Message from the Director
Lyle J. Fagnan, MD

The past year has been one of substantial growth and development for the network. We now have over 120 clinician members across the state and are reporting, in this edition of the newsletter, on the results of two of our first research studies. We believe that the enthusiasm of the rural clinicians and the addition of three Practice Enhancement and Research Coordinators (PERCs) have been instrumental to ORPRN’s success in receiving eight grants in the past year to study health issues as diverse as rural childhood immunization practices to information technology to improve medication safety for rural elders. These grants have ranged from five thousand to 1.5 million dollars, with much of the funding going directly to the communities we serve.

The staff of ORPRN want to thank the clinicians and clinic staff who have been a part of the network in its infancy. As we move forward we would like to ask you to participate actively in the network. The Steering Committee and ORPRN staff welcome your feedback. We encourage you to attend regional meetings and the annual Convocation, and get to know the PERC for your region. Together we can continue to grow and make the network a meaningful contributor to the health of rural Oregonians.

ORPRN CLINICS COMPLETE NATIONAL CHILDREN’S STUDY PILOT

In November, nine ORPRN clinics completed a rigorous pilot study for the National Children’s Study (NCS) funded by the National Institute of Child Health and Human Development and the Agency for Healthcare Research and Quality. The pilot was designed to assess the ability of practice-based research networks to participate in the full-scale NCS, a three-decade study of 100,000 children designed to look at the influence of environmental factors on health.

Participating clinicians took vital signs and conducted physical exams on 180 subjects (pregnant women and children ages 1 and 5). Twenty percent of these subjects were, by design, non-clinic patients who were recruited from the community through newspaper ads and flyers. Each visit took approximately three hours, with the majority of the subjects’ time spent with ORPRN’s PERCs who conducted nutrition questionnaires and developmental exams. ORPRN received recognition for having the most complete data collection of all the participating networks. (continued on page 2)
CONVOCATION DRAWS CLINICIANS FROM ACROSS THE STATE

ORPRN held its third annual convocation on October 7-9, 2004 at the Doubletree Lloyd Center Hotel in Portland in conjunction with the annual Oregon Rural Health conference. Thirty-one ORPRN clinicians and clinic staff attended, representing 65% of ORPRN’s affiliated clinics.

Dr. Lawrence Green, formerly of the Centers for Disease Control, delivered a keynote address on community-based participatory research. Dr. Albert Thompson, chairman of the ORPRN Steering Committee, convened the group and led the business session in which the ORPRN bylaws and Steering Committee membership were voted on by the ORPRN membership. Major sessions on the final day of the conference focused on the process of designing research studies and setting direction for ORPRN research.

The 2005 ORPRN Convocation will again be held in conjunction with the Rural Health Conference November 3-5 at the Sunriver Resort. The keynote speaker will be Dr. James Mold director of the Oklahoma practice based research network (OKPRN) who will present with one of the lead clinicians of his network. More information on the conference can be found at the ORPRN website or at www.ohsu.edu/oregonruralhealth/conf
AWARDS AND NOTABLES

Jeanne Bowden, RN, MPH, PHD of LaGrande, was chosen as the recipient of the Community Service Award from the Oregon Health Forum. Robert Holland, Jr., MD of John Day, will participate in a poster presentation of a study at the Society for Academic Emergency Medicine’s Western Regional Research Forum in Los Angeles in April entitled “How OHP Cutbacks Have Affected Rural Oregon: Trends in ED Use”. Robbie Law, MD of Reedsport was voted President Elect of the Oregon Academy of Family Physicians. Dunes Family Health Care in Reedsport welcomed a new Nurse Practitioner, Kathy Moon, MSN, to the clinic in February. Bob Bomengen, MD, of Lakeview, was featured in the January 2005 Reader’s Digest “Everyday Heros” section for his efforts to save a 14-year old. Yachats Community Health Clinic received a grant from the Meyer Memorial Trust to increase their nurse practitioner’s time so that the clinic can increase its fee-for-service income. Jennifer Holliday, ORPRN student researcher on the Preventive Services Project, received the Laurence R. Foster Memorial Scholarship honoring her achievement in pursuing her MD and MPH degrees from OHSU. Jennifer is a native of John Day. The community of Lincoln City was successful in its bid to establish a Federally Qualified Health Center.

Email news of note to kinga@ohsu.edu

ORPRN STUDY FINDINGS

PREVENTIVE SERVICES STUDY

Pls: Valerie King, MD, MPH and David Buckley, MD
Funding Agencies: The Arnold P. Gold Foundation and the Oregon Academy of Family Physicians
Dates: Summer 2004

Medical students Jennifer Holliday and Brett Gourley spent much of the summer in ORPRN clinics collecting data for a chart abstraction and survey study of preventive service provision in rural practices. Many thanks to the six clinics that participated in the study and to the Gold Foundation and the Oregon Academy of Family Physicians for providing funding for the students.

The project was presented by Dr. Valerie King as a poster at the November 2004 Robert Wood Johnson Foundation’s Generalist Faculty Scholars meeting. ORPRN has submitted two abstracts to The North American Primary Care Research Group (NAPCRG) and hope to have them accepted for presentation in November 2005 by Brett and Jennifer.

NAPCRG Abstract: Adult Preventive Services in Rural Primary Care
Authors: Gourley B, King V, Holliday J, Buckley B, Fagnan L.
Context: Adult preventive screening services can reduce mortality, but little is known about the adequacy of provision of preventive services in rural primary care clinics.
Objective: To determine the provision of recommended adult preventive services in clinics associated with a rural practice-based research network as well as the perceptions of clinicians and staff about the provision of preventive services.
Design: Retrospective audit of 150 randomly selected patient charts per practice and written survey of clinicians and staff. Setting: six rural primary care clinics in Oregon.
Outcome Measures: Documented obesity and tobacco use assessment and treatment; screening for various cancers; and immunization status using USPSTF and ACIP recommendations as standards; clinician and staff perceptions about office-based preventive services; barriers to providing services and resource needs.
Results: A total of 902 patient records were audited. Over 75% of patients were overweight or obese with an average BMI of 29.5. 23% were current tobacco users, but only 44% had cessation recommendations documented. 28% of patients age 50 or older had received colon cancer screening, while 44% of men in this age group had received prostate cancer screening, 43% of women age 40 or older had screening mammography and 31% of eligible women had documented cervical cancer screening. Fewer than one quarter of those age 65 or older had received pneumococcal vaccine and 48% had at least 1 influenza immunization in the prior 2 years. Clinics identified cost, patient activation and time as key barriers to providing preventive services.
Conclusions: These rural clinics documented provision of recommended preventive services, including colorectal, breast and cervical cancer screening, adult immunization, and counseling about smoking cessation and healthy weight, at rates substantially below national averages and Healthy People 2010 targets. Meeting national prevention targets will require methods of delivering services that address concerns and needs of rural clinics and patients.

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PREVENTIVE SERVICES STUDY (continued from page 3)

**NAPCRG Abstract:** Overweight and Obesity in Rural Primary Care Practices  
**Authors:** Holliday J, King V, Gourley B, Buckley D, Fagnan L.  
**Context:** Obesity is more common in rural areas, yet little is known about overweight/obesity screening and treatment practices in rural primary care.  
**Objective:** To describe overweight/obesity screening and treatment practices, clinician and staff attitudes, and availability and patient use of physical activity resources within rural communities.  
**Design:** Chart audit, clinician/staff survey and patient survey. Setting: Six rural primary care clinics in Oregon.  
**Patients/Other Participants:** 902 randomly selected patient charts, 111 patients, 37 clinicians/staff.  
**Instrument:** Data abstracted using a standardized form covering a two-year period beginning January 2002. Surveys of clinicians/staff attitudes and community resources.  
**Outcome Measures:** Screening and treatment for overweight/obesity; practice attitudes and availability/use of local recreation resources.  
**Results:** BMI was calculable for 526 of 902 subjects with heights recorded. Average weight for patients with and without height measurements was similar. Average BMI was 29.6 and 75.5% were overweight/obese by BMI. Only 2% of charts documented BMI. Diet, increased activity, and weight loss recommendations were noted for 13.1%, 15%, and 8.9% of overweight/obese patients, respectively. Obesity was seen by clinicians/staff as the most important health problem facing their communities, but 68% of clinicians/staff felt their clinic was doing an average or worse job screening and treating obesity. Barriers to providing adequate overweight/obesity care were costs, uninsured and non-coverage. 55% of community informants reported no public recreation facilities in their community and 80% did not use any private or membership recreation facility.  
**Conclusions:** Overweight/obesity appears to be underscreened and undertreated in Oregon rural primary care clinics, although clinicians may simply not be documenting their findings and treatment recommendations. The majority of patients are overweight/obese which may indicate an even greater need for nutrition and physical activity resources. Rural communities do not have widely available resources for physical activity and patients do not tend to use the resources that are available.

CURRENT STUDIES

**USING INFORMATION TECHNOLOGY TO IMPROVE MEDICATION SAFETY FOR RURAL ELDERS**  
**PIs:** Paul Gorman, MD (OHSU), Karl Ordelheide, MD (Lincoln City)  
**Funding Agency:** Agency for Healthcare Research & Quality (NIH)  
**Dates:** 10/04-9/07  
**Settings:** Samaritan North Lincoln Hospital, OHSU, Lincoln City Medical Center, and long-term care facilities and pharmacies in Lincoln County.  
**Summary:** This study is a collaboration with Samaritan North Lincoln Hospital, OHSU, and other institutions to establish a master medication information system to improve the safety of rural elders.

**EVIDENCE-BASED PRACTICES: AN OPPORTUNITY TO PREVENT BEHAVIORAL HEALTH DISORDERS IN CHILDREN AGES 0 TO 6**  
**PI:** Lyle Fagnan, MD (OHSU)  
**Lead ORPRN Clinicians:** Scott Graham, DO, Steven Hussey, MD  
**Funding Agency:** SAMHSA/CSAP through the State of Oregon  
**Dates:** 11/04-1/07  
**Settings:** Family practice offices in Lakeview; Lake County Mental Health; other local behavioral health providers  
**Summary:** This study redesigns well-child care by systematically screening children ages zero to six years old within the primary care setting for early risks of behavioral health disorders. The study is also designed to integrate the medical and mental health settings to provide coordinated referral and follow-up services. (continued on page 5)

A breakout session at the 2004 Convocation
CURRENT STUDIES (continued from page 4)

CHRONIC OPIOID THERAPY AND PREVENTIVE SERVICES
PIs: James Calvert, MD (Klamath Falls) and David Buckley, MD (OHSU)
Funding Agency: American Academy of Family Physicians Foundation
Dates: 3/05-10/05
Settings: Klamath Open Door, Strawberry Wilderness, Rinehart Clinic, Elgin, Union, Cascades East, Lincoln City Medical Center
Summary: This study investigates, through retrospective chart review, a possible association between chronic opioid therapy for non malignant pain in the primary care setting and the performance of preventive health services.

RURAL OREGON IMMUNIZATION INITIATIVE – PHASE 1
PIs: Scott Shipman, MD, MPH (OHSU), Lyle Fagnan, MD (OHSU), James Gaudino, MD, MPH (DHS)
Funding Agencies: Centers for Disease Control via the Oregon Department of Health and American Academy of Family Physicians Foundation
Dates: 5/04-6/05
Summary: Phase I is an email and paper survey of all, approximately 1,300, rural clinicians in Oregon regarding immunization practices and beliefs. The survey was completed in April and data analysis is underway. The follow-up study (Phase II), which will be conducted in ORPRN practices, includes the use of the statewide immunization registry (ALERT), provider and parent focus groups, chart review, and implementation of the quality improvement program AFIX.

RURAL COLLABORATIVE PROJECT TO IMPROVE DIABETIC AND CARDIOVASCULAR HEALTH IN OREGON
PIs: Lyle Fagnan, MD (OHSU) and David Shute, MD (OMPRO)
Funding Agency: Centers for Disease Control via the Oregon Department of Health, Chronic Illness Division
Dates: 2/05-6/05
Settings: The Dalles, Condon, Union, Elgin, and Halfway
Summary: This is a quality improvement initiative in partnership with the Oregon Medical Professional Review Organization (OMPRO). The three objectives for this short term project are to: 1) identify and track a cohort of 50 adult patients with diabetes and/or hypertension; 2) recruit a community partner to develop a menu of ideas to improve coordination of care; and, 3) participate in distance learning sessions to improve diabetes and hypertension care through the Chronic Care Model.

ORT-PRINS I
PI: Lyle Fagnan, MD and Scott Shipman, MD, MPH (OHSU)
Dates: 5/05-ongoing
Settings: All ORPRN clinicians and practices
Summary: ORPRN has expanded the Primary Care Network Survey to include more in-depth questions about clinicians and practices which will help to characterize the network to aid with research data analysis and grant proposals. The ORPRN PERCs will be traveling to each clinic over the next few months to conduct the survey.

OSTEOPOROSIS SCREENING IN RURAL OREGON
PI: Eric Orwoll, MD (OHSU)
Funding Agency: Bone and Mineral Unit at OHSU
Dates: 5/04-7/05
Settings: Statewide
Summary: An email survey of clinicians was conducted in nine ORPRN practices and a mailed survey sent to approximately 6,000 women age 65 and older in the same nine communities. The purpose of the survey is to help understand osteoporosis screening, care and attitudes. The data is currently being analyzed.

CLINICAL INFORMATION STUDY (CIS)
PIs: Julie Reynolds, PhD and Lyle Fagnan, MD (OHSU)
Dates: 10/02-7/05
Settings: Seven ORPRN Clinics
Summary: This is a qualitative study using semi-structured interviews of 36 ORPRN clinicians and observation in six practices. The purpose of the study is to develop an understanding of knowledge-based information flow into, within, and out of community practice settings. Individual practice reports are being completed.

RURAL HEALTH CLERKSHIP PROJECT INVENTORY
PI: Lyle Fagnan, MD (OHSU)
Dates: 8/03-6/05
Summary: Medical student Natasha Ingvolstad-O’Neal is conducting a systematic review and data inventory of 880 rural clerkship projects (1992-2002). Since 1992 OHSU medical students have been required to complete a population-based study or project during their six-week rural rotation. This database is intended to generate ideas for potential research projects for ORPRN.
The Oregon Rural Practice Based Research Network (ORPRN) is dedicated to improving the health of rural populations in Oregon through conducting and promoting health research in partnerships with the communities and practitioners they serve.

**ORPRN STAFF**
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**STEERING COMMITTEE**
- Chair: Albert Thompson, MD (Pacific City)
- Vice Chair: Jeanne Bowden, RN, MPH, PhD (LaGrande)

**Member Clinics**
- Wheeler
- OHSU Pacific City
- Lincoln City
- Siletz
- Yachats
- Reedsport
- North Bend
- Coos Bay
- Hood River
- The Dalles
- Boardman
- Fossil
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- Halfway
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The mission of ORPRN is to improve the health of rural populations in Oregon through conducting and promoting health research in partnerships with the communities and practitioners they serve.