PATIENT CENTERED
QUALITY FOCUSED
WHETHER FINDING SOLUTIONS TO CLINICAL CHALLENGES OR DEVELOPING NEW BUSINESS MODELS TO ENHANCE PERFORMANCE, PROCIRCA IS COMMITTED TO PROVIDING SOLUTIONS THAT BENEFIT BOTH OUR CLIENTS AND THEIR PATIENTS.

A HISTORY OF EXCELLENCE
For nearly 30 years, Procirca® has been a leading provider of cardiovascular and neurologic support services including: perfusion, blood management, mechanical circulatory support, and intraoperative neuromonitoring. As medicine has evolved, Procirca has led the way in offering the latest technologies and services to over 60 hospitals throughout the world. Our expertise combined with the clinical and academic capabilities at UPMC, one of the nation’s leading integrated health care systems, position us as leaders in the clinical care environment.

QUALITY
The Procirca management team averages 22 years of experience each; our clinical professionals average more than 12 years of hands-on experience. Our skill, expertise and continuing education, help ensure the safety and satisfaction of our patients, as well as the peace of mind of our clients. Because our staff works in a wide variety of clinical settings, we are able to identify and implement current best practices for our clients. Procirca’s web-based quality management tool – periApp – supports performance improvement and quality management programs across all service offerings and clients. We also use The Joint Commission and the American Association of Blood Bank (AABB) standards to demonstrate an organizational commitment to providing quality care.

INNOVATION
Whether finding solutions to clinical challenges or developing new business models to enhance performance, Procirca is committed to providing solutions that benefit both our clients and their patients. For example, Procirca leverages the latest academic and clinical research advancements in mechanical circulatory support (MCS) technologies to provide unparalleled support and education to patients and practitioners in both startup and advanced MCS programs. Procirca’s Center for Clinical Neurophysiology (CCN) training program is among the most comprehensive in the world. The CCN program relies not only on volume of experience, but exposure to the latest surgical intraoperative neuromonitoring (IOM) techniques and systems coupled with world-renowned domain experts in neurophysiology. Our dedication to ongoing staff training and education, combined with our consulting experience, allow us to offer clients the most up-to-date expertise and methods of meeting their clinical challenges.

COST-EFFECTIVENESS
We understand the challenges faced by all health care facilities to deliver superior service while containing costs. Procirca considers both quality patient care and cost when addressing health care management challenges. Procirca develops solutions that work clinically and financially. Our seamless operational, planning and management capabilities work together to deliver an integrated solution that suits your needs. Using our expertise, we can develop a program that provides only the services you need and capitalizes on our extensive purchasing power and resource optimization capabilities. Procirca is able to offer a complete, customized suite of services that positively affects patients, staff and your bottom line.
**PROCIRCA**

**PERFUSION**

Our leadership and expertise enable you to develop and maintain a world-class perfusion program. Although our portfolio of services continues to grow to accommodate new technology and client requests, we currently offer the following services:

- Adult and pediatric cardiopulmonary bypass including minimally invasive surgery and robotics
- Cardiopulmonary support
- Intra-aortic balloon pump (IABP)
- Extracorporeal membrane oxygenation (ECMO)
- Transplant support
- Congestive heart failure fluid removal/aquaphoresis
- Chemoperfusion
- Patient transport
- STS data management
- Program assessment
- Long and short term locum tenens coverage
- Perfusion and ECMO education

**BLOOD MANAGEMENT SERVICES**

Procirca’s Perioperative Blood Management (PBM) program is managed utilizing the AABB Standards for Perioperative Autologous Blood Collection and Administration. These Standards provide for delivery of superior quality care. The patient-centered, evidence-based approach to minimizing allogeneic blood transfusions benefits patients as well as our clients. Patients benefit from receiving their own blood and avoiding the risk associated with receiving allogeneic blood. Our clients benefit from significant quality improvement cost reductions in the purchase of blood, the associated costs of preparing and delivering the blood, and the complications that can occur post-transfusion.

Our Perioperative Blood Management program includes:

- Autologous component therapies include platelet-rich and autologous conditioned plasma, fibrin glue and bone marrow aspirate concentrate
- Autotransfusion
- Cardiac post-op blood recovery
- Orthopedic post-op blood recovery

**MECHANICAL CIRCULATORY SUPPORT**

Procirca works closely with our hospital partners to support all clinical or educational needs that can arise; and industry partners in the development of adult/pediatric MCS technologies and creating best clinical practices in all aspects of MCS support. Procirca emerged from the artificial heart program at UPMC, which is recognized globally as a premier MCS program. Our goal is to make the expertise we bring to UPMC available around the world.

Procirca also partners with device manufacturers to offer surgical and clinical training courses, as well as provide onsite clinical support on their behalf. We have delivered education programs and supported patients on a global basis. Furthermore, the experienced staff at Procirca has provided advanced training courses for VAD coordinators, physicians and industry personnel.

**CENTER FOR CLINICAL NEUROPHYSIOLOGY**

Procirca’s Center for Clinical Neurophysiology (CCN) has pioneered and set the standards for intraoperative neuromonitoring (IOM). Procirca’s CCN is one of only 17 centers across the country that has earned accreditation from the American Board of Registration of Electroencephalographic and Evoked Potential Technologists (ABRET). Let us put our expertise to work for you in the following:

- Our clinical experience covers the full spectrum of surgical procedures requiring IOM.
  - Neurosurgery: brain tumors, spinal decompression, spinal fusion, clipping of aneurysm, chiari decompression, awake craniotomies
  - Orthopaedic: scoliosis correction, total hip replacement, acetabular fracture
  - ENT: thyroidectomy, parotidectomy, tympanomastoidectomy, cochlear implants
  - Cardiac: AAA, AVR, CABG
  - Vascular: carotid endarterectomy
  - Functional neurosurgery: deep brain stimulation and single cell micro-electrode recordings
  - Interventional Radiology: coiling of aneurysm, embolization of tumor, arterio-venous malformation
  - Pediatric: all pediatric procedures requiring IOM
  - Procedures involving proprietary IOM systems used in DLIF and XLIF spinal fusion procedures

**SERVICE OFFERINGS**

Procirca provides a number of cardiac support services, including mechanical circulatory support services, perfusion and perioperative blood management. Procirca’s Center for Clinical Neurophysiology offers turnkey solutions for all of your intraoperative neuromonitoring needs. We work with each client to build a customized program that fits into your existing operations. We provide what you need and allow you to add and remove services as patient demand evolves. If there are services that you need which we do not currently provide, we would be pleased to discuss adding them to our portfolio.

<table>
<thead>
<tr>
<th>BLOOD MANAGEMENT SERVICES</th>
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Our neurophysiologists are board-certified, and are some of the most experienced domain experts in neurophysiology. The CCN's neurophysiologists provide real-time interpretation of IOM data 24/7/365.

Our training and education experience produces some of the most sought-after neurotechnologists in the industry.

- CNIM certification
- Competency-based training rooted in didactic and hands-on experience that covers the gamut of IOM procedures

Our IT, data management, and security experience can assist you in protecting and organizing your patient's IOM data.

- Setting-up secure connections for real-time IOM data interpretation by board-certified neurophysiologists
- Managing and encrypting IOM data so patient data collected at remote locations never ends up in the wrong hands
- Secure server set-up which allows quick, easy accessibility for all of your IOM data

Our administrative support can help you to streamline your IOM service's delivery and customer experience.

- periApp provides a secure, web-browser based, easy-to-use scheduling portal for all of your physicians, office staff, and hospital personnel
- A billing and coding evaluation can help you recoup the maximum reimbursement for the IOM services that you provide.

Turn to Procirca to help you provide your patients with the highest-quality IOM service available. Procirca can provide all aspects of your IOM service, or we can help you solidify a particular area of concern. We at Procirca would welcome a chance to design a customized solution for your IOM needs and team your institution with the leaders in clinical neurophysiology.

**PROGRAM ASSESSMENT AND TECHNOLOGY DEVELOPMENT**

Procirca is committed to developing and implementing best practices in all of our clients’ facilities. Our professionals can analyze your existing programs for improvement opportunities, design a new program or help you strategize next steps.

Our goal is to help you increase efficiency, enhance patient care, lower costs and boost patient and staff satisfaction. Procirca offers solutions for a variety of operational and program design issues, such as:

- Perfusion program design and management
- Blood management program design and services
- Mechanical circulatory support services
- IOM scheduling, billing, and operational workflow
- Professional and technical quality compliance of your IOM program
- IT security and data management of your IOM systems
- Compliance monitoring
- Capital planning and acquisition assistance
- Assistance with The Joint Commission, the AABB and other national governing bodies and regulatory organizations

If you have additional needs, please let us know and we will be happy to discuss how we may help you.