

July 2009



Mary's Message

Mary Krugman, RN, PhD, FAAN
Director, Professional Resources

Starting a new fiscal year is like starting a new calendar year: time to recognize successes and plan for the future. This is true for us in research, for the fiscal year 2008-2009...amazing accomplishments and continued growth ahead for f/y 2010!!! Read below of all the successes of this past year which contribute to strengthening our practice environment and professional nursing! The achievements noted below are just a snapshot of all that the Research Nurse Scientists do on behalf of our hospital!!

- A Revised Practice Outcomes Manual, now entitled *Research and Evidence-Based Practice Manual, 2nd edition*. You will be so proud of this manual when it is distributed in the next month! With 30 contributors and over 200 pages, it is an incredible resource for our UCH staff and those external to our organization needing a readily available resource. I would like to thank **Regina Fink, RN, PhD, AOCN, FAAN**, for her leadership in coordinating and editing this document! While many of us contributed, her work made this excellent manual come together seamlessly! Thanks to all who helped create such a fine document.
- Another success was our *20th Annual Rocky Mountain Regional Multidisciplinary Research and Evidence-Based Practice Symposium!* There were outstanding presentations by UCH and external participants, as well as notable keynote speakers. This symposium, under the leadership of **Kathy Oman, RN, PhD, CEN, FAEN**, chairperson, marked a significant increase in UCH poster presentations, which were facilitated by our research staff and other mentors. A total of forty three nurses from UCH presented either pre-conference, podium, or poster sessions highlighting a variety of clinical research or evidence-based practice projects conducted in the institution. In addition, three posters from rural health hospitals who had participated in our AHRQ grant were presented. These were significant advancements for our hospital! Congratulations to all who helped plan, support, present or attended, and to Kathy's leadership to make this so successful!
- Many clinical improvements are in progress for our critical care and med/surg areas, under the expertise of

Editors

Research Nurse Scientists

Regina Fink, RN, PhD, AOCN, FAAN

Kathy Oman, RN, PhD, CEN, FAEN

Mary Beth Flynn Makic, RN, PhD, CNS, CCNS

*Re*Introducing the *Colorado Model*

Colorado Patient-Centered Interprofessional Evidence-Based Practice Model
University of Colorado Hospital



**Colleen J. Goode PhD, RN, FAAN, NEA-BC
Professor**

University of Colorado Denver, College of Nursing

Shortly before I retired from my position as Vice President and CNO, I reviewed the literature to see what was new in the way of evidence-based practice (EBP) models and what had changed regarding the components of these models. After this review, I saw the need to revise our UCH model. I presented my review of the literature to the Research and Evidence-Based Practice Council and solicited their input. There was consensus for a revision of the model to bring it up-to-date with current knowledge about EBP. The review of the literature indicated a need for a stronger focus on the role of the patient and family. Newer models in the literature defined evidence-based practice as a process of shared decision making between the clinician and the patient based on research evidence. The outcome of this decision making process is **patient-**

Mary Beth Flynn Makic, RN, PhD, CNS, CCNS₂, including her joint leadership on the CAUTI-study, continued efforts to improve skin outcomes across the hospital, and the mentoring educators and others in various evidence-based practice projects. Many small projects involving clinical nurses create a significant tipping point for engagement in improving outcomes. Mary Beth's clinical expertise is already touching clinicians and making a difference!

The successes of the past year lay a foundation for future planning. This upcoming year will be marked by increased collaboration with faculty from the College of Nursing, the generation of new projects by clinical staff who participated in the EBP Boot Camp, and focused research on clinical topics that will make a difference in our patient outcomes. We are fortunate to have this talent at UCH, Research Nurse Scientists willing to mentor staff and support an environment of inquiry and engagement in making our care better at UCH!!



Pictured (from left to right): Drs. Kathy Oman, Regina Fink, Mary Beth Flynn Makic, Mary Krugman

Research Symposium Update

The 20th Annual Rocky Mountain Multidisciplinary Research Symposium: Improving Patient Outcomes through Evidence-Based Practice

**Kathy Oman, RN, PhD, CEN, FAEN
Research Nurse Scientist**

The 20th Annual Rocky Mountain Multidisciplinary Research Symposium was held at the Renaissance Denver Hotel on March 12 & 13, 2009. It was a collaborative effort of the University of Colorado Hospital Research & Evidence Based Practice Council, University of Colorado Denver, College of Nursing, Veterans Affairs Eastern Colorado Health Care System Denver Nursing Service, Denver Health Medical Center, The Children's Hospital,

centered evidence based care. There was a consensus in the EBP council that the revised model needed to have a defined focus on the role of the patient. For that reason, the decision was made to put the patient at the center of the model and to clearly state that the patient's preferences, experiences, and values will determine whether an evidence-based intervention is implemented. The patient needs to be provided the evidence supporting the intervention/protocol; he/she is the ultimate decision maker regarding whether the protocol is carried out.

The second major change to the model was to frame the model with 4 concepts essential for embedding research into practice. These concepts are: facilitation, mentorship, organizational support, and leadership. Over time, studies related to barriers to research, facilitators of research, and personal experience of those involved in trying to change the culture in an organization to one of EBP, have indicated that facilitators, mentors, organizational support, and leadership are key concepts needed to successful transfer of research into practice. The organization must have a high priority focus on EBP. Leaders in the organization must support this focus, speak to the importance of EBP and encourage and reward those who foster and implement EBP. CNS/Educators, Research Nurse Scientists, and Level IV nurse clinicians at UCH are key facilitators who guide and encourage others to question practice and to make changes based on evidence. Mentors also play an important role. The literature also emphasizes the important role that educators have in mentoring. The new UCH Colorado Model places organizational support at the base of the model because the organization provides the ongoing reinforcements for sustaining the model. After several revisions the final model is now presented for your review. The evidence based practice council looks forward to your feedback.

References:

Rycroft-Malone J, Seers, K, Kitchen, A, Harvey, G., Kitson, A, McCormack, B. What counts as evidence in evidence-based practice? *J Adv Nurs.* 2004;47(1):81-90.

Melnyk BM, Fineout-Overholt E, eds. *Evidence-Based Practice in Nursing and Health Care: A Guide to Best Practice.* Philadelphia: Lippincott Williams & Wilkins; 2005.

Kitson, A, Harvey, G, McCormack, B. Enabling the implementation of evidence based practice: A conceptual framework. *Quality in Health Care.* 1989; 7(3), 149-158.

Titler, MG, *Developing an evidence based practice.* In LoBiondo-Wood G, Haber J (eds) *Nursing research: Methods and critical appraisal for evidence-based practice,* 6th ed. St Louis: Mosby. 2006.

Sigma Theta Tau International Alpha-Kappa at Large Chapter, and Kaiser Permanente,.

The pre-conference day began with lunch and keynote speaker **Janet Houser PhD, RN on the topic of “Evidence for the Workplace: Investigating the Context of Care Delivery”**. Dr. Houser gave an informative and engaging talk about the challenges of the acute care work place with excellent recommendations for change. This was followed by four concurrent workshops dealing with Qualitative Research, Cultural Diversity in Research, Program Design, and Simulation.

Friday’s keynote address was delivered by **Nancy Dunton PhD, the Principal Investigator of the National Database of Nursing Quality Indicators (NDNQI)**. Dr. Dunton gave an overview of the NDNQI data and discussed its use in making clinical improvements. The remainder of the day was filled with 32 podium and 34 poster presentations showcasing research, education, and evidence based practice projects. Forty three UCH nurses presented their research and EBP projects this year. The interdisciplinary presenters included nurses, physicians, respiratory therapists, social workers, and pharmacists. Podium and poster presenters came from as far away as Lebanon and Thailand and added an international flare to the conference for the first time.

The conference was a rich opportunity for nurses from diverse educational, practice, and research backgrounds to come together for sharing, networking, and valuing the work that health care professionals do to improve health for the people we work with. The conference is held March/April every year so mark your calendars and plan to attend, participate, and/or support next year’s symposium to be held on March 4 & 5, 2010. Call for abstracts for next year’s symposium is available on line at: www.uch.edu/call-for-abstracts The deadline is September 28, 2009. For more information contact: Kathy Oman 720-848-6656, kathy.oman@uch.edu.



Pictured: above Drs. Nancy Dunton (keynote speaker) and Colleen Goode

Pictured: below Barb Wenger, RN, MS, OCN; oncology CNS/educator



Pictured: (from left to right) Carolyn Sanders, RN, PhD, Mary Holden, RN, MSN, CCRN; Emily Schultz, RN, BSN; Petra Kelly, RN, BSN

Carolyn's Corner

Carolyn Sanders, RN, PhD
Vice President for Patient Services & Chief Nursing Officer



At the time the EBP model was being revised, I was transitioning into my new role as Vice President for Patient Services and CNO. I was fortunate enough to be present at the EBP council meetings when the decision was made to place the patient at the center of our model. Adding the patient’s “experiences, values, and preferences” to our model is paramount in reflecting our focus on Patient and Family Centered Care delivery. Implementing this model throughout our clinical practices will only enhance our patients’ experiences and allow them to truly become partners in care.

One final revision made to the model was changing the title to, “*Colorado Patient-Centered Interprofessional Evidence-Based Practice Model*”. We added the term



Liver Transplant Outcomes & Interdisciplinary Collaboration

Michael Talamantes, LCSW
Social Work Clinical Educator

This past spring, there was some interdisciplinary collaboration which occurred regarding a liver transplant research project. Sam Murillo, a MSW candidate at the University of Denver, who was doing a clinical internship with Michael Talamantes, LCSW on the liver transplant team, examined some data regarding quality of life in liver transplant recipients. This data is being collected by transplant coordinator Tracy Steinberg, RN, MS, CNS, as patients are completing a quality of life survey at the time they are listed for liver transplant and at subsequent intervals afterwards. With some guidance and collaboration from Kathy Oman, Research Nurse Scientist and Masako Terada from the University of Colorado Denver, College of Nursing, Sam was able to use some of the data from this ongoing research project to meet the requirements for his research class. The sample size used was 38 as there was only that number of patients who had completed the survey at the three different time intervals (pre-transplant, one-year post and three-year post). No new data were collected as only the secondary data was analyzed. Data revealed that at the Time 1, 57.6% of the sample reported that their health was causing them difficulty, while at Time 3, only 30.3% of the sample reported that their health was causing them difficulty. Also, gender differences in perception of life were explored. While the data show that patient life satisfaction improves after liver transplantation, it is difficult to assess which variables have impacted their quality of life. The recommendation of the research project is to continue to seek out objective measures which can best assess the variables which contribute to increased quality of life, including liver transplantation. Hopefully, there can be more interdisciplinary collaboration in the future involving various disciplines on the Anschutz Medical Campus.

“interprofessional” because we value the importance of collaboration to improve care quality by bringing together different types of specialized knowledge from various care areas to better understand patient problems. With the growing complexity of patient illnesses and the increasing specialization of health practitioners, being open to interprofessional collaboration will augment our ability to deliver unified and comprehensive patient care. In our quest to provide the best evidence-based care for our patients, we often fall into “profession-specific” EBP that may lack the exchange of ideas and theories of other professionals. We need to move-on from the status quo and utilize evidence across and among disciplines to enhance the spread of EBP. We already know EBP improves outcomes. By adding an interprofessional approach to our EBP model, we can improve even more.

As Colleen points out above, it is imperative for organizations to facilitate, mentor, and provide leadership and organizational support for EBP in order for it to be embraced in the hospital culture. One way in which UCH has demonstrated this support is our recent showcasing of our interprofessional, patient centered EBP and research posters that were on display this past May during Nurses’ week. All of these posters demonstrate how UCH professionals are collaborating in providing patient centered care to improve outcomes. These posters were viewed by professionals of all types and I know personally how impressed they were at the work that has been done. It gave me such a sense of pride. Moving forward, we must continue this positive trajectory in operationalizing our new “*Colorado Patient-Centered Interprofessional Evidence-Based Practice Model*”---our patients depend on it.

References

Newhouse, R. Evidence-based behavioral practice. *JONA*, 2008;38(10):414-416.

Zwarenstein, M. & Reeves, S. Knowledge translation and interprofessional collaboration: Where the rubber of evidence-based care hits the road of teamwork. *Journal of Continuing Education in the Health Profession*, 2006;26:46-54.



Moving Evidence into Practice in the SICU

Jennifer Chavez, RN Level II, held a journal club on the importance of using stroke volume as a valuable hemodynamic parameter in guiding fluid volume status of cardiac patient's post operatively. With the advent of the new Edwards hemodynamic monitors, there are more hemodynamic values that can be trended to guide optimal treatment of patients. Jennifer took the opportunity to review the evidence of stroke volume as a valuable indicator and tied that evidence to the new technology in the ICUs. She is working closely with Shannon Johnson, RN MS, CNS/Educator of the SICU and the CT Surgical Physicians to incorporate integration and education of this HD parameter into the ICU plan of care.

Mandy Moore, RN, Level II, charge nurse, in the SICU has been reviewing the evidence on the benefits, indications, and contraindications of Continuous Lateral Rotation Therapy (CLRT). She is synthesizing the current evidence on the benefits of CLRT and developing an ICU guideline. She is working closely with Shannon Johnson, RN MS, CNS/Educator of the SICU in developing the CLRT protocol. The goals of the protocol are to guide clinical practice that maximizes CLRT therapy improving patient's pulmonary function as well as decrease patient pulmonary complications, ventilator days, and overall ICU length of stay.

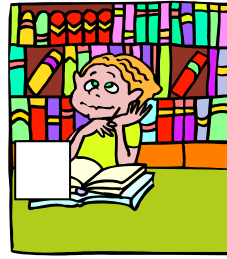
Trivia

Question!



Qualitative researchers frequently talk about "data immersion" in the analysis phase of their research. What does this term mean? The first person to email the correct response to regina.fink@uch.edu will win a Starbucks coffee card!

Question from **last** newsletter: What procedure is done during the design of a study to determine how many subjects will be needed? Answer: A power analysis
Winner: Monique McCollum, Patient Education Coordinator, Professional Resources



Journal Clubs

ICU Journal Club: Ventilator Sedation and Daily Wake Up Protocol

Please join any session that works for your schedule
We will review the literature and the revised Ventilator/Sedation Orders

Review the Article (Girard TD. et al. Efficacy and safety of paired sedation and ventilator weaning protocol for mechanically ventilated patients in intensive care. *Lancet*. 371: 126) and complete the Critique prior to attending journal club.

MICU/CICU

July 21 1100-1200 Room 2106

July 23 0745-0845 Room 2118 (Nursing Break Room)

SICU

August 4 & 6 0730-0830 Room 2.2341.3 (west end of SICU back hallway)

Neuro ICU

August 6 1100-1200 Nursing Break Room

August 14 0730-0830 Nursing Break Room

BTICU

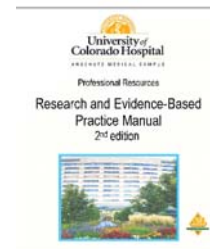
July 22 0730-0830 Burn Gym

July 28 1300-1400 Burn/Neuro Conference Room 3.2213

Respiratory Therapy Department

July 22 1400-1500 RRT Department

Coming soon to your unit! Ask your educator how to access the Research and Evidence-Based Practice Manual, 2nd edition.



To order your own copy visit:

<http://www.uch.edu/docs/pdf/Invoice%20-%20Practice%20Outcomes%20Research%20Manual%20-%20Template.doc>

Kudos



Kathy Oman, RN, PhD, CEN, FAEN will be presenting at the National Magnet Conference on October 1-3, 2009 in Louisville, KY. Her abstract "Healthcare Provider Evaluation of Family Presence During Resuscitation" was accepted for a podium presentation.

Regina Fink, RN, PhD, AOCN, FAAN; Ellen Hjort, RN, ND; Barbara Wenger, RN, MS, OCN; Paul Cook, PhD; Mary Cunningham, RN, BSN, OCN; Aimee Orf, RN, BSN, OCN; Wendy Pare, RN, BSN, OCN; Jennifer Zwink, RN, BSN, OCN recently published a manuscript, "The Impact of Dry versus Moist Heat on peripheral IV Catheter Insertion in a hematology/Oncology Outpatient Population" in the *Oncology Nursing Forum*, 36(4), July 2009, E198-E204.

Sara Rushman, RN, BSN, CNOR, CNIII, from the Day Surgery Operating Room presented her study, "Implementation of a timing protocol for breast specimens sent to pathology," at the 56th Annual AORN Congress in Chicago, Illinois, in March 2009.

Terri Link, RN, BSN, MPH, CNIII, from the Day Surgery Operating Room published a chapter titled "Zero tolerance in perioperative services" in Aspen Publisher's 10th Annual Update (June 2009) *Perioperative Services: A Manual for Directors and Managers*.

- ✓ Linda Brazen, RN, MSN, CNOR, Clinical Educator for the UCH Operating Rooms is the new Consulting Nurse Editor for this book.
- ✓ Suzanne Sortman, RN, BSN, MA, CNOR, Inpatient OR Manager has a chapter accepted for the June 2010 edition entitled, "Effective Communication for Safe Patient Care."

Linda Brazen, RN, MSN, CNOR, Clinical Educator for the UCH Operating Rooms published, "Competency implications affecting patient safety in the perioperative services," in a new Elsevier Publisher Book (1st edition May 2009) *Perioperative Safety* (D. Watson, editor).

Linda Brazen, RN, MSN, CNOR, Clinical Educator for the UCH Operating Rooms had an article accepted for publication in "OR Nurse 2009." The title of the article is "Warm hands, warm heart: Perioperative prevention of unintended hypothermia."

Nurse Driven Burn Resuscitation Protocol: The Burn Trauma ICU

Kyra Fahlstrom, RN, Clinical Nurse II; Camy Boyle, RN, BSN, Clinical Educator; Mary Holden, RN, MSN, CCRN, Nurse Manager; Drs. Gordon Lindberg and Josh Goldberg; Mary Beth Flynn Makic, RN, PhD

Successful resuscitation of burn injured patients, especially burns greater than 20% body surface area is essential to patient survival. Successful resuscitation is a fine balance between providing adequate fluid for tissue perfusion but avoiding over resuscitation as that will lead to potential complications such as abdominal compartment syndrome and ARDS.

Kyra Fahlstrom RN attended a few presentations on Nurse Driven Resuscitation Protocols at the American Burn Association conference in March 2009. This sparked her interest and she engaged in a discussion among BTICU RN staff. Current burn resuscitation practice was driven by fluid calculations based on the Parkland formula and physician orders to adjust IV fluids (IVF). The burn team had a perception that IVF were not decreased in a timely manner following the current practice guidelines. The BTICU RNs decided to explore the evidence and develop a Nurse Driven Burn Resuscitation Protocol (NDBRP) to better meet burn patient fluid volume requirements without administering excessive fluid volume.

Kyra Fahlstrom spearheaded the project with mentorship from her BTICU Educator Camy Boyle. She completed a review of the literature and presented her findings to the BTICU process improvement team. The team agreed that developing an evidence-based NDBRP was a great project for the BTICU. She developed a unit based FOCUS-PDCA to guide the project and measure outcomes.

Kyra developed an evidence-based protocol and practice policy/guideline and presented it to the BTICU MD/RN team in May of this year. She has developed a PowerPoint presentation and case study that is being used for intensive training with the BTICU RNs to ensure they understand and can apply the protocol guidelines in a consistent manner. The protocol involves the RN assessment of the patient's total burn surface injury, Parkland formula calculations, and adjustment of IVF and vasoactive agents based on assessment variables to include urine output and CVP. The protocol also guides the nurse to observe for complications such as abdominal compartment syndrome which can be life threatening for patients. Assessment of over resuscitation can also be addressed using the protocol by administering albumin and/or lasix. The evidence-based NDBRP provides a guideline for fluid resuscitation to maximize patient survival after burn injury and hopefully

Help from the Health Sciences Library



Lisa Traditi, MLS, AHIP – Head of Education; UC Denver Health Sciences Library

New Online Tutorial for CINAHL (Cumulative Index to Nursing and Allied Health Literature)

The latest addition to the online tutorials available from the Health Sciences Library focuses on finding the best evidence in the CINAHL database. Created by Addie Fletcher, Information, Research, and Outreach Librarian, the CINAHL tutorial is available at <http://tiny.cc/HSlibraryCINAHL>. The tutorial is easy to follow and allows learners to explore at their own pace.

Part of the larger “Searching for Evidence Based Information” tutorial, the CINAHL tutorial is easy to follow and allows learners to explore at their own pace. Explore the larger tutorial at <http://hslibrary.ucdenver.edu/education/evidence-based-pharmacy-tutorial.php>.

Discover the many other tutorials provided by the Health Sciences Library at <http://hslibrary.ucdenver.edu/online-tutorials>.

Meet with a Librarian In-person: Librarian Office Hours in the AOP

Librarians are in the House! They’re in the Anschutz Outpatient Pavilion, that is. Health Sciences Librarians are holding "Ask a Librarian Office Hours" in the Patient Information Center (1st floor near the main entrance) every Thursday from noon to 1:00pm. No appointment is necessary – just walk in!

Can’t wait for Thursday to ask your question? You can get help right now!

1. Use the *Ask A Librarian* services: <http://hslibrary.ucdenver.edu/aal/> where you can chat online, email your question or schedule a House Call visit by a librarian
2. Call the Library: 303-724-2152
3. Come to the Library

minimize complications associated with over and under resuscitation. The protocol also assists the medical residents that rotate through the unit as it provides a more concrete guideline for treating burn injured patients based on current evidence.

Success of the NDBRP will be measured based on patient outcomes associated with fluid resuscitation. Kyra has collected data from past patient charts and will collect data from charts when the protocol is followed in the management of burn injured patients with greater than 20% burn. Data she is following include: total fluid volume received compared to Parkland calculations, bladder pressures, total ventilator days, total ICU days.

The NDBRP is an exciting example of bringing the evidence back from a conference, exploring the current evidence of our practice with the literature and developing an EBP protocol that can be implemented in our facility to optimally improve patient outcomes.

EBP Boot Camp: Mission Possible



The Evidence-Based Practice champions and other interested nurses enlisted to attend a full day workshop on May 12 to learn more about EBP and commit to completing an EBP project. The following nurses are being mentored by the research nurse scientists and the educators:

Cancer Center	Susan Swanson	Role of RN in ambulatory clinic
NICU	Adrienne Isaacs	Palliative care in the NICU
Burn/Trauma ICU	Andrea McFarland	Care for the caregiver; tranquility room
OB-Gyn Clinic	Terry Randler Danielle	1 hour glucose testing in pregnant women
MDSS/6E	Justice	CIWA guidelines

Hours (See <http://hslibrary.ucdenver.edu> for
Holidays and closures)

Monday - Thursday: 7:00 am to 11 pm

Friday: 7:00 am to 6:00 pm

Saturday: 10:00 am to 6:00 pm

Sunday: 10:00 am to 8:00 pm

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<http://hslibrary.ucdenver.edu/aal/> or call 303-724-2152.

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Keep up with what's new by subscribing to *The Appendix: The Official Organ of the UC Denver Health Sciences Library*, an online newsletter, To subscribe, please go to
<http://hslibrary.ucdenver.edu/newsletter/subscribe.php>.

AIP OR	Kaci Meddings	The Model Preceptor
Home Dialysis	Sheri Southoff	Hyperkalemia
6W transplant	Kim Fischer	Patient education
CVC procedure	David Thompson	Improve through put/start times, decrease pt waits
CeDar	Valerie Fuson	Benchmark CeDar against ASAM standards
CeDar	Jonathon DeCarlo	ASAM placement criteria validity/benchmarking
Onc/BMT	Lindsey Spencer	improve sleep patterns of BMT patients
7E Medicine	Kay Fekula	Florence Nightingale and EBP
AOP pre/post	Cheryl English	Patient safety
ED	Bethany Squire	PO hydration with Zofran at triage
ED	Julia Waters	ED throughput; wait in WR versus exam room
AOP Day Surgery	Anne Soisson & Terri Link	Professional RN/Salary model: Impact on patient outcomes and nurse satisfaction
SICU	Jennifer Chavez	SV as a hemodynamic monitoring parameter

TRANSCULTURAL NURSING JOURNAL CLUB



Lassetter, JH & Callister, LC (2009). **“The impact of migration on the health of voluntary migrants in western societies”** *Journal of Transcultural Nursing* 20(1), 93-104.

Tuesday July 28, 2009
7E Conference Room, AIP
1200-1300

Instructions to access article:

1. Click on “Training and Education” on the HUB Intranet Homepage
2. Click on “Health Sciences Library”
3. Type “Journal of Transcultural Nursing” and click on “Journal Titles”
4. Click on Sage Premier 2009”
5. Click on “Select article from archive”
6. Click on “January 2009”
7. Scroll down to the 10th article and print

All clinical staff are welcome to attend!

Please bring your lunch. Dessert will be provided.

1.0 CE applied for