

LBJ Tropical Medical Center Pago Pago American Samoa

The Lyndon B. Johnson Tropical Medical Center was opened in 1968. It is a regional acute care facility licensed for 109 beds, and located on the island of Tutuila, the main island of the American Samoa group. LBJ provides emergency care, general medical and primary care, acute care, and specialty department care to the residents of American Samoa.

Health Care Capacity: LBJ has five major departments/wards: Medicine, Pediatrics, Surgery, Obstetrics/Gynecology, and ICU. The eight-bed ICU provides services for both adults and pediatric patients. We offer a busy Labor & Delivery unit, a NICU/Newborn Nursery, and a 4 suite Operating Room. LBJ also provides 24 hour Emergency Medicine, and outpatient clinic services.

Specialty clinics include: Dental, ENT, Ophthalmology, Psychiatry, and Physical Therapy. A 16 station Hemo-Dialysis unit is supervised by our local team, and overseen by Nephrologists on rotating contracts from the U.S. Further consultation/support is provided by specialty service physicians on a rotating schedule (Cardiologist, Rheumatologist) and locum specialists from the U.S., New Zealand, Australia, and the United Kingdom. LBJ is a CMS compliant acute care facility, and adheres to U.S. standards of care.

Work Force: Currently the medical work force includes 38 world trained physicians, 3 Physician Assistants, and one midwife. LBJ employs 10 dentists. Services are supported by 156 nurses and nursing assistants. Ancillary services include an inpatient and retail pharmacy (1 pharmacist) Diagnostic Imaging department (Radiology, fluoroscopy, mammography, 4-Slice CT), CLIA certified level 1 laboratory, respiratory therapy, cardiac testing lab, physical therapy, medical social services, nutrition department, and morgue.

Outpatient Network: The American Samoa Department of Health staffs and runs 5 primary health care clinics on Tutuila and the surrounding islands. The Tafuna Family Health Clinic, staffed with 4 public health care providers is situated in the most populated district of Tutuila. Dr. Steven McGarvey (PhD, Brown University) and his current research fellow, works with the Tafuna Family Health Clinic with the intent to introduce weight loss and nutrition programs, and increase community diabetes/hypertension monitoring efforts. Other Public Health clinics are in Amauli (Eastern district), Leone (Western District) Tau, and Ofu, both in the Manu'a island group. These American Samoan Government clinics are supplemented by one private physician office (two physicians) and the Veterans Administration clinic opened in 2007 staffed with Internal Medicine and Psychiatric specialists.

Off-Island Transfer: Patients requiring extensive specialty health care are referred to Hawaii, New Zealand, or the Philippines through LBJ's third party administrators. Although referral is possible through these professional associations, the cost of care off island is a barrier to most patients. One of LBJ's strategic plan objectives is to improve the quality of care, and off island speciality support for our resident physicians to minimize and eventually eliminate the "off island" health care program. Currently, the medical Executive Committee meets weekly to determine the necessity of "off island" care.

Funding/Budget: LBJ's direct medical care is funded by the United States Medicaid Block Grant program. (approximately \$10M/year) The US Department of Interior funds technical assistance and infrastructure development programs. (approximately \$6M/year) Matching funds from American Samoa Government appropriations, (\$4M/year) patient participation in the form of facility fees, (\$4M/year) and other revenue from cafeteria sales, and medical records retention (\$1M/year) also fund LBJ. Total annual medical care expenditures reach approximately US\$ 32 million, corresponding to almost US\$470/year per capita. The bulk of the hospital budget goes to curative medical activities, and chronic care.

Medical Education: LBJ has been active in the training of resident physicians and medical students. Residents wishing to complete elective residencies at LBJ have been accommodated, and have come from Canada, Fiji, Germany, and US. Physician assistant residents, medical residents, medical school students, ancillary program residents, and physician fellows from diverse Universities (Vancouver School of Health Sciences, Brown University, Duke University, Jefferson College) have all participated in the program, and benefited from this unique training environment. Human resource development in medical sciences has become a priority in American Samoa, and partners such as PIHOA and WHO are participating in Human Resources For Health collaborative programs.

Practical nursing degrees are attainable at the American Samoa Community College. Registered nursing degrees are attained through overseas programs and distance learning. The ASG health services regulatory board requires nursing qualification and certification through American nursing associations. (NCLEX).

Work Ethic/Cultural Implications: The intersection of the *fa'a Samoa* (the Samoan way) and predominantly western medicine at LBJ hospital creates a varied work ethic. During work hours, the traditional/familial hierarchy that staff live with outside of the hospital, is replaced with an experience/training/capability driven model.

Department of Emergency Medicine & Primary Care

Dr. David Bouslough MD Chief of Service

Dr. Sean Stracensky Manager of Primary Care Clinic

Staff members:

Annie Fuavai MBBS

Lotonoamoni Maae MBBS

Erica Sipili MBBS

Maria Gayapa MD

Saipele Fuaimono MBBS

Fia Porotesano MBBS

Peter Kolone PA

Tim Brinker PA

Katrina Hoke PA

Jamie Stevens PA

Currently the Emergency Department has a dual function, providing acute medical care and Primary Care clinic services. The current department staff are a mixture of medical generalists, anesthesiology, pediatrics and family practice physicians. The medical staff is augmented by four PA's who rotate in the ER and in the primary care clinic.

Physical Layout: Emergency Department care is provided 24 hours a day. The department has both an ambulance and ambulatory patient triage area. Triage occurs on an Immediate/Urgent/Non-Urgent scale classification. The floor plan boasts one large nursing desk/work area. Adjacent are 4 physician office/exam rooms, each with a computer and examination area. Physicians use these rooms like a clinic setting, with ambulatory patients cycling into the physician's dedicated room. The rest of the department is filled with 8 curtained bays that function like traditional ER rooms (physician goes to the patient). One or two are designated "crash" rooms for resuscitation.

Staffing Scheme: Physicians and Physician Extenders currently staff an 8am-4pm, 4pm-12am, and 12am-8am shifts. The predominant patient load is during daylight hours. In Samoa, once the sun goes down, everyone is expected to return to their home. However, Friday and weekend nights are becoming more busy as the majority of the workforce are frequenting local restaurants, and entertainment centers (cinema, nightclubs, bars, bowling alley) at this time.

Nursing staff shifts are similar to the physicians in the ED/FP on a 24/7 basis. Most nursing staff work 8-12 hour shifts. Extra personnel needs are supplied through an elaborate "float" system, that shifts staff to areas of need.

A triage station is available at the check in desk, and waiting area.

Records/Charting: Record keeping is a mix of both paper and electronic charting. The hospital uses the Veterans Administration CPRS/VISTA electronic medical record system. CPRS is a computer record of patient data, both inpatient and outpatient, and allows the physician the opportunity to design his own documentation templates. Nursing records in the ED, and patient encounters are charted in paper and carbon copy requisitions. Laboratory/radiology results are interfaced with CPRS, and are reported electronically and by print out in the ED.

Patient Flow: While the day shift and afternoon hours are the most busy, *fa'a Samoa* places no urgency on efficiency or patient flow. Patients enter the department through the "no appointment" waiting area, and through ambulance triage. Triage categories are applied in a three tiered manner (non-urgent, urgent, immediate). Ambulatory patients are shifted to the new primary care unit if possible. They are also seen in the exam rooms. Offices, and emergency cases are seen in the curtained gurney bays.

Emergency Medical Services

Mr. Fuapopo Avegalio, Chief, EMS

Emergency medical Services (transport to LBJ) is available on island. The EMS department is run as a subsection of the Department of Public Safety. EMS staffing currently employs 5 paramedics, and 37 other EMTs, staff and volunteers. EMS headquarters are in a separate building from the hospital, but on the same grounds. Transit times are often in excess of 45 minutes due to the "out and back" model from the hospital's single dispatch area. EMS scope of practice is guided by a policy and procedure document that is regularly reviewed and certified by hospital physicians. The service operates several EMS rigs that are well outfitted with U.S. equipment.

Ancillary Services

Diagnostic Imaging

Tofala Iafeta Department Manager

Modalities available are plain film x-ray, ultrasound, CT (4 slice) There are some interventional radiology procedures performed. Currently 2 radiologists share nightly call. Both live in hospital housing, and imaging studies and official reads are available around the clock, when requested by page.

Laboratory

Ms. Freida Taumua Department Manager

LBJ's lab functions as both the hospital laboratory and the Public Health Laboratory. The lab is a CLIA regulated level 1 lab. Advanced tests require send

out to Honolulu for completion, and our lab personnel are IATA certified packers and shippers. Hawaiian Air provides sample cargo twice a week.

Bacteriology: gram stain, acid fast smear, fungal smear, and cultures with sensitivity.

Blood Bank/Transfusion: type and screen/cross, whole blood, PRBCs, plasma

Urinalysis: full evaluation

Chemistry: Ca, Phos, Acid Phos, Alk Phos, triglyceride, total cholesterol, protein, Alb, globulin, A/G ratio, CPK, LDH, SGOT, SGTP, Uric acid, amylase, dbili, tbili, K, Na, Cl, CO₂, Bun, Cre, Glc, 2 hour PP Glc, Glc tolerance (Troponin likely to be added soon).

Serology: VDRL/RPR, FTA, streptozyme, CRP, Monospot, cold agglutinin, RA test, serum pregnancy, blood gas, typhoid O/H, paratyphoid O/H, proteus OX-10,

Hematology: CBC with or without dif, RBC, Hgb, HCT, MCV, MCH, MCHC, Plt, ESR

Pharmacy

Ms. Evelyn Ah-Hing-Faiuso PharmD Department Manager

LBJ is a member of the CMS pharmaceutical system. Medications are delivered once a week to the island. A current formulary is available as an online tool linked to the CPRS/VISTA medical record system. A Pharmacy/Utilization Committee regularly reviews new medications for addition to the formulary.

In-Patient Services

Admission/Specialty Consultation: All patients evaluated in the ER/PC or other outpatient clinics may be admitted to the hospital through the on-duty medical officer or respective service.

Billing/Revenue:

Billing documentation for ED/FP visits is the responsibility of the physician/physician extender. An ICD-9 "Patient Encounter Form" accompanies each chart, and individuals designate the extent and quality of their care provided.