

## **Bustamante children's hospital Kingston, Jamaica**



Information provided by:

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### **1. BACKGROUND BUSTAMANTE'S CHILDREN'S HOSPITAL**

#### **1.1 Place in the national health system**

Bustamante's Children's Hospital is a public hospital in Kingston, Jamaica, established in 1963 when the paediatric ward at the Kingston Public Hospital was transferred to this location.

The facility was formerly the British Military Hospital and was handed over to the Jamaican government after the country gained independence in 1962. Bustamante Hospital for Children is the only specialist children's hospital in the English speaking Caribbean and serves patients from birth to 12 years of age.

Bustamante's hospital, as a specialist hospital for paediatric care, serves the entire country. In addition it serves occasionally patients from nearby small islands; the Cayman Islands and Turk and Caicos.

The health service delivery system in Jamaica is a decentralized system with four Regional Health Authorities responsible for service provision and management of the facilities in the public system.

Due to its geographic location Bustamante is run by the South East Regional Health Authority (SRHA). The SRHA is a statutory body of the Ministry of Health regulated by the 1997 National Health Services Act.

## **1.2 Hospital Capacity, services and patient load**

The hospital has 283 beds, including 5 ICU beds.

It provides a comprehensive range of diagnostic, preventative, curative, rehabilitative and ambulatory services offered in paediatric medical and surgical specialties and sub-specialties; including General Medicine, Cardiology, Neurology, Asthma and Respiratory ailments, Rheumatology, General Surgery, Neurosurgery, Orthopaedics, Urology, Ears, Nose and Throat (ENT), Nephrology, Dermatology, Plastic and Burns, Ophthalmology and more. The hospital also has a Social Work programme providing psychosocial, educational and recreational services.

Affordability: Any patient at Bustamante is treated free of costs in line with the no-user fee policy of the government for services in the public system. Only those from other islands do pay for service.

The hospital is usually overcrowded and has long waiting times for diagnostic and medical interventions as well as for outpatient consultations. The Accident and Emergency department operates on a twenty-four hour basis and sees approximately 77,000 patients per year.

## **2. IMAGING SERVICES**

### **2.1 Services and patient load**

The X-ray department is providing out- and inpatient diagnostic radiography and ultrasound services. Patients are transported to the Kingston Public Hospital for MRI and CT scans.

The department serves an overwhelming number of about 4000 patients for examinations per month from all over the Island (the vast majority is outpatient). This includes referrals from nearby islands such as the Cayman Islands and Turk and Caicos.

In addition, about 80 pediatric patients have CT scans done per month and for MRI this is about 20.

### **2.2 Staffing**

The department has two pediatric radiologists, six radiographers and 2 darkroom technicians.

One of the radiologists is leaving the country in February 2015. There is no immediate replacement and this will increase the burden on the other radiologist and may negatively affect service provision.

### **2.3 Equipment**

Current machines include:

- one X-ray machine
- one fluoroscopic machine (out of service)
- one general ultrasound unit
- two portable X-ray machines.

The hospital is in the process of submitting a grant proposal to the Public Health Fund to purchase a fluoroscope and replace the current one that is not operational.

The hospital is currently building a cardiac interventional suite which will be operational in 2016.

## **2.4 Maintenance**

The machines are not on any service contract. For the X-ray machines and MRI there is a local service contractor. For CT and fluoroscopy the service contractor is overseas.

Spare parts are not available within the country and are purchased overseas. The costs of overseas service contractors (CT and Fluoroscopy) are very high. Maintenance is a challenge.

## **2.5 Supply lines**

The supply is quite reliable. There have hardly been out of stock problems.

## **2.6 Infrastructure**

The Bustamante hospital has adequate power and standby generator that carries the X-ray unit.

The Kingston Public Hospital, where the MRI and CT scans are done, has also a standby generator, but that generator doesn't carry the X-ray unit.

Both hospitals do have internet access. The band width at KPH is about 20 megabytes. The server is reliable.

# **3. TELE-REPORTING**

## **3.1 Active sites for imaging children**

All hospitals offer X-ray services to children. In addition to the Bustamante Children's hospital (via the Kingston Public Hospital) the Cornwall regional hospital offers CT services for children.

There is no digitalized system in place for the Bustamante Children's hospital.

Digital equipment is available at KPH and is dicom compatible for the CT and MRI unit. However, the platform for interconnectivity is not available.

At Cornwall regional hospital there is pacs system that integrates images from CT, fluoroscopy and ultrasound.

## **3.2 Identified needs in tele reporting**

Dr. Lawrence, the pediatric radiologist, expressed particularly need for support in:

- MRI reading for neurology,
- Musculoskeletal reading.

In those areas she has limited capacity and a high number of cases.

**The project can assist Jamaica in improving timely access for children to diagnostic services as well as serving as a capacity building tool for radiologists. Delay of diagnosis and treatment (including for oncology) due to waiting times is a major problem in the public system.**

## Other observations

If possible, an additional site can be added after a pilot period. This could be a more remote site; for example a district hospital with a pediatrician and no pediatric radiologist.

## Project coordination

Who would be the on-site coordinator?

**DR. LAWRENCE**

*[He/she produces films for tele-opinions, identifies needs, works with WFPI on improving systems and support, assists with audits and reporting, collaborates with the WFPI on research and publication and provides answers to practical and strategic questions about the facility/work.]*

For WFPI to fill in: Who would be the WFPI coordinator?

**DR. RAMON SANCHEZ**

[He/she runs the WFPI tele-reporting team via a tele-reading platform, supervises the project, maintains dialogue with the on-site team, ensures quality control, audits & reports, liaises with other WFPI coordinators on improvements to systems and support, looks for/steers opportunities for research and publication]

### **Legal caveat**

The WFPI only gives advice via it's tele-reporting work. We offer medical colleagues working at the patient's bedside an opinion which he/she can use (or not) as he/she thinks fit. The legal responsibility for the patient remains with the onsite colleague.