Core Curriculum

The SCAI Structural Heart Disease Council: Toward Addressing Training, Credentialing, and Guidelines for Structural Heart Disease Intervention

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The field of structural heart disease (SHD) intervention has grown rapidly over the past several years. While training program content, standards, credentialing, and board examinations for percutaneous coronary intervention have matured and become well developed, no such structure exists in the field of SHD. Recognition of the need for training program standards and SHD curriculum stimulated the SCAI to form a SHD council, described in this report. In the accompanying two articles, we report the results of a survey of the status of SHD training in programs in the United States and define a core curriculum for structural intervention training. © 2010 Wiley-Liss, Inc.

Key words: valvular heart disease; congenital heart disease in adults; pediatric interventions

INTRODUCTION

The field of structural heart disease (SHD) intervention has grown rapidly over the past several years. This growth has evolved from the rapid development of new technology-enabling therapies for conditions previously treatable only with open heart procedures or not treatable at all. Interest from patients in less invasive therapies, and recognition among the practice community that percutaneous, catheter-based valve therapies, and shunt closure procedures have become real world, practical, and effective interventions has fueled this development.

While training program content, standards, credentialing, and board examinations for percutaneous coronary intervention have matured and become well developed [1,2], no such structure exists in the field of SHD. Peripheral interventional therapies have lagged behind coronary interventions in this development, and SHD is far behind [3–7].

Recognition of the need for training program standards and SHD curriculum stimulated the SCAI to form a SHD council [8]. The stated mission is to create a worldwide forum for cardiovascular SHD specialists to collaborate on issues to treat SHD and optimize patient care, and to promote communication and cooperation among diverse organizations and cardiovascular societies. The long-term goals of the council are to improve the quality of care, strength, and advocacy efforts for the recognition of SHD and its role in patient care, advocate for improved access to this care, increased opportunities for mentoring and career development, and foster relationships with other organizations that support SHD treatment. The council is composed of two chairs, a co-chair, and over 30 physician participants. A wide geographic representation is present in the council and diverse expertise from the fields

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of adult and pediatric interventional cardiology and cardiovascular surgery are included.

There are many long-term specific goals of the council. The development of a core curriculum, assessment of the current state of SHD training in the United States, and ultimately around the world. Furthermore, to develop pathways for evaluation of structural interventional devices in collaboration with regulatory agencies that expedite and facilitate their approval are all among these goals. This latter point is especially difficult, as the populations of patients with structural diseases are often small, and in contrast to coronary interventional device development, not easily amenable to large randomized trials. Some of the early efforts of the council will include an interaction with FDA to develop objective performance criteria based on historical data for comparison with outcomes from new device interventions for structural conditions.

A draft core curriculum has been developed and will both guide current training efforts in SHD intervention and also serve as a basis for future program development and trainee evaluation. Defining training requirements and program standards is a major challenge for SHD interventions. Further defining requirements for training and credentialing for established practitioners may be an even greater hurdle. Not only are the procedures rapidly evolving but establishing training requirements poses some specific issues for structural compared with coronary intervention. To help us look forward, the Council has made a survey of training programs to get a snapshot of the current landscape in the United States.

Numerous issues will need to be addressed as the work of the SHD Council moves ahead. Training programs standards and certification are the largest and will take several years to develop. This brief introduction to the structure, mission, goals, and activities of the SCAI SHD Council defines a clear beginning to this process.

REFERENCES


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