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## The IPE Insight. Volume 2015, No. 1. February-March, 2015.

The UNM HSC Inter-professional Education Team

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February-March, 2015

Volume 2015 – No. 1

## THE ROAD TO CAMBRA

# New Interprofessional Frontiers: Putting the Mouth Back into the Body



On February 12, 2015, an interprofessional audience including nursing, pharmacy, medicine, dental residents, dental hygienists, and others heard worldwide lecturer, **Dr. Douglas Young, DDS, MBA**, from Arthur Dugoni School of Dentistry, University of the Pacific, present his ideas for innovations in oral health care to positively impact overall patient wellbeing and outcomes.

Young pointed out that based on a 3 year study data, if we simply treated the periodontal health of the patient, we would save \$3,200 per patient in combined savings in medical and pharmaceutical costs. The impact would decrease annual hospitalizations by 33%, and reduce annual doctor visits by 13%.

### Twelve-year-old Deamonte Driver died of a toothache...

A routine, \$80 tooth extraction  
Might have saved him.  
If his mother had been insured.  
If his family had not lost its  
Medicaid.  
If Medicaid dentists weren't so hard  
to find.  
By the time Deamonte's own  
aching tooth got any attention the  
bacteria from the abscess had  
spread to his brain, doctors said.  
After two operations and more than  
six weeks of hospital care, the  
Prince George's County boy died.  
By Mary Otto, Staff Writer  
Washington Post, Feb. 28, 2007

Relaying a true story that is very familiar in the dental community, Dr. Young illustrated the critical importance of oral health when he drew on the tragedy of Deamonte Driver, who died in a DC suburb only 8 years ago from bacteria from an abscess that spread to his brain.

### Oral Systemic Connection

A new paradigm between dentistry and medicine is now developing regarding patient care. The oral systemic

connection to medicine includes: Cardiovascular disease (CAD and stroke), poor pregnancy outcomes (fetal development, low birth weight, pre-term births), diabetes, bacterial pneumonia (VAP), orthopedic implant failure and kidney disease.

Young, who works in a patient-centered medical home facility said, "All of our patients that are scheduled to get a liver, kidney

or heart transplant, have to be cleared by dental before they are allowed to get their transplant so this oral systemic connection is a real connection between medicine and dentistry."

### Oral Health and Medical Health Collaboration

In the *Interprofessional Education and Practice...The Dentist of the Future: Part Three*, Lindsey A. Robinson writes that the opportunity for interprofessional collaboration is for oral health care professionals to help medicine in treating these chronic diseases, and for medical providers to help oral health care professionals in treating this infectious disease called dental caries.

Collaboration with oral health is not a new concept. Pediatrics provide fluoride varnish and fluoride supplementation. Collaboration with dental and nursing at NYU has been going on for 7 years and reported their findings in [Interprofessional Education Between Dentistry and Nursing: The NYU Experience](#).

In medicine, when a patient has these symptoms--*overweight, high blood pressure, and high cholesterol*--it is highly proven to be associated with heart disease. On the dental side, the symptoms of caries--*bad biofilm, absence of saliva, and dietary and destructive lifestyle habits, like meth--*

are not only highly suggestive of caries disease, they are *causative* factors.

Research has proven that these are the only 3 things that can cause caries disease.

They have a stronger

relationship to disease than the medical factors, and yet, traditional dentistry ignores these until there is a hole in the tooth.

### Interprofessional Collaboration is a Two-way Street

**Oral health professionals** can play a major role in screening and monitoring chronic diseases, such as diabetes, hypertension, hypercholesterolemia, etc.



**Medical health professionals** can help educate, refer, and deliver oral care treatments for patients with chronic oral diseases, such as periodontitis and caries disease, especially when an oral systemic connection exists. The patient-centered medical home is just one collaborative model to do this.

## The Caries Process

Biofilm that behaves badly creates an acid; the acids are small chain acids, and they soak through the pellicle and into the enamel. It dissolves the subsurface of the enamel; this is called demineralization. The mineral then comes out of the tooth and, if not stopped, the surface will actually collapse and there will be a hole or cavity in the tooth.

Fortunately, we now have metrics to measure the biofilm that behave badly by using a meter called, ATP bioluminescence. If we correct the chemistry but leave the bacteria creating acid, we're going to get another cavity. So, we must correct the biofilm in addition to the chemistry.

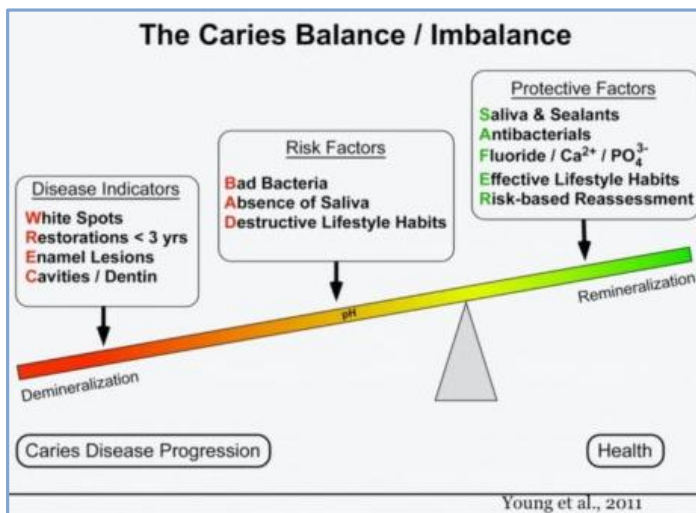
As long as you have an intact enamel surface, you are protected from bacterial invasion. We need dentists to drill teeth that have holes in them because once the surface is cavitated and the enamel has a hole all the way to the dentin, bacteria can march right into the tooth. But as long as there is some enamel left, it's protecting the tooth.

pH determines the direction of flow and whether the tooth will remineralize or demineralize. "It's all about the pH which determines whether bacteria behaves or does not...and it's huge, said Young.

## CAMBRA (Caries Management By Risk Assessment)

In the Caries Disease Progression graphic, you will see there are **Disease Indicators** such as white spot lesions, radiographic evidence of enamel lesions, cavities in the last 3 yrs. due to decay; **Risk Factors**, which tell you why you got the cavities: Bad bacteria, absence of saliva, destructive lifestyle habits; and **Protective factors** including saliva and sealants, antibacterials, fluoride, effective lifestyle habits, and risk-based reassessment.

Once out of balance, oral health care puts it back in balance by providing products to modify biofilm behavior and correct the chemistry based on the CRA (Caries Risk Assessment).



## Message to Healthcare Providers

Dr. Young asks healthcare professionals to understand that dental caries is an oral health disease. "Dentistry has no turf

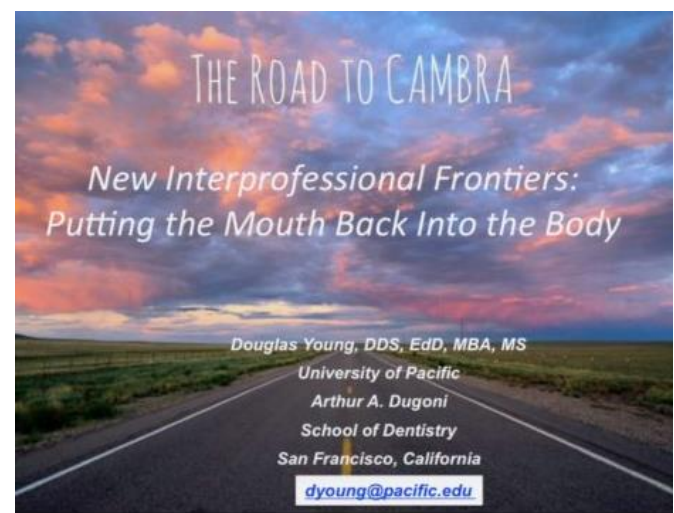
over oral disease. You see disease, you treat disease. You don't need a dental license; you're not drilling a tooth. We have so much disease, we can't do this by ourselves--we need to collaborate," Young said.

Once the medical model adopts oral health, maybe it will be better understood that this is a medical disease.

See also the additional article on page 8 for a recap of the interprofessional **Oral Health Panel Discussion and Global Café** program which followed Dr. Young's presentation and the developing ideas toward expanding oral healthcare throughout New Mexico.

You can view Dr. Young's entire presentation using the below link (start at 5:47)

<http://hscmediasite.unm.edu/unm/Play/86833fdff9a64476945216da6ce8c8391d?catalog=68e3f64c-491d-4f41-8a51-eef3a8826c50>



The **Oral Health Grand Rounds** and the subsequent **Panel Discussion and Global Café** on February 12, 2015 were made possible due to grant support through **HRSA UD7HP25045: Innovations in Primary Care Oral Health**, as well as support of the HSC Office of Interprofessional Education.



# In Action!!

## Updates from IPE Groups

Interprofessional working groups were formed as a result of last year's IPE Curriculum Retreat held in May 2014 and focus on key expressed interests. Through the continuous work of several dedicated professionals, they continue to gain momentum and are contributing significantly to furthering the education of our health profession students at the Health Sciences Center.

### Patient Safety and Quality Improvement

The Patient Safety and Quality Improvement working group received a SEAC (Scholarship Education Allocation Committee) grant to develop and implement an interprofessional student IPE LoboWings training which will be implemented this April in several sessions including medical, pharmacy and nursing students.



LoboWings incorporates Crew Resource Management skills and tools adapted from commercial aviation, to improve and standardize

communication and teamwork for safer patient care.

This program provides a foundation for effective interdisciplinary practice and problem solving, process improvement, Lean methodology, etc. In the paper, *Lean Methodology in Health Care*<sup>1</sup>, author Kimsey notes, "In a lean organization, everyone is responsible and accountable for integrating lean thinking principles, methodologies, and tools into daily work." And, "The premise of the methodology is that there are eight wastes in any organization: 1) unused human potential, 2) waiting, 3) inventory, 4) transportation, 5) defects, 6) motion, 7) over-production, and 8) processing."<sup>2</sup>

Teams at UNM have used LoboWings concepts to:

- Ensure clear staff roles and accountabilities
- Improve accuracy of team communications and functions
- Reduce/eliminate inefficiency, delays, and rework
- Catch, correct, and eliminate preventable errors before they result in patient harm

They will continue to expand the curriculum to address important patient safety and quality issues for all HSC students in interprofessional service learning settings. The group meets regularly on the 2<sup>nd</sup> Monday of the month.

### Community Engagement

The **Community Engagement** working group meets regularly (twice a month on the second Wednesday) to develop the required community-engaged curriculum, an interprofessional service learning course for the early learner, which is based upon IPE competencies and community-engaged principles.



The curriculum will be implemented with 6 sessions including a kick-off this October 27th and 5 dates in Spring 2016 (February 2, February 9, March 8, April 5 and April 12).

Professions represented will include a total of about 338 students made up of nursing, medicine, pharmacy, PA, OT and PT. Twenty to twenty-five community sites have been identified based on existing relationships that each of our schools and colleges have.

Students will form approx. 20 groups, divided into 2 subgroups, with about 8-9 students in each group--a nice size for IP team building and those competencies. Collaboration among 40 faculty will also be needed from each school and will be crafted in manageable timeframes to work with the students.

The basic frame is there would be faculty facilitating small student teams in these community sites, out of classroom, conducting agreed-upon community engaged activities based on community-identified priorities.

A faculty development workshop on "How to Facilitate IPE Student Instruction" will be offered by the IPE team this fall. One facilitation training would be sufficient to have the required skills to be a facilitator for small groups in this setting.

There are a number of learning activities that the Community Engaged working group has been working on in developing the course objectives, the IPE competencies, the teaching activities, the assessment tools, etc.

The long term goal is to make this effort sustainable to benefit both students and our communities.

If you are interested in learning more about these working groups, please contact the IPE Office at [HSC-IPE-Office@salud.unm.edu](mailto:HSC-IPE-Office@salud.unm.edu).

### Welcome to New Staff!

As the new year began, the IPE Office took on a new look in its HSLIC office space on the main floor and added its first, full-time staff. Before joining IPE officially, **Diane Bessette** had been providing support to the IPE team since Sept. 2013 on a volunteered basis through the generosity of the College of Nursing where she worked as an admin coordinator. During that time, she began *The IPE Insight* and was instrumental in coordinating the 2014 IPE Curriculum Retreat from which our work groups were born.



Since joining the IPE office, Diane has added her considerable managerial and computer skills to set up IPE business operations. She has been providing support to the IPE work groups as needed and is excited to be in the final throes of completing the IPE website for its launch soon.

As with the recent *Oral Health Grand Rounds & Global Café*, an event held in collaboration with the College of Nursing and UNM Division of Dentistry, Diane shared some of the administrative workload to lend IPE support for this important endeavor.

Diane joined the University after relocating from Washington, DC, in July 2012. Previously, she was the office and HR manager at a national association for public hospitals. In the past Diane worked for many years with national design firms and ultimately opened her own business working with architects and engineers in the DC metro area producing building specifications.

## Health Sciences Student Council

### Spring Fling Triathlon, Kids Race and Wellness Fair

Kyle Leggott, HSSC president, 3rd yr. medical student

Anica Chairez, HSSC Vice President, 2nd yr. Pharmacy student

The Health Sciences Student Council (HSSC) is an interprofessional organization and every year we collaborate with students of all health professions to organize several different health related events.

Already this year, the HSSC has participated in a number of health and wellness fairs. Plans are continuing with upcoming activities at the April 12<sup>th</sup> **UNM Spring Fling Triathlon, Kids Race and Wellness Fair** to be held at UNM Johnson Center. This will include a timed Run-Bike-Swim sprint triathlon. The run is a two-loop course around UNM. The bike course is out to Mesa Del Sol and back, and the swim will take place at UNM Johnson Olympic-sized pool. The swim is a serpentine swim up/down one lane at a time. The distances are 5k run, 20k bike and 400m swim. For further details, go to <http://coe.unm.edu/departments-programs/hess/spring-fling-triathlon-2015/index.html>.



In addition, we are planning to host a social event for all HSC students some time before the Spring semester ends. Contact us with any questions at [hsc-hssc@salud.unm.edu](mailto:hsc-hssc@salud.unm.edu).

**Fall 2014 Event Highlights.** Last Fall, the HSSC sponsored or participated in an interprofessional drive thru flu clinic, the Fit For Fun 5k and the HSC Education Day. In collaboration with UNMH and the New Mexico Medical Reserve Corps (NMMRC), the HSSC provided two drive-thru flu shot clinics for the community. The clinics were very successful, helping to vaccinate over 3,100 patients. The HSSC trained and organized student volunteers from nursing, pharmacy, medicine, physician assistant and paramedic programs.

On October 18<sup>th</sup> marked the 2nd annual Fit for Fun 5K. This event was held over two days and included an expert panel discussion on *The Future of Interprofessionalism in Healthcare in New Mexico* and the 5k run/walk and health fair on the following day. The dental hygiene program and physical therapy programs had the greatest participation by program size. It was no surprise that the overall fastest program and winners of the 5K race were students from the physical therapy program.

At the October 27<sup>th</sup> HSC Education Day highlighting interprofessional education, the HSSC ran one of the large group sessions in which a diverse panel of students provided information and answers to questions regarding their interprofessional experiences and the student perspective. They were able to speak to an audience of educators, administrators and faculty members.

## 1st Annual Interdisciplinary Workshop and Patient Care



### Presents the 1<sup>st</sup> Annual Interdisciplinary Workshop Patient Care Challenge!

**What:** Learn, Collaborate, Network, Free Food, Great Prizes!

**Who:** All Health Care Professional Students

**When:** Saturday, March 21 from 9:00 a.m. - 1:00 p.m.

**Where:** Domenici Center (NE)

**How:** Sign up at:  
<http://www.signupgenius.com/go/70a0e48aea922a31-interdisciplinary2>

Come & enjoy a complimentary breakfast while hearing a panel of Interdisciplinary health-care professionals speak on the topic of collaboration within the medical field. This will be followed by a student group care challenge where each group will be given an hour to formulate a treatment plan for their patient while being evaluated. May the group with the best treatment plan and teamwork WIN!!! 1st place and 2nd place prizes available! A complimentary lunch and debrief will also be provided.

Initiated by HSC students, this **IPE Patient Care Challenge** promises to be a fantastic opportunity to learn and collaborate in interprofessional teams.

The IPE team has identified a case study appropriate for all health professions and will serve as judges.

If you have any questions, please feel free to contact:

Candace Mims  
PharmD Candidate 2016  
[cmims@salud.unm.edu](mailto:cmims@salud.unm.edu)

[Sign up here](#)



## Wed., March 18th Public Health Emergency Preparedness Activity

Members of the IPE team, with Krista Salazar leading from the College of Pharmacy, along with Loren Kelly, College of Nursing and Michel Disco from the College of Pharmacy have worked tirelessly to coordinate a one-day **Public Health Emergency Preparedness Activity** scheduled for Wednesday, March 18<sup>th</sup>.



The complexities of this emergency preparedness functional exercise required significant work in collaboration with the Department of Health, the City of Albuquerque, Homeland Security, the Poison

Control Center, UNM Hospital and HSC schools/programs and UNM main campus. The exercise is scheduled from 8 am to 4 pm and will take place at Johnson Gym. In addition to massive collaboration efforts, the IPE team ensured that this interprofessional exercise also meets our mutual educational and is content appropriate for the level of the learners. See the learning objectives and goals presented in the side bar. See the learning objectives and goals presented in the side bar.

Over 200 students will participate. The learners include nursing, pharmacy, physician assistants, EMS, radiological sciences, and medical laboratory sciences. Over 40 faculty/staff will be involved as observers, evaluators or timers.

On the day of the event, student and facilitator participants will also get a lot of content in the *Just in Time* training. During the event the students are going to be role playing as “volunteers” and “clients”. The “volunteer” role will prepare students to effectively function as a team while learning to run Points of Dispensing (PODs) to safely and efficiently dispense medications to a large mass of citizens in response to a public health emergency. Drug interactions based on the scenarios presented will involve students contacting the Poison Control Center for advice to ensure safe medication use. The “client” role play will facilitate health care provider-empathy building and will involve learning how to properly respond to patient related access and functional needs. All students will play the role of a “volunteer” and a “client” because they will switch roles mid exercise.

After the exercise there will be a *hot wash* facilitated by the DOH. The term *hot wash* is used to describe the exercise debrief that immediately follows an exercise. The hot wash allows for participants to give feedback about what worked well

and opportunities for improvement. This collaborative effort is mutually beneficial for educating UNM students, staff and faculty about their role in emergency response and for giving feedback to improve our city readiness for public health emergencies.

The DOH required a 3 hour pre-training session for students to complete before March 18<sup>th</sup>. Both “live” pre-training was offered on 2 different dates. For those students who couldn’t participate in the “live” pre-work sessions, online training was available. In the pre-work, students respond to general emergency questions at the end of the required modules, and they must get 80% and above to receive their certificate and participate in the disaster exercise. Students were required to sign up for the Medical Corps Reserves.



### Learning Objectives & Goals for the Public Health Emergency Preparedness Activity

#### Activity Goal

To participate in a modified functional city readiness initiative (CRI) to prepare for emergency mass health care needs in the city of Albuquerque at UNMH and UNM.

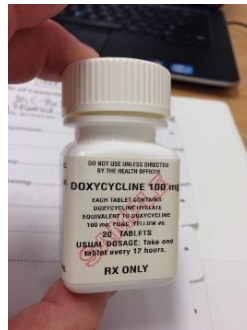
#### Activity Learning Objectives:

##### Pre-Activity Objectives

- Describe what a NM DOH Point of Dispensing (POD) system is and what constitutes opening a POD operation in response to a public health emergency.
- Describe potential roles in operations of a POD.

##### Day-of Activity Objectives

- Utilize NM DOH systems tactical POD course to respond to a public health emergency
- Implement teamwork while learning the roles as POD director, team leads and train the trainer.
- Demonstrate empathy and cultural sensitivity while assessing health care, education and advocacy needs of site population.
- Demonstrate effective communication with colleagues and patients to deescalate at risk situations and enhance desired outcomes while under the pressures of a citywide public health emergency.
- Collaborate with peer, faculty, staff and interprofessional resources while acting as patient advocate.



# Interprofessional Geriatric Elective—Spring 2015

Shelley Marion Modell

The IPE Geriatric elective course took full swing this past January and February and once again has proven to be the model for Interprofessional Education.

A record number of students participated this year, representing Health Sciences students from nursing, medicine, physician assistant, pharmacy, OT, and PT. Once again, we had a strong showing of students from UNM's Nutrition and Dietetics Program. And, for the second year in a row, we benefited from the participation of faculty and students from New Mexico State University and New Mexico Highlands University Schools of Social Work.

The course ran through two weekends in January and February, during which time students participated in interprofessional teams to work through three complex geriatric cases.

Outside of class time, students had the opportunity to observe interprofessional collaborations in clinical sites across Albuquerque.

Finally, the students were able to bring their classroom experience and the knowledge gained through clinical observations to two community based Health Fairs, which were held in HUD Elderly Housing campuses.

## *During this course students:*

- *Learn from each other about the roles and responsibilities of different team members*
- *Explore community support services and health literacy issues*
- *Facilitate patient-centered, team-oriented care*

*Students attended all four class sessions during 2 weekends from 9 am-4 pm, Jan. 24/25 and Feb. 7/8.*



## Cheers to GREAT Faculty!

The following faculty participated in this year's course and are applauded for their commitment to IPE!

### College of Pharmacy

Melanie Dodd, PharmD., Ph.C., BCPS  
Juliann Horne, PharmD

### Occupational Therapy

Betsy VanLeit, PhD, OTR/L

### College of Nursing

Judith Harris, DNP, FNP-BC  
Loren Kelly, MSN, RN  
Christine Cwik, MSN, RN

### School of Medicine

Carla Herman, MD, MPH  
Aswani Alavala, MD

### Physician Assistant

Kathy Johnson, PA-C, MA

### Physical Therapy

Janet Popp, PT, MS  
Debbie Doerfler, DPT, OCS

### Nutrition/Dietetics Program

Deborah Cohen, DCN, RD  
Jean Cerami, MS, RD, CDE, LD  
Elle Skinner, Instructor  
Diana Gonzales-Pacheco, DCN, RD

### Social Work

Amanda Hausner, MSW, LMSW  
NM Highlands Social Work  
Gail Leedy, MSW, PhD  
NM State University Social Work



# Interprofessional Geriatric Elective Health Fair—Feb. 14

*Shelley Marion Modell*

Students participated in the **Interprofessional Geriatric Elective Health Fair** on February 14, 2015 at the AHEPA III Housing for the Elderly residence in Albuquerque, which was coordinated with Susan Lawton, MSW - Service Coordinator for the residence. Students were doing team practice with one student from each profession (nursing, medical, OT, PT, nutrition, and social work) meeting with the resident together. They covered everything from blood pressure to fall prevention, and students were able to watch and learn from each other while the residents adored it and gained the benefits of the varied instruction. The next one will be held on February 28<sup>th</sup>.

## Students

Susie Law-Godat  
Stefanie Sismaet  
Nicholas Halvaei  
Michel Faust  
Mark Jaramillo  
Johanna Nacion  
Jennifer Murad  
Francesca Garcia  
Connor Hudson

Conni Ma  
Christy Marinaro  
Chris Smith  
Candice Noel  
Brenda Tryon  
Beverly Apodaca  
Anna Apodaca  
Amenda Barnes

## Disciplines Providing Services

Pharmacy  
Nursing  
Medicine  
Nutrition  
OT  
PT  
Social Work:  
NM Highlands & NMSU

## Faculty

Betsy Vanleit, OT  
Melanie Dodd, COP  
Christine Cwik, CON  
Elle Skinner, Nutrition  
Shelley Modell, Geriatrics





# Oral Health Panel Discussion & Global Café—Feb. 12<sup>th</sup>

## Panel Discussion

Opening the interprofessional panel discussion on oral health on February 12th, **Dr. Peter Jensen** spoke of the challenges that New Mexico faces—a heavier burden of children living in poverty who have a high risk of oral disease; the 77 million baby-boomers population joining Medicare has more underlying chronic conditions; and although recommended by the American Dental Association, only 10% of dentists in our country are willing to see children by age 1.

There is a 2-way challenge that affects success in managing oral health. We need to rethink the model for treatment of diseases and how it chooses to integrate the medical model with the use of preventive care strategies, assessment of risk factors, and management of oral diseases. The challenge for non-dental professionals is to integrate the mouth into overall health assessment, treatment and referral, and communicating to the patient the effects of **oral health** on **overall** health. These challenges require broad, interdisciplinary efforts across health, social, educational and legislative sectors to initiate effective improvement in oral and therefore, overall health. Where New

Mexico has a population ratio of >5000 to every 1 dentist, there are great dental needs here.

**Dr. Nancy Ridenour** addressed potential policy issues beginning with the revelation that Medicare enrollees do not receive dental coverage. Working on amending Medicare to include dental services could be a long range goal.

In 1968, Medicaid children became entitled to early and periodic screening, diagnosis and treatment (EPSDT) and dental care as necessary for relief of pain and infection, restoration of teeth and maintenance of dental health. However, there are not enough providers to provide these services. As an expanded Medicaid state, our children are required to have EPSDT services, which includes dental screening and referral to dental care. More

targeted low income population and includes preventing disease, promoting good oral health, and restoring oral structures by emergency physicians.

The ACA does cover primary care, emergency services, hospitalization, maternity and newborn, mental health and addiction, prescription drugs, rehabilitative services, lab services, prevention services and pediatric services. You can get medical services for dental care if it's a medically related issue, e.g., trauma, being evaluated for transplant, but not for general dental care.

The state's expanded Medicare provider, Centennial Care, has managed care organizations (MCOs) and the different MCOs may include some adult dental coverage; providers need to look at what plans our patients are covered by.

Most doctors will do what's paid for, and there's an incentive for a health system to do what's paid for, so what are some ideas about how we can improve payment for dental service? We could partner with funders and providers to approve dental bundle payment at a value based payment; in other words, if a diabetic patient is in the hospital and there is a bundle payment, part of that could include dental services if you can show that dental care will decrease their hospitalization or decrease their readmission rate. Then, definitely use any outcomes research that shows decreased costs, increased quality and increased access.

As a regulatory issue, we could ask the Centers for Medicare and Medicaid Services (CMS) to include dental as an essential service. However, to convince CMS, we will need the research and evidence that shows it will help lower costs, increase quality and increase access.

The CMS Innovation Center has appropriated \$20B to look for innovative practices. Dr. Ridenour encouraged applying to the CMS Centers for Innovation for this initiative which she felt would qualify. To really have enough people involved to show a difference, it would require going outside the state of New Mexico to get other practices in multi-states. However, the benefit of working through the Innovation Center is that if we show a difference, it is *automatically* a part of Medicare and does not have to go back to Congress—which is huge.

We can work at the state level to expand currently covered services as they are really looking at cost-cutting measures and would have an interest if we show how oral disease increases health care costs related to diabetes and other diseases.

**Dr. Christine Cogil** brought the discussion to a clinical level, speaking about a project that partnered the College of Nursing, the UNM Dental Residency, and El Pueblo Health Services, a federally qualified health center in Bernalillo, through a HRSA grant to integrate oral health into primary care. One of the early challenges they found as they began integration of oral health into primary care was that they didn't speak the same language. When Dr. Jensen talked about a *physical exam*, he was talking about it from the neck up, while from primary care perspective, it was assumed to be a physical exam of the whole body. Initially, Cogil wasn't looking beyond the lips or looking down the pharynx, but Dr. Jenkins showed them there was a lot of real estate in between. "We needed to get beyond the vocabulary, which is often true in any interdisciplinary effort. The goal was to help health care providers learn to look at the teeth and the gums and understand that there was a reason to do so," stated Cogil.

### The Panelists

**Dr. Peter Jensen** is professor of Dental Medicine and Nursing and director of the Advanced Education in General Dentistry Residency Program at UNM. He is lead dentist on the Interprofessional Innovations in Primary Care Oral Health, a HRSA-funded project at El Pueblo Health Services working collaboratively with the College of Nursing and Community Health Center providers.

**Dr. Nancy Ridenour** is Professor and Dean at the UNM College of Nursing here at UNM. She has served the Innovations in Primary Care Oral Health project in an advisory capacity. Dr. Ridenour brings to her position at UNM a distinguished career as Nurse practitioner, educator and scholar as well as extraordinary depth of expertise in health policy history, process and change.

**Dr. Christine Cogil** is Clinical Instructor in Nursing and Dental Medicine here at UNM. She is the attending nurse practitioner on the Interprofessional Innovations in Primary Care Oral Health project. Dr. Cogil brings a distinguished career of Nurse Practitioner practice with rural and underserved populations on the US-New Mexico border to her position, and she has completed a Doctorate of Nursing Practice with a focus on oral health.

recently, the CHIPRA (Children's Health Insurance Program Reauthorization Act of 2009) requires dental services to a

It was clearly understood that if they were going to be successful teaching primary care providers how to do an oral assessment, there was no time for anything complex—it had to be a simple process. The solution was to give them an assessment tool. As an interdisciplinary effort (with dentist, nurse midwife, and nurse practitioner), the team looked at existing Caries Management By Risk Assessment (CAMBRA) tools. However, because these tools had a lot of dental language, they decided to come up with a **primary care oral assessment tool** that not only looked for caries, but any oral lesions that a primary care provider might come across. Cogil shared some of the innovations that came out of that project.

Cogil highlighted that caries is a #1 disease in children, and primary care providers tend to see children more frequently, and earlier in life, than dentists do. Therefore, as Dr. Young has often proposed, health care providers need to be involved in the child's oral health early on and frequently so we can prevent that disease. "It's crazy that dental cavities is a #1 chronic disease in our children," said Cogil. Periodontitis is associated with preterm birth and low birth weight, and high levels of cariogenic bacteria in mothers can lead to increased dental caries in the infant. In diabetes, chronic inflammation, dry mouth and the decrease of saliva flow, etc. add additional complications which reduce the body's ability to fight bacterial infections and diabetics may experience more frequent and more severe oral disease. Therefore, we need to be educating and helping our primary care providers see the link between the mouth and the body and integrating that into their primary care.

#### ***The Simple and Quick Way--the 4 L's Oral Assessment...in 60 Seconds or Less***

Lift the lip and

Lower the lip

Look at the teeth; take your finger and run a lap around the gum. *Do you find any soft areas?*

Lift the tongue. *Do you find any lesions underneath?*

## **Global Café Insights**

The Global Café session hosted at least thirty-three faculty, residents and students from Nursing, Dental Medicine, Dental Hygiene, Pharmacy and Medicine from across the Health Sciences Center with a few community guests. Dr. Douglas Young participated in these interprofessional groups that engaged in enthusiastic conversations around the following trigger questions.

1. *What has broadened, stimulated or challenged your thinking in the messages from the Grand Rounds lecture and panel today? What's new?*
2. *From your professional perspective, what are your thoughts about how we can translate this new knowledge about oral health to work together better to impact oral disease?*
3. *What support and opportunities would foster innovative inter-professional health professions efforts to meet the challenges of oral disease in the populations you serve?*

Dr. Cynthia Arndell, associate professor of internal medicine and member of the HSC IPE team and Dr. Barbara Overman, associate professor of nursing and director of the

Interprofessional Innovations in Primary Care Oral Health project, served as facilitators.

The following main points and insights were taken from comments voiced by Café participants:

- While dentists are trained in CAMBRA, how it is applied, valued and put in action needs work. It is an interprofessional opportunity
- Our education foci in Dental Medicine is on procedures
- Schematics and guides are important for application in primary care and must be easy and efficient
- Institute a research program on oral health at Health Sciences Center with IPE participation.
- Interesting that disconnected EHR's do not support Dental/Medical patient care collaboration
- Anyone on the health care team can use the CAMBRA products and improve oral health
- Reduce medical-dental separation in practice
- Why not have dental hygienists work in schools?
- Reduce medical-dental separation in education
- Rotation in oral health would be a great IPE experience
- Policy Change: Go *interprofessionally* to our legislators...more effective than going separately
- Interprofessional class in CAMBRA because current caries treatment model is broken
- Include school teachers in these interprofessional oral health discussions.

### **Follow-up Activities**

An Interprofessional Oral Health Grand Rounds on Caries Disease Management will be held from 12:15 to 1:15 pm, Wednesday, March 25<sup>th</sup> at the Interprofessional practice site, El Pueblo Health Services, 121 Calle de Presidente, Bernalillo, NM. Any interested faculty or student is welcome to attend. Please connect with [boverman@salud.unm.edu](mailto:boverman@salud.unm.edu) if you plan to attend.

College of Nursing meetings are already established to consider greater incorporation of oral health content into the Advanced Nursing Practice curriculum and possible application of PCOAT in community-based College of Nursing GEHM clinics at senior centers. Dr. Joanne Haeffele, Jan Martin, Pam Iwamoto and Jackie Wuellner are working on these areas of interest and would welcome the opportunity to make interprofessional connections around these activities.

Drs. Overman, Cogil and Jensen in collaboration with the Disability and Health Policy Division of the UNM Center for Development and Disability have included Caries Disease Management approach in a project proposal submitted to HRSA Maternal and Child Health focused on improving oral care for pregnant women and newborns.

Discussion is beginning among Drs. Douglas Young, Overman and Cogil regarding a Caries Disease Management course for non-dentists.

Inter-institutional Nursing follow-up discussions are being pursued with Dr. Wanda Borgess of University of San Francisco to explore joint projects based on mutual interest.

Multi-site research potential is being explored. Members of Dental Medicine, Dental Hygiene and Nursing faculty met with Kelly Byram of HSC PCORI initiative with Dr. Young during his consultation visit. Collaborative team research efforts will continue to be explored.





## KaBOOM—Designing Healthy Communities for Homeless Families

HSC students across HSC are very interested in ways to help address the needs of our most vulnerable populations and recently collaborated with faculty and community partners to raise funds and recruit volunteers to build a playground for homeless children. The event began with faculty from UNM School of Architect and Planning discussing how neighborhood design and where we live impacts our health.

“As students looking to enter the health professions, we are striving to promote and create healthy communities,” said Katherine Ogawa, a first year medical student, who helped recruit volunteers, along with physician assistant (Graduate, First Masters), Victoria McCoskey, both studying at UNM’s School of Medicine.

“What better way to encourage healthy habits than giving children a safe and exciting place to play,” added Ogawa.



Despite looming tests on Monday for many of the students, there were sixteen volunteers made up of second year physician assistants, and first and second year medical students.

They were spread throughout the construction site from paint to cement to wood chips to safety monitor. The students truly enjoyed the morning and were in awe as they watched the transformation to a healthier community.

Built in November, this was the third KaBOOM playground that BCBSNM helped build. Over 250 volunteers assisted in the five hour transformation of a parking lot into a playground for the children of the program.

“The [video](#) really captures the essence of the Saranam program and the exceptional community effort that went into building this amazing playspace for our children,” said Sue Rzendzian, director of development for Saranam.

Saranam (meaning ‘refuge’) is a two-year housing and education program for homeless families. We support the

families while the parents and children continue their education in a safe, supportive community. Parents are provided with intensive case management, life skills, financial skills and other support, which dramatically increases their income potential and subsequently the chances that the cycle of substance abuse, domestic violence, homelessness, and poverty will be permanently broken.

“For the past eleven years, our programming has focused on the family unit by working primarily with the parents. By providing a playspace for our 40 children, and additional financial support, we have the opportunity to provide in-depth services for our children, who have suffered trauma and crisis over and over again in their young lives,” said Rzendzian.

Having spent many years in construction, Roberto Aguero figured this would be an opportunity to put some of his skills to good use. “When I pulled onto the job site, I couldn’t believe the turnout! Over a hundred people filled the street,” stated Aguero. Even with so many people onsite, he was impressed by how well everything was organized into construction teams. There were people who were experienced and others who had never mixed a bag of concrete in their lives. But all pitched in to cut, carry, haul and do whatever was needed. Aguero added, “The best part was seeing the looks on the kids wandering around. They were excited by all the activity and once we were done, couldn’t wait to move in.”



Saranam children helped design the playground and their parents took leadership roles for the entire building process. They now have a place where they can grow, develop and strengthen their community support systems.

As one parent said, “This playground will be useful for future residents of the program, but it is groundbreaking for our children! I want to say thank you to all of you who came out to help us. You didn’t have to be here, but we’re grateful that you are!”

For more information about Saranam, please contact Sue Rzendzian at [saranam.suerz@gmail.com](mailto:saranam.suerz@gmail.com).

To view a short video of this phenomenal project, go to <http://vimeo.com/114390128>.



## Making the Case for IPE

Through the story of Amina—a Somali woman striving to manage her diabetes and maintain her health in an urban setting—the National Center has been able to effectively articulate how interprofessional health care can advance the



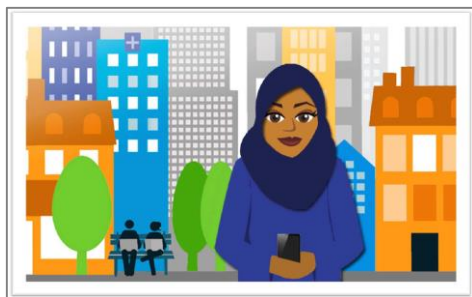
Triple Aim of better care, better health, and lower costs. The National Center has translated this powerful story into a set of teaching tools, including the [Amina in the Nexus](#) videos, to help health professionals, students and community members reflect on the need for collaborative care. Numerous academic institutions have used these tools to guide efforts to redesign their IPE programs or build them from the ground up.

### Overview of Amina in the Nexus

The story explains Amina's situation and how her 'care and learning team' of students, community members and practitioners interact with her via technology and meetings to ensure that she remains healthy and out of the emergency room.

### Purpose and Outcomes

By completing and reflecting on the [Amina in the Nexus](#) story, participants will be able to:



- Recognize the components of a health care system and environment that must be present to provide optimal patient and community care in a Nexus
- Identify some outcomes that result from a health care system that integrates interprofessional practice and education
- Articulate an aspect of how the integration of health care and education in their communities exemplifies good interprofessional practice and education
- Identify what needs to be changed for the [Amina in the Nexus](#) story to become a reality in each of their communities
- Understand elements of the Nexus at three levels - micro (clinical or community), meso (health care and university systems) and at the macro (policy)
- Reflect upon the role of the patient, family and community in improving individual health care and community health.

For the **Resource and Facilitation Guide**, see: <https://nexusipe-resource-exchange.s3.amazonaws.com/Amina-Resources/Amina in the Nexus Facilitator Guide FINAL.pdf>

## Nexus Resource Exchange

# Interprofessional Education in Anatomy: Learning Together in Medical and Nursing Training

Author(s)

*Gudrun Herrmann, Ulrich Woermann, Claudia Schlegel*

Teamwork and the interprofessional collaboration of all health professions are a guarantee of patient safety and highly qualified treatment in patient care. In the daily clinical routine, physicians and nurses must work together, but the education of the different health professions occurs separately in various places, mostly without interrelated contact.

Such training abets mutual misunderstanding and cements professional protectionism, which is why interprofessional education can play an important role in dismantling such barriers to future cooperation.

In this article, a pilot project in interprofessional education involving both medical and nursing students is presented, and the concept and the course of training are described in detail. The report illustrates how nursing topics and anatomy lectures can be combined for interprofessional learning in an early phase of training.

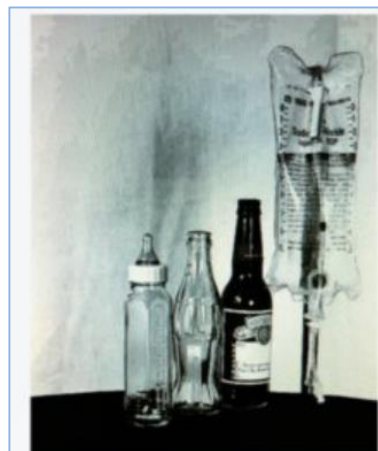
Evaluation of the course showed that the students were highly satisfied with the collaborative training and believed interprofessional education (IPE) to be an important experience for their future profession and understanding of other health professionals. The results show that the IPE teaching concept, which combines anatomy and nursing topics, provides an optimal setting for learning together and helps nurses and doctors in training to gain knowledge about other health professionals' roles, thus evolving mutual understanding.

Please note: The full text of this article is only available to those with subscription access to the [Wiley Online Library](#). Contact your institutional library or the publisher for details.

[Link to Resource](#)

<http://www.ncbi.nlm.nih.gov/pubmed/25475829>

## Life's Continuum of Bottles



Dr. Allen Wong (Awong@pacific.edu)





## Students Provide Health Screenings at Lobo Living Room 'Secrets of Longevity' Talk

*Irene Gray, Alumni Relations Specialist  
College of Pharmacy*

On January 22, 2015, College of Pharmacy students, in addition to Physical Therapy students, provided health screenings for attendees of the UNM Alumni Association's 'Lobo Living Room' at Hodgin Hall. The 'Lobo Living Room' series is a semi-monthly event that features UNM alumni presenting on their areas of expertise. Dr. Len Kravitz, 1974 and 1994 alumnus of Education, discussed the "secrets" of longevity and how people can live their lives to their fullest potential.



Attendees to the event were treated to blood pressure and BMI screenings from our students, in addition to Dr. Len Kravitz' lively presentation on how to keep themselves healthy. Their presence was a great complement to the presentation and guests at the event were excited to have our students there.

Photos from the event can be found on the UNM Alumni Association's Flickr page:

(<https://www.flickr.com/photos/unmalumni/sets/72157648170802873/>), and a video of Dr. Len Kravitz' presentation can be found on the YouTube channel here: <https://www.youtube.com/watch?v=gx4yxS9yAVY>.



UNM Alumni Association members learn the *Secrets of Longevity* from Dr. Len Kravitz, UNM Professor of Health, Exercise and Sports Science

## Starting from scratch: New Mexico pharmacists build care transitions program from ground up

By Amy K. Erickson, MA, Senior Editor, *PharmacyToday*



*Left to right:  
Angela Aldrich, PharmD, PhC,  
and Allison Burnett, PharmD,  
PhC, CACP*

As innovators in patient care, pharmacists at the University of New Mexico Hospital (UNMH) saw a need to develop a transitions of care program for patients that spanned the inpatient and outpatient health care spectrum. The catch, however, was that there was no funding and no time in the staff's schedules to do the work.

### Medication reconciliation

Allison Burnett, PharmD, PhC, clinical team lead for internal medicine, and Gretchen Ray,

PharmD, PhC, BCACP, Associate Professor of Pharmacy Practice at the University of New Mexico College of Pharmacy, collaborated with other hospital leaders to launch a pilot quality improvement program that commandeered pharmacy residents to perform admission and postdischarge medication reconciliation activities. "At the time, we didn't have a position dedicated to care transitions, and we didn't have enough staff pharmacist time available, so the idea came about to have pharmacy residents dedicate 4 hours a week to care transitions and covering the service," said Ray.

The first step in creating UNMH's Care Transitions Service (CTS) was getting a handle on what the hospital's care transitions needs were. "I met with providers and learned about the issues they were seeing and what was needed," said Burnett. She found that one of the leading physicians in the family practice department was very interested in working with the pharmacy department to reduce medication errors. "He expressed a real motivation and interest in collaborating with us because he was seeing that even after medication reconciliation was done by providers, patients were going on to experience adverse events and were being readmitted for medication errors," Burnett added.

### Harnessing resident power

After much collaboration and discussion, "we basically volunteered the pharmacy residents to come up with a schedule, develop the tools needed for standardized patient interviews, a process for patient selection and identification, and a collaborative practice agreement between pharmacy and the family medicine unit that delineated which actions could be performed autonomously per pharmacy-driven protocol and which actions required involvement of the provider to get the

medication discrepancies resolved,” said Burnett, who served as project coordinator and provided oversight to the residents.

The team then worked with the University of New Mexico College of Pharmacy to include student pharmacists and develop a longitudinal clinical rotation, thereby providing not just a clinical service, but also a learning experience for future pharmacists. “Prior to this, most of the rotations were month-long rotations,” Burnett explained. “We recruited 4 students in the first year and 13 students in the second year of the program.”

### Pilot phases

To promote buy-in and minimize resistance to change, Burnett and the group implemented the care transitions program in phases. They began by conducting admission medication



*Pharmacy resident Cole Larsen, PharmD, interviews a patient.*

interviews that augmented provider medication reconciliation. As this process became more streamlined, they began performing discharge medication reviews to ensure accuracy of discharge prescriptions and clarity of the patient’s medication list. This process also included calling the

patient’s community pharmacy to deactivate any prescriptions no longer needed to avoid duplication of therapy through automated refill.

To evaluate the success of the care transitions program, Burnett, Ray, and the group launched a 5-month pilot study focused on patients admitted to UNMH’s family medicine service, which comprises two teams and has an average daily census of about 30 patients. Pharmacy residents and student pharmacists performed medication reconciliation and targeted medication-related interventions on a group of 191 patients from November 2012 to March 2013. The results were impressive.

According to Burnett, a total of 1,140 medication-related problems were identified, with an average of 6 per patient. About 70% of these problems were resolved using pharmacy-driven protocols and did not require input from a provider. “The fact that we found these problems after the admitting provider had already performed medication reconciliation showcases how pharmacists can have a big impact on patient care,” said Burnett.

In addition to testing the program in the hospital, the post-graduate year (PGY)2 ambulatory care resident working in Ray’s clinic conducted a 2-month pilot test of outpatient care transitions services. The PGY2 resident identified patients discharged from the hospital and conducted a medication review and



*Pharmacy residents Cheyenne Newsome, PharmD, and Keenan Ryan, PharmD, triage patient lists.*

reconciliation immediately before the patient saw his or her provider at the first postdischarge appointment. All medication-related problems were documented by the resident and reconciled in the patient chart as well as presented to the patient’s postdischarge provider before the provider saw the patient. In 16 outpatients, 28 medication-related problems were identified, and in more than 80% of the cases, the number of problems declined from admission to postdischarge medication reconciliation.

Ray noted that the outpatient piece is very important. “Even after medication reconciliation took place at admission, we found additional medication-related problems after the patient was discharged,” she said. “This means that in just a few days after discharge, medication issues arose before the patient was even seen for their first hospital discharge appointment.”

### Successful outcomes

Based on the overwhelming success of the CTS from admission to postdischarge, hospital leadership approved funding for a full-time care transitions coordinator. After a lengthy and extensive nationwide search, Angela Aldrich, PharmD, PhC, was selected for the position. “The first thing I wanted to do was use the platform built by Gretchen and Allison to create a care transitions system to expand the program,” said Aldrich. “I use the student transitional care project as a platform to try to identify areas for improvement and places where tools need to be refined.”



*Alex Rankin, MD; Aldrich; Vicente Jaramillo, PharmD candidate; and Brandi Bowman, PharmD candidate (left to right).*

In addition to expanding the program, Aldrich reviews medications for patients seen by three medical teams and one hospital unit. “I go through all the patient profiles and look at their medication history, review the current medications that are active and look for any

discrepancies, and for potential reasons for discrepancies,” said Aldrich.

### Catching medication problems

Aldrich believes that by using pharmacy-based care transitions services, pharmacists can play a critical role in making sure patients are taking the appropriate medications and the appropriate dose. For example, recently one of Aldrich’s patients was on a psychotropic medication for which the dose was adjusted due to adverse events. When the patient was admitted, however, the dose recorded on admission was the original dose, not the adjusted dose. “The admitting team was not aware that the dose was adjusted during the patient’s last outpatient interaction,” explained Aldrich. By conducting interviews with the patients and confirming information with the outpatient provider, Aldrich made sure the correct dose was entered into the patient’s electronic medical record.

Another example of the value of the pharmacist role in care transitions, noted Aldrich, was when a patient was instructed to use two fentanyl patches by an outpatient provider. “What the



patient didn't realize was that the patches were intended to be two different strengths, so [the patient] was accidentally overdosing himself by about 25% by placing two of his original strength patches," said Aldrich. "We identified that problem through our pharmacy-led services."

### Putting the pieces together

One of the reasons Aldrich was drawn to the transitional care coordinator position at UNMH was the opportunity to work across the entire health care system and with different medical disciplines. "There were no boundaries that were drawn for transitions of care," said Aldrich. "For the CTS program to work, we needed to coordinate with the college of pharmacy, the school of medicine, and work with every level of provider throughout the system."

Aldrich noted that everyone who helps take care of a patient has some hand in ensuring safe transitions. At UNMH, a network of community pharmacists and ambulatory care pharmacy team members come together to make a cohesive system. "All of those aspects are very exciting because all the pieces are there to make an excellent system," said Aldrich. "We just have to bring them all together."

### Pharmacist roles

Burnett believes that pharmacists are a natural fit for creating and driving a care transitions program. "We are trained to be drug experts, that's the way we think," she said. "Whereas a hospitalist has limited time, pharmacists are taught to efficiently obtain the best possible medication history using at least two sources of information."

Members of the CTS team use information from the patient or caregiver and the community pharmacy, and cross-reference that information with data in the electronic health record. "We know how to use multiple resources of information and how to elicit the best kind of information from the patient using open-ended questions," Burnett explained.

### Care during the continuum

One of the things that makes the UNMH's care transitions program stand apart is the fact that medication-related problems are identified throughout the continuum of care. "We developed the program to look at different time points in the care transitions process, both at admission and postdischarge in the clinic," said Ray. "When pharmacists are incorporated into the care transitions flow, we can make an impact at so many points."

She noted that it is important to continue care into the outpatient setting. "Even though we have pharmacist interventions while the patient is hospitalized, medication-related problems do arise after a patient has been discharged," said Ray. "It is important for pharmacists to have contact with the patient and their medical home teams after they've been discharged as well."



Pharmacy resident Nwamaka Nwagbologu, PharmD, phones patients post-discharge.

Another unique aspect is enlisting the help of student pharmacists and pharmacy residents. "We wove students and pharmacists together, so all of the care transitions activities are done in a less segregated manner. It's less isolated and more like an integrated set of activities that go along with other clinical daily duties," explained Burnett.

According to Aldrich, the next step in the CTS is to gather data to show that when medication-related problems are resolved, it potentially reduces readmissions and improves quality of life for patients. "Ultimately that's our goal—to improve patient care by keeping them out of the hospital and providing safe medication use," Aldrich said.

## Three Stanford Graduates Are Matching Unused Prescriptions With Patients Who Need Them

*Unopened drugs—billions of dollars worth—are trashed in this country each year. What if they instead went to the 50 million who can't afford them?*

By [Megan Gambino](#), [smithsonian.com](#)

Adam Kircher was a healthcare consultant for McKinsey and Company. Kiah Williams was leading the Clinton Foundation's childhood obesity initiative, and George Wang, an expert in the nation's drug donation laws, was working on several legislative



initiatives around the country, when all three Stanford graduates quit their jobs in 2011 to found [SIRUM](#).

The four-year-old startup, Supporting Initiatives to Redistribute Unused Medicine—or SIRUM, for short—connects

pharmacies, drug manufacturers, nursing homes and other health facilities with excess, unexpired prescriptions to safety-net clinics that can dole out the medications to patients needing them for free. The company is providing this service in California, Oregon and Colorado and hopes to expand its operations into the 39 other states where drug donation is legal. The three founders share their story with Smithsonian.com.

**Let's start with the problem. What problem are you trying to fix?**

**Williams:** We are trying to solve two problems simultaneously. Medication is second only to insurance premiums as America's highest out-of-pocket healthcare cost. As a result, one in four working-age adults in the United States skip taking prescription medication due to cost. Society ends up paying a much higher price when patients skip medications and let diseases go untreated. Taxpayers ultimately foot costlier bills for worse conditions and pay for avoidable emergency room visits. At the same time, as patients struggle to afford medications, America is destroying about \$5 billion worth of unused, unexpired medicine each year. Nurses, doctors and pharmacists

at healthcare institutions across the U.S. spend countless valuable hours popping out perfectly good pills and squeezing out creams and solutions into trash cans. These wasted medications get incinerated, dumped and flushed and ultimately end up in our air and water supplies, where they pose significant environmental and health hazards.

#### **So, what exactly is SIRUM?**

**Wang:** SIRUM is a non-profit designed to solve those two inefficiencies in our healthcare system by matching the surplus that exists with the need that persists. By saving medicine, and delivering it to where it can do the greatest good, SIRUM saves lives, reduces waste and cuts healthcare costs.

Using an online platform and the same modern logistics that make it possible for anyone anywhere in the U.S. to order an Amazon item today and receive it tomorrow, we connect the untapped surplus of drugs from manufacturers, pharmacies and health facilities with the needs of safety-net clinics.

#### **You've called SIRUM the "Match.com of medicine." How does it work exactly?**

**Kircher:** SIRUM's online platform allows donor and recipient organizations to easily upload medicine surpluses or needs they have. Our system then connects compatible donor and recipient organizations and coordinates all donation logistics, including producing itemized drug manifests, and handling all shipping and tracking. Donations are made directly from donor to recipient, creating a fast, efficient donation process with low overhead costs and no middlemen. Once a recipient organization receives a donation, pharmacists or doctors verify the integrity of each donated medication and dispense them to patients in need.

#### **Are there any legal or logistical limitations to your redistribution of medicines? What laws are in place to allow for these transfers?**

**Wang:** Laws typically known as "Good Samaritan" laws exist in 42 states protecting drug donation or redistribution to at least some extent. SIRUM is the only organization in the nation that has created and leveraged the infrastructure needed to operate donation programs in-line with these laws and take full advantage of them.

#### **How did you come up with this concept?**

**Kircher:** I developed the idea for SIRUM in 2005 after witnessing the destruction caused by the 2004 Indonesian tsunami—and the way in which inefficient donation logistics prevented critical medicine from getting to the Indonesians who desperately needed them. An industrial engineering master's degree student at Stanford at the time, I hypothesized that an online peer-to-peer, matchmaking service could reduce the fulfillment time of donated medications from 9 months to a matter of days. Aware of recent legislative changes that for the first time enabled and legally protected medicine donation in 40 states, George and Kiah took my idea out of academia and applied it to donors and clinics directly and domestically in the U.S.

#### **How would you describe your success to date?**

**Williams:** Since starting full-time at SIRUM in 2011, we have created from the ground up, in California, what is now the largest drug redistribution program in the country. Since

inception, SIRUM has facilitated the redistribution of 1 million pills worth about \$3 million wholesale directly to safety-net clinics to help serve about 20,000 patients in need. That amounts to two tons of medicine diverted away from our waste streams—and thousands of tons more waste avoided by forgoing the production of the 1 million pills these safety-net clinics would have otherwise had to purchase anew. SIRUM currently operates programs in California, Colorado and Oregon, with over 200 donor and recipient organizations participating.

#### **As you see it, what is the potential impact SIRUM could have on healthcare?**

**Williams:** Our ultimate vision is to get every one of those \$5 billion worth of medications being wasted to a patient in need. Even if we just stopped the \$700 million of drug waste happening in long-term care facilities alone, we estimate we could fill about 10 million prescriptions.

But it's not just the cost of purchasing medications that we can affect. We could also reduce those secondary costs we incur when we let our most vulnerable go without the medications they need—the emergency room visits, the incarcerations, the lost productivity. And finally, we could save families from having to decide between other basic needs, like fresh food or clothing, and medications—they could have both.

#### **How do you plan to scale your company? What's next?**

**Kircher:** We are currently exploring pilot programs in a few of the other states with Good Samaritan laws while also growing our new programs in Colorado and Oregon, and our flagship program in California. Although we currently mostly work with long-term care facilities, like nursing homes, we are always seeking out donation partners in other parts of the pharmaceutical supply chain, like pharmacies, wholesalers and manufacturers.

Read more: <http://www.smithsonianmag.com/innovation/three-stanford-graduates-are-matching-unused-prescriptions-with-patients-who-need-them-180954032/#U6KX6fkulMRIOYs.99>





# Changes in healthcare, changing the patient's role

by Leah Mohler, OTS, AOTA/POTA Student Delegate,  
Thomas Jefferson University 2016

Medical practices across the country are currently testing the Independence at Home Demonstration (IAH), under the Affordable Care Act, in which selected patients are seen at home by a healthcare team. IAH, if approved, could come to include 1.5 million patients.

Through Jefferson's Health Mentor Program (HMP), 2nd year students within interdisciplinary teams recently completed a community visit to their mentor's home.

Occupational therapy (OT) student Amanda Siefert's team included two medical students, a nursing student, and a couple and family counseling student. Her mentor has lived with a C5-C6 spinal cord injury for over 20 years. She noted that home visits change the patient's role from the sick person seeking help to a role showcasing their strengths and compensatory strategies. "It's a much more positive experience."

Medical student John Taras also recently visited his mentor's home. "It changes the interaction. I felt as though I got to finally know who this man is that we have been meeting with for the past year." Taras was impressed by his mentor's immaculate home and the smart accommodations he created to meet his and his wife's health condition needs. Taras also commented how his mentor posed questions to challenge him to find any further accommodations. He wanted to know what the students could do for him.

As evidenced by Jefferson's Health Mentors Program, the future for 1.5 million new IAH patients may be changed from the hospital to the home and to be empowered in their patient roles.



## New course promotes breaking down silos to optimize patient care

University of Michigan,  
[The University Record](#)

*This January, over 250 students and 11 faculty members from 5 University of Michigan health science schools (Dentistry, Medicine, Nursing, Pharmacy and Social Work) launched a semester long IPE course titled "Team-Based Clinical Decision Making."*

Health professions schools at the University of Michigan (U-M) are taking a unique approach to educating future clinicians. The schools of Dentistry, Medicine, Nursing and Social Work, and College of Pharmacy are launching an innovative course titled Team-Based Clinical Decision Making.

The winter 2015 course is "the first of its kind at the university and may be one of the largest semester-long interprofessional education offerings in the country," says course director Gundy Sweet, clinical professor of pharmacy. More than 300 students will work in interprofessional teams, rotating through all five schools and solving difficult patient cases. "We are designing

very complex cases that will require all team members to consider the perspectives of each profession to develop a successful care plan," explains Bruce Mueller, associate dean of academic affairs at the College of Pharmacy. Faculty also will co-teach the two-credit course in interprofessional pairs.

"For many years, we have operated in professional silos within health care, but that has changed dramatically in the last few years," says Dr. Rajesh Mangrulkar, associate dean of medical student education.

"At UMHS, we have many outstanding models of highly effective interprofessional clinical care teams. But we haven't been nearly as intentional in educating the learners how to work with other health professional students and function in those teams."

With representatives appointed by the deans of the seven health science schools, the Steering Committee for Interprofessional Education has been charged with advancing these types of initiatives at the university.

"This course is the product of almost three years of committed effort among the health sciences schools to transform the learning environment for our students," says Dr. Carol Anne Murdoch-Kinch, associate dean for academic affairs at the School of Dentistry. "This is one of many learning activities being developed that will ensure that our graduates have the interprofessional competencies required to succeed and lead in a changing health care environment."

For now, the course is still in the pilot phase. The Doctor of Pharmacy and Doctor of Dental Surgery programs have integrated the course into their curricular requirements, while the Master of Social Work program will initially require the course for Integrated Health Scholars and Detroit Clinical Scholars. The course is also open as an elective for students in the Medical Doctor and Nurse Practitioner programs.

The goal for future years is to grow the course to include more students and perhaps more schools.

"In the future, I would love to see every NP (nurse practitioner) student involved," states Michelle Pardee, clinical assistant professor at the School of Nursing. "This is a great opportunity for students to interact across disciplines and develop the interprofessional skills necessary to be successful in healthcare."

The ultimate goal of the course, said Bradley Zebrack, associate professor of social work, is to positively influence patient care.

"Preparing the next generation of health care providers to work collaboratively across professional boundaries will contribute to enhanced patient outcomes and improvements in the quality of health care."

"I believe the future of health care is dependent on interprofessional collaboration," says third-year dental student Eric Tye, who will be among the first cohort to take this course. "This requires commitment from all professions to step outside of their individual silos, break down the barriers of misunderstanding, and learn how to work together to provide optimum patient care."

Email questions about the course to [IPE-health@umich.edu](mailto:IPE-health@umich.edu).