Evidence based practice (EBP) has been a term that has floated around for a long time now. In fact, if you want to ensure that your idea will be accepted as a poster or a podium, just be sure to tie the term evidence based practice into it and you will have nursing leaders taking notice of your idea. That being said, how does one begin an evidence based project? Is there a simple method that anyone can use to solve problems at the bedside?

Evidence based practice is defined as “…the conscientious use of current best evidence in making decisions about patient care. It is a problem solving approach to practice that incorporates:

• a systematic search for and critical appraisal of the most relevant evidence to answer a burning clinical question
• One’s own clinical expertise
• Patient preferences and values.”  
(Pape, 2003, p. 186)

Thus, evidence based practice involves several steps. First based on the definition, one must examine research evidence. In the second step the information obtained from research is combined with clinical experience, available resources and finally the patient’s preference is considered to determine the best care for the patient (Pape, 2003). A goal of the evidence based practice movement is to increase the speed with which the knowledge obtained from research is integrated into patient care.

The use of evidence based practice has lead to the development of several models for the application of evidence based practice. The Funk and Stetler models were among the first models to promote evidence based practice. These two models became known for promoting practice that did not depend primarily on experience and thus de-emphasized ritual, and un-systematic clinical experiences. The Funk model has three major components that include evaluating the quality of the research, looking at the characteristics of communication and facilitation of the utilization of the research. The Funk model considered several barriers to the utilization of evidence and attempted to optimize the use of research in practice. The Stetler Model of research utilization and evidence based practice was first published in 1976. It was created to help nurses progress from critiquing published findings to the application of these findings into practice. This model consists of steps to assess and use research findings. It focuses on critical thinking and the use of findings. The steps of this model are termed preparation, validation, comparative evaluation/decision making, translation/application, and evaluation. (Ciliska et al, 2005).

Four organizational models have been proposed that assist nurses in the application of evidence based practice. These are the Iowa model, Rosswurm and Larrabee’s model, the Advancing Research and clinic practice through close collaboration (ARCC) and Kitson’s model. These models add a key component when compared to Funk or Stetler. They consider the the impact of the organization on EBP. Each of these models address the key component of EBP: develop a question, search and evaluate the available evidence, utilize the evidence, evaluate the practice decision or change. Each model provides a unique method for accomplishing these steps. (Ciliska et al, 2005).

The Iowa Model uses key triggers that can be either problem focused or knowledge focused to lead the clinician in utilization of the components of this model. Initially the clinician generates a question either from a problem or as a result of becoming aware of new knowledge. The second step in this model is to determine if...
I am so tired of winter. Even with the winter Olympic games on the television, I find myself disillusioned with winter so I am happy to have the opportunity in this article to think about spring. Spring at ONS is a time when we begin to think about the coming of oncology nursing month and national congress. “There when you need us” is the theme of this year’s oncology nursing month which is celebrated with the opening ceremony at the ONS national convention.

I am disappointed that I will not be able to attend this year’s congress in San Diego as it holds the promise of being a great conference. The theme of the conference, “Wild About Oncology Nursing” is a great title to showcase the outstanding presentations that will be available this year at Congress. You are encouraged to “get wild and be wowed!”

Full details of ONS congress can be found on the ONS web page (www.ons.org). For those of us who cannot attend congress in person, ONS now has a virtual congress. The Congress virtual meeting gives you access to the valuable content and CNE from the conference, even if you can’t make it to the event in San Diego. Access for virtual attendees is $500. ONS also has a social networking page where you can sign up and meet old friends who are at Congress called Crowdvine. Through this interactive platform, you’ll be able to get talk to speakers and other attendees, share information about resources that will help you to recognize the importance of the work that oncology nurses do every day caring for patients with cancer. I encourage you to go to congress if you can, and if not, work to celebrate oncology nursing month and make a difference for patients and your co-workers for we are there when you need us…oncology nurses!

But for those of us who will not be able to experience the uplifting spirit present at ONS congress, we can create our own history and celebrate oncology nursing month in our own manner. The ONS website includes ideas and promotions that you can incorporate into your own activities that will give you opportunities to recognize the importance of the work that oncology nurses do every day caring for patients with cancer.

I encourage you to go to congress if you can, and if not, work to celebrate oncology nursing month and make a difference for patients and your co-workers for we are there when you need us…oncology nurses!
Evidence Based Practice: Demystifying the Iowa Model

Continued from page 1

there is relevance to organizational priorities. If the question posed is relevant, then the next step in the process is to determine if there is any evidence to answer the question. Once the evidence has been examined, if there is sufficient evidence, then a pilot of the practice change is performed. If there is insufficient evidence, then the model supports that new evidence should be generated through research. Thus, there are two outcomes to this model. One outcome would be to institute a practice change based on available research if after a trial period evaluation of the trial demonstrates there is appropriateness to the practice change. The second outcome would be to generate research. With either end point, there is dissemination of the results thus moving forward evidence based practice. (Ciliska et al, 2005).

Step one of the Iowa model is to formulate a question. The question if asked in a PICO format is easier to use to search the literature. A PICO format uses the following method to frame the question:
Frame question in PICO format
  • \(P\) = Population of interest
  • \(I\) = Intervention
  • \(C\) = Comparison of what you will do
  • \(O\) = Outcome (Nolan et al, 2005)

For example if one wished to discover if irrigation is necessary with a continent diversion post cystectomy in a bladder cancer patient then the question should be worded like this: Does irrigation of a continent diversion in bladder cancer patients improve recovery compared to those patients who do not have their continent diversions irrigated? Unless the nurse is aware of new data that reports that irrigation improves outcomes, this is a problem focused question. It is important to develop a well formulated question to avoid searching for wrong, too much or irrelevant information. Various websites can be used to help formulate the question. These include:

The centre for evidence based medicine: http://www.cebm.net/index.aspx?o=1023

University of Washington: Construct well-built clinical questions using PICO http://healthlinks.washington.edu/ebp/pico.html

Step two of the process would be to determine the relevance of the question to organizational priorities. In this example, one would discover if improved recovery or decreased hospital time post cystectomy was an organizational priority. If this were not a priority, then posing this question would yield little in the way of practice change.

Step three of this model is to determine if the evidence answers the question. There are many databases available to be searched including CINAHL, MEDLINE, EMBASE and the Cochrane Database of Systematic Reviews. The first database that should be searched is Cochrane. If a systematic review is available to answer your clinical question, it will be housed here. The next database to be searched is the National Guidelines Clearing House (www. guideline.gov). This will provide you with information on guidelines that have already been established. Finally CINAHL and MEDLINE should be searched for relevant data. Once the data has been collected one must critically appraise the data and synthesize it. ONS provides guidelines for authors that rank evidence that are helpful when evaluating evidence. This can be located at http://www.ons.org/Publications/Books/AuthorGuidelines/media/ons/docs/publications/typesevidence.pdf. Initial exam of the evidence should include the following information:
  • What is the question posed by the study?
  • What is the design of the study?
  • What is the description of the sample?
  • What were the procedures of the study?

Critical questions that should be asked when appraising evidence include:
  • What were the results of the study?
  • Are the results valid?
  • Will the results help me in caring for my patients?

Once the evidence has been gathered, evaluated and synthesized, one should determine if there is enough evidence to support a practice change. If the search began based on a problem trigger, should other levels of evidence be considered or should a research study be instituted? Finally once the practice change has been instituted, there should be a timeline for which the practice change is evaluated. The final step to the process is to share the outcomes of your practice change with other in the form of an article or poster.

References:


Congress Speaker Experiences Cancer as a Patient and a Nurse

As an experienced oncology nurse and three-time cancer survivor, Nancy Jo Bush knows both sides of the cancer care continuum. Join her on May 15 from 8:30–10 pm at the ONS 35th Annual Congress as she presents the Mara Mogensen Flaherty Memorial Lecture on post-traumatic stress disorder (PTSD) and cancer. To learn more about this and other exciting Congress sessions, check out the Schedule at a Glance at http://onsopcontent.ons.org/ItineraryBuilder/conferences/Sessions.aspx?eId=28
Diffuse, Large B-Cell Lymphoma

Presented by Dr. Christopher Friese
Summarized by Loretta R. Biskup, RN, BSN

The November MDONS presentation was by Dr. Christopher Friese, an assistant research associate at the University of Michigan School of Nursing and Comprehensive Cancer Center, Ann Arbor. Dr. Friese received his nursing degrees; BSN,MS, PhD from the University of Pennsylvania. His post doctorate was served at Harvard University in cancer prevention and control. He focused his research on patient outcomes following cancer treatment. He has written many publications and has lectured nationally as well as internationally.

There are more than 35 types of lymphomas of which 30 are classified as Non-Hodgkin’s. Diffuse large B-cell (DLBCL) is the most common, accounting for 30% of all newly diagnosed cases. Diffuse large B-cell is aggressive and fast growing. Nearly all Non-Hodgkin’s lymphoma cases occur in adults with the average age being 60. Men are more likely to develop DLBCL than women. Caucasians are more likely to develop DLBCL than people of African or Asian race.

There are two primary types of lymphocytes; B cells and T cells. Although most lymphocytes begin their development in the bone marrow or lymph nodes, only the B-cells continue to develop in the bone marrow or lymph nodes. The T-Cells leave the bone marrow/lymph node and continue their growth in the thymus. In DLBCL, the abnormal cells are larger and continue growing and reproducing.

The presenting symptom of DLBCL is often a painless or rapid swelling in the neck, armpit or groin. There may also be night sweats, unexplained fevers and weight loss. Initial diagnosis will be made by biopsy of the enlarged node. About 60% of the patients confirmed with DLBCL will be Stage III or IV. The remaining 40% will have localized disease, being confined to one part of the body.

Treatment will depend on the staging, based upon the number and location of involved lymph nodes and whether it has spread beyond the lymph nodes to other organs. The four stages are:

- **Stage I** – limited to one lymph node region.
- **Stage II** – involves two or more lymph nodes, either above the diaphragm or below the diaphragm.
- **Stage III** – involves lymph node regions on both sides of the diaphragm.
- **Stage IV** – spread beyond the lymph nodes and involves one or more organs; e.g. bone, liver, lung.

As part of the staging process and before treatment begins a patient will have a complete blood work-up, x-rays, CT of chest, abdomen, and pelvis. A bone marrow biopsy is also included to determine if there is disease within the marrow. A PET scan may also be used to differentiate active disease from normal tissue and identify new areas of disease.

The PET scan identifies cancers based on the high activity within the cell, whereas, CT scans and MRI’s identify tumors based on size, shape and location. PET scans can be very useful in assessing whether patients are likely to fail R-CHOP (as predicted by mid-treatment PET scan). Patients who have a negative PET scan after four cycles R-CHOP have an excellent prognosis (>85% chance of cure) and should complete the standard six cycle treatment of R-CHOP. Those having a positive PET scan after four cycles have a poor prognosis (about 10% chance of cure) and may have an improved outcome if switched to a salvage regimen R-ICE (Rituximab, Ifosfamide, and Carboplatin, Etoposide).

Treatment of DLBCL also depends on whether the disease is localized or advanced. Patients with localized disease are treated with fewer cycles (usually three cycles) of R-CHOP in combination with radiation treatment to the involved area. The standard treatment for patients with advanced disease is a combination of chemotherapy and immunotherapy. The most common regimen is Rituximab, Cyclophosphamide, Doxorubicin and Vincristine intravenously with Prednisone orally given every three weeks for 6-8 cycles.

Rituximab is the most recent agent added to the “Gold Standard”, (CHOP). Rituximab is a monoclonal antibody that works against the CD20 protein found on the surface of B cells. The Food and Drug Administration approved its use in 1997 for B cell Non-Hodgkin’s lymphoma. Rituximab in combination with CHOP chemo is now standard therapy. It destroys B cells that have CD20 on their surface. As with most chemotherapy, some of the common side effects that require careful nursing considerations are: fever and low blood counts, nausea and vomiting, hypersensitivity reactions, constipation, hair loss, tumor lysis syndrome, cardio toxicity, neurotoxicity and infertility.

If a patient has recurrent or refractory disease there is only a small chance of cure. Depending on the patient’s age and underlying medical problems, treatment may include “salvage chemo”. If there is a response and the patient is healthy enough, high-dose chemotherapy and autologous hematopoietic stem cell transplant may be recommended.

A scoring system known as the International Prognostic Index (IPI) rates the four year survival after treatment with R-CHOP. The Index gives one point for each of five negative characteristics which reduce the chance of survival. Negative characteristics are: age over 60, a high level of LDH, poor performance status, a clinical stage III or IV, and more than one involved extra nodal disease site.

Multiple studies are ongoing for DLBCL including one which has examined the use of Bortezomib to treat patients refractory to chemotherapy. A few of the many studies now recruiting are:

1. Phase III study of adjuvant therapy in poor risk patients with DLBCL versus matching placebo after patients have achieved complete response with first line Rituximab.
2. A pilot study using the MRI as a tool for early evaluation of tumor response in DLBCL.
3. Combination chemotherapy and Rituximab in treating patients with primary mediastinal DLBCL.

For the future, we can expect to see more widespread use of monoclonal antibodies with other chemotherapy regimens in treating all forms of cancer.
Meeting Summaries

December

The December meeting again focused on good work in the community. We collected supplies and made hygiene kits for the homeless in Detroit. Enjoy the photos of the wonderful time we all had!

January

Immunomodulatory Antibodies for the Treatment Of Advanced Melanoma: A Workshop For Oncology Nurses

Presented by Peg Esper MSN, MSA, APRN, BC, AOCN
Summarized by Grace Marshall RN, OCN

The recognition of tumors is an important part of the immune system. Tumors express antigens that are recognized as foreign by the patient with the tumor. In melanoma, lymphocytes, macrophages and natural killer cells are seen surrounding melanoma tumors on histology. B cells make antibodies that can bind to tumor cells and mark them for destruction. T cells can directly recognize and destroy tumor cells or make substances called cytokines that help other innate immune cells such as macrophages kill tumor cells.

Melanoma is among the most immunogenic of all solid tumors; Spontaneous regression of primary tumors occurs in 3%-15% of melanomas. It develops secondary to intrinsic and extrinsic factors. Intrinsic factors include inherited genotypes. The most common extrinsic factor for melanoma is UV radiation from the sun. This can result in damage to the DNA of cells via thymine dimerization if left unchecked. When a cell divides, these mutations are passed onto new cells. If these mutations develop in proto oncogenes or tumor suppressor genes, the rate of mitosis can become uncontrolled leading to the formation of a tumor. Mutations of CDKN2A and CDK4 and several other genes have been found in melanoma prone families. These genes are important in cell cycle regulation. Melanoma cells grow autonomously and secrete many cytokines and growth factors. This allows the cancer cells to grow independently of growth factors. Cytokine production by melanoma cells induces tumor cell proliferation, stimulates angiogenesis and cell adhesions molecules and generates resistance to inhibitory proteins of cell proliferation.

The production of interleukin 10 (IL10) and vascular endothelial growth factor (VEGF) can confer immunosuppressive properties to melanoma cells. This is done by blocking the maturation and function of antigen presenting cells (APC) which results in defective antigen presentation.

IL2 is a protein that occurs naturally in the body. It plays an important role in activating and increasing the number of T cells. IL 2 therapy possess the same properties as naturally occurring IL 2. It helps to increase T cell activation, synthesis of B cells and cytotoxic T lymphocytes and natural killer (NK) cells. These are all important in immune system function. Once activated, helper T cells secrete cytokines such as tumor necrosis factor (TNF) and interferon gamma that both have anti tumor effects. Cytotoxic T lymphocytes and NK cells directly kill tumor cells. IL 2 is used in first line or second line therapy for advance melanoma.

Interferons work by binding to cell surface receptors and interacting with genes of both normal and malignant cells. They modulate the expression of NK cell, T cells, monocytes and dendritic cells in both

Continued on following page
cancer and non cancer tissue which increases the response to tumor cells.

What Current Therapy Is Available
In 1995 Interferon was approved for stage IIC or stage III. Treatment consisted of high dose adjuvant Interferon or observation. Trial results did not consistently support significant increase in overall survival.

In 1998 IL-2 was approved for stage IV disease and was directed at stimulating host immune cells. In this protocol, high dose IL-2 is given every 8 hours up to 14 consecutive doses over 5 days or as tolerated.

Biochemotherapy combination of chemotherapy and immunologic agents have also been shown to be effective for melanoma. These combinations consist of IL-2, Interferon, cisplatin, vinblastine and temozolomide or DTIC. Phase II studies have demonstrated response rate of 40-60% in metastatic melanoma. There is also a potential to eliminate micrometastatic disease in high risk patients. Data from 3 randomized controlled trials demonstrated that high dose IL-2 can elicit an overall response rate of 5%-27%, with a complete response in 0%-4% of patients. Patients who achieved a complete response in the 5 randomized trials also demonstrated impressive long-term response rates that ranged from 1.5-148 months (median: 70 months).

Melanoma continues to be a major health problem. FDA approved therapies have been modestly effective in harnessing the patients immune system in treatment of melanoma. Adjuvant Interferon shows small percentage of progressive free survival but insignificant overall survival advantage in stage IIB/III melanoma. High dose IL-2 boluses show modest response rate of up to 27% and a minimal complete response of <5%.

Biotherapy shows encouraging results with regression of bulky disease, but no significant improvement in overall survival. The increase in incident and mortality from melanoma dictates the necessity for continued research in immunomodulating therapies

The prognosis of a patient with stage IV metastatic malignant melanoma remains poor. Despite decades of research, for patients with disseminated melanoma median survival is < 10 months. Only two agents are approved by the FDA for the management of stage IV melanoma Dacarbazine and high dose IL-2. IL-2 is only used at a select number of locations through out the US. Both are associated with modest response rates and survival.

What Drugs Are Being Tested for Melanoma
CTLA-4 is a substance expressed on key lymphocytes. It is a negative regulator of immunity. It plays an important role in dampening T cell responses and limiting antitumor responses. There are a couple of antibodies that have been developed against the CTLA4 antigen. These drugs include Iplimumab and Tremelimumab. The way that they work is to cancel the effect of CTLA4 causing an immune stimulation allowing the T cell to become activated. CTLA4 can be thought of as a brake on the immune system. New drugs cut the “brake cable” and allow the immune system to be directed or steered to develop an anti-tumor immune response.

The first study was done on a human IgG2 mAb targeting CTLA4 agent Tremelimumab (n=34). Published trials of this drug did not show improvement in overall survival compared to standard therapy. This drug is no longer in trial in the US.

The second drug, Iplimumab, has shown an overall survival of 13.5 months which is better than 7.0 months with standard treatment. Surprisingly, patients can exhibit an initial response with a slow induction to a complete response. While others may show sustained disease that progresses to a complete response over time. Thus, the study has shown that the antitumor effects of CTLA4 antibodies can follow a different pattern. They can be immediate, delayed after disease progression, or in the presence of new lesions. This has resulted in a immune related response criteria (IrRC). IrRC considers only measurable nodes, defined total tumor burden, follow up of disease progression patients to detect late response, and include as responders those patients who have stable disease with less than or greater than 25% decline in tumor burden.

The most common side effects linked with these drugs are related to the immune system. While toxicity does not always mean a response, there appears to be an association. The most common side effects are rash, diarrhea, endocrinopathies and hepatitis. These side effects are always reversible and manageable with immunosuppressives. These side effects require aggressive work up and management for moderate to severe events. These side effects are treated with established therapies eg corticosteroids. 70% of all patients have a rash which can be very itchy. They are frequently associated with T cell infiltrates. Nursing interventions include:

1. Inform medical personnel of reaction
2. Teach the patient to:
   a. Avoid new products
   b. Avoid hot baths
   c. Potential treatment course (topical, antihistamines, steroids)
   d. Reassure that IRAE can possibly lead to clinical benefit

Diarrhea is the most common GI side effect. It can be a life threatening side effect although most cases can be managed with systemic therapy. Uvitis can also develop. Key points to instruct patients include:

1. Importance of informing medical personnel of diarrhea no matter how insignificant
2. Educate on possible risk of perforation
3. The need for aggressive and early treatment
4. Narcotics can mask effects of colitis
5. IRAEs could possibly indicate a favorable response

Hypophysitis (hypopituitarism) can also develop as one of the endocrinopathies. With treatment, there will be a return of function for approximately 50% of all patients with cessation of the drug. Key patient education points include:

1. Signs and symptoms of possible hypophysitis headache
2. Other possible symptoms that can indicate a pituitary hormonal insufficiency
3. Importance of notifying medical personnel of symptoms
4. Generally but not always irreversible

CTLA-4 blockade produces durable CRs with manageable toxicity; it is an active agent in melanoma with median OS of 11–16 months in 400 pts. Responses to anti-CTLA-4 mAbs may occur with prolonged kinetics or even after progression, suggesting that response criteria such as RECIST may be inappropriate. Changes in ALC over time may be associated with benefit, but further confirmatory trials are required. This may result in a paradigm shift in how we care for melanoma patients.
Well here it is, 2010. Who would have thought that a mere decade ago many of us were stockpiling water, batteries and canned goods, preparing for the big Y2K computer crash that never came. So many people expend a great deal of energy on such tasks while creating a level of chaos in their life that is unnecessary and unhealthy. My thought is to channel all that energy and ambition and put it into something that will give serious rewards - especially to the oncology community.

My goal for 2010 is to spread the word about ONS and MDONS and all the benefits they provide oncology nursing in the Detroit area. There is so much to be gotten from joining our organization. Things such as professional networking, promoting professionalism and certification, scholarship and CEU opportunities, sharing ideas on how to care for our patients, as well as a feeling of knowing you are helping hundreds or thousands of people in need because you have chosen to commit your career to oncology nursing.

Our patients are in need of dedicated oncology nurses who have passion for the specialty, specialized education and knowledge, and most importantly, warm, caring and compassionate hearts. Oncology nurses are a breed apart - we do the things that many cannot imagine doing. We stand strong, fists raised in the air with patients fighting cancer. We hold their hands, stroke their foreheads and then shed tears with those patients when there is no more fighting to be done… knowing all the while we were in the presence of a real life hero. For that’s what cancer survivors are - heroes. They are just disguised as regular people.

So this is my challenge to all of our membership this year: Be a difference-maker, be a hero of a different sort. If every one of us became an influence or mentor to just one person this year, imagine the impact that could have on our community. Imagine inspiring a new oncology nurse or nursing student. Consider what becoming a mentor to a peer could do not only do for you, but for them and all of the patients to which they have contact. This impact is the very reason that I became an oncology certified nurse. Someone showed me how amazing and exciting oncology was. She saw that glint in my eye and ran with it and still today is one of my dearest friends. To me, that’s what being an oncology nurse is all about.

So let’s spread the word about our wonderful MDONS organization and all that it has to offer. You know all the benefits of MDONS, that’s why you’re a member. We are the best advertisement any money could buy. And in exchange for this challenge we will continue to build on the strong foundation that has been set for our chapter, while building membership and ultimately changing the lives of oncology patients and survivors for the better. Push your comfort zone this year or join one of the MDONS committees. I truly believe that there are so many people waiting to be inspired… are you up for the challenge?

---

Congratulations to our scholarship winners for 2010!

**Elaine Valdaez Scholarship - MDONS 2010 Conference Scholarship**
Margie Warren, RN

**Advanced Practice in Nursing Scholarship:**
Lisa Zajac RN • Tracie Ann Peer, RN

**Nursing Student Educational Scholarship:**
Mary Ward, RN

**Certification Awards for ONCC certification or renewal**
Rose Ermete, RN • Angela Maynard, RN • Susan Wozniak, RN

---

Save $100 on 2010 Certification Tests!
Adolescents and young adults (AYAs) with cancer face many challenges, not only with their disease but also with the impact it may have on their developing lives. Two ONS members share how their institutions meet the unique needs of AYAs with cancer in the March issue of ONS Connect.
The Chapter Capsule

...is a publication of the Metropolitan Detroit Chapter of the Oncology Nursing Society, MDONS is devoted to improving the quality of care given to patients experiencing cancer. This newsletter is published four times a year, in spring, summer, fall and winter. Letters and articles from members are welcomed. All material is subject to editing for space and clarification. Neither the Metro Detroit Chapter nor the ONS National Office assumes responsibility for opinions expressed herein. Acceptance of manuscripts does not indicate or imply endorsement. Materials may be submitted to:

Carole Bauer, BSN, RN,OCN,CWOCN
6116 Smithfield Drive; Troy, MI 48085

2010 MDONS OFFICERS

President
Sheryl Cummings, cummings_sheryl@yahoo.com

President Elect
Michelle Wallace, mwallace@beaumonthospitals.com

Past President
Susan Wozniak, susan.wozniak55@gmail.com

Nominating Chair
Angela Maynard, amaynard@beaumonthospitals.com

Secretary
Ann Marie Campbell, amcamp19@yahoo.com

Treasurer
Nancy Morrow, Namor04@yahoo.com

Newsletter Editor
Carole Bauer, carolebauer@wowway.com

Newsletter Assistant Editor
Sandy Remer, sdremer@earthlink.net

Membership Application
Metropolitan Detroit Chapter - ONS

- New  - Renewal  - One Year $20.00  - 3 Years $50.00

National ONS Number (as noted on member cards): __________________________

Name: ____________________________________________________________________

Institution Name: _______________________________________________________

Professional Position: ___________________________________________________

Business Address: Street: _________________________  City: _______________________

State/Zip: _________________________  County: _________________________

Phone: _________________________  Email: _________________________

Preferred Mailing Address:  - Business  - Home

Membership and Correspondence to:  Grace Marshall, 3111 Rivard Ave., Windsor, ONT N8T2J1

http://metrodetroit.vc.ons.org

Staff

Susan Wozniak
Susan.Wozniak55@gmail.com

Theresa Benacquisto
theresab65@comcast.net

Lisa Zajac
LMZ08@aol.com

Rita Di Biase
Rita Ди Biase

Nancy Morrow
Nanmor04@yahoo.com

Joan McNally
joanmcnally@aol.com

Rita Dundon
313-881-8584

Mary Wilson
MPW1511@aol.com

Grace Marshall
marshallg@karmanos.org

Loretta Biskup
edbiupk@yahoo.com

Alicia Piccolo
alicia_piccolo@yahoo.com

Deborah Hasenau
deb_and_bark@yahoo.com

Sheryl Cummings
cummings_sheryl@yahoo.com

Sabrina Richer
sabrina.richer@hms.com

Gayle Snider
gayle.snider@infusystems.com

Michelle Wallace
mwallace@beaumonthospitals.com