Year 3

Annual Report, 2013-2014

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Academic Health Department Steering Committee

From Knox County Health Department:

Martha Buchanan, MD, Director

Mark Miller, MS, Deputy Director

Jennifer Valentine, MSN, Director of Accreditation and Quality Improvement

From University of Tennessee Department of Public Health:

Paul Erwin, MD, DrPH, Professor and Head

**Charles Hamilton, DrPH, Professor and MPH Program Director*

***Kathleen Brown, MPH, PhD, Professor and MPH Program Director*

Representing both organizations:

Julie Grubaugh, MPH, Academic Health Department Coordinator

Steering Committee meets quarterly

**retired July 31, 2014*

***hired August 1, 2014*

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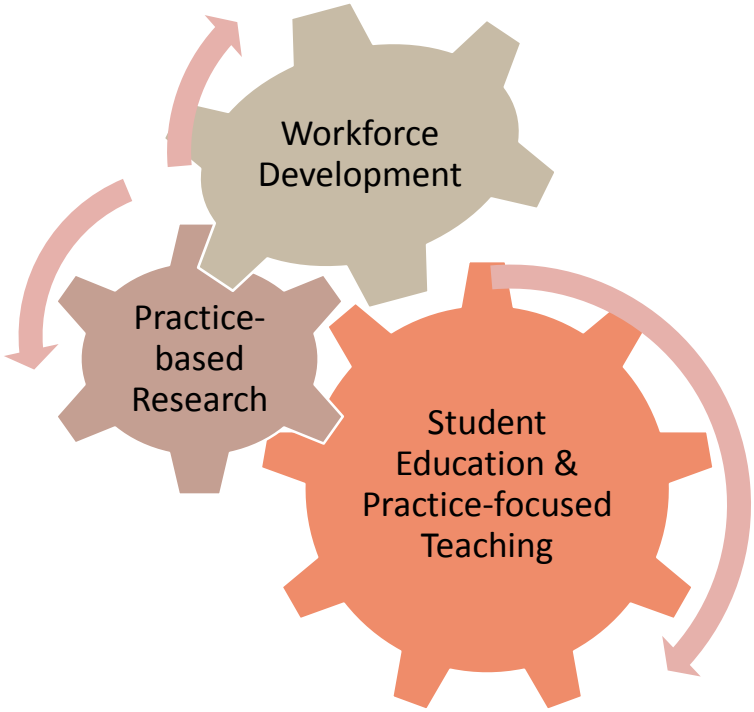
Executive Summary

The purpose of our Academic Health Department (AHD) is to bridge knowledge and improve health through mutually beneficial collaboration between public health practice and academia. In 2011, the Knox County Health Department (KCHD) and University of Tennessee Department of Public Health (UT DPH) formalized the AHD via a memorandum of understanding.

This report describes accomplishments during our 3rd year: August 2013-July 2014.

Our AHD has 3 Focus Areas



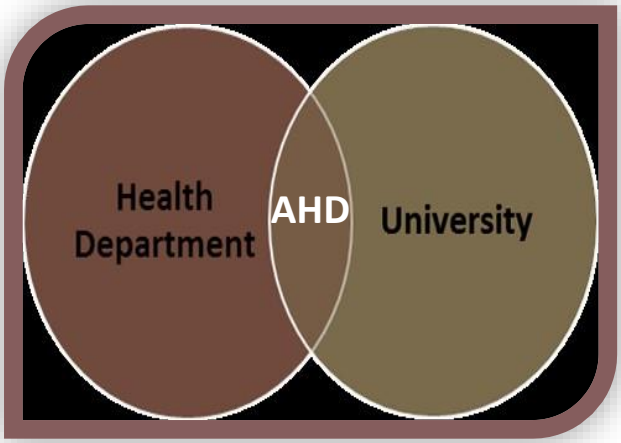
Examples of 2013-2014 Focus Area Achievements
Increased variety of intern disciplines at KCHD to include Law and Communications
UT DPH completed 3rd annual Public Health Summer Academy, an Evidence-based PH training for 22 HD employees in surrounding 15-county area
Completed joint research study on improving Women's Health clinic show rates

Other capacity building achievements this year:

- ✓ Finalized AHD Logic Model
- ✓ Created and began using Evaluation Plan based on Logic Model to measure intended outcomes of partnership
- ✓ Secured permanent funding for AHD coordinator position
- ✓ Published AHD case example in the *Journal of Public Health Management and Practice*

What we do

Our AHD is built on over 40 years of partnering between the local health department and university public health department (MPH program). Formalizing the partnership through an MOU in March 2011 has made it easier to collaborate and leverage each other's resources to accomplish shared goals.



We have 3 overarching goals.

1) Excel in student education & practice-focused teaching
2) Assure relevant, timely workforce development
3) Engage in practice-focused research

Partnering allows increased capacity and efficient use of everyone's resources!

Per the AHD MOU, Martha Buchanan, MD, Director, Knox County Health Department (left) is appointed adjunct faculty; Paul Erwin, MD, DrPH, Professor & Head, UT Department of Public Health (right) is appointed KCHD consultant.

Our structure. An AHD Steering Committee with executive leadership from both organizations meets quarterly to monitor and refine shared activities. A full-time shared AHD coordinator position manages the day-to-day operations. The coordinator is a permanent staff position, which is held by the University, but funded equally by the organizations. The coordinator maintains an office at both locations and divides her time accordingly. We have found that having a person on the ground at both sites is vital to assuring a) a central point of contact; b) implementation of initiatives; and c) new opportunities and matches are identified quickly.

For more information: See the *Journal of Public Health and Management and Practice* article that includes a case study article on our AHD model (May-Jun;20(3):304-309; 2014)

Also, our MOU, AHD Coordinator job duties, and past reports may be accessed online at http://publichealth.utk.edu/AHD/achealthdept.html

AHD Goals & Objectives (2013-2014) objectives indicated by in report.

Goal #1: Excel in student education and practice-focused teaching

Objectives	Due date	Status
A. UT DPH faculty will invite a KCHD employee as guest lecturer in at least 3 MPH courses.	8/1/2014	**Achieved**. 4 MPH Courses (Finance, Environmental Health, Program Evaluation, Seminar) hosted 7 KCHD employees
B. KCHD will provide a community-based service learning opportunity for an MPH course that traditionally has not included service learning.	12/31/2013	**Achieved**. KCHD Environmental Epidemiologist provided Environmental Health course its first community-based project
C. AHD will conduct Continuous Quality Improvement project: development of student timesheet to improve communication and accountability of KCHD interns.	8/1/2014	**Achieved**. Timesheet modeled after employee version, piloted, refined based on student & preceptor feedback.

Goal #2: Assure relevant, timely workforce development

Objectives	Due date	Progress
A. AHD will facilitate training activities to assist with KCHD's application for Public Health Accreditation Board (PHAB) accreditation.	8/31/2014	**Achieved.** UT DPH sponsored mock accreditation visit from KY Health Departments in July
B. UT DPH faculty will teach week-long Public Health Summer Academy using evidence-based public health framework to at least 20 East TN Regional Health Department employees.	7/18/2014	**Achieved.** 22 employees trained

Goal #3: Engage in practice-based research

Objectives	Due date	Progress
A. AHD will facilitate a joint practice-based research project with the research question originating in health department and rapid translation of findings to improve processes or programs.	1/31/2014	**Achieved.** Assessed no-show rates in Women's Health Clinic
B. AHD Steering Committee will reflect on joint research process with researchers and health department personnel to refine practice-based research process.	8/21/2014	**Achieved.** Researchers and Director of Clinical Services reflected during August AHD meeting

Goal 1: Student Education & Practice-focused teaching – partnering begins in the classroom and continues through employment

Classroom- KCHD professional staff served as guest lecturers in the following MPH classes:

Finance, Seminar, Environmental Health, Program Evaluation

- Benefits- Provided public speaking experience for staff. Exposed students to real-world scenarios. Increased faculty understanding of public health issues.

Community- Faculty partnered with KCHD to provide community-based service learning as part of coursework:

NEW partnership facilitated by AHD: J. Chen, UT DPH faculty, partnered with Al Iannacone, KCHD Environmental Epidemiologist, to provide eight MPH students with community-based project to update environmental health assessment. Helped UT DPH meet goal of one-third of MPH courses having service learning component!

- Other courses: Nutrition first-year studies helped diabetes educator; Center for Sport, Peace & Political Conflict course students assisted with walking bus program; MPH course did a community assessment of safety and community pride in priority neighborhood; Graduate course in public health and food sciences provided students opportunities to assist with disease outbreak investigations

Internships- Robust, tailored internships with relevant projects that helped KCHD accomplish strategic priorities resulted in:

- 227 students completing 7,561 intern/volunteer hours at KCHD
- 4 undergraduate interns deciding to enroll in MPH programs
- 19 UT MPH interns placed in a variety of settings; 84% preceptors rated students' overall performance as "often" or "consistently" exceeded expectations

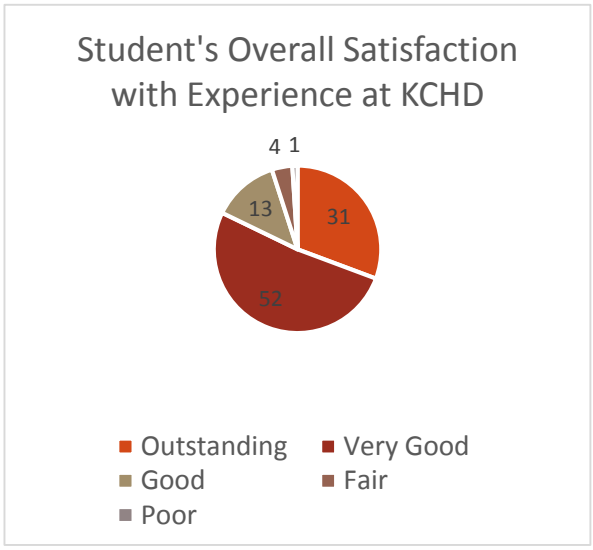


Figure 1: Survey of KCHD student interns, rotations, class projects, 2013-2014 (n=101)

Employment- Interns hired at KCHD included:

- MPH Health Policy and Management intern (summer 2013) hired as temporary employee to see Electronic Health Record through the planning to implementation stage (12 months), may become permanent position
- MPH Epidemiology intern at KCHD in summer 2012, has been hired annually ever since to coordinate the KCHD's flu mist clinics

Spotlight: Pre-dental student develops mentorship with dentist

How it began. Jack Kang contacted the AHD Coordinator to request dental clinic shadowing at Knox County Health Department during fall 2014. **The centralized student process managed by the AHD partnership, made it easy to connect Jack with an appropriate, well-matched experience.**

Jack Kang

UT pre-dental student

Email, 9/24/13:

Hi Ms. Julie,

I just wanted you to know that I had an amazing experience at the dental clinic today! I had the privilege to meet with the doctors, as well as many of the dental assistants. They are all extremely nice and welcoming.

I personally shadowed Dr. Shipley today this morning. Before I left, I asked her if I continue to shadow her because I really enjoyed my time with her. She said she would be glad to have me back and that it would be great. I just would like to confirm with you if this would be ok. Thanks again for providing this exciting and important experience to me!

Sincerely,

Jack

What happened next? Jack and the dental clinic mutually agreed for him to shadow weekly on an on-going basis until graduation in May 2015. In addition to observing dentist-patient communication, clinic processes, and clinical procedures, his mentor, Dr. Carol Shipley, DDS, allowed Jack to practice drilling on extracted teeth. Jack helped trouble-shoot a dental software camera to resolve problems.

Relationships* and *opportunities grew out of Jack's shadowing experience.

- As president of the University of Tennessee Student Dental Association (SDA), Jack invited Dr. Shipley to serve as the SDA Dental Advisor. She agreed and even offered to host the SDA's pool party at her home.
- Jack continued to refer pre-dental students to shadow KCHD.
- In October 2014, Jack addressed the full health department staff (>200 employees) by sharing a personal testimonial ("Connect Purpose" story) about what the shadowing has meant to him as someone who grew up in poverty with limited access to dental care.

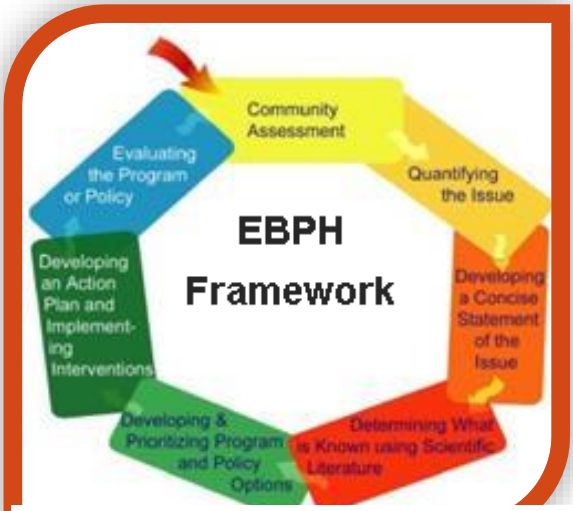
"How truly great it is to have the privilege of observing passionate and kindhearted dentists…being able to witness the joy of patients of receiving affordable dental care from these exceptionally talented dentists…and it couldn't be done without the help of all the friendly dental assistants and administrative staff! Ultimately, the time I've spent here at KCHD has sincerely affirmed my desire for becoming a dentist as it approaches closer and closer every day!" – Jack Kang

Goal 2: Workforce Development

Public Health Summer Academy

During the week of July 14, 22 employees of the **East Region** and the **Knoxville Regional Lab** plus two interns participated in the third annual **UT Public Health Summer Academy**. Held on the UT campus each day from 8 a.m. until noon, this week-long educational program focused on strengthening the public health knowledge and skills of participants.

Sessions focused on the **evidence-based public health (EBPH) cycle** with emphasis on applying information directly to individual public health work environments, whether administrative or clinical. Evidence-based public health is the process of integrating science-based interventions with community preferences to improve population health.



Credit: Ross Brownson

PHSA was facilitated by Paul Erwin, MD, DrPH, professor and head of the UT Department of Public Health and Academic Health Department Coordinator Julie Grubaugh with instruction provided by UT faculty and East Region staff members

"The PHSA far exceeded my expectations." – County Director

100% recommend to colleagues

"I must admit, having been out of college for over 20 years, I was very anxious about attending the Academy but felt very relaxed and comfortable during the class." –PHSA participant

Reflection papers submitted 1-month after PHSA, indicate the most common skill employees learned was how to better interpret data. The most common ways employees reported they are applying information to their jobs include: developing clear problem statements, Primary Prevention Initiatives (PPI), evaluating policies, processes, programs, including quality improvement and lean process improvements, locating health data and evidence-based programs online.

PHSA class of 2014

The PHSA was supported by a sub-award to UT/DPH from ETSU's Public Health Training Center. More information is available at http://publichealth.utk.edu/summeracademy.html

Spotlight: Mock PHAB Accreditation Site Visit

National Public Health Accreditation

In September 2011, the national Public Health Accreditation Board (PHAB) officially launched voluntary public health accreditation, which provides public health departments an opportunity to measure performance under a set of standards.

The accreditation assessment process provides valuable, measurable feedback to health departments on their strengths and areas for improvement. Accreditation is one mechanism used to ensure excellence through evidence-based, innovative, and nationally recognized best practices.

Kentucky health department mock accreditation site reviewers

Leveraging the AHD to Prepare for Mock Accreditation Site Visit

Reviewers discuss strengths and opportunities for improvement to achieve PHAB accreditation

In May 2014, a group of seven Kentucky health department employees conducted a 2-day mock accreditation site visit to KCHD, which was funded by a sub-award to UT/DPH from ETSU's Public Health Training Center. (LIFEPATH).

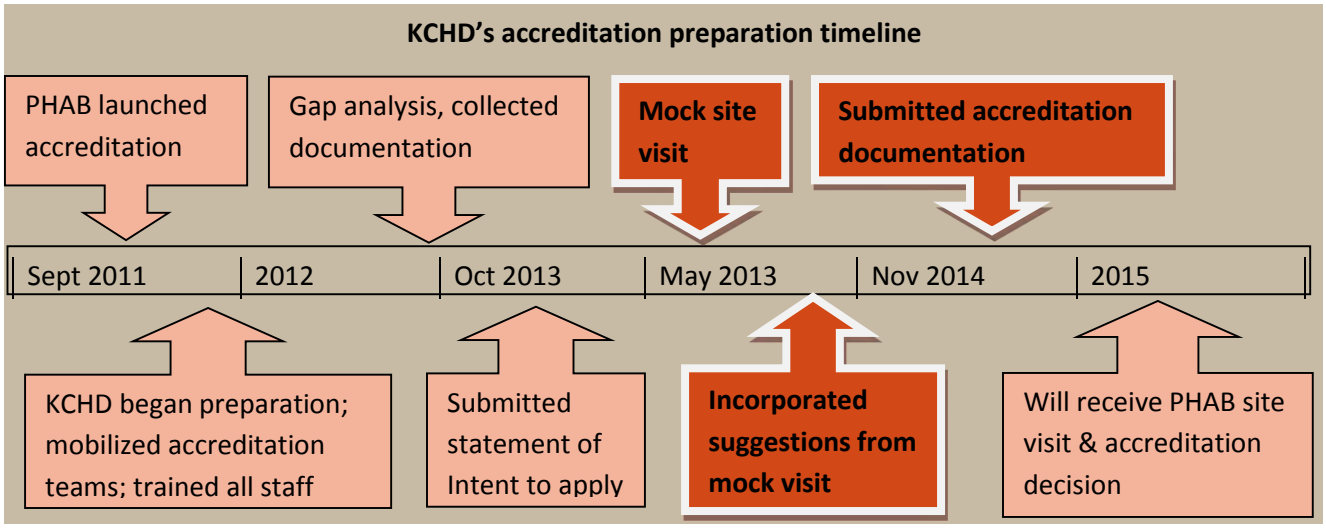
"Money well-spent" – KCHD Director

"Best decision we made" – KCHD's Director of Accreditation and Quality

The mock site reviewers reviewed documentation for all 12 domain areas and provided feedback. The visit culminated with reviewers' presentation of strengths and opportunities for improvement.

Outcome- KCHD implemented improvements based on the mock site visit recommendations and then submitted documentation to PHAB in November 2014. Because the visit was so valuable, KCHD recommends health departments preparing for accreditation replicate the mock site visit.

KCHD's accreditation preparation timeline



Goal 3: Practice-based Research

The AHD has changed its initial approach to supporting research and will continue to refine it over time.

- In year one, a seminar approach called "Public Health Grand Rounds" involved a faculty member meeting with three to five KCHD employees to learn about relevant programs in order to deliver a one hour presentation on faculty research in a seminar open to all health department employees. While relationships were built, the presentations did not meet real practice needs.
- In year 2, the AHD Steering Committee decided to focus on an even greater challenge: conducting joint practice-based research (PBR) with the question originating within the health department. In August 2012, KCHD managers brainstormed research questions that could help their staff do a better job or improve the services. Managers developed a list of seven questions, to which UT faculty narrowed to one that was most relevant to faculty expertise. A small group of faculty and HD employees held an initial meeting to brainstorm research approaches, from which two investigators were identified to lead the AHD's first joint practice-based research project during summer 2013.

Principal Investigators

Kathleen Brown, MPH, PhD, (then) Director, Community Assessment & Health Promotion, KCHD (left)

Carole Myers PhD, MSN, Faculty, UT College of Nursing & Department of Public Health (right)

Research question: ***How can we reduce Women's Health clinic missed appointments?***

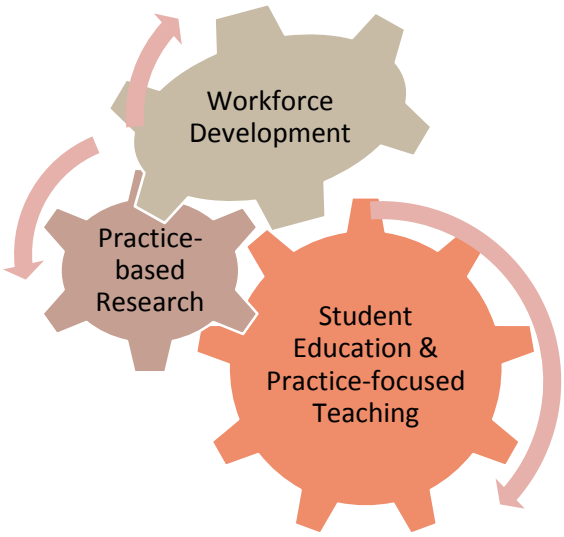
- Mixed methods study, analyzed existing attendance records & conducted interviews
- Utilized student intern support
  - Brown and Myers received $2000 small grant award from the UT Department of Public Health to complete this project; $750 for gift cards from the UT Center for Health Sciences Research
  - Recommendations presented to KCHD in December 2013
  - Process reflections presented to AHD Steering Committee in August 2014

Future Directions

Our AHD will continue collecting data to measure AHD operations and outcomes, as specified in our AHD logic model and accompanying performance metrics.

Measurable objectives with specific strategies will be developed for the priorities listed below.

The AHD Steering Committee will continue to meet quarterly to assess progress.



2014-2015 priorities include:

Excel in student education & practice-focused teaching • Develop tools to evaluate service learning class projects • Conduct preceptor training at KCHD on managing interns and develop a Continuous Quality Improvement (CQI) project based on preceptor input
Assure relevant, timely workforce development • Support KCHD's training needs to achieve accreditation by the Public Health Accreditation Board (PHAB) • Leverage AHD partnership to satisfy UT DPH's re-accreditation by the Council on Education for Public Health (CEPH)
Engage in practice-focused research • Conduct joint research on Neonatal Abstinence Syndrome (NAS) project to examine facilitators and barriers to beliefs about birth control in methadone clinic • Develop plan to identify evidence-based practices currently in use at KCHD
Other capacity building/outreach • On-boarding of new faculty and key HD employees • Submit manuscript on AHD Logic Model