

# *Imagine the Possibilities ...*



The JMU-RMH Collaborative 2007-2012  
Five Years of Fostering  
Innovation Together





## *Mission*

To create a climate that fosters innovation together

## *Goals*

- Facilitate collaborative initiatives
  - Research and Scholarship
  - Clinical care—evidence-based practice
  - Education
  - Solution-driven initiatives
- Enhance internal and external communication

col·lab·o·rate [ kə lábbə ràyt ]: 1) to work together, especially in some literary, artistic or scientific undertaking. 2) to work with another person or group in order to achieve something.



# A Message from the Interim Provost, JMU

Fellow JMU and RMH Collaborators:

It is truly a privilege to write this letter on the 5<sup>th</sup> anniversary of the JMU-RMH Collaborative. It seems like only yesterday when we took up the challenge of doing something truly unique to push the limits of traditional collaboration between a hospital and a university. And the list of activities and efforts coming from this collaboration has been amazing and gratifying.

Collaboration between James Madison University and Rockingham Memorial Hospital surely goes back to the founding of these two institutions and their mutual interest in and support of the welfare of the greater community. Some of the earliest educational collaborations likely developed as Rockingham Memorial Hospital's Registered Nurse training program transitioned to an undergraduate Bachelor of Science in Nursing program at James Madison University. Collaborative educational efforts have continued to grow with Physician Assistants, Occupational Therapists, Speech Pathologists, Psychologists, Health Service Administration, Dietetics, Kinesiology and other health related programs over the years.

Most recently within the JMU-RMH Collaborative it was our mutual interest in preparing highly qualified nursing personnel steeped in evidence-based practice, teaming and leadership skills that lead to the establishment of a dedicated educational unit at the hospital. Certainly working together to address the health needs of our community and the changing world of providing health care brings us in natural alignment for collaboration in the educational endeavor, both in pre-service and professional development/graduate education.

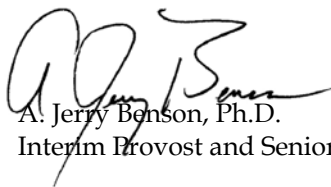
But five years ago we challenged ourselves to go beyond the traditional educational collaborations. We challenged ourselves to develop a true partnership--a collaborative where we work together to look critically at our goals and strategic plans to see how we could engage to advance both institutions and better serve our community and society at large. A true systemic approach where we value and promote collaborative planning, synergies of ideas and resources, and mutually beneficial activities that challenge and enable all parties to be even better. This effort has been supported by the highest administrative levels of both institutions and has been acknowledged as a distinguishing feature for RMH and a valuable partnership by Sentara.

The range of collaborative projects has been exciting, running the gamut from educational partnerships where faculty, practicing professionals and students are all learning from each other; to research in biomedical, biotechnology, bioengineering, evidenced-based practice and health education; to sustainable environmental efforts; to health administration and enhanced services; to the development of new lines of services to citizens of our region that incorporate education for future and existing practitioners and research. But the most rewarding "win" to me has been the development of a partnership where ideas bud, are picked and nurtured and begin to blossom as part of the natural operation of our two institutions--this is the real definition of collaborative. And we continue to do this by truly sharing our expertise and resources--not always looking for or receiving new funding.

None of this could have happened without the belief, dedication and hard work of a number of colleagues far too numerous to list here. From a dedicated core of individuals who stimulated our thinking and nurtured our ideas to the place now where there is spontaneous collaboration among our greater family has been an amazing and rewarding journey. We still have new heights to achieve and new paths to walk, but we have established the foundation on which to do really exceptional activities. Thank you for all that you have done and continue to do to advance the missions of James Madison University and Rockingham Memorial Hospital-Sentara, and to serve all our constituencies.

Congratulations on five great years!

Sincerely,



A. Jerry Benson, Ph.D.

Interim Provost and Senior Vice President



# A Message from the President, RMH

Fellow JMU and RMH Collaborators:

What a difference five years makes. In 2007, when the JMU-RMH Collaborative was launched, RMH was in the midst of constructing a new hospital and developing a health campus on the outskirts of Harrisonburg. Also, that was my first year as President and CEO of Rockingham Memorial Hospital.

Somehow, in the midst of all that was happening that year, Jerry Benson and I began to have conversations about the synergy between our two institutions and all the wonderful collaborations we had enjoyed through the years. The first that I know of was the school of nursing program.

We both realized that the possibilities for collaboration were endless and that working together, the good we could do for our community was boundless. Working together more deliberately and planfully, we believed we would be able to create an environment where even more and greater collaboration could flourish.

It is gratifying to look back on the past five years and see that indeed, our vision has come to fruition. More than 50 JMU-RMH collaborative projects have taken flight over the past five years. This report highlights just five of the many projects that have been born through the collaborative and taken flight.



The Scottish historian and essayist said of collaboration, “The lightning spark of [thought](#) generated in the solitary [mind](#) awakens its likeness in another [mind](#).”

“When spider webs unite, they can tie up a lion.” *Ethiopian Proverb*

Harrisonburg Community Health Center  
Joint Institutional Review Board  
Research Rounds  
Wetlands Project

Congratulations to all who have helped to further the efforts of the collaborative and to all who have worked on collaborative projects. I look forward to what our institutions and our people can perceive and achieve over the next five years.

Sincerely,

Jim Krauss  
RMH President

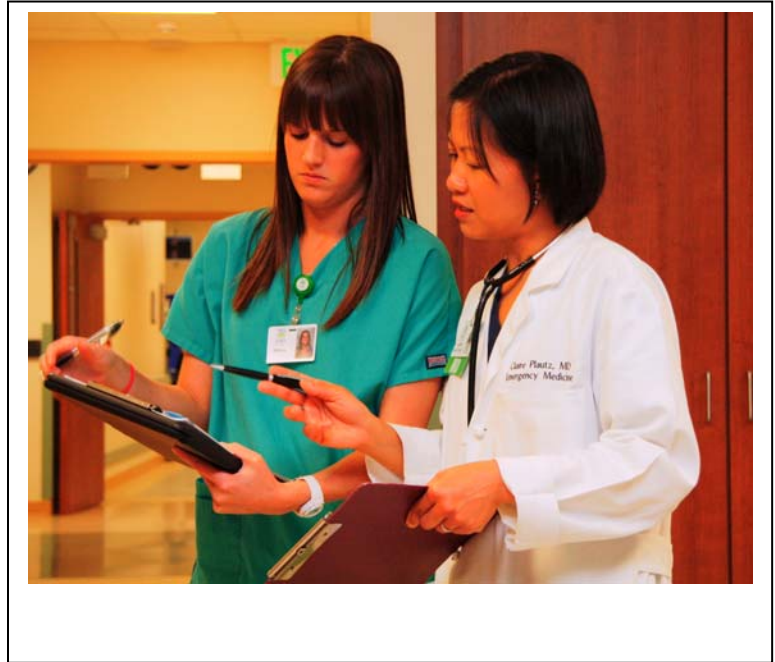


## Clinical

# Scribes Enhance Patient Care, Efficiency in ED Through Clinical Documentation

In October 2010, emergency physician Claire Plautz, MD, launched the RMH Emergency Department scribe program, in conjunction with JMU, to enhance patient care and improve physician efficiency.

Scribes are pre-med or allied health students from James Madison University as well as Eastern Mennonite University who observe and provide documentation for ED physicians as they provide patient care. At JMU, Dr. Plautz worked with Dr. Sharon Babcock, associate biology professor, associate director, Institute for Innovation in Health and Human Services, and director, Pre-professional Health Programs, to recruit students to the program.



The scribes accompany the physician as he or she provides patient care and performs clinical activities. The scribes document the physician-patient interaction, creating a thorough and accurate account of the patient's ED visit. The scribes' charts are clearly noted and verified before they become a permanent entry in the patient's medical record.

As part of the learning process, Dr. Plautz gives the scribes feedback on their notation, explains interesting physical exam or X-ray findings, and meets with them once a month to review the program.

The scribes earn a modest stipend, but the true value of the program is the opportunity to be immersed in the clinical environment and to gain a realistic view of the medical profession. Scribes undergo extensive training, learning which historical elements are significant and studying aspects of the medical chart, medical terminology and coding. They also learn about patient confidentiality and professionalism.

Benefits for ED physicians and staff include increased timeliness of documentation, more accurate billing, and a positive impact on the patient-doctor interaction. Scribes help free physicians from the task of documentation, allowing them to focus more closely on the patient and maintain eye contact without having to look down or take notes. Recognizing the value of scribes, several other RMH ED physicians are also now using them.

Scribes commit to at least one semester, though many have stayed longer to gain more experience. The program has quickly become competitive, and Dr. Plautz is having to turn away outstanding applicants.

**Caption ED physician Claire Plautz, MD, collaborates with JMU student scribe Erin Albury.**

## Solution-Driven Initiatives

### Preserving Wetlands on the New RMH Health Campus

Nestled into the vast 254-acre RMH health campus is a tiny, 5-7 acre “fertile crescent” of land known as the wetlands. This grassy, marshy section of land sits at the headwaters of Pleasant Run, a tributary to the Chesapeake Bay.

In 2009, as a collaborative endeavor between JMU and RMH, James Madison University professor Wayne Teel, PhD, and students in his “Sustainability, An Ecological Perspective” class began to look at how to manage this land on the new RMH property.

Historically, wetlands have been regarded as wastelands and suffered from large-scale efforts to drain them, says Teel. However, scientists have realized that these marshlands serve a valuable role in flood control, water filtration and providing habitats for certain plant and wildlife species. As RMH sought to use environmentally safe, sustainable practices during the construction of its new hospital, preserving and enhancing this piece of land was particularly important.

“We wanted to ensure that RMH construction did not disturb the natural habitat of the wetlands,” says Dennis Coffman, director, RMH Facilities Planning and Development. “We also desired to protect and preserve the wetlands for the future.”

Pleasant Run is considered navigable water, and so is classified as a federal stream. Pleasant Run was already recognized and listed as an “impaired” stream. Therefore, RMH paid particular attention to the quality of water being released into the wetland on its property, because it would eventually trickle downstream into Pleasant Run.

A small stream runs through the wetlands, situated behind the new hospital building. The construction of parking lots on the site dramatically increased the amount of storm water runoff making its way into this stream. Rather than have a torrent of water cutting through the land, eroding it and releasing pollutants into the watershed, the college students devised a plan to create a slowly meandering stream. This helps prevent polluted water from being released into Pleasant Run.

A wetland’s built-in filtration system cleans the earth’s water before it reaches fish and other organisms, says Teel, JMU professor of integrated science and technology. “Water that comes off impervious surfaces, like parking lots, picks up particles that aren’t healthy for downstream life,” he explains. “We tried to manipulate the water so it flowed correctly offsite. The most important thing was managing the pulse of water to reduce flooding impact and prevent erosion. We wanted to slow it down so the water was released in the stream as if there were no impervious surfaces nearby. We also wanted to beautify the area.”

JMU also established a monitoring station near Port Republic Road and watched the effect the RMH construction project had on the stream. With one detention pond already in place on site to help filter runoff from the construction site, RMH was releasing cleaner water into the stream than before construction began, when the land was under farm use, Coffman says. This monitoring station is an ongoing part of the JMU-RMH collaboration effort.

JMU students also worked with RMH to enhance the wetlands to provide an area replete with native plant species and bird life. To further enhance the wetlands habitat for birds, in the summer of 2011, 16-year-old Andrew Krauss of Harrisonburg built and placed nesting houses on the site as his Eagle Scout project. The area may someday have walkways where people may observe nature in the wetlands.



**Caption: A nesting house for native birds stands sentinel over the wetlands on RMH's new health campus.**



## Education

# Working Together to Provide Stroke Education and Improve Stroke Care in Our Community

Stroke is the No. 4 cause of death and a leading cause of disability in the United States. Education can lead to quick action to reduce or even prevent the damage caused by stroke.

In 2009, RMH began the journey toward achieving primary stroke center certification by the Joint Commission on Accreditation of Healthcare Organizations. This certification ensures that a healthcare facility is providing exceptional, evidenced-based care for patients in their community who experience a stroke.



One of the requirements for obtaining the certification was staff and community education. RMH clinical educator Cristy Long, R.N., along with two other RMH clinical educators, was assigned the job of developing the curriculum to educate the nursing staff at RMH on strokes. Long's nursing unit also was selected to become the Certified Stroke Unit at RMH.

As part of Long's work toward her master's degree in clinical education from JMU, she engaged her expert contacts at JMU to help develop the educational program. In three of her classes in 2010, she worked on different aspects of stroke education. In Dr. Linda Hulton's class, she performed evidenced-based research regarding the need for a stroke center. In Dr. Patty Hale's class, she developed the needs assessment and class curriculum to educate staff, and in Dr. Judith Rocchiccioli's class, she developed the community education program, which she later used as her practicum.

"My classes and my instructors were very valuable resources," Long said.

To date, over 250 RMH nurses have become NIH Stroke Certified. Long and other nurses also performed education in the community on the risk factors of stroke, signs and symptoms of stroke and the importance of calling 911 for immediate medical attention.

A goal for the RMH stroke team in 2011 was to design an educational conference for staff and the community. The team collaborated with the JMU Nursing Program to provide an educational opportunity for RMH professional staff, area nursing students and EMS providers.

A team of RMH and JMU representatives planned the conference. The team included Cristy Long, stroke unit clinical educator; Phyllis Anderson, CCU clinical educator; Carlissa Blosser, ED clinical educator; Hilda Taylor, JMU Nursing Dept.; Vicki Martin, JMU Nursing Department; and Janet Marshman, RMH Stroke Coordinator. Emily Akerson, associate director, Institute for Innovation in Health and Human Services, and affiliate faculty, Department of Nursing, was instrumental in providing support and resources for the conference.

On Oct. 5<sup>th</sup>, 2011, the conference, "Because One Stroke is Enough: Stroke Conference for Healthcare Professionals," was offered with the support of the collaboration between RMH and JMU Nursing Program. Speakers included Dan Chehebar, D.O, RMH neurologist and medical director of the stroke program at RMH, along with JMU professors and outside experts in the field of stroke. More than 100 clinicians, students and EMS professionals attended the day-long conference. Three different tracks were offered to pull a broad cross-section of the community: one for nursing and nursing students; one designed for EMS providers, and one for rehabilitation professionals.

A highlight of the conference was having a community stroke survivor and a JMU student who was a stroke survivor talk about their experiences in a personal way.

In mid-March 2012, RMH was surveyed by representatives of the Joint Commission and, within 24 hours, received notification that it had been designated as an Advanced Primary Stroke Center.

**The RMH stroke team includes, front from left, Stroke Medical Director Dr. Dan Chehebar, Neurology; Carlissa Blosser, RN, Education; Cristy Long, RN, Education; Stroke Coordinator Janet Marshman, RN, Quality and Patient Safety; Channing Fox, Decision Support; and back from left, Judy Jenkins, Rehab Services; Pam Wilkins, Pharmacy; Helen Simmons, RN, Heart and Vascular; and Phyllis Anderson, RN, Education.**

## Research and Scholarship

### Sharing Knowledge and Advancing Research Through Quarterly Research Rounds

In April 2010, RMH and JMU launched quarterly Research Rounds for JMU and RMH researchers or those with research interests. More than 50 attended the first informational session.

“Research Rounds is a seminar series focusing on medicine, health, and healthcare,” explains Bill Grant, PhD, assistant professor, JMU Department of Economics. The rounds are modeled after a program at Duke University that Dr. Grant was involved with while completing a fellowship at the Duke Clinical Research Institute

The research rounds are one-hour topic-focused sessions, and the speakers must submit a working paper in advance. The rounds are brief presentations that include time for audience engagement through feedback, questions and discussion.

According to Grant, research rounds create intellectual networks that can lead to more and better collaboration. The rounds also stimulate the conceptualization and sharing of good ideas. Presenters must be able to engage in constructive debate in an intellectual setting, Grant noted.

“JMU offers conceptual expertise, research skills, practical experience and connections to key players in the academic setting,” Grant explains, “while RMH offers depth and breadth of medical expertise and knowledge.” He adds that the needs of RMH medical staff members drive the topics, with plans to offer at least four sessions per year during the fall semester (September-December).

Presenters and topics to date have included the following:

- Steven Marra, M.D.  
RMH Cardiothoracic Surgery Medical Director  
*“Opportunities for Collaborative Research Between RMH and JMU”*
- Lincoln Gray, Ph.D.  
JMU Professor of Communication Sciences & Disorders  
*“Researching Gender Differences in Treating Heart Failure at RMH”*
- Kevin Minbiole, Ph.D.  
JMU Associate Professor of Chemistry  
*“The Medicinal Research Collaborative at JMU”*
- Judith Flohr, JMU Nursing; Cindy Reeves, RMH grant writer; Teresa Boshart Yoder, director, Women’s Services at RMH  
*“Women and Girls Grant: A Phase II Study”*
- Kristi Lewis  
JMU Department of Health Sciences  
*“The Healthy Community Council 2011 Assessment”*



- Bill Grant  
*JMU Department of Economics*  
*"Putting Comparative Cost Effectiveness into the Hospital's Hands"*

Grant notes that the rounds offer multiple benefits to each organization. The research allows RMH to bring the latest advances, therapies, and techniques to patients. It also helps to attract and retain the best and the brightest physicians and nurses who are interested in engaging in research. He says engagement in research helps improve the overall reputation as a community hospital.

"Research rounds support our innovation strategy and desire to be on the leading edge of new development that will help our patients," says Kay Harrison, RMH vice president, Business Development.

The research rounds allow JMU to groom the next generation of researchers and provide practical experience for other students. The rounds also offer a venue for those professors who must publish a certain number of papers each year to retain their positions. The rounds also offer a pipeline for innovation.

"The RMH/JMU research collaborative is one of the many fine examples of the work our two great organizations are doing together to build a stronger and more healthy community" says Dr. Marra. "Faculty members from the University and RMH medical staff physicians have been putting their collective efforts together to find solutions for health-related concerns and problems that face not only our community but the world as a whole. Some examples include collaboration to design heart imaging programs that generate data to better define proper treatment of various forms of heart failure and also research design engineering projects to create an artificial heart model that can generate data to predict prosthetic heart valve performance.

Dr Marra notes that it is not just the research mission that is served by the two institutions in these efforts, but also the very important education mission as well. "

Students from the undergraduate and graduate schools of JMU have worked very closely with our faculty and staff, and many have also elected to come and observe physicians working in both the operating suites and during clinical rounds," he says. "It is been both exciting and a wonderful experience to be a part of these two impressive institutions and I look forward to further strengthening this partnership."

**Caption: RMH Cardiothoracic surgeon joins in the conversation during a recent Research Rounds session.**

## Clinical

# Better Care Through Evidence-Based Practice

Kitty Pitsenbarger, RN, gets discouraged when her patients in the RMH Ambulatory Surgery Center come out of surgery dealing with nausea. Her desire to find alternatives to the typical anti-nausea medications led Pitsenbarger and some of her fellow ASC nurses to become interested in testing an idea they had heard about at other healthcare facilities. That idea was to use scopolamine patches, often used to treat motion sickness, to relieve post-surgical nausea.

As a seasoned nurse with 14 years experience, Pitsenbarger is well aware of how to address patient needs.

Figuring out how to conduct a research project, however, was daunting. Thanks to the JMU-RMH Collaborative, she and other ASC nurses have joined forces with their research-oriented nursing colleagues at JMU to engage in evidence-based practice (EBP). EBP is part of a growing international movement that promotes the gathering and analysis of scientific data to identify and apply best medical practices.

“Our goal is to make patients as comfortable as we can while they’re here,” Pitsenbarger says. “Their outcomes should be positive. It’s about better patient care.”

The hospital’s Nursing Clinical Ladder Recognition Program offers incentives to encourage nurses to engage in EBP research projects. These projects not only have the potential to improve care at RMH, but also to cut costs – always an important consideration. One group, for example, is examining how to assess pain in patients who are unable to communicate because of a mental impairment, such as Alzheimer’s disease. And nurses in the Critical Care Unit recently completed an evaluation of monitoring equipment used on sedated patients to determine which are the most reliable for various medical scenarios.

“These projects improve patient care and patient outcomes through the conscientious use of current evidence and best practices,” says Leslie Ney, RN, chair of the Nursing Clinical Ladder Recognition Program.

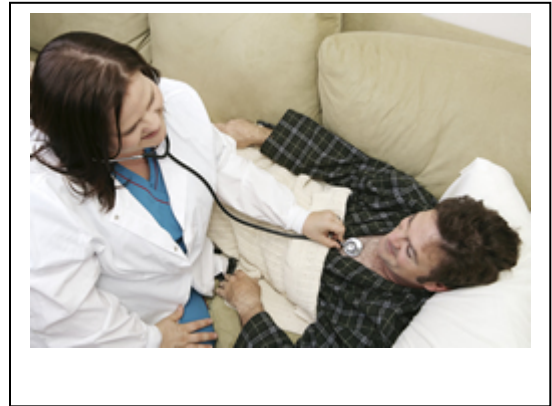
Because nurses work on the front lines, they often have insight into areas where patient care could be improved. By working with nursing faculty at JMU – whose professional responsibilities include scholarship – they can engage in studies that may have practical application for patients, says JMU nursing professor Margaret Bagnardi, RN, MSN, EdD. She has led seminars for RMH nurses on how to conduct research and prepare presentations, and has helped with data analysis.

“Nurses at the bedside are able to tell us what is important to research,” says Bagnardi, who also is a part-time nurse in RMH’s Critical Care Unit. “We are creating those links between practice and academia. The end result is that we can bring patients the most current, research-based care available.”

Bagnardi’s first two “Introduction to Evidence-Based Practice” seminars covered a basic understanding of research principles and how to transfer these into clinical practice. Dr. Bagnardi was joined by George Curran, the health sciences librarian from RMH’s Virginia Funkhouser Health Sciences Library, to provide participating nurses with lessons on how to conduct research online and in the RMH library.

When the first seminar was scheduled it quickly filled up with nurses looking to take advantage of the opportunity, so a second session was scheduled.

The topics of a second set of seminars included how to evaluate the quality of the research and whether the findings would be applicable to the patient population in this area. Some of the topics chosen by nurses for research are wound management, preventing blood clots, and IV/Catheter care.





The Ambulatory Surgery Center studied research on ways to prevent post-operative nausea and ways to implement changes based on their findings.

In May 2011, a third set of workshops focused on identifying and recruiting hospital staff to act as mentors to nurses wanting to get started using EBP. The program will continue to expand with the availability of staff onsite.

In the spirit of collaboration, JMU undergraduate nursing students will be assisting with the research projects, and an exhibit of the EBP projects will be displayed at the hospital. An additional benefit to JMU is the opportunity for faculty to conduct research with the help of the nursing staff and to work with the staff in translating research evidence into practice guidelines.

## How Can You Become Involved?

- Let us know your ideas for collaboration between JMU and RMH. Share information about collaborative projects already underway. Go to [www.jmu.edu/rmh-jmu](http://www.jmu.edu/rmh-jmu) to submit a project or contact a Steering Team member (see below).
- Join us in celebrating collaborative wins at our annual celebration. Collaborative wins have achieved some or all of their project goals. Collaborative wins can be submitted on the website or by contacting a Steering Team member.

## Collaborative Steering Team Members 2011-2012



Carrie Willetts, 2012 facilitator

Kay Harrison, 2008 and 2011 facilitator

Emily Akerson, 2009 and 2010  
facilitator

Sharon Lovell, 2007 facilitator

Mark Graham

John Lough

Jim Shaeffer

Debra Thompson

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Learn more about the JMU-RMH Collaborative at

[www.jmu.edu/rmh-jmu](http://www.jmu.edu/rmh-jmu)