

46th EDTNA/ERCA International Conference



Caring together

September 9 – 12, 2017, ICE Krakow Congress Centre, Krakow, Poland

Conference Theme: True Partnership and Global Approach in Management of Renal Care

The importance of the Vascular Access Coordinator

Maurizio Gallieni
Nephrology and Dialysis Unit
San Carlo Borromeo Hospital
University of Milano, Italy



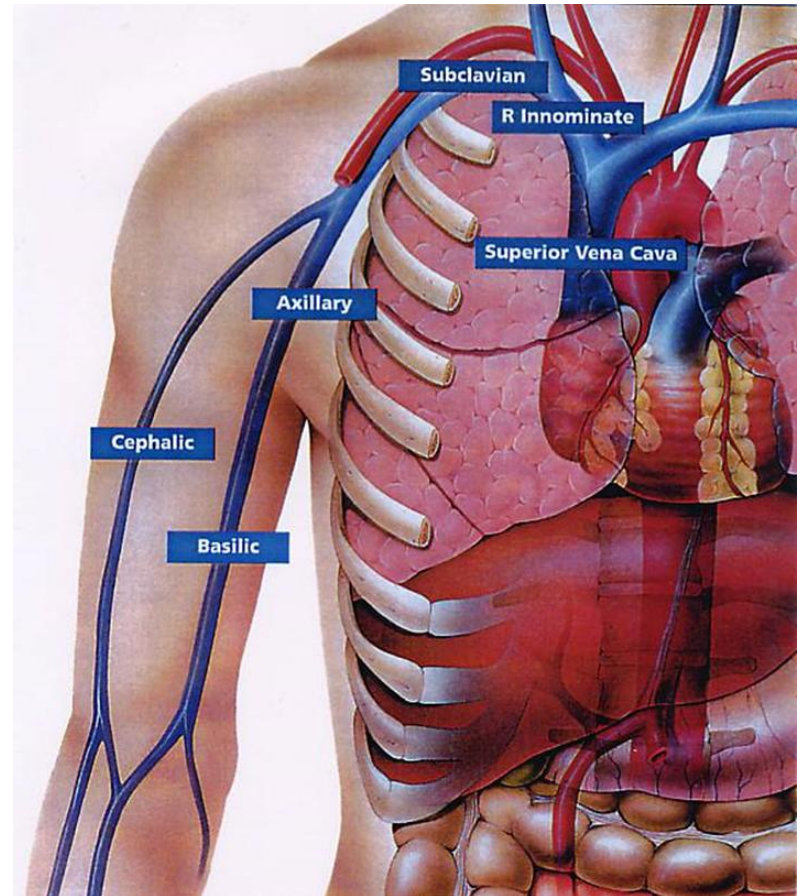
Outline of the presentation

- 1. Introduction**
- 2. Web based resources regarding the vascular access coordinator**
- 3. Why do we need a vascular access coordinator?**
- 4. What is the role of the vascular access coordinator?**

Introduction

- **Delivery of healthcare is ameliorated by a team approach. Renal replacement therapy is more effective when patients have an adequate vascular access (VA), which is ideally an arterio-venous fistula, or alternatively a graft or a vascular catheter.**
- **The role of the vascular access coordinator (VAC), a highly specialized figure, has been developed because of the complexity of hemodialysis vascular access and the need for a multidisciplinary approach for best results in clinical care.**
- **The identification of a VA coordinator within each dialysis team can be crucial for obtaining good outcomes in VA, keeping a low number of grafts and catheters, as well as monitoring functioning accesses and planning timely interventions before they irreversibly fail.**

The most important role of the vascular access coordinator is not the ability to create an access but the organization and coordination of timely interventions to provide and maintain a functioning VA.



Risks of Vascular Access

Venous Stenosis

Trauma caused by CVCs may impact on stenosis

Thrombosis

Multiple central venous devices increase risk of thrombosis x4

Up to 60% of DVT's are asymptomatic

Think of patient's risk factors

Infection


Multiple placement of vascular access devices increases risk of infection

There is a clear link between thrombosis and infection

Outline of the presentation




1. Introduction
2. **Web based resources regarding the vascular access coordinator**
3. Why do we need a vascular access coordinator?
4. What is the role of the vascular access coordinator?

<http://fistulafirst.esrdncc.org/ffcl/change-concepts/change-concept-1/vascular-access-coordinator-resource-manual/>



End Stage Renal Disease (ESRD)
National Coordinating Center (NCC)

Contact the ESRD NCC: 844-472-4250
nccinfo@hsag.com



Home Fistula First +

Vascular Access Coordinator Resource Manual

[Home](#) → [Fistula First Catheter Last - FFCL](#) → [Change Concepts](#) → [Change Concept 1](#) → [Vascular Access Coordinator Resource Manual](#)

Vascular Access Coordinator Resource Manual

This document was designed by ESRD Network 14 to assist Vascular Access Coordinators with a Table of Contents of available tools on the Fistula First Website.

Section 1: Introduction

- [Centers for Medicare & Medicaid Services \(CMS\) Measures Assessment Tool \(MAT\)](#)
(Item D; Surveyor Laminates [Zip file])
- [ESRD Network of Texas, Inc. Criteria and Standard for Vascular Access Quality Assessment and Performance Improvement](#)
- [Vascular Access Best Demonstrated Practices & FFBI Change Concepts \(09-2011\)](#)
- [Websites: ESRD Network 14 and Fistula First Breakthrough Initiative](#)

Section 2: FFBI Change Concept 1- Routine QAPI Review of Vascular Access



Canadian Association of Nephrology
Nurses and Technologists



Mission Statement

The mission of the Canadian Hemodialysis Access Coordinators (CHAC) Network is to provide a forum to support networking and development of partnerships.

This collaborative team of experts will focus on identifying, developing and disseminating integrated standards of vascular access services for patients on dialysis as guided by current evidence-based information.



CHAC Mission (1):

- **Develop strategies to preserve veins.**
- **Develop key performance measures regarding AV fistula as the access of choice when deemed eligible. AVG for patients not eligible for a fistula and provisions for central line insertions when all other options are exhausted.**
- **Standardize education surrounding modality selection in parallel with access choice.**
- **Standardize outcome indicators for Vascular Access with strategies to utilize the data to develop best practice guidelines and support policy and procedure Development.**



CHAC Mission (2):

- **Develop continuing education programs to achieve and maintain expertise in cannulation facilitated by ongoing technical advancements such as portable ultrasound.**
- **Communicate and share outcomes of successful monitoring and surveillance programs related to dialysis adequacy and relevant clinical outcomes.**
- **Strive to embrace research opportunities related hemodialysis vascular access.**
- **Ensure timely integration of emerging scientific data into clinical practice guidelines.**

Outline of the presentation


1. Introduction
2. Web based resources regarding the vascular access coordinator
- 3. Why do we need a vascular access coordinator?**
4. What is the role of the vascular access coordinator?

Why do we need a vascular access coordinator?

- 1. Improving outcomes.** Creation, preservation and maintenance of adequate vascular access for patients with end stage renal failure is critical to the successful outcome of hemodialysis
- 2. Better deal with increase morbidity.** More and more HD patients hospitalizations are due to VA creation or complications:
 - Secondary access creation
 - Declotting
 - Access revision
 - CVC insertion
- 3. Reduce costs**

Why do we need a vascular access coordinator?

J Vasc Surgery 1999; 30:727-33.

 JVS
Journal of
Vascular Surgery

Official Publication of the Society for Vascular Surgery

A practical approach to vascular access for hemodialysis and predictors of success

Peter G. Kalman, MD, Mark Pope, MD, Cyndi Bhola, RN, Robert Richardson, MD, and Kenneth W. Sniderman, MD, *Toronto, Ontario, Canada*

- In summary, the success of an access program in a practical and cost-effective way depends only partially on the vascular surgeon, who serves an important technical role, ensuring the success of a particular access site.
- The organization of a vascular access program in a practical and cost-effective way for reduced length of hospital stay is streamlined through a dedicated access coordinator who ensures an integrated, multidisciplinary approach.

Original Article

Implementation of a vascular access quality programme improves vascular access care

M. van Loon¹, W. van der Mark², N. Beukers³, C. de Bruin³, P. J. Blankestijn², R. M. Huisman³, J. J. Zijlstra⁴, F. M. van der Sande¹ and J. H. M. Tordoir¹

... an access quality improvement plan was introduced by **vascular access coordinators** with the aim to decrease vascular access-related complications by preemptive intervention of malfunctioning accesses.

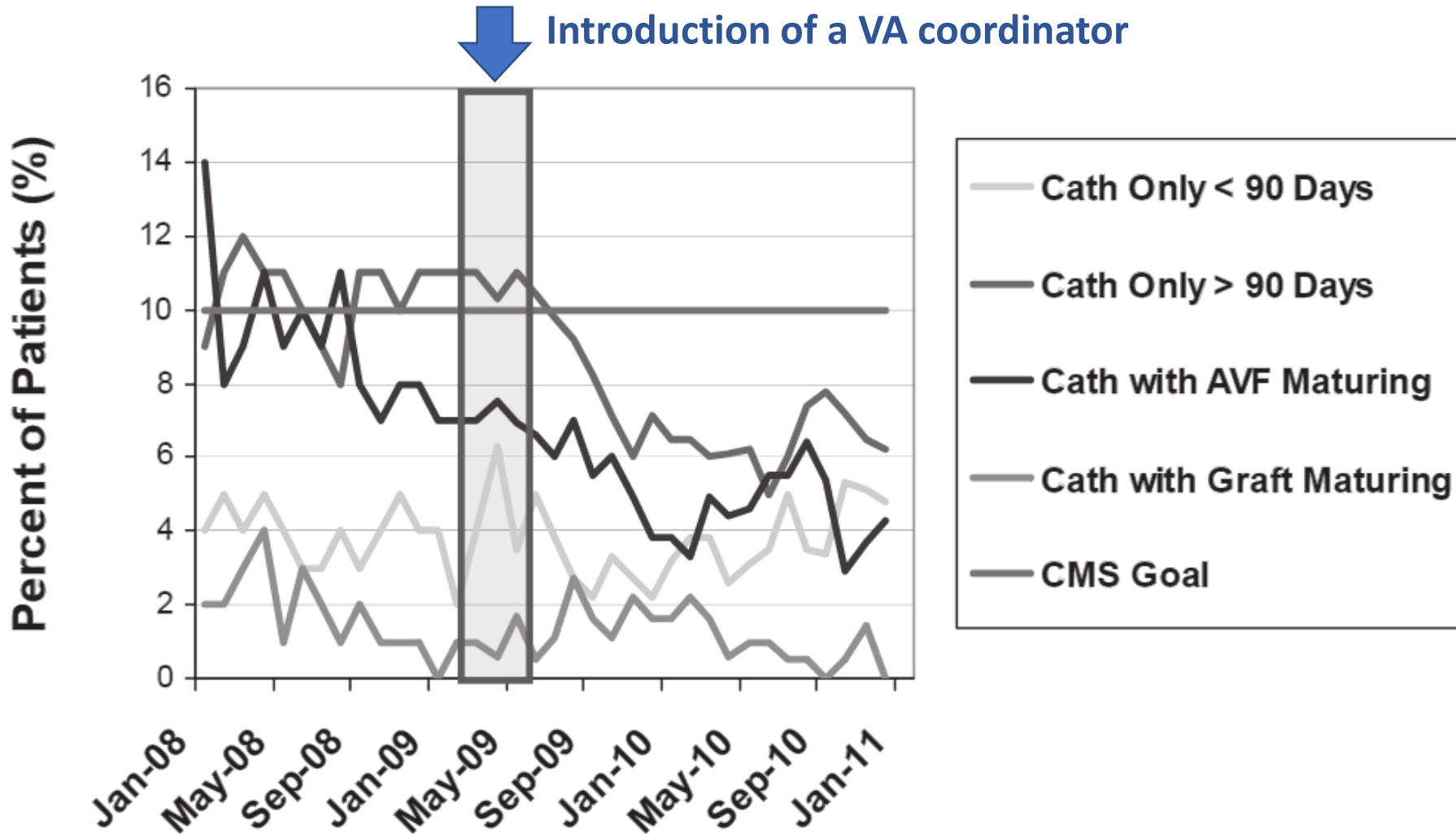
... In a cohort of 2300 patients, after the surveillance program started, the number of autogenous arterio-venous fistulas (AVFs) had increased significantly from 69 to 77% (P<0.01)...

A Vascular Access Coordinator Improves the Prevalent Fistula Rate

Amy Dwyer, Paula Shelton, Michael Brier and George Aronoff
University of Louisville, Louisville, Kentucky

After the implementation of a comprehensive access program led by a VAC, the prevalent AVF rate increased from 50% to 65%. The number of grafts decreased while the percentage of dialysis catheters used for more than 90 days was cut in half.

University of Louisville Catheter Rates



Outline of the presentation

1. Introduction
2. Web based resources regarding the vascular access coordinator
3. Why do we need a vascular access coordinator?
4. **What is the role of the vascular access coordinator?**

What is the Role of the Vascular Access Coordinator?

A vascular access coordinator focuses on the vascular access needs of patients, with a broad approach aimed at:

- Improving communication with patients/family and among all levels of dialysis staff and the vascular access care team.**
- Improving the dialysis unit working environment by ensuring the access is healthy and functioning**
- Ameliorating the vascular access quality assurance program**
- Improving patient outcomes**
- Reducing the cost of vascular interventions**

What is the Role of the Vascular Access Coordinator?

The VA coordinator acts as a link (communication) between nurses, nephrologists, surgeons, radiologist and patients/family to:

- Educate to a “save the veins” approach.**
- Facilitate early access placement.**
- Emphasizing on fistula placement and salvage whenever possible.**
- Organize a clinical surveillance of VA function**
- Organize promptly interventional procedures**
- Discuss and help in resolving vascular access complications: thrombosis, Infection, cannulation issues.**
- Keep an up-to-date documentation on VA issues**

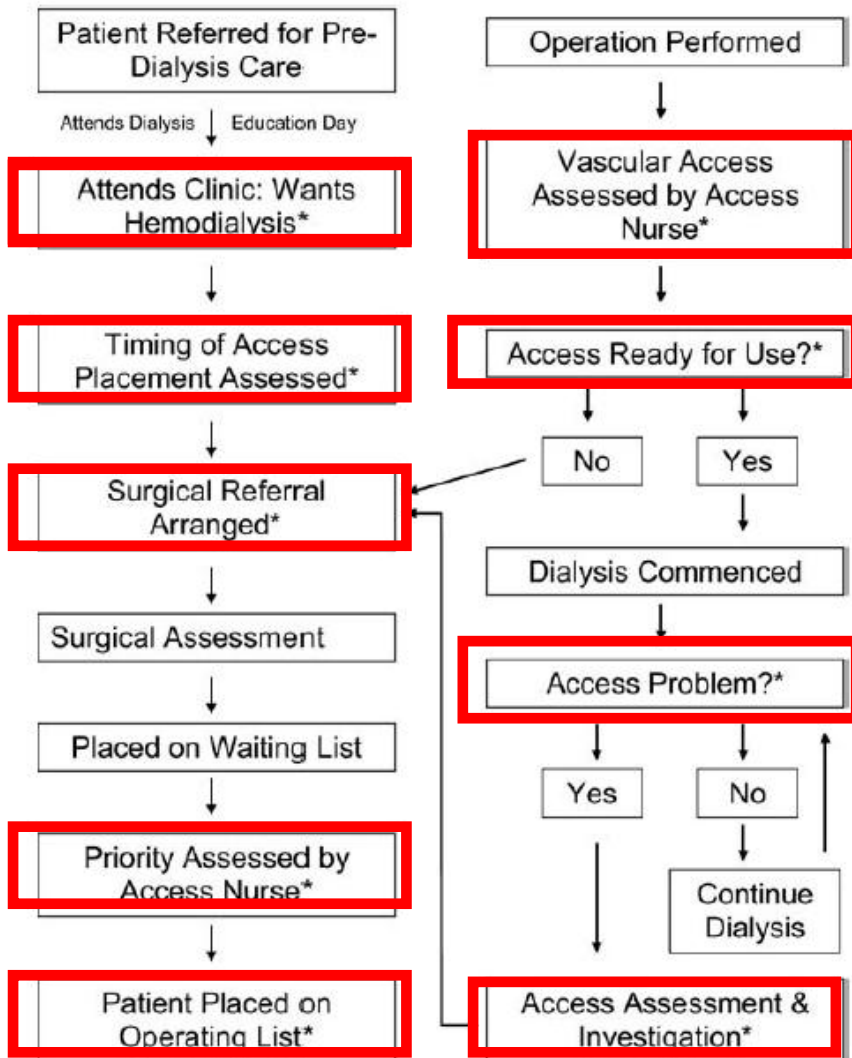
Effect of a Vascular Access Nurse Coordinator to Reduce Central Venous Catheter Use in Incident Hemodialysis Patients: A Quality Improvement Report

Kevan Roy Polkinghorne, MBChB, MClInEpi, FRACP, PhD,^{1,2}
Mechelle Seneviratne, RN, BN, GradDipHealthSci,¹ and Peter G. Kerr, MBBS, FRACP, PhD^{1,2}

Results 12 months before and after introducing a VA coordinator:

- The proportion of patients starting hemodialysis therapy with an AVF increased from 56% to 75% (odds ratio, 2.85).
- The total number of catheter-days in the implementation phase decreased from 4685 to 2833 days.

Patient flow from referral for dialysis to vascular access creation and start of dialysis therapy. *Steps in which the vascular access nurse provides a pivotal role.



Investing in the Lifeline:

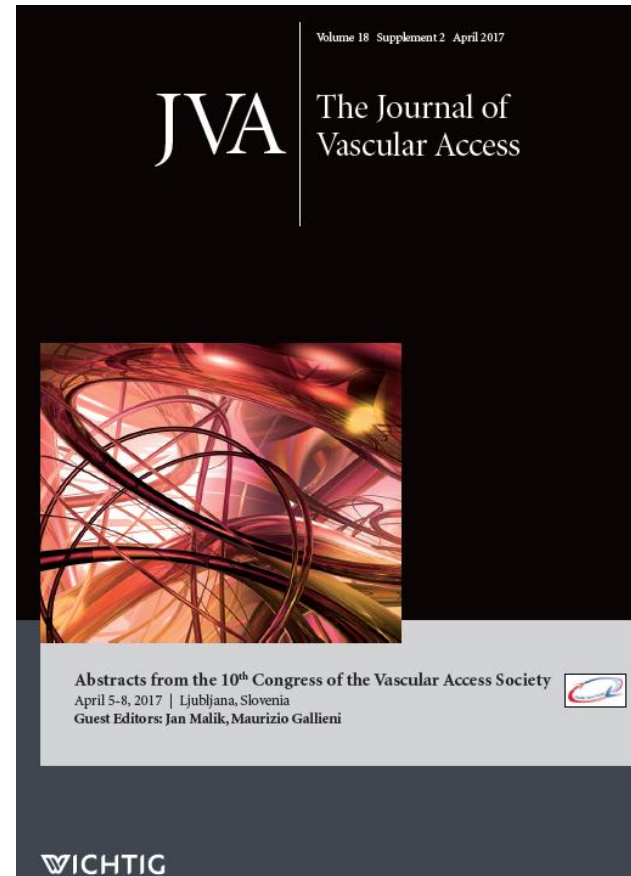
The Value of a Vascular Access Coordinator

The question is not, “can we afford to implement the role of the vascular access coordinator?” but “are we willing to form the team?” and if so, “How can we afford Not to have a vascular access coordinator?”

LESLEY C. DINWIDDIE

Nephrol News & Issues 2003

www.vascular-access.info



www.vascularaccesssociety.com/