

Academic Physician Quarterly

A DEPARTMENT OF MEDICINE BULLETIN



UF UNIVERSITY of
FLORIDA
College of Medicine
Jacksonville

FOCUS

Page 2

GME CORNER

Page 3

CLINICAL CASE

Page 4

RX UPDATES

Page 5

NEWS AND NOTES

Page 6

MEET YOUR COLLEAGUES

Page 7

UF & SHANDS BRAND

Page 7

CHAIRMAN'S MESSAGE

Dear colleagues:

One of the good things I look forward to in Fall is getting together with family and friends to celebrate Thanksgiving. This uniquely American holiday gives us an opportunity to take a moment to reflect on all the good things that happened to us during the past year. The Department of Medicine and the College of Medicine in Jacksonville finished the last fiscal year with a stellar financial record. This superb financial health was coupled with exceptional scholarly productivity of the faculty. The number and quality of manuscripts published by the faculty increased substantially and their scientific discoveries were presented at national meetings. This brought more visibility and recognition to our campus and helped aggrandize the University of Florida and Jacksonville.



In this issue of the Academic Physician Quarterly (APQ), we have a Focus Topic on our newly inaugurated inpatient unit that is dedicated for clinical research. The purpose of this Clinical Research Unit is to facilitate the development of new drugs and medical devices to promote health, fight disease and enhance the quality of life.

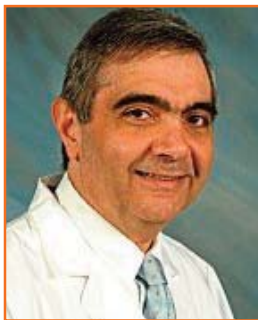
Another exceptional piece of good news is that on August 17, 2011, all our primary care ambulatory clinics have achieved level 1 NCQA (National Committee for Quality Assurance) Certification. The designation of the clinics as a Patient Centered Medical Home carries important implications and highlights our commitment to excellent patient care.

Finally, we are excited to report that Shands Jacksonville has been granted Magnet Recognition by the American Nurses Credentialing Center (ANCC). The Magnet Recognition Program is nationally recognized as the gold standard of nursing excellence. This designation highlights the Shands Jacksonville nursing staff excellence.

Indeed we have a lot to thank for at this Thanksgiving Holiday.

Happy Thanksgiving to you all.

Arshag D. Mooradian, M.D.
Professor of Medicine
Chairman, Department of Medicine



Arshag D. Mooradian, M.D.

Professor of Medicine

Chairman, Department of Medicine

UF Clinical Research Unit at Shands Jacksonville (JAX CRU): Innovation through clinical research

One of the key missions of academic centers is to enhance patient care through advancement of science and innovation in health care. The University of Florida College of Medicine and Shands Hospital in Jacksonville have made major commitments to advance research enterprise in Northeast Florida. In addition to recruiting clinician scientists into the ranks of the faculty, the University and Shands have invested heavily in the research infrastructure. Examples of the latter include creation and support of the research office with direct authority to facilitate research contracts, dedication of a new building for laboratory research and establishment of the Clinical Research Unit at Shands Hospital (JAX CRU). This unit is a joint venture of Shands Hospital and UF that is partly supported by funds through the National Institute of Health and the University of Florida Clinical and Translational Science Institute (CTSI).



JAX CRU is a new home for research with the principal purpose to facilitate the development of new drugs and medical devices to promote health, fight disease and enhance the quality of life.

What's Unique about the JAX CRU?

This research unit is the only general hospital based unit in the Northeast Florida region. Harboring of the CRU in Shands hospital was implemented to maximize the safety of our study subjects. It combines the intellectual wealth of academic thought leaders with access to a large and diverse patient population in an environment of exceptional operational capabilities that include:

1. The Clinical Investigators are nationally recognized thought leaders with faculty appointments at the University of Florida. They are Board Certified clinicians with expertise across all therapeutic areas.



2. A large base of patient population with an estimated annual outpatient visits approximating 600,000 annually.

3. Cutting edge technologies such as the Proton Therapy Institute, one of only

7 such units in the country.

4. Superb operational capabilities that include:

- a) Rapid start-up
- b) Utilization of nationally recognized IRB's to expedite pharmaceutical industry sponsored studies.
- c) One point contact for expediting the execution of contracts and Confidential Disclosure Agreements.
- d) Full complement of support services including laboratory, radiology, cardiac imaging and physiology, advanced endoscopy, pharmacy, dietetics, biostatistics and data management.



Currently there are seven ongoing clinical research projects that are facilitated by the JAX CRU staff.

If you would like to know more about this unit and how to access its services, please contact Rhonda Calhoun, R.N., B.S.N. Nurse Manager, Clinical Research Unit; 655 West 8th St. 6th Floor; Jacksonville, FL 32209. Phone (904) 244-9815 or pager (904) 227-4604.



Carlos Palacio, M.D., M.P.H.

**Associate Professor of Medicine,
Division of General Internal
Medicine**

**Associate Program Director,
Internal Medicine Residency**

The Difficult Patient Encounter

We all know difficult patients; even if they constitute a fraction of the total patient panel, they seem to be much more. They may be young or old, physically sick or healthy, male or female. Whenever their names show up on a clinic schedule, they bring about a sinking feeling in the pit of many a physician's stomach or a sense of free-floating anxiety among the staff. Sometimes difficult patients have legitimate concerns but the personal biases they elicit from care providers and staff can cloud objectivity in all but the most resilient and open-minded professionals. They demand the unreasonable; other times they are overly worried about some ache or a recent television commercial about some strange illness. They typically take longer to see or speak to on the phone. The "good" patient, it turns out, is the one without psychosocial issues with an acute biomedical disease which is easily diagnosed and responds well to treatment.

In an article published by Hinchey and Jackson this past January, the authors conducted a cohort study to assess difficult patient encounters. They assessed predictor variables in both patients and physicians that lead to difficult patient encounters. The study was conducted at a walk-in clinic providing both primary and urgent care for adults age 18 or older. Although most patients were referred back to their primary physicians, they were typically seen by an acute care physician. This setting was selected to hold clinician and patient characteristics and interactions constant.

Subjects were evaluated prior to their visit for mental disorders, demographics, symptom characteristics, recent stress, symptom-specific visit expectations, functional status, and somatization using validated survey instruments. An immediate post-visit survey assessed satisfaction, whether patients were still worried their symptoms could be serious, and whether they had unmet expectations. Two weeks later, the patients completed a questionnaire assessing symptom outcome and severity, stress in the previous two weeks, functional status, overall satisfaction, and presence of unmet expectations. Six-month health utilization before the index visit was obtained from the electronic medical record.

Providers completed the Physician Belief Scale (38 questions) which correlates inversely with psychosocial orientation, patient-centered communication and malpractice

claim rates. A score of greater than seventy is associated with poor psychosocial orientation. Immediately after each visit, the clinician completed the Difficult Doctor Patient Relationship Questionnaire (ten questions) which assesses how difficult the physician viewed the encounter. A score of greater than 30 qualifies as a "difficult" encounter.

Overall, 750 adults were enrolled with a 96% adherence rate. Average patient age was 53.6 years and 52% were women. Caucasians and African-Americans constituted most of the patients seen (47% v. 44% respectively). No significant differences were noted in age, race, gender, education, psychiatric disorders or number of symptoms between patients seen by the staff clinicians or residents. A total of 38 clinicians and residents saw the patients. The average staff clinician saw 34 patients while the average resident saw 9 patients; almost half of the clinicians were women.

Difficult encounters constituted 17% (N=153 encounters) of the total. Patient predictors included more symptoms, greater symptom severity, worse functional status, higher expectations, and a greater likelihood of mental disorders. More experienced clinicians reported a lower proportion of difficult patient encounters. Clinicians with less than ten years of experience rated 23% of their patient encounters as difficult while clinicians with greater than twenty years of experience rated only 2%. Physicians with poor scores (>70) on the Physician Belief Scale reported 23% of encounters as difficult compared with 8% with better (lower) scores.

Difficult encounter patients were more likely to have unmet expectations, less likely to trust their clinicians, more likely to have worsening symptoms and higher 6-month utilization rates. Independent predictors of difficulty included more than 5 somatic symptoms, report of increased stress in the last week; and depression or anxiety disorder.

This study brings a measure of insight into doctor-patient interactions. Perhaps systematically clarifying patient expectations, enhancing the level of psychosocial readiness of clinicians, and effectively addressing mental illness will help reduce the likelihood of difficult encounters. It should probably be no surprise that more experienced clinicians view less encounters as difficult. Still, this could be a function of self-selection. Physicians who don't feel comfortable dealing with psychosocial issues may choose to go into specialties that are more concordant with individual comfort levels. In the end, physician (and perhaps institutional) competence in providing patient-centered care and communication may be determined by how prepared physicians and systems of care are to deal with challenging psychosocial issues.

If it's a poor musician who blames the instrument, perhaps it is a poor physician (and perhaps a poor institution) who blames the patient?

REFERENCES

Hinchey SA, Jackson JL. A cohort study assessing difficult patient encounters in a walk-in primary care clinic, predictors and outcomes. *J Gen Intern Med.* 2011 Jun;26(6):588-94.

Jaisri Maharaj, MD, Department of Medicine
 Raafat Makary, MD, PhD, Department of Pathology
 Adil Shujaat, MD, Department of Medicine
 Carmela Monteiro, MD, Department of Pathology
 Gurjit S. Kaeley, MBBS, MRCP, Department of Medicine
 University of Florida College of Medicine – Jacksonville

Hydralazine-Induced Pulmonary-Renal Syndrome

INTRODUCTION

Hydralazine may cause a drug-induced lupus rarely affecting the kidneys. Although hydralazine-induced vasculitis has been described, reports of pulmonary-renal syndrome related to hydralazine are few. We report a case of advanced disease in a Caucasian gentleman treated with hydralazine 100mg tid x 8 months.

CLINICAL PRESENTATION

A 57-year-old Caucasian male presented to the emergency department with worsening dyspnea, non-productive cough and decreased urine output present for one week. He denied any fever, weight loss, skin rash, chest pain, orthopnea, nasal congestion or vomiting. Past medical history was significant for hypertension, hyperlipidemia, coronary artery disease and previous right cerebellar infarct. Home medications included amlodipine 10 mg daily, lisinopril 20 mg daily, clopidogrel 75 mg daily, pravastatin 40 mg daily and hydralazine 100 mg three times daily which was started eight months previously. Physical examination revealed an ill-looking, tachypneic gentleman with coarse crackles in both lung fields.

Computed Tomography of the chest revealed new diffuse airspace opacities in both lungs. Bronchoscopy and bronchoalveolar lavage revealed diffuse alveolar hemorrhage with no malignant cells or acid-fast bacilli. Serum creatinine was 895 mg/dL at presentation (baseline 1.54 mg/dL). Urinalysis contained 3+ blood and showed 60-80 isomorphic red blood cells per high power field. Initial serological studies showed positive antinuclear antibodies (ANA) - speckled pattern, titer > 1:1320 and strongly positive anti-histone antibodies (5.5 units). Anti-double-stranded DNA, anti-RNP, anti-Smith and anti-Sjogren's antibodies were also positive (17 IU/ml [0-9], 3.9 AI [0.0-0.9], >8 AI [0.0-0.9] and 1.0 AI [0-0.9] respectively). Although on serum immunofluorescence, atypical perinuclear anti-neutrophil cytoplasmic antibodies (p-ANCA) were positive, antibody testing revealed the presence of anti-myeloperoxidase (MPO) antibodies (76.5 U/ml). Serum complements were normal and anti-glomerular basement membrane antibodies were negative. Renal biopsy revealed necrotizing crescentic glomerulonephritis without complement or antibody deposits on immunofluorescence, or dense deposits on electron microscopy, most consistent with pauci-immune crescentic glomerulonephritis. No definite evidence of vasculitis was apparent in the kidney biopsy, but this was felt not to definitively exclude vasculitis due to its skip

distribution.

The patient's presentation was felt to be consistent with a small to medium vessel vasculitis, which manifested as pulmonary alveolar hemorrhage and was associated with rapidly progressive glomerulonephritis. The patient's symptoms responded to cessation of hydralazine as well as treatment with high dose corticosteroids and a single infusion of cyclophosphamide. Pulse-dosed methylprednisolone was administered for a total of sixty-eight days. Serial chest imaging showed resolution of lung opacities. He needed renal dialysis, which was weaned at three months. Following three months from initial presentation, repeat atypical p-ANCA, anti-double-stranded DNA, anti-RNP and anti-Sjogren's antibodies that were previously positive, were now negative. He has chronic residual renal impairment with an estimated glomerular filtration rate of 37 mL/min/1.73m.²

DISCUSSION

Hydralazine-induced lupus is associated with positive ANA and anti-histone antibodies (Ab).¹ Renal involvement is uncommon. Hydralazine-induced vasculitis typically presents with necrotizing cutaneous or renal vasculitis with rapidly progressive renal failure.² Hydralazine-induced vasculitis is associated with the presence of diverse Ab including p-ANCA as in our patient. Pathogenesis entails drug accumulation in neutrophils, apoptosis and release of neutrophil blebs as immunogens.³

Yokogawa et al reviewed 68 cases of hydralazine-associated vasculitis; only 8 cases had both kidney and lung involvement.³ Two were fatal within one month from uremia and lung hemorrhage. Most cases required aggressive therapy with steroids and cytotoxic therapy following hydralazine cessation. While many cases resolve completely, advanced disease as in this scenario can lead to chronic renal impairment.

Our patient presented with pulmonary-renal syndrome, a rare, severe form of small to medium vessel necrotizing vasculitis. No definite evidence of vasculitis was apparent in the kidney biopsy, but this did not definitively exclude vasculitis due to its skip distribution. We concluded that pulmonary-renal syndrome in this case was secondary to hydralazine-induced vasculitis and the patient responded to hydralazine cessation and immunosuppressive therapy.

CONCLUSION

- Vasculitis should be suspected when patients on hydralazine present with a pulmonary-renal syndrome.
- Pulmonary-renal syndrome has an aggressive course and treatment usually necessitates steroids and cytotoxic agents

REFERENCES

1. Dobre M, Wish J, Negrea L. Hydralazine-Induced ANCA-Positive Pauci-immune Glomerulonephritis: A Case Report and Literature Review. *Renal Fail.* 2009; 31(8):745-8
2. Kalra A, Yokogawa N, Raja H, Palaniswamy C, Desai P, Zanotti S et al. Hydralazine-Induced Pulmonary-Renal Syndrome: A Case Report. *Am J Ther.* 2010 0(0).
3. Yokogawa N, Vivino FB. Hydralazine-induced autoimmune disease: comparison to idiopathic lupus and ANCA-Positive vasculitis. *Mod Rheumatol.* 2009;19:338-4

By Bridget Scoville, Pharm.D.

Continuous and Extended Infusions of Antibiotics

Reprinted with some editing from *Drug Update, Volume 27, Number 6, with permission.*

As bacteria become increasingly resistant to antimicrobials, healthcare professionals are finding innovative ways to administer older antibiotics. This article will review continuous and extended infusion of antibiotics and discuss the advantages and disadvantages compared to traditional dosing.

Extended and continuous infusions are possible with a multitude of antibiotics including beta-lactams, carbapenems, vancomycin, and some cephalosporins. The traditional dosing of antibiotics typically includes infusion over 30 minutes. Extended infusion involves infusing antibiotics over several hours (e.g., 3 to 4) while continuous infusion are given over 24 hours. For example, piperacillin-tazobactam (piper-tazo) (Zosyn) can be dosed as 3.375 grams infused over 4 hours every 8 hours (extended infusion) or as 13.5 grams over 24 hours (continuous infusion)¹.

Pharmacokinetic and pharmacodynamic studies support the rationale for longer infusion times¹⁻⁴. Since bacterial eradication is time-dependent for these specific antibiotics, it is reasonable to use a lower total dose over a longer period of time to maximize efficacy. Beta-lactams have maximal bacterial killing when the concentration is maintained at 4 to 5-fold higher than the MIC. Unfortunately there have not been many well-designed studies looking at clinical benefits.

There are several potential advantages including improved efficacy and lower drug costs. A retrospective study published in 2007 by Lodise and colleagues describes using extended infusion dosing for the treatment of *Pseudomonas aeruginosa* in critically ill patients². Patients who received 3.375 grams of piper-tazo every 4 or 6 hours were compared to patients who received 3.375 grams every 8 hours infused over 4 hours. The mean duration of piper-tazo therapy was the same in both groups (8.4 days), and an equivalent number of patients concomitantly received an aminoglycoside or fluoroquinolone. Patients with an APACHE II score of at least 17 had a median length of stay (LOS) of 21 days and a 14-day mortality rate of 12.2% when given extended infusion piper-tazo compared to a median LOS of 38 days and a 14-day mortality rate of 31.6% for traditional dosing (a statistically significant difference). There was no difference in median LOS or 14-day mortality in patients with an APACHE II score of less than 17. There was an estimate savings of \$68,750 to \$135,750 in direct drug acquisition costs.

In a 2009 paper, Patel and colleagues performed Monte-Carlo simulations for intermittent and extended infusion of piper-tazo to determine optimal renal dosing⁴. The simulation concluded that when a patient's creatinine clearance (CrCl)

is less than 20 mL/min, extending the dosing interval for the extended infusion from every 8 hours to every 12 hours did not result in substantial accumulation nor did it change the probability of target attainment. However, when using every 12 hour dosing in patients with CrCl less than 40 mL/min, there was a suboptimal change in the probability of target attainment (only three patients with a CrCl <40 mL/min were included in the simulation).

Despite possible advantages, there are also disadvantages. Piper-tazo, for example, would need its own dedicated line during continuous infusions and would need to be administered by itself during extended infusions (12 hours of line time per day) because of incompatibilities with other IV medications. It may not be reasonable to place an extra line for the sole purpose of giving an extended or continuous antibiotic infusion. There must also be consideration for the stability of the product (especially if given as a continuous infusion over 24 hours). Some antibiotics have short stability at room temperature and would require the IV bag to be exchanged regularly. Meropenem is recommended for a maximum of a 3 hour infusion⁵. Lastly, there have been no studies evaluating the safety or effectiveness of continuous or extended infusion of antibiotics in pediatric patients. The pediatric population would, therefore, still need to use traditional 30-minute infusion times.

Implementing an extended or continuous infusion program would involve extensive education and cooperation across many departments. Prescriber would need to specify in the order to give the infusion over 4 hours otherwise under dosing could result (due to the every 8 hour schedule). In addition, nurses would need to ensure that the infusion pumps are properly set to give the antibiotic over 4 hours.

In conclusion, the switch to extended infusion of antibiotics must be well-planned and discussed across multiple disciplines within the hospital. Use of continuous infusion may not be as feasible as extended infusion of antibiotics since continuous infusions require a dedicated IV line. The most important advantage to using extended infusions is likely improved efficacy with the added benefit of reduced drug costs. Shands Jacksonville is currently piloting the use of extended infusion in the SICU and MICU, focusing on the most critically ill patients.

References

1. Nicolau D. Pharmacodynamic optimization of beta-lactams in the patient care setting. *Critical Care*. 2008;12:S2.
2. Lodise TP, Lomaestro B, Drusano GL. Piperacillin-tazobactam for pseudomonas aeruginosa infection: clinical implications of an extended-infusion dosing strategy. *Clin Inf Diseases*. 2007;44:357-63.
3. Roberts J, Lipman J, Blot S, et al. Better out-comes through continuous infusion of time-dependent antibiotics to critically ill patients? *Curr Opin Crit Care* 2008;14:390-96.
4. Patel N, Scheetz MH, Drusano GL, et al. Identification of optimal renal dosage adjustments for traditional and extended-infusion piperacillin-tazobactam dosing regimens in hospitalized patients. *Antimicrob Agents Chemother*. 2010;54:460-5.
5. Berthoin K, Le Duff CS, Marchand-Brynaert J, et al. Stability of meropenem and doripenem solutions for administration by continuous infusion. *J Antimicrob Chemother*. 2010 May;65 (5):1073-5. Epub 2010 Feb 21.

Dr. House receives 2011 ACP Outstanding Teacher of the Year Award

The Department of Medicine is proud to announce that Dr. Jeff House, the Internal medicine Core residency program Director, is the recipient of 2011 American College of Physicians (ACP) Outstanding Teacher of the year Award. He received the award during the Florida ACP chapter meetings in Tampa on September 10th, 2011.

This prestigious award is given annually to a faculty member who is recognized to display qualities of a great teacher.

Congratulations to Dr. House.

Internal Medicine Residents are State Champions

Our residents; Drs. Chandrikha Chandrasekharan, Vishal Jaikaransingh and Reshma Ramlal have become this year's Doctors Dilemma (aka Medical Jeopardy) Champions at the Florida Chapter of the American College of Physicians (ACP) Conference. This winning team will be heading to the National ACP Conference in April for the national competition. The state champions are now the holders of the Doctors Dilemma trophy that will reside at the UF Jacksonville Department of Medicine GME office.

Congratulations to the winners.

Shands Jacksonville has been granted Magnet Recognition

We are excited to report that Shands Jacksonville has been granted Magnet Recognition by the American Nurses Credentialing Center (ANCC).

The Magnet Recognition Program is nationally recognized as the gold standard of nursing excellence. The program was developed by the ANCC to recognize healthcare organizations that provide nursing excellence and to promote successful nursing practices and strategies. Currently, only 386 of the more than 6,000 U.S. healthcare organizations have received the credential.

For our more than 1,000 nurses, this prestigious recognition is validation for the level of excellence they have worked to achieve in patient care.

Please join us in congratulating our nurses on their exemplary service.

Research Day Awards

The Department of Medicine once again this year had an exceptionally successful presence at the Research Day on May 12th, 2011.

Over a third (36 out of 97) of platform and poster presentations from fellows and residents were made by the members of the Department. Of the platform presentations Dr. Ryan Wilson was the first place prize winner and Dr. Rosalyn Alcalde received the fourth place prize. In addition, among the poster presentations Dr. Margaret Gladysz received the third place prize.

Congratulations to all the participants and the top prize winners.

Shawn Tai, M.D. receives Edward Jelks Award

Dr. Shawn Tai, who finished his residency last June, received the Edward Jelks Outstanding Resident Clinician Award.

This award is presented annually to the resident who, through dedication, diligence and compassion, or through innovation in patient care, is considered to have contributed the most to the improvement of patient care at Shands Jacksonville. The Award consists of a plaque and a check for \$500.

Congratulations to Shawn for this honor.

NCQA Recognition of our clinics

On August 17, 2011, all our primary care ambulatory clinics achieved level 1 NCQA (National Committee for Quality Assurance) certification.

The designation of the clinics as a Patient Centered Medical Home carries important implications and highlights our commitment to excellent patient care. This success was the result of the hard work of our clinic managers, Ms. Sheena Lewis, Ms. Carmen Curry and Ms. Robin Junifer who worked diligently on this project with the institutional leadership.

Congratulations to all our primary care providers and clinic staff.

MEET YOUR COLLEAGUES



Gladys R. Velarde, M.D., Associate Professor, Division of Cardiology

Dr. Velarde earned her medical degree from the New York University in New York, NY. She completed her residency in Internal Medicine at Presbyterian Hospital in New York, NY and her fellowship in Cardiovascular Disease at Boston City Hospital in Boston, MA and Mount Sinai School of Medicine in New York, NY. Dr. Velarde's clinical interests include cardiovascular disease in women and special populations, preventative cardiology and echocardiography.



Thomas Wannenburg, M.D., Associate Professor, Division of Cardiology and Assistant Program Director, Cardiac Electrophysiology Fellowship

Dr. Wannenburg earned his medical degree from the University of Stellenbosch in Stellenbosch, South Africa. He completed his residency in Internal Medicine at Francis Scott Key Medical Center/Johns Hopkins Health System in Baltimore, MD. He completed his fellowships in Cardiovascular Disease and Clinical Cardiac Electrophysiology at Wake Forest University School of Medicine in Winston-Salem, NC. Dr. Wannenburg's clinical interests include atrial and ventricular arrhythmias, implantable cardiac devices and sudden cardiac arrest.

UF & SHANDS BRAND

UF and Shands Jacksonville Receive National Recognition for Patient-Centered Care

The National Committee for Quality Assurance has recognized the University of Florida College of Medicine-Jacksonville and Shands Jacksonville as Patient-Centered Medical Home (PCMH) providers. This prestigious designation highlights UF and Shands' commitment to following a set of national standards geared toward improving teamwork, better coordinating patient care and building the relationships between providers and patients.

The UF College of Medicine-Jacksonville and Shands Jacksonville are the first and only health organizations in Northeast Florida as well as the only academic medical group in Florida to receive this designation.

"Our focus is always on providing the most comprehensive and meaningful care possible for patients and their families," said Nipa R. Shah, M.D., chair of the UF Department of Community Health and Family Medicine in Jacksonville. "This means using the core principles of the Patient-Centered Medical Home model of healthcare. As part of our mission, we also want to make sure that care is accessible and centers on what is best for each individual. This designation recognizes us for the

high quality of care that we strive to provide at every patient visit, and beyond."

The Patient-Centered Medical Home is a model of healthcare delivery that aims to improve the quality and efficiency of care and includes practices that promote partnerships between patients and their personal clinicians. Clinician-led care teams provide for all the patient's healthcare needs and coordinate treatments across the healthcare system.

"Our patients always come first, and the medical home program is another way to give them the compassionate care all physicians strive for," said Robert Nuss, M.D., dean of the regional campus for the UF College of Medicine-Jacksonville. "We want to thank the National Committee for Quality Assurance for recognizing our efforts."

"Our physicians and caregivers are proud of this recognition," said Jim Burkhart, president and CEO of Shands Jacksonville. "Our goal each and every day is to provide the best possible care for our patients. This achievement shows we are on the right path."

Medical home clinicians demonstrate the benchmarks of patient-centered care, including open scheduling, expanded hours and the use of proven health information

Continued on Page 8

News & Notes continued from Page 7

systems. Early evaluations of the Patient-Centered Medical Home model have shown promising results in improving care quality and lowering costs by increasing

To receive recognition, which is valid for three years, UF and Shands Jacksonville demonstrated the ability to meet the program's key elements and embody the characteristics of the medical home. The standards are aligned with the joint principles of the Patient-Centered Medical Home established with the American College of Physicians, the American Academy of Family Physicians, the American Academy of Pediatrics and the American Osteopathic Association.



"The patient-centered medical home promises to improve health and healthcare," said NCQA President Margaret E. O'Kane. "The active, ongoing relationship between a patient and a clinician in medical homes fosters an all-too-rare goal in care: staying healthy and preventing illness in the first place. PPC-PCMH recognition shows that Shands Jacksonville and the University of Florida have tools, systems and resources to provide its patients with the right care at the right time."

access to more efficient, more coordinated care. By avoiding unnecessary hospitalizations and emergency room visits, these early results are producing savings for payers, purchasers and patients.