

## CURRICULUM VITAE

**NAME:** Jeffrey Brian Rich, M.D.

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### **CURRENT PROFESSIONAL POSITION:**

Cardiothoracic Surgeon, Mid-Atlantic Cardiothoracic Surgeons, Ltd.	Jan 2009- Present
Scientific Director, Sentara Cardiovascular Research Institute	June 2009- Present
Assistant Professor of Clinical Surgery, Eastern Virginia Medical School, Norfolk, VA	1990- Present

### **PAST PROFESSIONAL POSITIONS:**

Director, Center for Medicare Management Centers for Medicare and Medicaid Services Department of Health and Human Services	Feb 2008- Jan 2009
CardioThoracic Surgeon, Mid-Atlantic Cardiothoracic Surgeons, Ltd.	1990- Feb 2008
Scientific Director, Sentara Cardiovascular Research Institute	2005- Feb 2008
Surgical Director, Heart Transplant Program Sentara Norfolk General Hospital	2005- Feb 2008
Director, Ventricular Assist Device Program Sentara Norfolk General Hospital	1990- Feb 2008
Director, Heart-Lung and Lung Transplantation Program Sentara Norfolk General Hospital	1990-July 2004

## EDUCATION

	<u>SCHOOL OR HOSPITAL</u>	<u>YEAR</u>	<u>DEGREE</u>
Undergraduate	Northwestern University Evanston, Illinois	1971-73	
	University of Illinois Chicago, Illinois	1975-77	B.S. Bio- Mechanical Engineering
Graduate	University of Chicago Pritzker School of Medicine Chicago, Illinois	1977-81	M.D.

## POST-GRADUATE TRAINING

Internship	Massachusetts General Hospital Harvard Medical School Boston, Massachusetts	1981-82	
Residency	General Surgery Resident Massachusetts General Hospital Harvard Medical School Boston, Massachusetts	1982-84	
	Registrar General Surgery Senior Registrar Vascular Surgery Flinders Medical Centre Adelaide, Australia	1984-85	
	Senior Resident General Surgery Massachusetts General Hospital Harvard Medical School Boston, Massachusetts	1985-86	
	Chief Resident General Surgery Massachusetts General Hospital Harvard Medical School Boston, Massachusetts	1986-87	
	Resident Cardiovascular Surgery Stanford University Hospital Stanford, California	1987-88	
	Chief Resident Cardiovascular Surgery Stanford University Hospital Stanford, California	1988-89	
	Chief Resident Thoracic Surgery Stanford University Hospital Stanford, California	7/89-12/89	
	Chief Resident Heart/ Heart-Lung Transplantation Stanford University Hospital Stanford, California	1/90-6/90	

**STATE LICENSURE:** Virginia

**BOARD CERTIFICATION:**

Board Certified in General Surgery, June 1988 and 1998

Board Certified in Cardiothoracic Surgery, June 1991, 2001 and 2011

**HOSPITAL STAFF MEMBERSHIP:**

Sentara Norfolk General Hospital Norfolk, Virginia	Active Staff	1990-Present
Sentara Virginia Beach General Hospital Virginia Beach, Virginia	Active Staff	1991-Present
Naval Regional Medical Center Portsmouth, Virginia	Active Staff	2004- Apr 2011
Children's Hospital of The King's Daughter Norfolk, Virginia	Staff	1990-2007
DePaul Hospital Norfolk, Virginia	Consulting Staff	1990-1997

**LOCAL COMMITTEE APPOINTMENTS:**

Sentara Norfolk General Hospital

Dept of Cardiac Services Executive Leadership Committee	Feb 2009- Present
Cardiac Surgery Operations Committee	Feb 2009- Present
Advanced Heart Failure Advisory Committee	Feb 2009- Present
Trend Analysis Committee	Feb 2009- Present
Dept of Cardiac Services Quality Committee	Feb 2009- Present
Cardiac Surgical Program Committee, Chairman	2004- Jan 2008
Department of Cardiac Services Quality Committee, Chairman	2004- Jan 2008
Department of Cardiac Services Executive Leadership Committee	2004- Jan 2008
Heart Transplant Executive Committee	1994- Jan 2008
Department of Surgery Quality Committee	1994- Jan 2008
Department of Surgery Peer Review Committee	2004- Jan 2008
Surgical Services Committee	2001- Jan 2008
Center of Excellence Executive Committee	1995-July 2004
Center of Excellence Quality Assurance Committee	1995-July 2004

Co-Chairman	
Continuous Quality Improvement Committee	1990-2004
Urgent Response Committee	1992-1996
Medical Records Committee	1992-2000

#### Eastern Virginia Medical School

Residency Review Committee	1991-2000
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#### Sentara Virginia Beach General Hospital

Cardiac Performance Improvement Team	2000- Jan 2008
Heart Institute Committee	1996-2003

#### American Heart Association, Virginia Affiliate, Tidewater Council

Board of Directors	1992-1996
Vice-President	1993-1994
President	1994-1995
Executive Board	1993-1995
Heart Ball Committee	1992-1995

### REGIONAL COMMITTEE AND BOARD APPOINTMENTS

Director At Large, Virginia Cardiac Surgery Quality Initiative	Feb, 2009- Present
Chair, Board of Directors, Virginia Cardiac Surgery Quality Initiative	2003- Jan 2008
Quality Committee, Virginia Cardiac Surgery Quality Initiative	1999- Jan 2008
CMS Demonstration Committee, Virginia Cardiac Surgery Quality Initiative	1999-2004

### NATIONAL COMMITTEE AND BOARD APPOINTMENTS

#### Federal Government

Member, Medicare Evidence Development and Coverage Advisory Committee (MEDCAC)	June 2011-
Member, Technical Expert Panel, CMS Physician Value Based Purchasing Project. Washington, DC.	March 2009-Sept 2009

## **Society of Thoracic Surgeons**

STS President	2012
STS 1 <sup>st</sup> Vice President	2011
Member, STS Executive Committee	2010 – Present
Member, STS Board of Directors	2010 – Present
Member, STS Quality, Research and Patient Safety Council Operating Board	2010- Present
Chair, STS Ad Hoc Presidential Taskforce on State/Regional Collaborations	2011- present
Member, STS Taskforce on Quality Initiatives	2010- Present
STS 2 <sup>nd</sup> Vice President	Jan 2010 – Jan 2011
Director-at-Large, STS Board of Directors	2004 - Jan 2008
Member, STS Education and Member Services Council Operating Board	2007 - 2008
Member, STS Health Policy and Relationships Council Operating Board	2006- 2007
Member, STS Quality Monitoring Taskforce	2005- Jan 2008
Member, STS Quality, Research, and Patient Safety Council Operating Board	2005-2006
Chair, Society of Thoracic Surgeons Taskforce on Pay For Performance	2004- Jan 2008
Member, STS Education and Member Services Council Operating Board	2004-2005
Member, STS Workforce on Health Policy, Reform and Advocacy	2003-2008
Chair, STS Taskforce on Quality Initiatives	2003- Jan 2008
American College of Cardiology Advocacy Committee (STS Representative)	2003- Jan 2008
Society of Thoracic Surgeons Taskforce on the National Quality Forum	2003-2004

## **National Quality Forum**

Member, Steering Committee, Phase I and II Resource Use Measurement	April, 2010 - present
Vice Chair, National Quality Forum Consensus Standards Approval Committee	June 2007 - Jan 2008

Member, NQF Membership Expansion Taskforce Member, Board of Directors, National Quality Forum	March 2007 - Jan 2008 2005 - 2007
Chair, National Quality Forum Council on Research and Quality Improvement	December 2004- Sept 2007
Co-chair, National Quality Forum Planning Group on Cardiac Surgery Performance Measures	2003
Co-chair, National Quality Forum Steering Committee for National Voluntary Consensus Standards for Cardiac Surgery	2004

### **Other National Quality Improvement Organization Leadership Roles**

Ambulatory Quality Alliance (AQA) Steering Committee	September 2005- Jan 2008
Quality Alliance Steering Committee	August 2006- Jan 2008
Workforce on Infrastructure for Expansion of AQA pilots	Sept 2006- Jan 2008
Quality Alliance Measure Implementation Strategy Workgroup	Sept 2007 – Jan 2008
Surgical Quality Alliance (SQA)	September 2005- Jan 2008
AQA Pilot Program Steering Committee	December 2005-June 2006
Principal, Hospital Quality Alliance (representing NQF)	December 2005

### **TEACHING EXPERIENCE**

Eastern Virginia Medical School Surgical Clerkship Lectures and Resident Teaching	1990- Present
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### **HONORS:**

Graduation with Highest Honors, University of Illinois - 1977
The Bell Scholar for Most Outstanding Graduating Senior in the Department of Engineering, University of Illinois - 1977
Phi Kappa Phi Academic Honor Society University of Illinois - 1979
Alpha Omega Alpha, University of Chicago School of Medicine - 1981
Who's Who in Medicine - 1991
Who's Who in Rising Young Americans – 1991

## **AWARDS**

Distinguished Service Award, Society of Thoracic Surgeons, 2008

Sentara Norfolk General Hospital Professionalism Award for Nurses and Physicians. April 2004.

## **Visiting Professor/Lecturer**

Thomas B Ferguson Lecturer, Society of Thoracic Surgeons 46<sup>th</sup> Annual meeting. January, 2010.

Henry Swan Visiting Professor. University of Colorado Denver. February, 2010.

The Kaiser Lecture. St Louis University. November 2008

## **MEMBERSHIP IN PROFESSIONAL SOCIETIES:**

Society of Thoracic Surgeons 1991-present

International Society of Heart and Lung Transplantation 1990-present

American Association for Thoracic Surgeons 2009-present

Fellow – American College of Surgeons 1995-2004

Phi Kappa Phi Honor Society

Alpha Omega Alpha Medical Society

## **RESEARCH ACTIVITIES:**

Scientific Director, Sentara Cardiovascular Research Institute 2005- Jan 2008  
Projects: 90 ongoing studies ranging from NIH trials to Industry Jan 2009 - Present  
sponsored clinical trials to Sentara designed unique clinical trials

University of Chicago School of Medicine  
Sponsor: David B. Skinner, M.D.  
Chairman, Department of Surgery  
Project: Electrical Stimulation of Cellular Synthesis 1981

University of Illinois, Chicago  
Sponsor: Professor I. Miller  
Chairman, Department of Engineering  
Project: Artificial Membranes/Red Blood Cells 1977

### **Principal Investigator (Clinical Trials):**

A Prospective, Randomized, Controlled, Un-blinded, Multi-Center Clinical Trial to Evaluate the HeartWare Ventricular Assist System for Destination Therapy of Advanced heart failure. Protocol HW-004. October 2010 – present.

Evaluation of XIENCE PRIME or XIENCE V versus Coronary Artery Bypass Surgery for Effectiveness of Left Main revascularization: EXCEL Clinical Trial. Protocol 10-389. Sept 2010 to present (trial revisions at FDA ongoing).

CONSERV-1 (Clinical Outcomes and Safety Trial to Investigate Eccallantide's Effect on Reducing Surgical Blood Loss Volume) A Phase 2 Randomized Placebo Controlled Dose ranging Study in Subjects Exposed to CardioPulmonary Bypass During Primary Coronary Artery Bypass Graft Surgery. Feb 2009 – April 2010 .

Thoratec Corporation Heartmate II LVAS Pivotal Study Protocol. June 2005 to feb 2008.

Surgical Treatment for Ischemic Heart Failure (STITCH) Trial. Sept 2002-present

Intermacs: An Interagency Registry for Mechanically Assisted Circulatory Support. Feb 2006 – Present

ABLATE Trial (AtriCure Synergy Bipolar RF Energy Lesions for Permanent Atrial Fibrillation Treatment During Concomitant On Pump Endo/Epicardial Cardiac surgery). Protocol# CP 2007-1. Nov 2007- Feb 2008

Contemporary Analysis of Peri-operative Cardiovascular Surgical Care (CAPS Care). March 2006- March 2007.

A Randomized, Double-Blind, Placebo-Controlled, Multi-center Study to Evaluate the Cardioprotective Effects of MC-1 in Patients Undergoing High Risk Coronary Artery Bypass Graft (CABG) Surgery (MEND-CABG II). Protocol Number: 06004, October 2006- Jan 2008.

AtriCure, Inc., "A prospective, multi-center study with case matched controls to evaluate the safety and efficacy of the AtriCure Bipolar System for the treatment of Continuous Atrial Fibrillation as adjunct therapy to elective open heart surgery". Protocol Number: CP2003-01, May 2005-. Jan 2008

RESTORE-MV Clinical Trial: Randomized Evaluation of a Surgical Treatment for Off-Pump Repair of the Mitral Valve. A prospective randomized multi-center trial comparing treatment of functional mitral regurgitation with Coapsys to open heart surgical repair of the mitral valve. October 2005 to march 2007.

A Phase III Study of Angiomax® (bivalirudin) in Patients with HIT/HITTS Type II, Undergoing Cardiac Surgery on Cardiopulmonary Bypass (CHOOSE-ON). Protocol No. TMC-BIV-02-03, September 2004- Jan 2008.

A Multicenter, Randomized, Double-Blind, Parallel-group, Placebo-Controlled Study of 2mg/kg Bolus Plus 24-hour 0.05mg/kg/hr Infusion of Pexelizumab in Patients Undergoing Coronary Artery Bypass grafting with Cardiopulmonary Bypass (PRIMO-CABG II, Pexelizumab for the Reduction in Infarction and Mortality in Coronary Artery Bypass Graft Surgery) Protocol 2003141, June 2004-Jan 2008.

A Phase III Randomized, Parallel, Double-Blind, Multi-Center, Placebo Controlled Study of the Effect of Pexelizumab on All-Cause Mortality and Myocardial Infarction in Patients Undergoing Coronary Artery Bypass Graft (CABG) Surgery With Cardiopulmonary Bypass.  
Alexion:Proctor:Gamble Pharmaceuticals.  
Start: May- 2002-2004.

Phase II Randomized, Double-Blind, Placebo-Controlled Study of the Effects of h5G1.1-scFv on Total Mortality and Adverse Cardiovascular Ischemic Outcomes in Patients Undergoing Cardiopulmonary Bypass.  
Alexion:Proctor:Gamble Pharmaceuticals.  
Start: December through August 2000-2002.

A Multi-center, Randomized, Double-Blind, Placebo-Controlled Group Comparison Study to Investigate the Efficacy and Safety of Aprotinin on Graft Patency in Patients Undergoing Primary Cardiopulmonary Bypass Surgery for Myocardial Revascularization.  
Start: April 1994 thru September 1995

A Multi-center, Randomized, Double Blind, Placebo-Controlled Group Comparison Study to Investigate the Safety and Efficacy of Aprotinin in Reducing Blood Loss and Transfusion Requirements in Patients Undergoing Primary Cardiopulmonary Bypass Surgery for Myocardial Revascularization.

Start: March 1993 thru February 1994.

Release from Hospital for Cardiac Transplant Candidates requiring Interim Support Using the Novacor Left Ventricular Assist System (LVAS) with Portable Controller and Battery.

Start: March 1995 thru 1998.

Sentara Norfolk General Hospital

Use of Aprotinin during Insertion of Novacor LVAS. 1993-1995.

Novacor 100 Left Ventricular Assist System (LVAS) Clinical Trial for Heart Transplant Patients. 1991-1996.

Sub- Investigator (Clinical Trials):

Prospective Study of the Outcomes of Elderly Patients Referred for Coronary Artery Bypass, Aortic Valve Replacement, or Coronary Artery Bypass and Aortic Valve Replacement. Sentara Cardiovascular research Institute. Sentara Heart Hospital. May 2009 – present.

Ablate AF Registry Trial (Atricure Synergy Bipolar RF Energy Lesions for Non-Paroxysmal Forms of Atrial Fibrillation Treatment during Concomitant On- Pump Endo/Epicardial Cardiac Surgery) Protocol CP2009-2. 2009 to present.

Post Approval Study of the St Jude Medical Biocor and Biocor Supravalve. Protocol 0505. Feb 2009- present.

ABLATE Trial (AtriCure Synergy Bipolar RF Energy Lesions for Permanent Atrial Fibrillation Treatment During Concomitant On Pump Endo/Epicardial Cardiac surgery). Protocol# CP 2007-1. Feb 2008- present

On-X® Valve Using Low Dose Anticoagulation (PROACT). May 2006- Jan 2008 and Feb 2009 – present

Surgical Treatment for Ischemic Heart Failure (STICH) Trial. September 2002-Present.

RED-CABG The Effect of AcadeFINE on Clinically Significant Adverse Cardiovascular and Cerebrovascular events in High Risk Subjects Undergoing Coronary Artery Bypass graft Surgery Using Cardiopulmonary Bypass. Protocol # P05633. RED-CABG Trial (Reduction in Cardiovascular Events by AcadeFINE in Subjects Undergoing CABG. May, 2009- Sept 2010.

Thoratec Corporation Heartmate II LVAS Pivotal Study Protocol. Feb 2009- 2010.

SYNTAX - SYnergy Between PCI with TAXUS and Cardiac Surgery. Boston Scientific. December 2005- Jan 2008.

MEND-CABG – MCI To Eliminate Necrosis and Damage in CABG A RANDOMIZED, DOUBLE-Blind, placebo-CONTROLLED, DOSE-ranging, multi-CENTER STUDY TO EVALUATE THE CARDIOVASCULAR EFFECTS ON MC-1 IN PATIENTS UNDERGOING HIGH-risk coronary Artery bypass graft (CABG) SURGERY. May 2004 Jan 2008.-

TR<sup>3</sup>ISVR Multi-Center Clinical Registry. March 2004- Jan 2008.

Survey of Sizing and Implantation Techniques used with the Carbomedics™ Prosthetic Heart Valve. VISS.NRG. January 2004-2006.

Home Anticoagulation Study of On-X Valve Morbid Events (HOME). January 2004-Jan 2008.

CardioGenesis Registry Study Protocol for Using TMR Holmium: YAG Laser System. Nov. 2003-2006.

Thromboembolic Complications-Randomized Trial of Previous and Current Generation Mechanical Prostheses (TRC-MP). October 2003.

Clinical Investigation of the Mitroflow Synergy™ PC Bioprosthesis for Aortic Valve Replacement. SYNPCR-01. May 2003- Jan 2008.

A Phase III Study of Angiomax® (bivalirudin) in Patients with HIT/HITTS Type II Undergoing Off-Pump Coronary Artery Bypass (OP CAB) Surgery. Protocol No. TMC-BIV-02-02. June 2003.

Clinical Protocol for a Double-Blind Multicenter Study of the Safety and Efficacy of Paracoxib Followed by Valdecoxib Compared to Placebo for Treatment of Post-Surgical Pain in Patients Who Have Coronary Bypass Graft via Median Sternotomy. Protocol No.: PARA-0505-071. September 2002.

A Phase III, Multi-Center Randomized, Double-Blind, Placebo-Controlled Trial of the Ex-Vivo Treatment with CGT003 of Coronary Vein Grafts in Patients Undergoing Coronary Artery Bypass Graft Procedures. Protocol #CGT003-04. July 2002.

A Double-blind Placebo Controlled Study of Adults Undergoing Non-urgent Coronary Artery Bypass Graft Surgery to Assess Effects of Galileo GLI 218 on Post-operative Cognitive Dysfunction. April 2002.

The EXPEDITION Trial (Na<sup>+</sup>/H<sup>+</sup> Exchange Inhibition to Prevent Coronary Events in Acute Cardiac Conditions) A double-blind, placebo-controlled, multinational trial to investigate the effect of IV treatment with the Na<sup>+</sup>/H<sup>+</sup> exchange inhibitor cariporide (HOE642) on all-cause mortality and non-fatal myocardial infarction in patients at risk of myocardial necrosis during and after coronary artery bypass graft (CABG) surgery - HOE642A/3002.. March 2001-2004.

A Multi-Center Clinic Study of the Safety of the Embol-X Intraaortic Filtration System in Patients Undergoing Coronary Artery Bypass Grafting (CABG) or Valve Repair/Replacement Surgery Procedure Requiring Cardiopulmonary Bypass – Randomized Study. April 2001-2004

A Phase III, Randomized, Double-Blind, Controlled Clinical Trial to evaluate the Efficacy and Safety of Hemolink (o-raffinose cross-linked human hemoglobin) in Patients Undergoing Primary Coronary Artery Bypass Grafting Surgery January 2001-2004.

A Multi-Center Clinical Study of the Safety of the Embol-X Intraaortic Filtration System in Patients Undergoing Coronary Artery Bypass Grafting (CABG) or Valve Repair/Replacement Surgery Procedures Requiring Cardiopulmonary Bypass- Randomized Study/ Non-Randomized Study. July 7, 2000.

Coronary Artery Bypass Endarterectomy Staging Trial (CABEST)  
Start: October 2, 2000 - National Institutes of Health Pilot Trial.

A Multi-center, Randomized, Double-Blind, Placebo-Controlled Group Comparison Study to Investigate the Efficacy and Safety of Aprotinin on Graft Patency in Patients Undergoing Primary Cardiopulmonary Bypass Surgery for Myocardial Revascularization.  
Start: April 1994 thru September 1995

A Multi-center, Randomized, Double Blind, Placebo-Controlled Group Comparison Study to Investigate the Safety and Efficacy of Aprotinin in Reducing Blood Loss and Transfusion Requirements in Patients Undergoing Primary Cardiopulmonary Bypass Surgery for Myocardial Revascularization.

Start: March 1993 thru February 1994.

Possis Perma-Flow Coronary Graft Clinical Study.

Start: September 1993- 1996.

Carpentier-Edwards Physio Annuloplasty Ring (Model 4450). Study # 93-2. (Post-Market Surveillance Data Collection).

Start: June 1994 thru 2000.

Secondary Prospective Study for the Evaluation of the Safety of Cryopreserved Human Allograft Heart Valves.

Start: April 1993 thru November 1994.

An Observational, Prospective Study of the Toronto SPV Valve in Patients requiring Aortic Valve Replacement.

Use of Nashville Rabbit Anti-Thymocyte Serum (N/R-ATS) to Delay Onset of Rejection in Thoracic Organ Recipients.

Use of Rabbit Anti-Human Thymocyte Globulin for Prophylaxis and Treatment of Allograft Rejection. September 1990 thru 1996.

A Multicenter, Randomized Controlled Clinical Trial to Study the Effect of Prophylactic Use of the Automatic Implantable Cardioverter- Defibrillator on Survival in Patients who are having Coronary Artery Bypass Grafting Surgery and have Left Ventricular Dysfunction and Positive Signal Averaged Electrocardiograms. (Survival Study).

Start: January 1992 thru 1996.

Changes in Monophasic and Biphasic Defibrillator Thresholds Over Time in Epicardial and Non-thoracotomy Lead System.

The Use of Inhaled Nitric Oxide for the Treatment of Pulmonary Hypertension.

Start: March 1995 thru 2000.

#### **INVITED JOURNAL REVIEWER:**

Asian Cardiovascular & Thoracic Annals	1998 - Jan 2008
Journal of Heart and Lung Transplantation	1998 - Jan 2008
Clinical Drug Investigation	1999 - Jan 2008
Journal of Thoracic and Cardiovascular Surgery	2005 - Jan 2008
Annals of Thoracic Surgery	2006 - Jan 2008
Journal of Thoracic and Cardiovascular Surgery	Feb 2008 - Present
Annals of Thoracic Surgery	Feb 2008 – Present

#### **INVITED LECTURES/PRESENTATIONS**

Lung Transplantation. Tri-County Medical Society. Suffolk, VA. February 26, 1991.

Left Ventricular Assist Devices and Pulmonary Transplantation. American Heart Association - Virginia Affiliate - Tidewater Counsel. Cardiology Conference. April 13, 1991.

Lung Transplantation. Virginia Medical Society. Williamsburg, VA. 1991.

Heart Transplantation. National Association of Surgical Assistants. New Orleans, Louisiana.

October 24, 1992.

Video Assisted Thoracoscopic Surgery. Virginia Medical Society, Norfolk, Virginia, November 1992

Video Assisted Thoracoscopic Surgery. Virginia Surgical Society, Williamsburg, Virginia, May 1993

Lung Transplantation. Lion's Club, Norfolk, VA. March 1993

Baxter Novacor LVAS Principal Investigators Meeting, 1994.  
Surgical Aspects of Novacor Implantation.

Critical Concepts '97 Cardiovascular Pulmonary Symposium.  
Left Ventricular Assist Devices. March 3, 1997.

Left Ventricular Assist Devices. Critical Concepts '97. Cardiovascular/Pulmonary Symposium. Norfolk, Virginia. March 3, 1997.

Novacor LVAS. Advanced Techniques in Cardiovascular Surgery. Institute Jantung Negara. Lumpur, Malaysia. March 18, 1997.

Risk Management in CABG: Significant Surgical Considerations. New Orleans, LA. January 24, 1998.

Analysis of Coronary Graft Patency after Aprotinin Use: The IMAGE Trial. AATS Annual Meeting, June, 1998.

Left Ventricular Assist Devices – Bridge to Transplant or Bridge to the Future. Heart Failure: Beyond Medical Therapy, Sentara Healthcare, Norfolk, Virginia 2001.

Surgical Options in Coronary Revascularization, Eastern Virginia Medical School Cardiology Symposium, March 2001

Surgical Treatment of Heart Failure, Eastern Virginia Medical School, Heart Failure Symposium, April 2002.

The Modernization of Medicare, Cincinnati Cardiovascular Society, April 2001.

The Virginia Cardiac Surgery Initiative: From Quality Improvement to Cost Containment. South Atlantic Cardiovascular Society, August 2002.

The Virginia Cardiac Surgery Quality Initiative; Policy, Payment and Reform. JFK School of Government, Harvard University, March 2004.

Sentara Heart Night Program, Cardiac Surgery 2004, Sentara Norfolk General Hospital, May 5, 2004.

The Virginia Cardiac Surgery CMS Demonstration Project: Statewide Quality Focused Global Pricing for Medicare Beneficiaries. The Society of Thoracic Surgeons, Tampa, FL, January 26, 2005.

Quality Measurement, Improvement, and Efficiency, The Society of Thoracic Surgeons, Legislative Advocacy Workshop, Washington, DC, September 14, 2005.

Health Policy, Payment Reform, and Public Reporting: Update on the Virginia Cardiac Surgery Demonstration Project, National Quality Forum and Pay for Performance. Massachusetts General Hospital, Thoracic Surgery Grand Rounds, September 29, 2005.

Pay for Performance, Advances in Quality and Outcomes: An STS National Database Event, General Session, The Society of Thoracic Surgeons, September 30, 2005.

Models and Measures in Paying for Performance in Cardiac Surgery in Virginia, Advances in Quality and Outcomes: An STS National Database Event, General Session, The Society of Thoracic Surgeons, September 30, 2005.

The Virginia Cardiac Surgery CMS Demonstration Project and Pay for Performance, Cardiac Grand Rounds, St. Joseph's Hospital, Minneapolis, MN, November 3, 2005.

Pay for Performance, Myocor Principal Investigators Meeting, Dallas, TX, November 13, 2005.

Pay For Performance: The Additive Value of a Regional Collaboration, Minnesota Society of Thoracic Surgery Meeting, Minneapolis, MN, January 26, 2006.

Pay For Performance, The Society of Thoracic Surgery 42<sup>nd</sup> Annual Meeting, Chicago, IL, January 31, 2006.

Quality Measurement, Improvement and Efficiency, AdvaMed Conference, Washington DC, February 15, 2006.

Gainsharing / QualitySharing. Medical Technology Leadership Forum, Annual Capitol Forum, Washington DC, February 16, 2006.

Perspectives on Cardiac Quality Improvement and Reporting: Provider/ National Quality Forum Perspective, Partners Cardiac Leadership Summit, Second Annual Event, March 2, 2006.

Pay for Performance and Payment Reform: The VCSQI Experience. VHA Cardiovascular Taskforce Meeting. Washington, DC. Sept 6, 2007.

Experiences with Combining Clinical and Financial Data: The VCSQI. Fall Distinctively Blue Conference, BCBS Association Annual Meeting. Orlando, FL. Sept 16, 2007.

Improving the Quality of care through Regional Collaborations. Town hall Session: Visionary Leadership Inspires Transformation. AHRQ 2007 Annual Conference: Improving Healthcare, Improving Lives. Bethesda, MD. Sept 27, 2007.

Physician Quality Reporting Initiative. Medical Group Management Association Annual Meeting. Philadelphia, PA. October 28, 2007.

The Society of Thoracic Surgeons New Quality Initiatives. STS Advancing Quality Outcomes Annual Conference. Minneapolis, MN. Nov 1, 2007.

Value based Purchasing. The American Anesthesiologists 2008 Legislative Conference. Washington D.C. May 5, 2008

LTCH Quality Measurement and Payment Policy. The Acute Long Term Care Hospital Association 2008 Spring Conference. Baltimore, MD. May 15, 2008

Hospital Acquired Conditions. The Federation of American Hospitals 2008 Policy Conference. Baltimore, MD. June 16, 2008

Value Based Purchasing. AdvaMed 2008, The Future of Innovation in Cardiovascular Disease – Washington DC. September 22, 2008.

Value Driven Healthcare. St Louis University Kaiser Lecture. St Louis, MO. Nov 19, 2008.

New Technology and Advances in Health Care: Can the United States Afford It? STS/AATS Tech Con 2009. Key Note Speaker. January, 2009.

Value Based Purchasing in the Traditional Medicare Fee-for-Service Program. The National Pay

for Performance Summit. Key Note Speaker. San Francisco, CA. March 9, 2009.

Healthcare Delivery Reform: The Role of Value Based Purchasing. Florida Society of Thoracic and Cardiovascular Surgeons. July 11, 2009.

Reflections From the Hill: Expectations vs. Reality. South Atlantic Cardiovascular Society Annual Meeting. August 7, 2009.

Healthcare Financing and Payment Reform: 2009. LIVE Quality Forum. Chicago, IL. Sept 25, 2009.

Medicare Financing and Reform: 2009. Pennsylvania Association for Thoracic Surgery Annual meeting. Florida. Oct 10, 2009.

Medicare Financing and reform: 2009. Sentara Dept of Cardiac Services Cath Conference. Norfolk, VA. Oct 20, 2009.

Medicare: An Insider's Perspective. Sentara Legacy Society Forum. Oct 20, 2009

Medicare Financing and Reform: Value Driven healthcare. Atlantic Health Physician Quality Meeting. New Jersey. Oct 22, 2009

Healthcare Delivery Reform: The Role of Value Based Purchasing. Alachua County Medical Society Dinner. Gainesville, FLA. January 12, 2010.

Healthcare Delivery Reform: The Role of Value Based Purchasing. University of Florida Gainesville Surgical Grand Rounds. January 13, 2010.

Resource Use and Quality Indicators for Cardiothoracic Surgery in 2010. STS Practice Management Summit. STS 46<sup>th</sup> Annual Meeting. Fort Lauderdale, FLA. January 24, 2010

Transforming the U.S. Healthcare Delivery System: Moving from Volume to Value. Thomas B. Ferguson Lecture. Society of Thoracic Surgeons 46<sup>th</sup> Annual meeting. Fort Lauderdale, FLA. January 26, 2010.

Healthcare Policy and Performance Measurement: Your Future and How You can Influence It. Department of Surgery Grand Rounds, University Of Colorado Denver. February 8, 2010.

Transforming the U.S. Healthcare delivery System. Administrative Conference, University of Colorado Denver. February 8, 2010.

Medicare: An Insider's Perspective: Experiences as Director of the Center for Medicare Management. Henry Swan Lecture. Denver Academy of Surgery. February 8, 2010.

Healthcare Policy and Performance Measurement: Your Future and How You can Influence It. Department of Surgery Grand Rounds, St Joseph Hospital. Denver, CO. February 9, 2010.

How Value based Purchasing Will Influence the Choice of Emerging Technologies. Florida Valve 2010. Orlando, FLA. March 12, 2010.

Transforming the U.S. Healthcare Delivery System: Moving from Volume to Value. University of Southern California Leadership Summit. July 19, 2010.

The U.S. Health Care System: Moving from Volume to Value. The Third Symposium on the Future of Heart Health. St Boniface Research Centre. Winnipeg, Manitoba. Canada. September 25<sup>th</sup>, 2010.

Impact of the Patient Protection and Affordable Care Act on Providers. Cardiovascular-Critical Care 2010. Washington, DC. October 1, 2010

Transforming the U.S. Healthcare Payment and Delivery Systems: Moving from Volume to Value.

Cardiovascular Quality Summit. Stanford University. October 15, 2010.

Inside CMS: The Politics of Healthcare. Problems and Outcomes in Cardiovascular and Thoracic Surgery 2010. Northeast Cardiothoracic Surgical Society 16<sup>th</sup> Annual Meeting. Purity Spring Convention center. East Madison, NH. October 28, 2010.

The Virginia Cardiac Surgery Quality Initiative. Massachusetts General Hospital Cardiac Surgery Grand Rounds. Boston, MA. December 2, 2010

Paying for New Technology in the Current Healthcare Environment. Dallas Leipzig International Valve 2010. Dallas, Tx. Dec 10, 2010.

Reforming Healthcare in the U.S.: Potential Impact for CT Surgeons. STS Practice Management Summit. STS Annual Meeting. San Diego, CA. January 30, 2011.

## **CONGRESSIONAL TESTIMONIES**

Measuring Physician Quality and Efficiency of Care for Medicare Beneficiaries, House Committee on Ways and Means, Health Subcommittee, March 15, 2005.

Gainsharing, House Committee on Ways and Means, Health Subcommittee, October 7, 2005.

Medicare Physician Payment: How to Build a Payment System that Provides Quality, Efficient Care for Medicare beneficiaries, House Committee on Energy and Commerce, Health Subcommittee, July 27, 2006

## **GOVERNMENT/FEDERAL AGENCY PRESENTATIONS**

The STS Database and Experience with Pay for Performance: Specialty Physicians Respond to MedPAC Report to Congress, Congressional Luncheon Briefing, United States Capitol, LBJ Room, Washington, DC, February 28, 2005.

Quality Measurement, Improvement, and Efficiency, Institute of Medicine, September 1, 20

## BIBLIOGRAPHY

**Rich, JB**, Akins CW, Daggett Wm Jr.: Right ventricular failure following cardiopulmonary bypass: inadequate myocardial protection or incomplete revascularization? *Ann Thorac Surg* 45(6):693-4, 1988.

Lee RC, **Rich JB**, Kelly KM, Weiman DS, Matthew MB: A comparison of in vitro cellular responses in mechanical and electrical stimulation. *Am. Surg.* 48(11):567-74, 1982.

Marshall SE, Lewiston NJ, Kramer MR, Sibley RK, Berry G, **Rich JB**, Theodore J, Starnes VA: Prospective Analysis of serial pulmonary function studies and transbronchial biopsies in single lung transplant recipients. *Transplant Proc.* 1991 Feb; 23; 1217-19 (In press).

**Rich JB**, Crisler C, Barnhart GR, Szentpetery S and Baker LB: When All Else Fails. The Novacor Left Ventricular Assist System. *Sentara Norfolk General Hospital Forum* Vol 9(3) Fall 1994.

Barnhart GB, Szentpetery S, Baker LB and **Rich JB**: Cardiac Transplantation: Current State of the Art. *Sentara Norfolk General Hospital Forum* Vol 9(3) Fall 1994.

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