

MESSAGE FROM

The Director

The Institute for Rural Health (IRH) takes its mission of improving the health of rural communities in the Commonwealth of Kentucky to heart. Over the past two years, the IRH staff and students within the College of Health and Human Services (CHHS) have journeyed countless miles offering health and dental services in the community. We have enjoyed visiting the small towns, viewing the countryside scenery that rural Kentucky has to offer, and developing new partnerships to improve the health status of rural Kentucky.

Through the use of the Mobile Dental Unit and Mobile Health and Wellness Unit, we provided an avenue for students to apply their newly acquired knowledge and skills from the classroom into practice by providing preventive services or health education in our service region. The IRH recorded 8,015 total patient encounters over the past two years, which provided CHHS students with valuable hands-on experience as we recorded 5,240 student engagement hours. During a two-year time span, the IRH staff and CHHS students have provided over 15,500 health and dental procedures in the community.

To better meet the needs of the community, the IRH has expanded its outreach and services over the past two years. In addition to providing clinical services, the IRH worked alongside the healthcare community by actively participating in the Barren River Community Health Planning Council and co-hosting a Kynect (Kentucky Health Benefit Exchange) informational session for health professionals, administrators, boards of directors, community agencies, navigators, and college faculty and students in South Central Kentucky.

As a major service arm for Western Kentucky University, community partners serve as an integral resource for the IRH to provide dental services, health services, and health education in the community. We are proud to report we have established 27 new community partners and/or outreach sites for the IRH to provide services.

We would like to thank Dr. John Bonaguro, Dean of CHHS, the students and academic units within CHHS, the WKU Foundation staff, grantors, donors, and our community partnerships for their support over the past two years. We look forward to another year of providing clinical rotations for CHHS students and serving our Commonwealth.



Sincerely,
Matt Hunt, MA
Director



RURAL HEALTH Biennial Report 2012-2014

The WKU Institute for Rural Health (IRH) is part of the College of Health and Human Services (CHHS) and was created to identify rural health and human services needs and to facilitate collaborative arrangements engaging WKU students and faculty and community agencies in addressing these needs. The IRH plays a major role in assisting CHHS in maintaining the focus of student engagement and community service.

The goals of the IRH are: 1) to facilitate in the education of future health professionals by engaging WKU students in service learning and multi-disciplinary activities within a diverse patient population; and 2) to improve the health and wellness status of residents of WKU's regional service area by providing health screenings, vaccinations, and oral health services at selected locations.

The mission of the IRH is to steward a high quality of life for rural populations and underserved areas by engaging students and faculty in service learning and research, providing clinical services, and serving as a global resource for improving health in rural communities.



SERVICE DATA

(2012-13 & 2013-14)

The patient population targeted by the IRH consists mainly of the portion of the population that has limited access to healthcare. Many barriers can keep a person from getting the healthcare they need. The three barriers to care that the IRH combats are financial, geographical, and educational. The IRH has adopted the same 27-county area in central Kentucky for which Western Kentucky University is responsible. In addition to our targeted area, the IRH's mobile clinical units also serve patients in Fayette, Jefferson, McCreary, Pike, and Wayne counties.

| Mobile Dental Unit Services for 2013-2014 | | Mobile Dental Unit Service for 2012-2013 | 2-Year Total | |
|--|------|---|-----------------|------|
| Dental Exams | 840 | Dental Exams | 1258 | 2098 |
| Kindergarten Screenings | 43 | Kindergarten Screenings | 53 | 96 |
| Varnish Treatments | 496 | Varnish Treatments | 168 | 664 |
| Dental Cleanings | 580 | Dental Cleanings | 222 | 802 |
| Restorations | 24 | Restorations | 41 | 65 |
| Extractions | 19 | Extractions | 53 | 72 |
| Dental Sealants | 792 | Dental Sealants | 965 | 1757 |
| Total Procedures | 2794 | Total Procedures | 2760 | 5554 |
| Total Patient Encounters | 883 | Total Patient Encounters 1258 | | 2141 |

| Mobile Health Unit Services for 2013-2014 | | Mobile Health Unit Servic for 2012-2013 | 2-Year Total | |
|--|------|---|-----------------|-------|
| Influenza Vaccinations | 1569 | Influenza Vaccinations | 1295 | 2864 |
| Blood Pressure Screenings | 1130 | Blood Pressure Screenings | 775 | 1905 |
| Cholesterol Screenings | 991 | Cholesterol Screenings | 791 | 1782 |
| Glucose Screenings | 994 | Glucose Screenings | 741 | 1735 |
| Bone Density Screenings | 883 | Bone Density Screenings | 648 | 1531 |
| BMI Screenings | 164 | BMI Screenings | 18 | 182 |
| Hemoglobin A1C | 1 | Hemoglobin A1C | 0 | 1 |
| Total Procedures | 5732 | Total Procedures | 4268 | 10000 |
| Total Patient Encounters 3437 | | Total Patient Encounters | 2437 | 5874 |



STUDENT ENGAGEMENT

HOURS (2012-13 & 2013-14)

The success of the IRH is a point of pride for CHHS and WKU. Continued success of the IRH means that more WKU students have experienced real fieldwork and that more members of our rural communities have received health care and health education, an essential component and cornerstone of our mission. We believe that students learn from every patient. The more patients that the IRH is able to see and treat, the more knowledge and real-world experiences the students of the CHHS receive as part of their education.

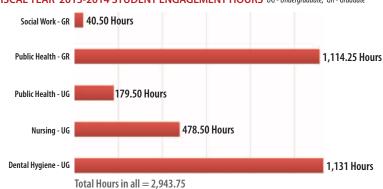


STUDENT ENGAGEMENT

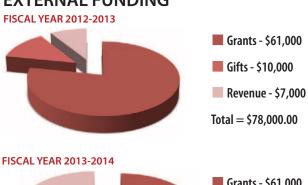
FISCAL YEAR 2012-2013 STUDENT ENGAGEMENT HOURS UG-Undergraduate, GR-Graduate

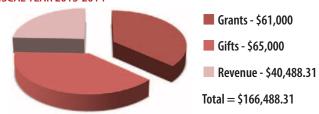






EXTERNAL FUNDING





what they're Saying about IRH...

"Without the services the WKU Health and Dental Unit offer, many of the population we serve would not have the care that is provided."

Renea Covington
Community Initiatives Director
Housing Authority of Bowling Green

"We are so very grateful for the services you offer here at the Health & Wellness Center and have been fortunate to partner with the Mobile Unit to offer blood sugar screenings in rural areas."

Jenny Golden
Director of Community Wellness
Medical Center Health and Wellness Center

"It has been a pleasure to partner with WKU's IRH. The IRH is very receptive to the needs of rural counties. I look forward to partnering with them on future endeavors in order to promote health and wellness throughout our community."

Jill Ford
Public Health Director
Monroe County Health Department

"I wanted to let you know how much I appreciate the WKU- Institute for Rural Health being able to visit my school. Dr. Daniel, Ms. Bonny and all of the students do such a great job with my kids. Although most of my children have Medicaid, many of them do not receive regular dental care.

I have shared an office with the school nurse for a decade and it hurts my heart to see a child suffering with a tooth ache. Each year I try to get as many 2nd graders as possible signed up for the WKU Dental Unit. Every tooth that is sealed is a small victory for me!! They also will do school dental screenings for any of my kindergartners who do not have one on file."

Dena HollandFRC Coordinator
Dishman McGinnis Elementary School

"I have had the experience of working with the WKU Dental Unit for several years now here in Allen County. I have nothing but good things to say about the staff and the dental hygiene students. Bonny Petty and Dr. Carter are great professionals to work with and have always been willing to work with me and our tight schedule here at the Primary Center. The service that is provided is such a needed service here in our community and I look forward to working with the Dental Unit in the future."

Natalie Berry Health Service Assistant Allen County Primary Center

"The Mobile Dental Unit staff were very courteous and professional. I had a grandmother and a dad that participated in the adult mobile dental unit clinic that had not received dental services in several years. I think he is still smiling bigger to this day due to his services from the unit."

Shelia Joy Center Manager Barren County Head Start

"Our employees always enjoy the interaction with the students and will often follow up with me after they have been made aware of a potential health concern during the health fair. Prevention is the key to maintaining good health and the WKU IRH helps me to educate the JMS population. I also appreciate the opportunity to share with our future RN's a glimpse into the occupational health nursing field."

Julia Tabor Plant Registered Nurse J.M. Smucker Company

"Through my experience with IRH as a former dental hygiene student, an intern and a current Graduate Assistant, I think the programs offered by both MDU & MHU provide opportunities to WKU students to interact with diverse communities, which adds to their overall experience and gives them a taste of how their profession will be like in real life."

Eiman AlEissa WKU Student The IRH would like to thank WKU faculty, staff, and students for collaborating and leading research efforts over the past two years. The IRH would also like to thank all of our community partners and their desire to improve the health status of the community.

LIST OF PUBLICATIONS AND PRESENTATIONS (* denotes students)

Michimi, A., Ellis-Griffith, G., Lartey, G., Ellis-Griffith, C., and Hunt, M. (2014). Variability between Self-reported Diabetes and Measured Glucose among Health Screening Participants in South Central Kentucky. *Primary Care Diabetes* 8(1), 31-38.

Dawkins*, E., Michimi, A., Ellis-Griffith, G., Peterson, T., Carter, D., and English, G. (2013). Dental Caries among Children Visiting a Mobile Dental Clinic in South Central Kentucky: A Pooled Cross-sectional Study. *BMC Oral Health* 13, 19.

Ellis-Griffith, G., Michimi, A., English, G., and Peterson, T. (2013). REDCap and Rural Health: An Opportunity to Enhance Collaborative Research and Rural Health Care Delivery. International Journal of Reliable and Quality E-Healthcare 2(1), 26-42.

POSTER PRESENTATIONS (* denotes students)

Carter, D., Petty, B., AlEissa, E. & Hunt, M. "Connecting Academia with the Community through Public Health Programs." 66th Annual Kentucky Public Health Conference. Louisville, KY. (April, 2014)

Jonchehe*, P., Bignall*, E., Shearer, D.L., Michimi, A., Ellis-Griffith, G., and Hunt, M. "Bone Density Screening Results in South Central Kentucky, 2006-2011." 44th WKU Student Research Conference, Bowling Green, KY. (March, 2014)

Nwosu*, U., Taylor, R., and Michimi, A. "Association between Fluoride in Drinking Water and Dental Caries of Children in South Central Kentucky." 44th WKU Student Research Conference, Bowling Green, KY. (March, 2014)

Douglas*, B., Ellis-Griffith, Michimi, A., Shah, J., Carter, D., & Hunt, M. "The Influence of Education Level, Income and Provider Density among Children Visiting a Mobile Dental Unit in South Central Kentucky." 44th WKU Student Research Conference, Bowling Green, KY. (March, 2014)

Carter, D., Petty, B., Ellis-Griffith, C., & Hunt, M. "Utilization of Mobile Health Service Programs for Healthcare Professional Student Service Learning." Kentucky Engagement Conference. Richmond, KY. (November, 2013)

Dawkins*, E., Michimi, A., Ellis-Griffith, Peterson, T., Carter, D., and English, G. "Untreated Dental Caries among Children Visiting a Mobile Dental Clinic: A Retrospective Study in South Central Kentucky."65th Annual Kentucky Public Health Association Conference, Louisville, KY. (March, 2013)

Karki*, R. and Michimi, A. "Prevalence of Uncontrolled and Controlled Hypertension among Adults in South Central Kentucky." 65th Annual Kentucky Public Health Association Conference, Louisville, KY. (March, 2013)

Michimi, A., Ellis-Griffith, G., Lartey, G., Ellis-Griffith, C. "Factors Associated with Diabetes and Diabetes Self-care among Adults Visiting Mobile Clinic in South Central Kentucky." 65th Annual Kentucky Public Health Association Conference, Louisville, KY. (March, 2013)

Michimi, A., Ellis-Griffith, G., English, G., and Peterson, T. "REDCap and Rural Health: Integrating Technologies into Research." WKU College of Health and Human Services Research Week, Bowling Green, KY. (March, 2013)

Michimi, A., Dawkins*, E. Ellis-Griffith, Peterson, T., Carter, D., and English, G. "Oral Health among Children Visiting a Mobile Dental Clinic: A Retrospective Cohort Study in South Central Kentucky." 14th Annual Kentucky Rural Health Association Conference, Bowling Green, KY. (August, 2012)

SPECIAL PROJECTS

Cardiovascular Awareness Reduction & Education Collaborative (CARE)
Christian Appalachian Project (CAP)
Fairview Prenatal Dental Outreach
Hart County Community Dental Day
Kynect Informational Session
McCreary County Christian Center Dental Outreach
Rotary Smiles Dental Program
STITCH Worksite Wellness Program

NEW COMMUNITY PARTNERS

Auburn Senior Center

The IRH is fortunate to collaborate and form partnerships with various community agencies. During the Fiscal Years of 2012-13 and 2013-14, the IRH worked with the following agencies to provide quality health and dental care in its service area:

Barren County Migrant Worker Program Bowling Green-Warren County Hispanic Health Fair Boys and Girls Club of Bowling Green Boys and Girls Club of Glasgow BRADD Kynector Program Butler County Cooperative Extension Service Butler County Farm Bureau CARE Collaborative Christian Appalachian Project Community House of Elkton Medical Center's Diabetes Education Program Fairview Community Health Center Hart County Dental Coalition Housing Authority of Cave City Housing Authority of Greenville Housing Authority of Morgantown Housing Authority of Scottsville Lakeview Fellowship Church Metcalfe County Dental Coalition Simpson County Cooperative Extension Service Walmart of Beaver Dam Warren County Refugees Services WKU RN to BSN program WKU-G WKU-O

The Dean

The Institute for Rural Health (IRH) is a vital part of the College of Health and Human Services (CHHS) and Western Kentucky University (WKU). IRH serves as a clinical rotation for the School of Nursing and Dental Hygiene programs. The Mobile Dental and Mobile Health and Wellness Units have provided students with over 5,000 hours of real-world experiences in a rural setting over the past two years. Approximately 15,000 dental and medical procedures have been performed on over 8,000 patients during 2012-2014. The services provided through the IRH address the overwhelming importance of preventive care and education to individuals within our service area. The IRH, in conjunction with our excellent academic programs, is preparing health and human services students for successful careers.

In addition to providing many opportunities for students, the IRH also provides multiple opportunities for research for faculty and staff within the college and across campus. Since 2012, the IRH has generated over \$244,000 from external sources to help fund research projects and continually improve patient care.

Staff in the IRH continuously strive to initiate new services to improve health in rural communities while engaging CHHS students and faculty in service learning. As the cost of health care continues to rise, the IRH will remain a vital resource in our community and surrounding areas.

The IRH Biennial Report tells a wonderful story, a story rich in providing excellence in educational opportunities for students in health and human services and a story that captures the needs of addressing the health needs of rural underserved areas.



Sincerely yours,

John A. Bonaguro, Ph.D.

Dean







✓ YES, Start my gift to help expand the services and outreach of the Institute for Rural Health.

| Institute for Rural Health. WKU Institute for Rural Health 1906 College Heights Blvd. #21038 | OO \square Pay in full | Other \$ Pay in full Other \$ Other \$ | □ Pay in full | ,000 □ Pay in full \$ per □ Month* □ Year Anytime on line at www.alumni.wku.edu/irh | for year(s)* | NSTALLMENT OPTIONS *Automatic Credit/Debit/EFT only *Automatic Credit/Debit/EFT only *Automatic Credit/Debit/EFT only Telestronic Cunde Transfer (TET) Desiration of Automatic Credit/Debit/EFT only Telestronic Cunde Transfer (TET) Desiration of Automatic Credit/Debit/EFT only Telestronic Cunde Transfer (TET) Desiration of Automatic Credit/Debit/EFT only Telestronic Cunde Transfer (TET) Desiration of Automatic Credit/Debit/EFT only Telestronic Cunde Transfer (TET) Desiration of Automatic Credit/Debit/EFT only Telestronic Cunde Transfer (TET) Desiration of Automatic Credit/Debit/EFT only Telestronic Cunde Transfer (TET) Desiration of Automatic Credit/Debit/EFT only Telestronic Cunde Transfer (TET) Desiration of Automatic Credit/Debit/EFT only Telestronic Cunde Transfer (TET) Desiration of Automatic Credit/Debit/EFT only Telestronic Cunde Transfer (TET) Desiration of Automatic Cunde Transfer (TET) Desirati | Please include a voided check. Withdrawals made on the 15th of each month. |
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