

## **ABSTRACT FOR CSI AFRICA 2019**

### **Title:**

Building operator depth for a sustainable pediatric cardiac catheterization program: Uganda Heart Institute's experience

### **Authors:**

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### **Background:**

The Uganda Heart Institute (UHI) cardiac catheterization program was started in February 2012. One operator (SL) was trained with a combination of the following: visiting team clinical service and training trips, out-of-country training fellowships, and weekly telemedicine case discussion/mentorship. With one operator (SL), UHI achieved its aim of developing independent operation after five years (2012-2016) of international mentorship, performing over 100 independent cases per year in 2017 and 2018, and is on track to perform 140 cases in 2019.

### **Methods:**

With an eye toward a sustainable practice, a prospective plan to build depth was instituted with a focus on in-country training of an additional operator. In year two of operation (2013), dedicated in-country training of a junior attending pediatric cardiology physician was initiated. The goal was, in successive years, progression from tertiary to secondary to primary operator performing in-country UHI pediatric cardiac catheterization cases.

### **Results:**

Since 2012, UHI has performed 562 congenital heart disease catheterization procedures, 393 (70%) of which are independent UHI procedures (no international provider presence). Procedures are patent ductus arteriosus (PDA)

device closure (278), diagnostic catheterization (165), balloon pulmonary valvuloplasty (69), and other (50)].

Of the 562 UHI cases, the new operator (TA) has participated in 455 (81%). TA performed as tertiary operator in 56 (86.2% of those were in years 2013-2014), as secondary operator in 310 (96.0% of those were in 2015-2018), and as primary operator in 62 (98.4% were in 2018-2019). TA has been the primary operator in (51), 94.4% of all cases done so far this year (2019).

Cases performed by TA as primary operator include PDA device closure (38), diagnostic catheterization (146), balloon pulmonary valvuloplasty (8), and balloon atrial septostomy (1).

**Conclusion:**

Through in-country training, Uganda Heart Institute is building operator depth toward a sustainable paediatric cardiac catheterization program.