flap in reconstructions for long bone defects.
- To determine the morbidity and complications from using the fibula flap

## **d. Research Question**

1. What are the aesthetic and functional outcomes of using the vascularized fibula flap for reconstruction?
2. What is the associated morbidity of harvesting of the free fibula flap?
3. What are the complications associated with limb reconstruction using the free fibula flap?
4. What are the early and late outcomes of reconstructions using the free fibula flap?

## **e. Methodology**

This is a descriptive prospective observational study.

## **f. Proposed Source of Data**

Patients having reconstructions using free vascularized fibula flaps at CORSU hospital.

## **g. Sample Size**

Dependent on how many vascularized flap reconstructions that will be carried out at CoRSU Rehabilitation Hospital within the study duration.

## **h. Methods of Data Collection**

1. Patient Demographic form
2. Patient Assessment form

## **i. Data Analysis**

Data will be coded and analyzed using STATA version 12.0.

## **j. Expected Outcomes**

Research publication

## **k. Budget Summary**

<b>S/N</b>	<b>Items</b>	<b>USD</b>
1	IRB approval	\$300
2	UNCST research clearance	\$300
2	X-rays	\$6,484.47
3	CT Scan	\$21,614.90
4	Lab Tests	\$2701.86
5	Transport refund	\$21,614.90
6	HR cost (consultation & coordination)	\$16,311.17
	<b>Grand Total</b>	<b>\$69,427.3</b>

### **I. Exit strategy or way forward**

Manuscripts developed from this study will be submitted to scientific journals for publication and abstracts submitted to symposia for presentation.



## X. Hip Surveillance in Paediatric Patients with Cerebral Palsy: A Prospective Research Study

<b>PROJECT TITLE:</b>	Hip Surveillance in Paediatric Patients with Cerebral Palsy: A Prospective Research Study
<b>Location:</b>	CoRSU, Kisubi (Uganda)
<b>Project Budget:</b>	USD 20,397
<b>Sectors of Work</b>	Research – Rehabilitation
<b>Targeted Beneficiaries</b>	Cerebral Palsy Paediatric Patients & Caretakers
<b>Donor</b>	None
<b>Project Duration</b>	3 years
<b>Project Status</b>	Planning phase - Not funded
<b>Project Code:</b>	NA

### a. Project Description

CoRSU Rehabilitation Hospital runs a weekly cerebral palsy clinic which provides rehabilitation and surgery to children with Cerebral Palsy (CoRSU 2018). Among the services provided, CoRSU offers preventive and salvage surgeries for patients with Cerebral Palsy who have hip displacement (subluxation/dislocation). Despite this, the hospital lacks standard operating procedures for treatment of hip displacement which is common among paediatric patients. Hip displacement can result in pain, difficulty moving the hip, reduced function (problems with sitting, standing and walking) and reduced quality of life. The statistics for Cerebral Palsy (CP) patients reviewed at CoRSU are indicated in the table below;

<b>Year</b>	<b>Number of CP Paediatric Patients at CoRSU</b>
2014	8
2015	17
2016	58
2017	94

The purpose of this study is to find out the prevalence of hip displacement in paediatric patients with Cerebral Palsy and to set up hip surveillance and treatment guidelines for this condition at CoRSU Rehabilitation Hospital. Hip surveillance allows for early detection of hip displacement. Early detection enables referral for assessment and correct management.

### b. General Objective

To provide an evidence base for the establishment of guidelines and Standard operating Procedures (SOPs) for treatment of hip displacement (subluxations/dislocations) in paediatric patients with Cerebral Palsy at CoRSU Rehabilitation Hospital.

### **c. Specific Objectives**

- To find out the prevalence of hip displacement (subluxations/dislocations) in paediatric patients with cerebral palsy at CoRSU Rehabilitation Hospital.
- To evaluate surgical and therapeutic outcomes of treatment of hip displacement (subluxations/dislocations) in paediatric patients with cerebral palsy at CoRSU Rehabilitation Hospital.
- To set up guidelines and Standard Operating Procedures for treatment of hip displacement (subluxations/dislocations) in paediatric patients with cerebral palsy at CoRSU Rehabilitation Hospital.

### **d. Research Questions**

1. What is the prevalence of hip displacement (subluxations/dislocations) in paediatric patients with cerebral palsy at CoRSU Rehabilitation Hospital?
2. What are the surgical and therapeutic outcomes of treatment of hip subluxations/dislocations in paediatric patients with cerebral palsy at CoRSU Rehabilitation Hospital?

### **e. Methodology**

This will be a prospective study of quantitative design.

### **f. Proposed Source of Data**

Paediatric patients with cerebral palsy.

### **g. Sample Size**

50-100 paediatric patients with Cerebral Palsy ages 2-13 years old.

### **h. Methods of Data Collection**

1. Hip Surveillance Assessment form

### **i. Data Analysis**

Data will be analyzed using SPSS.

### **j. Expected Outcomes**

- Research Publication
- Adoption of Hospital Guidelines and Standard Operating Procedures for Hip displacement (subluxations/Dislocations) in paediatric patients with Cerebral Palsy at CoRSU Rehabilitation Hospital.
- Establishment of Hip Surveillance Program for Paediatric Patients with Cerebral Palsy at CoRSU Rehabilitation Hospital.

### k. Budget Summary

<b>S/N</b>	<b>Items</b>	<b>USD</b>
1	<b>Administrative Costs</b> -IRB Approval -UNCST Research Clearance -HR Cost (Coordination and Physiotherapy)	\$950
2	Radiographic tests (x-ray)	\$6500
3	Transport Refund	\$2710
4	Accommodation -Ward -Hostel	\$5900
5	IT cost -SPSS Software -Desktop Computer -Laptop	\$4337
	<b>Grand Total</b>	<b>\$20,397</b>

### l. Exit strategy or way forward

Manuscripts developed from this study will be submitted to scientific journals for publication and abstracts submitted to symposia for presentation. Moreover, a Hip Surveillance Program will be established at CoRSU Rehabilitation Hospital. Furthermore, hospital guidelines and Standard Operating Procedures for hip displacement (subluxations/dislocations) in paediatric patients with cerebral palsy will be compiled and implemented at CoRSU.

## XI. Evaluation of Postoperative Therapy in Paediatric Patients with Supracondylar Humerus Fractures at CoRSU Rehabilitation Hospital

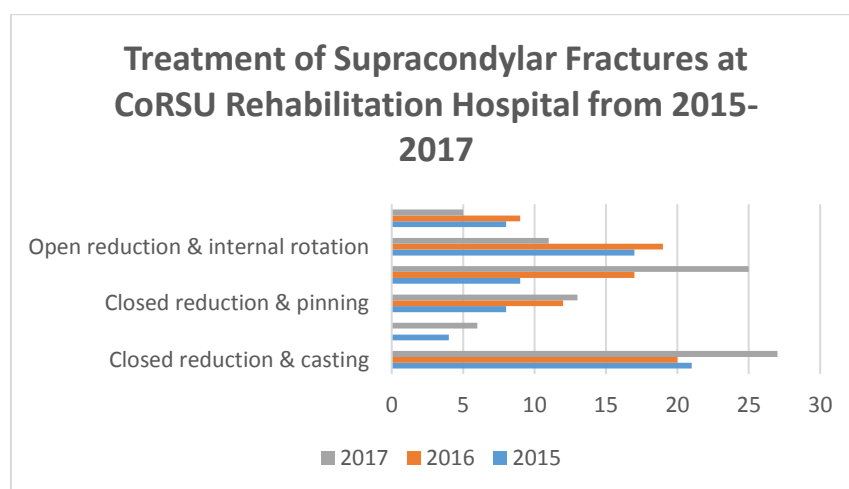
Project Title	Evaluation of Postoperative Therapy in Paediatric Patients with Supracondylar Humerus Fractures at CoRSU Rehabilitation Hospital
Project Location	CoRSU Rehabilitation Hospital
Project Budget	USD 1500
Funding organization/Agency	None
Project Duration	1 year
Leading Department	Rehabilitation Department
Targeted Beneficiaries	Children with Supracondylar Fractures
Project Status	Planning Phase

### a) Project Description

Supracondylar fractures account for 60% to 75% of all the fractures of the elbow in children. The major cause of these fractures is a fall on an outstretched arm with hyperextension of the elbow joint. These fractures are difficult to treat, often displaced and can be associated with neurological or vascular injury.

At CoRSU Rehabilitation Hospital, supracondylar fractures are treated using Orthopaedic procedures i.e. closed reduction with cast, open reduction and internal fixation, closed reduction with pinning, open reduction with external fixation (Fig 1). After surgery, every client is referred to physiotherapy by the attending Orthopaedic Surgeon.

Figure 1 shows the Orthopaedic techniques used at CoRSU Rehabilitation Hospital to treat patients with Supracondylar fractures.



The indication for therapy after supracondylar humeral fractures in children is not clear in the literature even with the presence of an active or passive limitation of the elbow joint range of motion. There's little evidence regarding the effect of therapy after supracondylar fractures in children. At CoRSU Rehabilitation Hospital, every child is referred for therapy after the first medical management. There is a gap in literature pertaining to the outcomes of physiotherapy recommended for paediatric patients with supracondylar fractures.

### **b) General Objective**

The general objective of this study is to discover the outcomes of postoperative therapy on supracondylar humeral fractures in children treated at CoRSU Rehabilitation Hospital.

### **c) Specific Objectives**

These include;

1. To find out the prevalence of supracondylar humeral fractures in children at CoRSU Rehabilitation Hospital.
2. To discover the outcomes of postoperative physiotherapy on supracondylar fractures in children treated at CoRSU Rehabilitation Hospital.

### **d) Research Question**

What are the outcomes of postoperative therapy on supracondylar humeral fractures in children treated at CoRSU Rehabilitation Hospital?

### **e) Methodology**

This is a retrospective study.

### **f) Proposed Source of Data**

CoRSU file maker database

### **g) Sample Size**

All data entries for supracondylar fractures from 2015-2018.

### **h) Methods of Data Collection**

A data checklist will be used to conduct this study. Data will be extracted from file maker using the checklist as a guide.

### **i) Data Analysis**

Extracted data will be analyzed using SPSS statistical software.

### **j) Expected Outcomes**

1. The study will guide the therapy team on whether therapy works in the Ugandan context and which therapy techniques work.
2. This study will help the therapy team to have a standardized protocol on managing supracondylar humeral fractures after the initial medical management.

3. This study will improve on the quality of care in terms of therapy given to children served at CoRSU Rehabilitation hospital.
4. This study will develop evidence-based practice in the Ugandan setting with new knowledge added to the therapy team of CoRSU Rehabilitation Hospital.

### **k) Budget Summary**

<b>S/N</b>	<b>Items</b>	<b>Total USD</b>
1	Administrative Costs -IRB Approval -UNCST Research Clearance -HR Cost -Coordination Costs	\$300 \$300 \$150 \$100
2	IT cost - NEW IBM/SPSS SPSS Statistics Premium (Shared use) Windows/Mac	\$150
3	Dissemination costs – publication and conference presentations	\$500
	<b>Grand Total</b>	<b>\$1,500</b>

### **l) Exit strategy or way forward**

Manuscripts developed from this study will be submitted to scientific journals for publication and abstracts submitted to symposia for presentation. The final report will be submitted to CoRSU Rehabilitation Hospital and a presentation made during a Continuous Medical Education (CME) meeting.

## XII. List of Ongoing Researches (Nov 2018)

No.	Title	Researcher(s)/Principal Investigators	Academic body(ies)/Institutions	Timeline
1.	Long Term Impact of Early (before the age of 6 months) primary palatal closure on speech characteristics (overall speech intelligibility, articulation, resonance) in children with congenital isolated clefts in Uganda.	Kim Bettens (PhD) Laura Bruneel Isaac Ojok Duncan Musasizi Kristiane Van Lierde (PhD)	Ghent University, Belgium	2018
2.	Outcomes of Vascularized Free Fibula Flaps for Reconstruction of Segmental Bone Defects at CoRSU Rehabilitation Hospital.	Daniella Akellot, MPH, Emmanuel Ewochu MMed Ortho, Muhumuza Moses Fisha MMed Ortho, George W. Galiwango MBChB, FCS Plastic Surgery, Andrew Hodges FRCS, FRCS - Plastic Surgery, Antonio Loro MD, MSc Ortho, Cornelius Masambu MBChB, Coleen S. Sabatini, MD, MPH	University of California San Francisco, USA	2018-2022
3.	Vascularized Fibula Flap for the Reconstruction of Segmental Bone Defects Secondary to Osteomyelitis in Children	Coleen Sabatini, MD, MPH	University of California San Francisco, USA	2018-2022
4.	Oral Health Status, Treatment Needs and Barriers to Oral Health Care among Children with Cerebral Palsy attending CoRSU Hospital in Uganda.	Dr Samantha Kachwinya Murungi	University of Nairobi, Kenya.	2018-2019
5.	A Comparison between Banana Leaf Dressing and Vaseline Gauze Dressing for Split-Thickness Skin Graft Donor Sites at CoRSU Hospital, Kisubi, Wakiso, Uganda.	Dr Naomi Leah Kekisa	Mbarara University of Science and Technology, Uganda	2018
6.	Donor Leg Morbidity and Associated Factors following Harvest of Free Fibula Flaps for Reconstruction at CoRSU Hospital.	Dr Cornelius Masambu	Mbarara University of Science and Technology, Uganda	2018
7.	Feeding Practices, Mothers' Experiences and Support for Children (0 to 24 months) with Cleft Lip And/Or Palate seen at a Specialized Hospital in Uganda: A Mixed Methods Study.	Maureen Nabatanzi	Makerere University of School of Public Health	2018

No.	Title	Researcher(s)/Principal Investigators	Academic body(ies)/Institutions	Timeline
8.	Patterns and Factors Associated with Malnutrition among Children Below 5 years at least 3 months Post Cleft Palate Repair at CoRSU Hospital, Uganda.	Dr Mbuga Joseph	Mbarara University of Science and Technology, Uganda	2018
9.	Factors affecting Post-Operative Pain Management among Orthopaedic Patients: At CoRSU Rehabilitation Hospital, Wakiso District.	Kenneth Kibuuka	Mulago School of Nursing/Midwifery, Uganda	2018-2019
10.	Association between weight at birth and attachment of minimal recommended surgical weight with cleft and or palate at CoRSU Hospital, Kisubi.	Kambale Vitswamba Obady	Mbarara University of Science and Technology, Uganda	2018-2019
11.	Knowledge, Attitudes and Practice of Health Workers towards Biomedical Waste Management at CoRSU Rehabilitation Hospital.	Nabirye Rose	Mulago School of Nursing/Midwifery, Uganda	2018-2019
12.	Health Care Providers' Hepatitis B Vaccination and their level of Knowledge, Attitude and Practice towards prophylactic management of HBV: A Cross sectional survey in Wakiso District.		Makerere University School of Public Health (MakSPH), Uganda	2018
13.	Factors influencing microvascular free flap survival at CoRSU Hospital, Uganda.	Dr Irene Asaba Mugisha	Mbarara University of Science and Technology, Uganda	2018-2019
14.	Development of a tool to increase the identification of congenital birth anomalies by community-level health workers.	Cosmas Sibindi	Yale University, USA	2018



**SECTION THREE: FUNDED AND ONGOING**

### **XIII. Improving the quality of life for persons with disability in Uganda through the provision of Comprehensive Rehabilitation Services**

<b>PROJECT TITLE:</b>	Improving the quality of life for persons with disability in Uganda through the provision of Comprehensive Rehabilitation Services
<b>Location:</b>	Uganda – East Africa
<b>Project Budget</b>	Euro 2,396,100
<b>Sectors of Work</b>	Hospital and Community Based
<b>Targeted Beneficiaries</b>	Persons with disabilities
<b>Donor</b>	Christopel Blinden Mission (CBM)
<b>Project Duration</b>	3 Years
<b>Project Status</b>	Funded
<b>Project Code:</b>	P3737

#### **a. Project Description**

According to the UNICEF situational analysis report on children with Disability in Uganda (2014)<sup>14</sup>, data is scarce and to some extent unreliable. Significant gaps in information are the lack of disaggregation of statistics by gender and types of disabilities and the non-existence of national and accurate data in areas other than education. Based on estimations, the disability prevalence among children is about 13%, as approximately **2.5 million** children live with some form of disability in Uganda.

Overall the UNICEF report indicates that children with disability are one of the most marginalized and disadvantaged groups in society due to a number of reasons such as:

- stigmatizing attitudes which lead to rejection;
- limited or total lack of access to basic services
- Continuous abuse and marginalization

#### **b. Overall Objective**

To improve the quality of life for persons with disability in Uganda through the provision of Comprehensive Rehabilitation services.

<sup>14</sup> United Nations Children’s Fund (UNICEF) situational analysis report on children with disabilities (2014)

### c. Specific Objectives

- To enhance holistic surgical and rehabilitation services for Persons with disability with a focus on Children with disability
- To provide appropriate rehabilitation services to reduce and/or alleviate disability.
- To strengthen community-based rehabilitation (CBR) services.
- To procure needed equipment and support interventions at infrastructural level.

### d. Main Activities

- Provide surgical and nursing care services to children and adults with disability
- Enhance and consolidate rehabilitation services at CoRSU Rehabilitation hospital
- Provide community based inclusive development services
- Procure medical equipment and maintenance of existing hospital infrastructure
- Enhance and consolidate nutrition rehabilitation services at CoRSU hospital
- Conduct regular financial audits to enhance financial accountability

### e. Budget Summary

<b>S/N</b>	<b>Items</b>	<b>EURO</b>
1	Result 1 – Surgical and Nursing services provision	1,509,600
2	Result 2 – Specialized rehabilitation services are consolidated	218,500
3	Result 3 – Community based inclusive development services	188,796
4	Result 4 – Provision of equipment and maintenance of infrastructure	368,204
5	Result 5 – Nutrition rehabilitation services are enhanced and consolidated	96,000
6	Financial accountability is enhanced through regular audits exercises	15,000
	<b>Total</b>	<b>2,396,100</b>

### f. Expected Results

- Improved health status of communities;
- Increased knowledge on disability at individual and community levels;
- Reintegration of children within their society;
- Restoration of self-esteem in the patients after receiving surgeries and treatment.

#### **XIV. A new Septic ward for treating Nosocomial and SSI serving Uganda's vulnerable populations**

<b>PROJECT TITLE:</b>	A new Septic ward for the management & treatment of Nosocomial infections & SSI serving Ugandan vulnerable populations
<b>Location:</b>	Uganda – East Africa
<b>Project Budget</b>	635,000 Euros
<b>Sectors of Work</b>	Hospital Based
<b>Targeted Beneficiaries</b>	Persons with disabilities
<b>Donor</b>	FAI, CBM Italy
<b>Project Duration</b>	3 Years
<b>Project Status</b>	Funded
<b>Project Code:</b>	P3359

##### **a. Project Outline**

Most hospitals in developing countries are not scientifically designed and the physical facilities tend to be inadequate and wards are overcrowded<sup>15</sup>. There are hardly any separate arrangements for infected and clean cases, especially in surgical and maternity wards<sup>16</sup>.

Compared to African hospital standards, the new Septic ward to be constructed at CoRSU Rehabilitation hospital will benefit from the following:

- Offering a special environment and isolation services for patients with infected wounds that will promote faster recovery, improved standard of services and overall better health care and wellbeing of all patients both in the hospital and in the communities (usually not monitored), improving the management of infected cases inside and outside the hospital.
- Considering that the recovery stay for each patient varies between 5 days and more than 3 weeks, thanks to the presence of the new Septic ward the hospital shall provide appropriate services for all infectious and at risk of infection patients.
- The Septic ward is the first of its kind in Uganda especially of that size, with 24 beds and built to a very high standard.

##### **b. Overall Objective**

Improved health conditions for the population living in Uganda and border countries.

##### **c. Specific Objective**

<sup>15</sup> RAO 2004, 'Designing Hospital for better infection control' MJAFI 2004; 60: 63-66 [medind.nic.in/maa/t04/i1/maat04i1p63.pdf](http://medind.nic.in/maa/t04/i1/maat04i1p63.pdf)

<sup>16</sup> BMC Research Notes 'Antimicrobial resistance in hospitalized surgical patients: a silently emerging public health concern in Uganda' <http://www.biomedcentral.com/1756-0500/6/298>

Buwembo K. B. M. Post-operative wound infection, Dissertation for M. Med Surgery, Makerere University, Kampala, 1990. 1-45.

Improve the quality and accessibility of orthopaedic and plastic surgery for the population of Uganda within three years.

#### **d. Expected Results and Main Activities**

##### **Result 1 – The New Septic ward for the Nosocomial and SSI Infections treatment is realized, equipped and functioning:**

- Finalization of the call for tender and selection of the construction company for the construction of the new Septic ward.
- Construction of the New Septic ward
- Equipment, supply provision and construction testing

##### **Result 2 - The New Septic ward provides appropriate and quality services for the Nosocomial and SSI infection treatment:**

- Training of medical staff on appropriate Septic therapy and Septic ward management
- Service provision to patients of the new Septic ward

##### **Result 3 – Improved networking and collaboration amongst local and national stakeholders, and communities are sensitized on orthopedic and plastic surgery services:**

- Organization of quarterly meetings amongst stakeholders on Septic management and appropriate treatments
- Implementation of a launch event for the promotion of the new Septic ward, orthopaedic, and plastic surgery services
- Implementation of awareness campaigns for local communities on SSI infection treatment.

#### **e. Budget Summary**

<b>S/N</b>	<b>Items</b>	<b>EURO</b>
1	Construction of the New Septic ward	531,241
2	Consultants for Project Management	63,749
3	Procurement of Project Management Consultant	3,000
4	Advertisement	620
5	Consultant fee	1,330
6	Stationary	500
7	Administrative costs	550
8	Contingency Reserve	37,010
	<b>Total</b>	<b>635,000</b>

## **XV. Contributing to comprehensive and quality treatment of children with cleft in Uganda**

<b>PROJECT TITLE:</b>	Comprehensive and quality treatment of children with cleft in Uganda
<b>Location:</b>	CoRSU Hospital
<b>Project Budget:</b>	USD 443,166.32
<b>Sectors of Work</b>	Cleft Treatment, Nutrition, Medical
<b>Targeted Beneficiaries</b>	Children With cleft
<b>Donor</b>	Smile Train
<b>Project Duration</b>	Ongoing
<b>Project Status</b>	Funded
<b>Project Code:</b>	NA

### **a. Project Description**

CoRSU is currently implementing a project whose aim is to support a comprehensive and quality treatment for children with cleft in Uganda. This project is implemented thanks to the support provided by Smile Train. On average, CoRSU performs about **200** surgeries on children with clefts annually. This is in addition to other forms of support provided to extremely needy families, in terms of clothing, nutrition and transport to and from the hospital.

In addition, Smile Train provides technical support towards trainings to build capacity of the CoRSU team, and towards the procurement of medical equipment.

### **b. Overall Objective**

Improved quality of life for children with cleft in Uganda

### **c. Specific Objectives**

- To build the technical capacity of the medical team and program staff at CoRSU.
- To perform surgical procedures and deliver high quality post-operative care for children with cleft in Uganda.
- To provide nutritional support for children with cleft before, during, and after surgery for better surgical outcomes.
- To support dental services for children with cleft whenever required.
- To support program administration for effective implementation to achieve desired outcomes.

### **d. Main Activities**

- Capacity building of medical and program staff at CoRSU
- Perform surgical procedures and deliver high quality post-operative care for children with cleft
- Support the nutrition of children with cleft to enhance recovery
- Support dental care for children with cleft

- Support program administration for effective implementation

#### e. Budget Summary

S/N	Items	USD
1	Surgery and Rehabilitation	216,000
2	Nutrition support	15,378
3	Dental care & Support	19,888
4	Education & Training	50,444
5	Administrative costs	21,120
	<b>Total</b>	<b>322,831</b>

#### f. Overall Expected results

- At least 80% of medical and program staff demonstrate capacity to deliver quality care for patients with cleft at CoRSU hospital.
- **400** needy children with cleft are able to receive surgery and rehabilitation services at CoRSU hospital.
- Targeted communities will demonstrate reduced levels of stigma and discrimination against children and adults with cleft.
- Health and nutrition needs for at least **240** children with cleft improved at CoRSU hospital.
- At least **200** children with cleft are able to access dental care services before, during, and after surgery.

**XVI. Increasing access to Rehabilitation services for children with cleft in Uganda through mobilization and awareness creation in communities**

<b>PROJECT TITLE:</b>	Increasing access to Rehabilitation services for children with cleft in Uganda through mobilization and creating awareness in Uganda
<b>Location:</b>	Uganda – East Africa
<b>Project Budget</b>	USD 19,438.32
<b>Sectors of Work</b>	Creating awareness, mobilizing patients and service delivery
<b>Targeted Beneficiaries</b>	Children with cleft
<b>Donor</b>	Transforming Faces
<b>Project Duration</b>	18 months
<b>Project Status</b>	Funded
<b>Project Code:</b>	N/A

**a. Project Description**

Transforming Faces is supporting a project to mobilize cleft patients and raise awareness in communities on issues affecting children with cleft in Uganda. This is a pilot project whose main goal is to facilitate and empower community-based grassroots structures to raise awareness and promote inclusion of children with cleft in Uganda. The ultimate aim is to increase access to rehabilitation services for children with cleft.

In a survey conducted by Kesande & Muwazi (2014)<sup>17</sup> on the prevalence, pattern and perception of children with cleft in Kisoro district of Uganda; it was found that over the 6-year period of the survey, the overall period prevalence of clefts was **0.77/1,000** live births. 60% of children had combined cleft lip and palate and the same proportion had clefts on the left side of the face. More boys were affected than girls: 13% versus 7%. About 45% of mothers were hurt on realizing that they had delivered a child with cleft. 40% of mothers indicated that a child with cleft was regarded as an outcast. About 91.7% of the medical staff reported that these children were not accepted in their communities.

Surgical intervention and psychosocial support were the management modalities advocated for by most respondents.

**b. Overall Objective**

To increase access to rehabilitation services for children with cleft in Uganda through mobilization and awareness creation in communities

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<sup>17</sup> Prevalence, pattern and perception of cleft lip and cleft palate among children born in two hospitals in Kisoro District, Uganda (2014)



### c. Specific Objectives

- To mobilize cleft patients (children and adults) for surgical intervention.
- To create awareness of patients with cleft among communities in Uganda.
- To form key strategic networks, partnerships, and collaborations with relevant stakeholders in access to rehabilitation services for children with cleft in Uganda.

### d. Main activities

- Mobilize cleft patients in communities for identification, assessment and referral
- Conduct Radio talk shows on rehabilitation of cleft patients and awareness
- Conduct awareness and sensitization campaigns for community health extension workers (VHTs)
- Hold networking and collaboration meetings with relevant stakeholders

### e. Budget Summary

<b>Items</b>	<b>USD</b>
Mobilization of cleft patients and communities	15000
Radio Talk shows on cleft	1111.11
Sensitization and awareness campaigns in communities	1055.55
Networking meetings	1000
Administrative costs (7%)	1271.66
<b>Total</b>	<b>19,438.32</b>

### f. Overall Expected Results

- Increased awareness on persons with cleft in the communities
- Increased number of children and adults with cleft accessing rehabilitation services in the communities
- More partnerships and collaborations created between CoRSU and other actors.

## **XVII. Increasing access to quality treatment and care for children born with clubfoot in Uganda**

<b>PROJECT TITLE:</b>	Increasing access to quality treatment and care for children born with clubfoot in Uganda
<b>Location:</b>	Uganda – East Africa
<b>Project Budget</b>	\$ 211,767
<b>Sectors of Work</b>	Hospital Based
<b>Targeted Beneficiaries</b>	Children with clubfoot
<b>Donor</b>	Miracle Feet
<b>Project Duration</b>	3 Years
<b>Project Status</b>	Funded
<b>Project Code:</b>	

### **a. Project Description**

Each year, an estimated **2,000** babies with clubfoot are born in Uganda. Without access to proper management, these babies face permanent disability. Treatment of clubfeet prevents disability, stigma, and difficulty to access education and work, and induces poverty for the patient, family and society as a whole.

Treating children with clubfeet and thereby preventing disability fits with 4 of the UN Sustainable Development Goals (STGs) highlighted as follows:

- 1 No poverty
- 3 good health and wellbeing
- 4 quality education
- 8 decent work and economic growth

The focus of WHO to strengthen access to rehabilitation in the overall health system by 2030 has given a renewed start of a national clubfoot programme in Uganda extra momentum.

The WHO has designed a list of 10 assistive devices which are advised to be accessible for all patients in need. Number 8 on the list are the foot abduction braces, used to maintain correction after the first phase of clubfoot treatment has been completed. CoRSU has successfully partnered with Miracle Feet to support life-changing clubfoot surgeries in Uganda<sup>18</sup>. In the year 2017, a total of **270** clubfoot procedures were performed at CoRSU. **195** of these were for male children below 18 years, 74 for female children, and 1 was an adult with clubfoot.

### **b. Overall Objective**

To increase access to quality treatment and care for children born with club foot in Uganda.

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<sup>18</sup> CoRSU Annual Report 2017

**c. Specific Objectives**

- To provide access to surgical procedures for children born with clubfeet.
- To strengthen systems, provide technical support and mentoring for sustainability of clubfoot interventions in Uganda.
- To increase awareness of clubfoot among parents, health professionals and the general public.

**d. Main activities**

- Perform surgical procedures on children with clubfoot
- Procure medical supplies for children with clubfoot
- Train medical staff in clubfoot specialized care, data entry
- Conduct clubfoot awareness campaigns among parents, medical staff, and the general public
- Support Project Administrative costs

**e. Expected Results**

- Improved quality of life for children with clubfoot in Uganda
- Increased capacity for medical staff at CoRSU in care and treatment of children with clubfoot.
- At least 75% of the targeted parents, medical staff, and the general public aware of clubfoot.

**f. Budget Summary (year 2)**

<b>S/N</b>	<b>Items</b>	<b>USD</b>
1	Treatment supplies	65,328
2	Outreach & Advocacy	27,990
3	Training & Support supervision	58,206
4	Administrative costs	60,243
	<b>Total</b>	<b>211,767</b>

## **XVIII. Fistula Treatment Program at CoRSU Hospital**

<b>PROJECT TITLE:</b>	Treatment of avoidable childbirth related injuries
<b>Location:</b>	CoRSU, Kisubi (Uganda)
<b>Project Budget:</b>	USD 105,044
<b>Sectors of Work</b>	Medical, Outreach/Mobilization
<b>Targeted Beneficiaries</b>	Women with childbirth related injuries
<b>Donor</b>	Fistula Foundation, Direct Relief, Funds-for-Fistula e.V.
<b>Project Duration</b>	01.01.2018-31.12.2018
<b>Project Status</b>	Funded
<b>Project Code:</b>	NA

### **g. Project Description**

Since 2015 surgical treatment for childbirth related injuries, namely vesico vaginal fistula, perineal tears (3<sup>rd</sup>/4<sup>th</sup> Degree) and pelvic organ prolapse (POP) under the Fistula Treatment Program is available at CoRSU. Our aim is to provide high quality surgical treatment with the support of physiotherapy and psychosocial counselling during the period of hospital stay.

Since its inception the program has been funded by Fistula Foundation, which is the biggest supporter of Fistula treatment worldwide. Up to date **526** women have received treatment at CoRSU Hospital. Consumables, especially sutures, catheters, urinary bags are donated through Direct Relief on a continuous basis. Surgical equipment and examination materials are provided by Funds-for-Fistula e.V. when needed.

The average costs of treatment per patient is around **525** USD and this not only includes the surgical treatment and hospital stay but also the transport of the patient including attendant to and from the hospital. As the highest case load is still found in Northern Uganda also the costs of mobilization are also included in the **525** USD.

### **h. Overall Objective**

Provide access to high quality treatment for women with childbirth related injuries in Uganda

### **i. Specific Objectives**

- Raise awareness for available treatment of childbirth related injuries in the target areas through community mobilizers
- To perform surgical procedures and deliver holistic post-operative care
- To provide regular trainings/CME's for staff involved in the care of Fistula patients
- To provide regular outreaches for the mobilization as well the review of operated patients

**j. Main Activities**

- Perform surgical procedures and deliver high quality post-operative care for women with child birth related injuries
- Support the involved staff on good appropriate post-operative care
- Support the involved community mobilizer in the outreach to the affected women
- Conduct outreaches 2-3 times per year to mobilize and review new and operated patients

**k. Budget Summary targeting 200 patients in 2018**

<b>S/N</b>	<b>Items</b>	<b>USD</b>
1	Mobilization	8,333
2	Transport Refund	11,111
3	Opening File	5,556
4	Hospital Ward	22,222
5	Surgery	37,500
	Consumables	5,556
	Visiting Surgeon	5,000
	Reserve (5%)	4,765
	Administration Overhead (5%)	5,002
	<b>Total</b>	<b>105,044</b>

**l. Overall Expected results**

- For the year 2018 the target is to treat 200 patients
- Involved nurses in postop care of VVF patients are knowledgeable
- The successful fistula closure rate is 80%

## **XIX. Interface Uganda**

<b>PROJECT TITLE:</b>	Provision of essential reconstructive surgery and training of local specialists within East Africa
<b>Location:</b>	CoRSU Hospital
<b>Project Budget</b>	Un defined
<b>Sectors of Work</b>	Medical and nutrition rehabilitation, capacity development, service delivery
<b>Targeted Beneficiaries</b>	burns, cancers ,accident victims and other deformities
<b>Donor</b>	Interface Uganda
<b>Project Duration</b>	On going
<b>Project Status</b>	Funded
<b>Project Code:</b>	N/A

### **a) Project Description**

The reasons for limited access to surgical services in East Africa are numerous, these include inadequate Human Resources for Health (HRH), limited surgical supplies, lack of transportation to get to distant health facilities that can offer the appropriate surgical services and health facilities prioritizing other emergency procedures like caesarean sections.

In response to these realities, Interface Uganda decided to partner with CoRSU Hospital to extend reconstructive surgery treatment to patients with burns, cancers, and other deformities.

It was observed that although CoRSU provides subsidized treatment especially to children, the cost of transport and hospital fees are unaffordable for many patients. This makes it hard for patients with burns, cancers and other deformities to access treatment. This can cause long term disfigurement or reduce their functional ability which can leave people destitute or unable to work and potentially cut off from their communities.

In many other cases the absence of specialists in some parts of the country to perform essential reconstructive surgery makes it difficult for patients to access the needed medical attention in their own location

### **b) General objective**

To support the provision of essential reconstructive surgery treatment.

### **c) Specific Objectives**

- Provide essential reconstructive surgery treatment burns, cancers, and other deformities
- Support certain elective trainings/fellowships for plastic surgery MMed students
- Support CoRSU with specialist advice, braces, splinting material and other supplies especially the nutrition and physio therapy department.

### **d) Main Activities**

- Identification and mobilisation of patients that fit the criteria that Interface supports medically
- Provision of Pre and post-surgical rehabilitation

- Support 2 Plastic surgery MMed students for the Burns attachment in India. Support the nutrition department with specialist advice, supplies (e.g. soft bottles & teats)
- Occasional supply of braces and splint material for the physiotherapy department as agreed between the UK Interface trustees and the physio department at CoRSU
- Support, when requested the Plastic Surgery department, for elective/fellowship placements for example in Microsurgery at Ganga Hospital, for 1 or 2 senior trainees.
- Support when requested for 2 anaesthetic officers to attend the Association of Anaesthesiologists of Uganda annual conference.

**e) Expected Outcomes**

- Increased the number of persons with disabilities receiving corrective surgeries and rehabilitation services at CoRSU
- Increased visibility of CoRSU and Partners
- Capacity building for staff

**f) Conclusion**

This partnership will improve access to surgical services for Persons with Disabilities

## **XX. Star Fish Enterprise, Dr. Keith Thompson**

<b>Project Title</b>	Treatment with Reconstructive surgery of Benign Jaw Tumours
<b>Project Location</b>	CoRSU Hospital
<b>Project Budget</b>	USD 11,434.96
<b>Funding organization/ Agency</b>	Star Fish Enterprise
<b>Project Duration</b>	1 Year (Renewable)
<b>Targeted Beneficiaries</b>	Patients with benign mandibular tumours
<b>Project Status</b>	Funded

### **a) Project Description**

Mandibular reconstruction for benign jaw tumours is a project run at CoRSU Rehabilitation Hospital through the department of plastic and reconstructive surgery with funds from Star Fish Enterprises.

The project started two years ago and it caters for patients with benign jaw tumours who are found in the areas of Hoima by the Star Fish Enterprise mobilizer known as Mrs. Specioza. The funds only cover patients from Hoima District and they must be located by Star Fish Enterprise Mobilizer (Specioza). These fees only cover patients' surgeries and hospital stay and do not include patient review fees and subsequent treatment.

### **b) General Objective**

To provide quality rehabilitative care and treatment for people with benign jaw tumours from the areas of Hoima.

### **c) Specific Objective**

To contain and treat people with benign jaw tumours

### **d) Activities**

- Assessment, and screening of people with benign jaw tumours at the out-patient department of CoRSU Rehabilitation Hospital.
- Provision of pre/post-surgical rehabilitation

### **e) Expected Results/Outcomes**

- Increased visibility of CoRSU among donors and potential partners
- Increased capacity of Community Based rehabilitation workers to monitor existing initiatives in supporting children with disabilities.



## **XXI. Other ongoing programs and support.**

The below table summarizes the financial and in-kind contribution provided by private companies, foundations, and various individual sponsors.

<b>Organization/Individual</b>	<b>Support provided</b>
Brussel Airline Ltd.	Educational, recreational material and financial support (5 to 10,000USD annually)
Bartlett Foundation	Financial support (>20,000 USD annually)
Various individual donations	Financial Support (>15,000 USD annually)



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