ARCHNET ADVISOR

Newsletter for the ARCHNet Practice-Based Research Network

ARCHNet is off to a great start!

David Schneider, MD, PhD Carissa van den Berk, PhD MSW

As part of Saint Louis University's Department of Family and Community Medicine's commitment to community-based research, we established ARCHNet. ARCHNet members are most interested in health disparities, behavioral health, quality improvement, access to care and chronic health conditions such as hypertension and diabetes.

There are several exciting projects which are currently underway through ARCHNet. In the 2015 kick-off meetings ARCHNet members collaborated on two exciting projects to better understand the health of our patients. Results of one of these projects, focused on the relationship between patient reports of allergies and mental health disorders, is reported on the next page. The other project focused on assessing mental health issues and social support available to individuals with chronic pain is ongoing.

ARCHNet has also established exciting collaborations with our department's Medical Family Therapy program, and SLUCOR (SLU's Center for Outcomes Research). Our founding ARCHNet members are: Denise Hooks-Anderson, Bill Manard, Christian Verry, Lawrence Gibbs, Mattie White, Kristen Reineke-Piper, Michael Barron and Denise Buck. "The emergence and success of practicebased research networks (PBRNs) over the past decade provide an important infrastructure for careful study of health care phenomena that comprise primary care, and PBRNs have begun to contribute important information to the knowledge base of primary care."

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Dr. Paul Nutting, JAMA 281(8II), 1999



Saint Louis University Department of Family and Community Medicine

ONGOING PROJECTS

- Multiple Allergies and Psychiatric Factors
- Web-based research tools for PBRN users
- Vaccine Refusal Research
- Chronic Pain and Trauma



Demands of allergy and mental health research require ARCHNet data collection

PBRN Study: Multiple Allergies and Psychiatric Diagnoses

Jeffrey Scherrer, PhD

Following clinical observations stated by PBRN leaders at our last meeting, we reviewed the literature and found a fair amount of research but little from real world data such as medical record cohorts. Therefore we utilized the Primary Care Patient Data Registry of over 27,000 unique patients who used SLUCare Family Medicine or General Internal Medicine between 2008-2013 to obtain patient data. An allergy file from EPIC was used to create an any allergy variable which could be medication, environmental, food, vaccine etc. Psychiatric diagnoses included any form of drug abuse/dependence, alcohol abuse/dependence, any anxiety disorder and depression. We then computed the distribution of having none, 1, 2, 3 or 4 or more allergies in patients with and without each psychiatric disorder. There was no association between number of allergies and alcohol abuse/dependence. There was a significant increase in the prevalence of multiple allergies among patients with drug abuse / dependence compared to those without drug abuse/dependence (p<0.001). As the number of allergies increased, the prevalence of drug abuse/dependence also increased. For patients with 0-2 allergies the prevalence was 1.0% to 1.2% and for those with 3 allergies and 4 or more allergies, the prevalence of drug abuse/ dependence was 1.9% and 2.0%, respectively. A similar and significant (p<0.0001) pattern was observed for the association between allergies and anxiety and depression. Among patients with no allergy, the prevalence of anxiety and depression was 4.4% and 5.6%, respectively. The prevalence increased at each increase in number of allergies. Among patients who had >4 allergies the prevalence of anxiety and depression was 11.8% and 20.1%, respectively. This unadjusted pilot analysis needs to be expanded to determine if specific types of allergies (e.g. food vs. medication) have different associations with psychiatric diagnoses. In addition the direction of effect should be determined. Because chronic inflammation is associated with chronic stress and mood disorders, it is reasonable to hypothesize a bi-directional relationship. Inflammation linked to allergy may increase vulnerability to mental illness and inflammation linked to chronic stress may increase allergic responses. Such analysis could be completed with existing data. Alternatively, there may be a common mechanism such as personality traits that predispose to multiple allergy and mental illness. To determine this would require data collection at PBRN sites.

SLU FCM Staffs Up ARCHnet

In February, SLU FCM brought a new research assistant on board to move the ARCHnet PBRN forward and begin to realize its potential. Adam Seehaver has a background in community and grassroots organizing, a skill set he plans to use in taking ARCHnet to the next level. Prior to SLU FCM, he served as the Organizing Director for a statewide public employees union representing about 7,000 Missouri public-sector employees. "There is a huge need for real-world data to be more fully incorporated into research, and for the medical practice and research worlds to be working more closely. I'm excited to do my part in making ARCHNet a leader in the PBRN world." Adam said.



Adam Seehaver

It's Your **Toolbox!**



It's said that "when the only tool in your toolbox is a hammer, every problem looks like a nail". This is as true in research as it is in carpentry. The world looks different the more tools you have in your toolbox.

Bearing this in mind, ARCHNet is building a research toolbox for its members. "Tools" could include, for example, a primer in navigating the IRB process, or how to write a research question, or even how to look for funding. The sky is the limit, and the purpose is to make sure that practitioners in the field have what they need to max out their participation in ARCHNet.

SO WHAT DO YOU

NEED? Please, give some thought to what sorts of tools would be most useful to you in your collaboration with ARCH-Net. We'll be reaching out soon to talk about this. The more input we get, the more tools we can provide, and the more complete the world will look.