

**Table 1. CCS CV Center Classifications (cont).**

Type VI		
Multispecialty	A	I-III • Clinical - invasive capabilities
	B	I-IV • Clinical - intervention capabilities
	C	I-V • Clinical - surgery capabilities
	D	Research and innovation
Type VII		
Cardiac Hospital	A	Superspecialized cardiac hospital division • Part of major multispecialty hospital
	B	Superspecialized Cardiac Hospital, stand alone • Stand-alone specialized cardiac hospital
	C	Teaching, training and service • Additional capabilities
	D	Research and innovation

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## The Benefits of a PCI Registry: An Update

Written by Rita Buckley

Godfrey Aleong, MD, FESC, Eric Williams Medical Science Complex, Trinidad, West Indies, reported on the progress and challenges in establishing a percutaneous coronary intervention (PCI) registry. To date, there are no multicenter, national, or Caribbean data in a PCI registry—only single-center data or anecdotal reports. Cath labs that perform PCI in the English-speaking Caribbean include those in the Bahamas, Barbados, Jamaica, Trinidad and Tobago, and Guyana. Within Trinidad and Tobago, there are 4 centers that perform catheterizations, three in the Port of Spain, one in San Fernando, and none in Tobago.

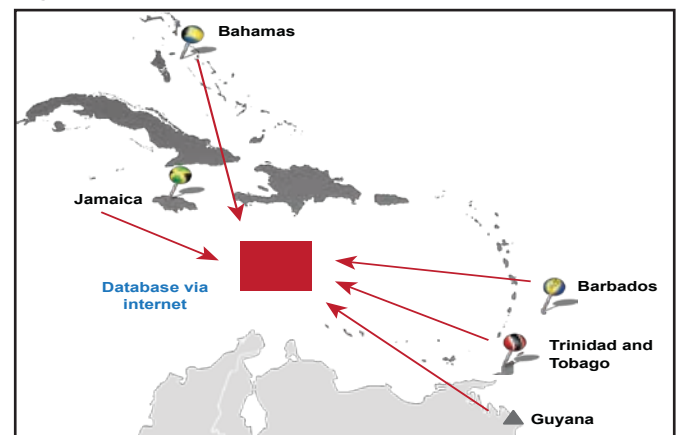
The aim of the PCI Registry is to create both a national and Caribbean registry that will link all centers. The data that are collected will provide effective and pertinent information about the patients and PCI procedures that are performed in the region and, in so doing, will increase the understanding of cardiovascular disease and the effect of PCI in the regional population.

The registry will contain important and accurate information that will generate research, such as a recent report on a comparison of 6-year clinical outcomes of sirolimus- and paclitaxel-eluting stents, based on data from three “real-world” registries in an academic hospital [Simsek C et al. *J Invasive Cardiol* 2011].

The Caribbean registry will provide the region with the information that it needs to participate in international trials and help the region develop a worldwide reputation.

It would include centers in the Bahamas, Jamaica, Barbados, Trinidad and Tobago, and Guyana that are connected to a database via the Internet (Figure 1).

**Figure 1. Cath Labs Connected via Internet Database.**



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Data that are collected would include:

- Patient demographics (such as the county and country) and characteristics (age, ethnicity, gender, cardiac risk factors, symptoms, previous cardiac history, and cardiac medications)
- Stenosis characteristics (American Heart Association classification)
- Procedure data/information (wire types, balloons, and stents used; whether stenosis was predilated or postdilated and to what pressures; ancillary equipment used, such as intravascular ultrasound, and fractional flow reserve)
- Complications
- 9-month clinical follow-up

Donation by individuals of their protected health information (PHI) for evidence-based research potentially benefits all individuals with diseases through improved understanding of disease patterns. However, without large numbers of people who donate their PHI to disease registries that are designed for research, it is difficult to discover complex patterns, create more specific evidence-based management techniques that can identify new opportunities in disease registry design, or analyze the current stage of a registry [Russler D. *J Diabetes Sci Technol* 2011]. The newly created United States Nationwide Health Information Network provides a good example of how to design, develop, maintain, and update a registry.

Creating a registry will take commitment, communication, and participation. Dr. Aleong encouraged all centers that perform PCI in the region to participate in making a registry a reality. The creation and maintenance of

Continued on page 20

Continued on page 17

a PCI registry is one of the most important efforts that can be undertaken; it will provide an invaluable source of information on a national basis and throughout the Caribbean. “It will supply the needed data that are currently lacking in our region and place us in a better position internationally,” he concluded.

## Status Report: The West Indies Cardiac Surgery Registry

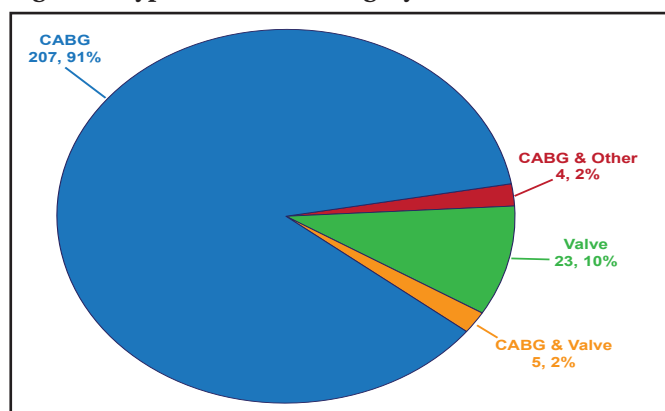
Written by Rita Buckley

Randolph Rawlins, MBBS, FRCS (Ed), FRCS (C/TH), the Doctor’s Inn Research Group (DIRG), Trinidad and Tobago, West Indies, discussed progress in the development of a West Indies Cardiac Surgery Database.

According to Mr. Rawlins, cardiac surgery is the first discipline to establish a major international registry of patient characteristics and outcomes. He noted that national registries of adult cardiac surgery have already been established in European countries, the United States, Canada, and elsewhere. “The UK Cardiac Surgical Register dates back to 1977,” he said.

In the West Indies, 207 coronary artery bypass grafts (CABGs) accounted for 91% of all cardiac surgeries. Other operations included 23 (10%) valve, 4 (2%) CABG only, and 5 (2%) combined CABG and valve surgeries (Figure 1). Of these patients, 17% was aged <50 years; 35% was aged 50 to 59 years; 31%, 60 to 69 years; 15%, 70 to 79 years; and 3%, 80 to 90 years. The in-hospital mortality rate was 5 patients out of 227.

**Figure 1. Types of Cardiac Surgery in the West Indies.**



Reproduced with permission from R. Rawlins, MBBS.

Data from local units and hospitals can be important for surgeons and surgical units, in that it can be used to create locally relevant risk models. However, data from other

national registries can be useful to compare outcomes in one’s own country with international benchmarks. “A risk-adjusted database can help surgeons advise their patients on the chances of a good operative outcome,” he said.

To date, funding for the West Indies Cardiac Surgical Database has come from various sources, including Ministries of Health, participating surgical centers, and surgical software vendors. Industries in Trinidad and Tobago have also promised support for a database project.

DIRG has proposed a list of 55 variables to the Caribbean Cardiac Society for a pilot project. They run the gamut from demographics to intraoperative, patient-, and cardiac-related factors—eg, left ventricular function, active endocarditis, tricuspid valve, recent myocardial infarction, and unstable angina.

Issues that were identified by Mr. Rawlins included the need for dedicated resources in each hospital for data collection and collation, including IT infrastructure and “database managers.” Ideally, the dataset should be centrally defined, with local teams empowered to collect information in ways that best suit their hospitals. The dataset should not be too extensive or be changed frequently. In addition, he noted the importance of compliance with data protection legislation and patient confidentiality principles and the key roles that are played by clinical leaders.

Other issues to bear in mind during registry development include the need to involve all cardiac centers and to recognize that in the early stages, the quality of the data may be limited. He pointed out that the initial effort does not have to be perfect before data is collected and used and that the final stimulus to complete data collection is publication of surgical results.

According to Mr. Rawlins, establishing a Prospective West Indies Cardiac Surgical Database should be a priority. Information from this resource would be of value to surgeons, cardiologists, and other health care professionals, and the registry would advance research, training, and professional development.

## Predictors of Ten-Year Survival Following AMI in San Fernando, Trinidad

Written by Rita Buckley

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