



IRENE Newsletter

IOWA RESEARCH NETWORK

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Our MISSION and PURPOSE

IRENE's mission is to improve the health and well-being of Iowans through collaboration in practice-based research on questions important to primary care physicians and their patients. IRENE's purpose is to create and foster a network of research collaboration between the academic medical center and primary care physicians throughout the state of Iowa with a particular focus on improving rural health.

DIRECTOR of IRENE



Barcey Levy, PhD, MD
Professor
Department of Family Medicine
University of Iowa
barcey-levy@uiowa.edu
(319) 384-7622

RESEARCH DIRECTOR



Barry L. Carter, PharmD
Professor
Department of Family Medicine
University of Iowa
barry-carter@uiowa.edu
(319) 335-8456

CONGRATULATIONS To Dr. Barcey Levy!!!

She was just awarded a National Institutes of Health Recovery Act grant entitled, "Enhancing Community-Based Cancer Control in Iowa." The 3-year award will help support the infrastructure to build a partnership among the citizens of Iowa, represented by the Iowa Cancer Consortium (an organization of professionals and lay people dedicated to reducing the burden of cancer in Iowa), the Iowa Research Network (a primary care practice-based research network), and the University of Iowa Holden Comprehensive Cancer Center. This partnership will focus initially on understanding and addressing the disparities in the burden of colorectal cancer in Iowa. (See pages 4 & 5)

Update on the Management of Skin and Soft Tissue Infections by Primary Care Clinicians in the Era of Community-Acquired Methicillin Resistant Staphylococcus Aureus: An Iowa Research Network Study

Since most CA-MRSA infections are managed initially on an outpatient basis, it is critical that primary care clinicians recognize and treat appropriately patients suspected of having such infections. The purpose of this study was to see if using a "best practices" intervention for managing skin infections made any difference in the management of skin infections, that is



to determine if there was a difference in the management of patients presenting with skin and soft tissue infections in primary care settings before and after an educational focus group meeting and recommendation of use of a skin and soft tissue infection algorithm.

This was a time series design study that collected data on the same skin and soft tissue infection variables for 6-12 months prior to the intervention and 6-12 months after the

intervention. Institutional review board approval was received for retrospective chart review, focus group meetings, and prospective subject recruitment. Informed consent for the prospective component was obtained from individual patients by the site coordinator who had received



Update on the Management of Skin and Soft Tissue Infections (continued from page 1)

The following offices participated in the study:

OFFICES

- Family Medicine Associates, Guttenberg, IA
- Genesis Family Medicine, Davenport and Blue Grass, IA
- Medical Associates, LeMars, IA
- Regional Family Health, Manchester, IA
- The Country Doctor, Bloomfield, IA
- UIHC CMS Riverside Clinic, Riverside, IA
- UIHC CMS Sigourney Clinic, Sigourney, IA
- UIHC Family Medicine Clinic, Iowa City, IA
- Urbandale Family Physician, Urbandale, IA

A study team investigator and research assistant visited each primary care office for a focus group discussion of management of skin and soft tissue infections, as well as review of the CDC guidelines. A total of 79 clinicians (nurses, nurse practitioners, physicians, physician assistants, family practice residents, pharmacists) participated. The focus group discussions lasted about 50 minutes. During this time, the purpose of the study was explained and conversations regarding the



management of skin and soft tissue infections were recorded and transcribed. The research team provided information about the CDC algorithm and the Up-To-Date algorithms for skin and soft tissue infection management.

Data analyses included pre- and post- intervention descriptive statistics and comparisons (chi-square for proportions and t-tests for continuous data). Two hundred and sixteen (89%) retrospective forms and 118 (95%) prospective usable forms were submitted. Mean age for the 334 subjects was 41 years and 47% were male.

Demographic characteristics were not significantly different by group except for insurance coverage, where more prospective subjects had private insurance and fewer had no insurance coverage.



Presenting characteristics of the patients were similar for site of infection, temperature, duration days of infection prior to being seen, number of risk factors, diabetes, being hospitalized, and having allergies to antibiotics. A difference was noted in the wound type, with more abscesses in the retrospective and more

combined abscess and cellulitis wounds in the prospective. Treatment for the infections was similar between groups with respect to incision and drainage, culturing the wound, packing the wound, and providing wound care instructions. Prescribing antibiotics that covered MRSA at the initial visit and overall during all visits significantly increased after the intervention. Prescribing any antibiotic at the first visit also trended towards being significant after the intervention. Prescribing a second antibiotic at the initial visit also increased significantly after the intervention. The number of antibiotics prescribed before and after the intervention did not change. A trend towards scheduling follow-up visits was noticed after the intervention.



To determine predictors for whether antibiotic that covered MRSA was prescribed at the initial visit or any time during the resolution of the infection, modeling was done. At the initial office visit, an antibiotic covering MRSA was more likely to be prescribed for those in the prospective group vs. the retrospective group, if they had an abscess or abscess & cellulitis rather than cellulitis alone, had a

Update on the Management of Skin and Soft Tissue Infections (continued from page 2)

abscess or abscess & cellulitis rather than cellulitis, had a culture sent, and were in the age group older than 20 and younger than 65 years (See Table below).

	Initial Antibiotic Covered MRSA N = 308	Antibiotics Covered MRSA at Any Time N = 313
	Odds Ratio (CI)	Odds Ratio (CI)
Prospective group (vs. cellulitis alone)	2.668 (1.54, 4.62)	2.70 (1.77, 4.32)
Abscess or Abscess & Cellulitis	2.810 (1.62, 4.86)	2.61 (1.63, 4.18)
Culture Sent	3.03 (1.72, 5.34)	2.54 (1.61, 3.98)
Had ≤2 Antibiotics overall (vs. > 2 Antibiotics)	7.67 (2.19, 26.88)	
Patient not hospitalized (vs. hospitalized)	10.55 (1.35, 82.60)	
Age ≥20 and <65 years		1.68 (1.17, 2.57)

American Cancer Society Colon Cancer Screening Project Update

The purpose of this project was to test office reminder systems of gradually increasing intensity to ensure that the patient is educated about CRC screening and receives a physician recommendation for screening. Sixteen IRENE offices are participating. From those offices, 8,372 potential subjects were invited to participate and 2,007 returned a baseline survey. From the answers on the baseline survey, we determined 942 were ineligible to participate as they self reported already been screened for colon cancer. Of the remainder who were eligible to participate in the study, 743 enrolled (signed the informed consent). Significant differences in the baseline questionnaire answers were found.

See the table below.

	Eligible (Due for Screening) N = 743 N (%) or Mean (S.D.)	Ineligible (Already Screened) N = 942 N (%) or Mean (S.D.)	p-value
Demographics and History of Colon Cancer			
Age	61 (6.95)	63 (7.06)	< 0.0001
Male	358 (48)	429 (55)	0.258
Personal history colon cancer	5 (14)	31 (86)	0.0002
Immediate family member with colon cancer	78 (11)	176 (19)	< 0.0001
Distant relative with colon cancer	83 (11)	172 (18)	< 0.0001
Personal history ulcerative colitis or Crohn's Disease	6 (1)	32 (3)	0.0004
Physician/Nurse CRC Recommendation			
Doctor or nurse has discussed test for colon cancer	461 (63)	840 (92)	< 0.0001
Doctor has discussed CRC screening	330 (45)	718 (69)	< 0.0001
Doctor recommended CRC screening	373 (51)	788 (85)	< 0.0001
Age of first recommendation	53 (7.39)	53 (9.09)	0.232
Age of most recent recommendation	58 (7.10)	60 (7.10)	< 0.0001
Doctor recommended CRC screening because of symptoms	57 (8)	274 (30)	< 0.0001
Age of first recommendation	51 (10.17)	54 (9.90)	0.027
Age of most recent recommendation	57 (9.18)	60 (8.18)	0.030

Enhancing Community-Based Cancer Control in Iowa IOWA CANCER CONSORTIUM

In 2001, the Iowa Legislature commissioned a detailed study of the impact of cancer on the state. Their report, *The Face of Cancer in Iowa*, led to the formation of the Iowa Consortium for Comprehensive Cancer Control, now known as the Iowa Cancer Consortium (ICC). As an organization built on the strength of collaboration, the ICC is made up of more than 300 individuals and 150 organizations, including researchers, legislators, insurance companies, health care providers, faith-based organizations, hospice organizations, pharmaceutical companies, cancer centers, cancer survivors, public health agencies, schools, and a variety of others interested in cancer control.

The ICC has created and is driven by a comprehensive, statewide cancer plan to address critical cancer problems in Iowa, *Reducing the Burden of Cancer in Iowa*. The goals of the plan include:

- Whenever possible, prevent cancer from occurring.
- When cancer does occur, find it in its earliest stages.
- When cancer is found, treat it with the most appropriate therapy.
- Assure that the quality of life for every cancer patient is the best it can be.
- Move research findings more quickly into actual practice.

Iowan, Get Screened!



Information about the Iowa Cancer Consortium, including membership and programs, can be found at www.canceriowa.org.

Iowa Cancer Consortium
100 MTP4 Room 162
Iowa City, IA 52242
(319) 384-1741
Toll free: 800-237-1227

We have openings for 5 regional Community Assistants to help with this project. We need **energetic individuals** who are good at organizing and collaborating with others. Compensation provided at \$10,000 per year, working on a part-time basis.

Position Overview

The Community Assistant will be the point-person for the facilitation and implementation of community-based partnerships in conjunction with the University of Iowa and the Iowa Cancer Consortium. This person will provide administrative support and leadership to the Community Advisory Board and will be involved with members, organizations, and activities of the partnership, bringing together all components to ensure the success of the partnership.

- Applications due by November 1st
- Interviews by telephone in November
- Start date December 1, 2010

Apply online at www.CancerIowa.org
Or email Comstock@CancerIowa.org

If you have questions, please contact Sara Comstock at 319-335-8144.

The infrastructure built as part of this program will eventually be applied to community-based programs and research that addresses other common cancers and life-style issues relating to cancer burden (such as tobacco cessation, obesity, lack of physical activity, and poor dietary practices).

One of the main goals of the grant will be to increase the number of family physician practices actively involved in cancer control research. Through the grant, we will provide support for a total of 50 practices to partner with us in this effort. Part of this will include information technology support for a computer to be placed in your practice that would be used for cancer control efforts in your practice (creating

patient registries), providing learning sessions about cancer control issues, and for your practice to be able to meet with and communicate with grant staff at the University using Skype or another form of telecommunication. Practices will be brought on in a sequential manner, 12 in year 1, 25 in year 2, and 13 in year 3.

If you are interested in learning more about this project, please fax back the enclosed form (page 5)

Enhancing Community-Based Cancer Control in Iowa

National Institutes for Health funded study
Principal Investigator: Barcey T. Levy, PhD, MD

What does my office have to do to be part of the infrastructure?

- Participate in a learning session about cancer control issues (at a time convenient for your office—usually the lunch hour)
- Communicate with grant staff or community assistants using Skype or another form of telecommunication 4-6 times per year (at a time convenient for you)
- Complete paperwork to conduct research at your office with the University of Iowa Institutional Review Board as the IRB of record to ensure the protection of human subjects
 - Obtain a Federalwide Assurance (FWA) (some of you may have it already)
 - The FWA assures that your institution engaged in research will comply with federal regulations and policies to conduct research
 - Have a couple of staff members certified in human subjects research (some of your staff may have completed this). Human subjects training is online and takes approximately an hour to complete
- Attend at least one state-wide meeting during the course of the 3-year grant, such as the Iowa Academy of Family Physicians annual meeting, the Family Physician Refresher Course, or the Iowa Cancer Summit
- Facilitate the implementation of a computer/printer in your office for telecommunication

Will my office be compensated?

- The first 50 offices to agree to participate will be provided with a desktop computer and printer for use during future infrastructure building and studies. Each office will need to pay for appropriate internet connections and e-mail service.
- Travel costs to the state-wide meetings will be covered by the grant.

What other benefits might there be?

- At the conclusion of the project, we will provide your office with the overall results of this infrastructure project.
- At the conclusion of the project, your office will be ready to conduct research if you are interested in the topics that are funded for the Iowa Research Network or the Iowa Cancer Consortium.



1. Would you be interested in participating in this project to develop cancer research infrastructure through IRENE?

Yes No Unsure, would like to talk with someone. Please call me at _____

2. Is your practice currently a member of the Iowa Research Consortium? Yes No Unsure

3. Does your office have a cancer disease registry? Yes No Unsure

4. Who is the best contact person in your office _____

5. Phone number for this contact _____

Physician Signature

Date

Print Name of Office

PLEASE FAX BACK TO Barcey T. Levy at 319-384-7647 by December 1, 2010

Thank You!

Recent IRENE Publications:

1. Witry, M.J., Doucette, W.R., Daly, J.M., & Levy, B.T. Family physicians perceptions of personal health records. (Winter 2010). Online Research Journal. *Perspectives in Health Information Management*.
2. Daly, J. M., Joshi, M., Levy, B. T., & Jogerst, G. J. (2010). Patient clock drawing and accuracy of self-report compared with chart review for colorectal cancer (CRC) Screening. *Archives of Gerontology and Geriatrics*, 50, 341-344.



IRENE Manuscript Submitted for Publications:

1. Daly, J. M., Ely, J. W., Levy, B. T., Smith, T. C., Merchant, M. L., Bergus, G. R., & Jogerst, G. J. (In press). Family physicians' perspectives on management of skin and soft tissue infections: An Iowa Research Network study. *Journal of Rural Health*.

If you are interested in receiving a copy of any of the above publications, please email the request to IRENE@uiowa.edu.

**Join us at the 38th Annual
Refresher Course
for the Family Physician**
 Meet other IRENE Members and encourage
non-IRENE physicians to join
 March 29 - April 1, 2011
 Marriott Hotel and Conference Center
 Coralville, Iowa
 IRENE Dinner: Tuesday, March 29th, 5:30 - 7:30 PM
 Coralville Marriott
 To sign up for the dinner contact: Jo Bowers, (319) 384-8994
 Email: Josephine-bowers@uiowa.edu

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EDITOR

Jeanette M. Daly, RN, PhD
 Assistant Research Scientist
 Fax: (319) 353-6725
 Email: jeanette-daly@uiowa.edu



ASSISTANT TO THE EDITOR

Amy Miranda, Research Secretary

CONTACT INFORMATION:

Toll free phone: 866-890-5963
 Email: irene@uiowa.edu

We're on the web!

<http://www.uihealthcare.com/depts/med/familymedicine/research/irene/index.html>

