A Rising Tide of Addiction

Both rural and urban areas are awash in opioids.
FROM THE DEAN

THE OPIOID EPIDEMIC is devastating families and communities across the United States, and Iowa is not immune. The national statistics from CDC are staggering—from 2000 to 2015, more than half a million people in the U.S. died from drug overdoses. Every day, 91 Americans die from an opioid overdose.

In this issue of InSight, we look at the opioid crisis through several lenses. Two Iowans—one a former heroin addict, the other a mother who lost her son to an accidental heroin overdose—share their personal stories and how they formed a nonprofit organization dedicated to helping those struggling with substance abuse.

On the research side, we learn about several multidisciplinary approaches College of Public Health investigators are taking to study both prescription and illicit opioids. Additionally, the UI Injury Prevention Research Center recently issued a report that identifies five priorities to address Iowa’s opioid crisis. The report was shared with an interim study committee tasked with evaluating the state of Iowa’s response to the opioid epidemic.

Another CPH-based center, the National American Indian & Alaska Native Addiction Technology Transfer Center, is working with tribal communities to provide tools that can be adapted to create culturally relevant approaches to addressing substance abuse.

Chronic pain, often an initial introduction to opioid painkillers for many patients, is an ongoing problem for millions of Americans. We examine how treatment of pain has changed in recent years, and how the UI Center of Excellence in Pain Education is developing educational modules for health care providers to improve pain management.

Finally, we look at another form of addiction, problem drinking. Professor Paul Gilbert is studying ways that some people are able to stop drinking on their own without clinical rehabilitation, and how their experiences can provide insight into successful recovery strategies.

These are difficult subjects, but the College of Public Health is committed to conducting evidence-based research that informs policy, preparing students with the skills to tackle complex problems, and engaging in community conversations to enact change for healthier populations.

Keith Mueller, Interim Dean

The Growing Opioid Crisis
Both rural and urban areas are awash in opioids.
## Iowa's Opioid Epidemic
The college is tackling Iowa's increasingly deadly opioid crisis with a multidisciplinary response.

## Reversing the Tide
Researchers and advocates outline priorities for responding to the opioid epidemic in Iowa.

## Culture, Connection, and Recovery
Tribal communities are pushing back against substance abuse with culturally relevant approaches.

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Both rural and urban areas are awash in opioids.
The United States is struggling with a worsening opioid epidemic. Since 1999, the number of overdose deaths involving opioids (including prescription painkillers and heroin) quadrupled. Every day, 91 Americans die from an opioid overdose and more than 1,000 people are treated in emergency departments for misusing prescription opioids, the Centers for Disease Control and Prevention reports. The numbers continue to trend upward. In 2015, there were more than 52,000 drug overdose deaths in the United States. That number grew to an estimated 64,000 overdose deaths in 2016, according to provisional data compiled by the National Center for Health Statistics.

The current epidemic of drug overdoses began in the 1990s, driven by increasing deaths from prescription opioids that paralleled a dramatic increase in the prescribing of such drugs for chronic pain, according to a CDC report. In recent years, as health care providers have become more cautious in prescribing opioids, other illicit drugs—including heroin and synthetic opioids such as fentanyl—are driving sharp increases in overdoses and deaths.

“This issue affects all of Iowa,” emphasizes Carri Casteel, associate director of the University of Iowa Injury Prevention Research Center, which is taking part in a CDC-funded project on preventing overdoses. “Our research shows deaths from prescription opioid overdoses are concerns in both urban and rural counties in Iowa. We also found high doses of prescription opioids are dispensed in both rural and urban parts of the state. It crosses all borders.”

College of Public Health researchers from across disciplines are collaborating to provide data about the opioid crisis in Iowa and develop policy and program recommendations to prevent overdoses.

“There’s a lot of interest in Iowa around prescription opioids, heroin, and fentanyl,” says Casteel. “We have many stakeholders—law enforcement, physicians, and others—looking for better ways to communicate ongoing efforts and share data to address the crisis.”
Despite its relatively small population, Iowa is not immune from the opioid epidemic. While prescription drug overdose deaths and rates of opioid prescribing are low in Iowa compared to other states, rates of prescription opioid deaths since 1999 have quadrupled in Iowa, making it only one of four states with such a dramatic increase. Reflecting national trends, the state is also seeing rising rates of heroin deaths.

“Heroin overdose death rates in Iowa have increased more than nine-fold in the past 15 years,” says CPH Associate Professor Carri Casteel, associate director of the UI Injury Prevention Research Center (IPRC). “The rapid growth of heroin death rates in Iowa is two to three times higher than the national average.”

A SECOND CHANCE

Laura McCaughey of Davenport, Iowa, was almost one of those overdose death statistics. McCaughey was introduced to heroin at age 16 by a boyfriend and was soon hooked. “Drug dependency gets out from under your feet before you know it,” she says.

She barely graduated from high school and dropped out of college after one semester. She job-hopped and acquired a criminal record, finding herself stuck in the same cycle for four years even though she sought treatment several times. “Nothing would stick,” McCaughey says.

Heroin addiction nearly took her life. “I OD’ed five times,” she says, recalling how she’d wake up in hospitals throughout eastern Iowa. “Every time my record got worse because I was found with drug paraphernalia.”

In October 2012, at the age of 20, McCaughey was jailed for possession of heroin and drug paraphernalia after being pulled over by Davenport police. “My parents wouldn’t bail me out because they knew I was safe there,” McCaughey says. “I had no stability, I didn’t have anything. I was just defeated.”
McCaughey credits the judge who heard her case for giving her a second chance. “She told my parents, ‘She’s not a criminal, she needs help.’ The judge let me out on the condition that my dad immediately drive me six hours to a treatment facility in Sioux City.”

The treatment stuck, and in 2013 McCaughey returned to Davenport to restart her life. Now 25, McCaughey is working full-time, pursuing a degree in psychology, and raising her two-year-old daughter. “She’s the light of my life,” McCaughey says.

PARTNERING ON A RESPONSE
McCaughey’s story underscores the complexity of opioid abuse and the importance of involving many partners and resources in responding to the crisis.

In November 2015, IPRC co-sponsored the summit “Heroin and Opioids: A Community Crisis.” The event, hosted at the College of Public Health, brought together more than 200 experts to discuss the heroin and prescription opioid epidemic plaguing eastern Iowa.

IPRC also has conducted research on prescription opioid and heroin overdoses and overdose deaths in Iowa using state death certificate records (2002–2014) and insurance claims data (2003–2014). Among the key findings:

- The rate of prescription opioid overdoses in Iowa increased from 2.1/100,000 in 2003 to 8.8/100,000 in 2009. This rate declined to 5.1/100,000 in 2014.
- In Iowa, prescription opioid overdoses and overdose deaths are decreasing, while heroin overdoses and overdose deaths are increasing.
- Those ages 25 to 49 make up the majority of all opioid-involved overdose deaths in Iowa.
- Males make up the majority of deaths from both prescription opioids and heroin.

IPRC also met with key stakeholders in Iowa to identify priorities to address this growing crisis in the state (see page 6).

MULTIDISCIPLINARY APPROACHES
College of Public Health researchers are taking a multidisciplinary approach to addressing opioid use and addiction in Iowa.

“We’re doing work on risk factors for overdose and dependence, and thinking about patterns of use,” says Ryan Carnahan, CPH associate professor of epidemiology. Investigators are also looking at patterns of long-term prescription opioid use, especially in conditions unlikely to benefit from it. Future work may involve in-depth evaluations of prescribing patterns for different health conditions.

Natalie Langenfeld, a doctoral student in biostatistics, is conducting research that applies infectious disease modeling to study the path of opioid addiction in communities over time (monthly) and space (Iowa’s 99 counties). The model incorporates data on prescription rates, demographics, overdose death records, possession arrests, distribution and manufacturing arrests, and treatment data. Ultimately, the model can be used to evaluate interventions as new data are made available.

The Iowa Institute of Public Health Research and Policy (IIPHRP) and the CPH Research Office have convened a broad group of researchers from across the university, including public health, pharmacy, and medicine, to identify teams interested in opioid research.

“Bringing together multidisciplinary teams generates new ideas and initiatives that will inform practices and policies related to this important topic,” says Vickie Miene, IIPHRP interim director.

OPEN CONVERSATIONS
McCaughey encourages more open conversations about opioid use. “If five people are in a room, probably three know someone who is affected by addiction,” she says. “The more we talk about it, the quicker we’ll find solutions and save someone’s life.”

McCaughey is vice president of Quad Cities Harm Reduction, a nonprofit organization working to save the lives of those struggling with substance use disorders. She remains strongly motivated to help others caught in drug dependency.

“I want to be a source for people to come to if they’re ready to be clean, or whatever is going on with them. Addicts are so alone,” McCaughey says. “I didn’t die for a reason. I want my daughter to be proud of me. I want to have a good ending to my story.”
Researchers and advocates outline priorities for responding to the opioid epidemic in Iowa.

BY DEBRA VENZKE

States and communities across the nation are grappling with how best to respond to the surging opioid crisis. In April 2017, the UI Injury Prevention Research Center (IPRC) sponsored a meeting in Des Moines to identify priorities for addressing the opioid epidemic in Iowa. The meeting was part of a larger national project funded by the Centers for Disease Control and Prevention, with the UI IPRC being one of four injury centers in the country participating in the grant.

Carri Casteel, IPRC associate director, led the meeting to discuss recommendations developed by the John Hopkins Center for Injury Research for reducing the opioid epidemic in several areas, including prescription monitoring programs, prescribing guidelines, overdose education, and community-based prevention. One goal of the meeting was to review these evidenced-based strategies and compare them to what is happening in Iowa.

“It was an opportunity for those working in fields affected by opioids to take an inventory of our successes and to identify gaps specific to Iowa that need to be addressed to move forward on this issue,” Casteel says.

Stakeholders at the meeting represented law enforcement, psychiatry, emergency medicine, public health, nursing, non-profit/advocacy, poison control, substance abuse treatment, pharmacy, insurance, drug control policy, elected officials, and others.

IDENTIFYING IOWA’S PRIORITIES

Among the barriers stakeholders identified were lack of training for health care providers on opioid addiction and treatment, lack of timely state data on opioid supply and overdose, and limited and unequally distributed addiction treatment services in Iowa.

The top five priorities for Iowa that stakeholders identified were:

2. Educate physicians, nurses, pharmacists, and other practitioners to recognize patients at high risk for opioid abuse and addiction.
3. Make the Iowa Prescription Monitoring Program a more accurate and effective tool.
4. Strengthen opioid overdose surveillance and prescription opioid monitoring among multiple organizations and agencies.
5. Improve health coverage for medical-assisted treatment and evidence-based behavioral interventions.
IPRC published the report “The Prescription Opioid Crisis: Policy and Program Recommendations to Reduce Opioid Overdose and Deaths in Iowa” that contains details about the five priorities, county-level statistics on opioid overdose death rates and prescribing practices in Iowa, along with highlights of initiatives in Iowa communities that have had some success in slowing the epidemic. The report is available online at cph.uiowa.edu/iprc.

The report was sent to Iowa policy makers and other state leaders, and the proposals were discussed with a legislative interim study committee tasked with evaluating Iowa’s response to the opioid epidemic. This committee submitted a report with its findings and recommendations to Iowa Gov. Kim Reynolds and the general assembly to inform possible action during the next legislative session.

REDDUCING HARM AND STIGMA

Community-based prevention efforts that focus on education, advocacy, and harm reduction strategies are also garnering attention. The national organization Harm Reduction Coalition defines harm reduction as “a set of practical strategies and ideas aimed at reducing negative consequences associated with drug use. ... Harm reduction incorporates a spectrum of strategies from safer use, to managed use, to abstinence, to meet drug users ‘where they’re at,’ addressing conditions of use along with the use itself.”

“Much like substance use, harm reduction has a long but stigmatized history,” says Paul Gilbert, CPH assistant professor of community and behavioral health. “People often thought it was too permissive or even encouraged drug use. But high-quality, rigorous evaluations have shown that harm reduction strategies are associated with substantial benefits, such as fewer wounds and abscesses, reduced hepatitis and HIV infections, and lower risk of overdose and death. Given the scientific evidence that’s accumulated, it belongs in our repertoire of public health responses to substance use.”

Kim Brown of Davenport, Iowa, is president and co-founder of Quad Cities Harm Reduction (QCHR). She helped form the nonprofit organization after losing her 33-year-old son Andy to an unintentional heroin overdose in May 2011.

“All of these overdose deaths are preventable,” says Brown, who is a registered nurse. “Addiction is a medical disorder. It should be firmly entrenched in public health. As long as we criminalize a medical condition, we have shame and stigma. We need true, realistic drug education.”

Andy’s death was shrouded in stigma, Brown recalls. “Nobody would talk to me about what happened to my son. But I wanted to do something to bring awareness to the community and legislators and law enforcement.”

INCREASING NALOXONE ACCESS

Brown has been advocating since 2012 for increased naloxone access in Iowa. Naloxone is a medication administered as a nasal spray or injection to reverse the effects of an opioid overdose.

In late 2016, a new Iowa law coupled with a standing order issued by Dr. Patricia Quinlisk, Iowa Department of Public Health Medical Director, allows naloxone to be purchased at a pharmacy without a prescription. Pharmacists are authorized to dispense naloxone to individuals at risk of opioid overdose, a family member or friend in a position to assist an at-risk person, and first responders.

More recently, University of Iowa emergency medicine physician and CPH alumnus Chris Buresh (12MPH) provided a standing order that allows QCHR and the Iowa Harm Reduction Coalition in Iowa City to dispense naloxone without prescription to Iowans at little to no cost. The standing order went into effect June 1, 2017.

But Brown would like to see even more done. “The state needs a standing distribution order to community and harm reduction organizations. We need a syringe exchange program to prevent people from getting HIV or hepatitis C and to keep used needles out of public bathrooms and off the ground.

“We need to get naloxone to the folks who really need it,” she continues. “Overdoses are often reversed by friends and family. I can’t have my son back, but I can help others keep their children alive.”
In 2012, Brooks Big John spoke to tribal, state, and federal leaders about the devastation the misuse and abuse of prescription painkillers was causing his community. Big John, at the time the tribal chairman of the Lac du Flambeau tribe in Wisconsin, described the growing toll of overdose deaths, including that of a lifelong friend: “He ended up sucking out morphine patches, to the point where he eventually overdosed and died.”

He went on to illustrate the desperate measures people took to obtain drugs. “We had a guy who was sleeping in the ceiling of the tribal center building where the clinic was, six or seven hours until everything closed, so he could break into our clinic and steal these pills.”

Big John delivered his comments at the “Tribal Prescription Drug Abuse Summit: Moving from Information Sharing to Action Plan” held in Bloomington, Minnesota. The need for such a gathering was identified by tribal leaders, who had expressed concerns about an increase in the use and abuse of prescription drugs in American Indian communities. The summit was convened by the Substance Abuse Mental Health Services Administration (SAMHSA) in collaboration with the National American Indian & Alaska Native Addiction Technology Transfer Center (AI & AN ATTC), the Great Lakes ATTC, and other federal, state, and tribal health agencies.

CULTURALLY RELEVANT APPROACHES

National surveys show that substance abuse rates are consistently higher among American Indian/Alaska Natives than other racial groups. The 2013 National Survey on Drug Use and Health shows that 12.3 percent of American Indians were current users of illicit drugs, compared with 9.5 percent of whites, 8.8 percent of Hispanics, and 10.5 percent of African Americans.

Anne Helene Skinstad, program director of the National AI & AN ATTC in the CPH Department of Community and Behavioral Health, says that the rates are likely much higher, noting that data are underreported or not reported at all by tribes due to mistrust of federal agencies.

There is also a hesitancy among tribes to engage in evidence-based treatment practices, Skinstad adds. “Psychosocial treatment and medication are Western methods and not culturally informed,” she says. “They are met with reluctance and concerns.”

To make treatment practices culturally relevant, the center spends time with tribal communities and translates the essence of evidence-based practices, Skinstad explains. “We want to respect tribal sovereignty, and we let the tribes decide how they want to implement the practice in a culturally informed way.”
CONNECTING TO CULTURE

In 2013, Lac du Flambeau tribal leaders, including Big John, declared a state of emergency and a “War on Drugs” in the community. Working with law enforcement, courts, schools, elders and spiritual leaders, and others, the community wrote a three-year strategic plan to address the substance abuse crisis, pool local resources, and secure funding.

Although Big John no longer serves on the tribal council, he remains an active community leader. According to Big John, the tribe has addressed the selling of illicit drugs, reduced gang involvement and violence, and strengthened tribal statutes to allow law enforcement to increase safety efforts. The tribe also received support from SAMHSA and the Robert Wood Johnson Foundation to build their own treatment center, allowing tribal members to receive treatment sooner, remain in their community, and connect to their culture. These steps create a sense of belonging, a protective factor for substance misuse.

Culture played a key role in the “State of Recovery,” Big John’s term for progress made over the last few years. The community, already grounded in prayers, gatherings, songs, and Big Drum ceremonies, engaged traditional leaders to support recovery efforts, revitalize language programs, and hold “Wellbriety” pow-wows to widen the “Healing Circle.”

Youth participate in collecting wild rice and making reed mats to connect with their culture. The community also held a youth gathering to offer opportunities for their voices to be heard.

“We need our youth to heal from the oppression they’ve experienced and never forget who they are. Cultural identity is key for our prevention efforts,” Big John explains.

However, numerous barriers remain in tribal communities. “If you’re driving two hours for methadone maintenance treatment every day, how can you hold a job?” Skinstad asks. “Many communities still don’t have access to naloxone (an opioid overdose-reversal drug), so there are fatal overdoses that could be prevented.”

A VISION FOR CHANGE

Many tribal communities are developing action plans to address the opiate problem. Some of the initiatives include distribution of emergency overdose kits, providing secure drop-off sites for unused prescription drugs, and establishing hotlines for those wishing to quit drugs or report traffickers.

“What came out of the summit was a model for the country,” Skinstad notes. “Following the symposium, we held conference call meetings for tribal leaders who wanted to implement a plan in their communities. They are still active. We gave communities tools, they discussed them with their elders, then they implemented them successfully.”

Pushing back against the opioid epidemic is long and hard work, but Big John encourages communities to be patient. “We didn’t get here overnight and the changes we want to make won’t happen overnight, but we are saving lives,” he says. “Good things come when people have the same vision.”

This article contains material written by Connie O’Marra, MSW, of the Training and Technical Assistance Center, that originally appeared in the September 2016 issue of the National AI & AN ATTC newsletter. O’Marra is a close collaborator with the National AI & AN ATTC and a trainer for the center.
Understanding the Complexities of Chronic Pain

BY JENNIFER NEW

“I remember my mother telling me that she was always in pain but just didn’t say anything because it didn’t seem like it would do any good. Now I understand what she meant,” says Pam Weest-Carrasco, a professional musician who had rotator cuff surgery last year. Although the surgery helped her to return to performing and teaching, she still grapples with daily pain. She’s hardly alone. An estimated 25.3 million adults in the United States experience chronic pain—pain that lasts more than three to six months—and another 40 million adults experience severe pain, according to the 2012 National Health Interview Survey. Whether a result of surgery, an accident, or illness, chronic pain is often at the root of other life-diminishing problems, such as depression, anxiety, and insomnia.

In addition to being physically and psychologically difficult, chronic pain is also costly. People lose wages from missed work or spend money for treatments, either because they are under-insured or are seeking therapies that are not covered. Recent estimates put the total national health care expenses and loss of productivity due to chronic pain at between $560 million and $630 million dollars a year.

PAIN AND PRESCRIPTION OPIOIDS

The most dramatic losses are those stemming from the opioid epidemic, which accounts for lost lives, work, and homes. Research shows that overdose deaths involving prescription opioids have quadrupled since 1999. Today, nearly half of all U.S. opioid overdose deaths involve a prescription opioid, and in 2014, nearly two million Americans either abused or were dependent on prescription opioid pain relievers, the CDC reports.

One reason for this bleak state is an over reliance by health care providers on opioid prescriptions. Chris Buresh is a professor of emergency medicine in the University of Iowa Carver College of Medicine and a CPH alumnus (12MPH). He calls himself a “mid-career physician,” having graduated from medical school...
in 2001. Again and again, he recalls of his student days, “we were told that opioids were safe and not addictive, so don’t hesitate to prescribe them.”

Fast forward to 2017, and opioid manufacturers are now facing a deluge of lawsuits and investigations brought by cities, states, and counties for their alleged role in fueling the opioid crisis.

Keela Herr, professor and associate dean for faculty in the UI College of Nursing and director of the UI Center of Excellence in Pain Education (CoEPE), explains that the uptick in opioid prescriptions corresponds to a desire to achieve pain relief in a medical system that is allotting less time for health care providers to spend with individual patients; visits are sometimes as brief as seven minutes. Drugs are a solution that prescribers understand and insurers recognize, as opposed to other clinically proven approaches to pain management, such as mindfulness meditation or massage.

“The tendency for practitioners is to ask, ‘How can I relieve this patient’s pain with the time and resources available?’ And that’s often meds,” says Herr.

Buresh concurs that physicians are much more amenable to choosing the path of least resistance, noting that it’s been proven that physicians respond to systemic changes that make their lives easier. Historically, for example, the introduction of anesthesia for surgery was quickly embraced, as opposed to hand washing, which was perceived as time consuming and was resisted.

**ASSESSING PAIN**

Things are shifting, however. As both the public and health care providers become more aware of the severity of the opioid epidemic, there is a growing reluctance to rely on opioids. As a result, chronic pain is increasingly not treated, or under-treated out of fear of addiction.

“I advocate that each person needs to be looked at individually,” says Herr, whose research has long focused on pain in older adults. “There is a place for opioid use, if we are using them safely, evaluating risks, and monitoring patient use and outcomes.”

An estimated 25.3 million adults in the United States experience chronic pain—pain that lasts more than three to six months.
Those if’s are dependent on health care practitioners who are trained in assessing and managing pain. But this is rarely the case. According to the 2011 Institute of Medicine report, “Relieving Pain in America,” there was an urgent need for pain education to be improved for health care students at the undergraduate and graduate levels in order to address the health care system’s deficiencies.

Buresh says he received a few hours of pain education during medical school, which was mainly focused on the Likert scale, the 1-10 scale of pain that is ubiquitous to hospital rooms. As someone who now teaches emergency medicine to residents and also serves as the medical director for the Iowa Harm Reduction Coalition (see page 6), it’s significant that Buresh doesn’t find this to be a very useful tool.

“Assessing pain is a constant source of frustration in the ER because it’s so subjective,” he says.

This variance in experience can cause people to doubt other’s pain in a way that we are less likely to doubt something that is measurable, such as a cancer staging. It also helps explain why medicating is a first reaction for health care providers who have too little training in the many factors that comprise pain.

IMPROVING PAIN EDUCATION

Directly improving education is the goal of the National Institutes of Health’s establishment of 11 university-based Centers of Excellence in Pain Education (CoEPE). The centers act as hubs for the development, evaluation, and distribution of pain management curriculum resources for medical, dental, nursing, pharmacy, and other schools to enhance and improve how health care professionals are taught about pain and its treatment.

The University of Iowa’s winning proposal to the NIH emphasized its existing strength in pain research across campus. Led by Herr in the College of Nursing, Tanya Uden-Holman in the College of Public Health, and Kathleen Sluka in the Carver College of Medicine, other project members are drawn from the School of Social Work and the College of Pharmacy.

Each of the CoEPEs is under an annual contract to develop one or two web-based educational pain case modules. Now in its third year, the University of Iowa has emphasized interprofessional approaches to pain management and developed three modules—each in web video form—on acute injury farm accidents with chronic pain, older adults with frozen shoulder pain, and total knee arthroplasty in older adults with osteoarthritis.

REACHING A SPECTRUM OF PROVIDERS

Laurie Walkner, a curriculum expert in the College of Public Health, oversees the actual creation of the training videos, collaborating with the lead case developer Dana Dailey, a physical therapist and assistant research scientist in the Carver College of Medicine. There has been a conscious decision to create materials that focus on some of Iowa’s health care strengths, Walkner says, including treating older adults and agricultural health issues.

“We really think about what competencies we should meet,” she says of the UI’s multidisciplinary CoEPE team. “The videos feature a spectrum of health care providers who would be involved with any of the topics, from the diagnosing physician, to nursing staff, to physical therapists and psychologists. Representatives from each area work with us to be sure that these cases reflect the questions and approaches that practitioners in those areas would utilize.”

The training modules follow a case from initial assessment through treatment, emphasizing different approaches to pain throughout. The team has tried to make them as realistic as possible, using actor-patients who are accustomed to working with medical students, and filming in skilled nursing centers.

The ultimate goal is for health care providers to understand pain in a much more multi-faceted way.

Weest-Carrasco, the musician, says that she’s never had a single conversation about pain with any of her providers. “I was given a prescription and told to use it if I needed it,” she recalls. “That’s not really enough.”
PUTTING DOWN THE BOTTLE

Paul Gilbert is studying how problem drinkers quit without help from rehabilitation programs.

BY TOM SNEE
When alcohol consumption causes so many problems that a person decides to quit drinking, some will turn to clinical rehabilitation for help, but others will just put down the bottle and never pick it up again.

Paul Gilbert is interested in those who go cold turkey and how their experiences can provide insight into alcoholism in general. Gilbert, assistant professor of community and behavioral health in the University of Iowa College of Public Health, is studying people in eastern Iowa whose drinking was causing so many problems in their lives that they quit, but did so without entering a clinical treatment program.

**EXPLORING PATHS TO RECOVERY**

An expert on adult alcoholism who has conducted numerous studies about problem drinking, Gilbert plans to talk to 30 Iowans about their success quitting drinking. Using interviews and surveys, he’ll ask about their life history, their drinking patterns, what prompted them to quit drinking, and how they did it.

Gilbert is conducting this study as preparation for his next major research project, which will explore different paths to recovery. He will recruit a national sample of 600 former problem drinkers and assess how they define recovery, the degree of “recovery capital” available to them, and the various strategies they used to resolve their problems without treatment. Recovery capital refers to the quantity and quality of internal and external resources that a person has to initiate and sustain recovery from addiction.

Gilbert’s goal is to determine whether there are differences in successful strategies for recovery between men and women or by race/ethnicity. The initial Iowa study will provide preliminary information. He also hopes the lessons learned ultimately will lead to more ways to minimize the harms from drinking even without clinical treatment.

**A VARIETY OF STRATEGIES**

Gilbert says the number of problem drinkers who use clinical rehabilitation programs after they make the decision to quit drinking is smaller than people might expect, only about 10 to 15 percent. Many of the rest use some sort of support program, such as a 12-step program. Many others use no program at all and just quit drinking.

Ultimately, Gilbert’s goal is to find out how some people can quit without clinical assistance and how their experience might help others who need help. For instance, the data might show that certain types of people benefit from earlier intervention or a different model of intervention. Some could benefit simply from guidance about moderation rather than complete abstinence.

Gilbert already has interviewed a dozen respondents, and though it’s too soon to draw conclusions, he found people use a variety of strategies to quit drinking. Some attend a 12-step program and continue to use it; others started by attending a program, then leaving when their drinking was controlled; yet others just said they were going to stop drinking or reduce the frequency of their drinking and did so with no assistance.

**WHY PEOPLE QUIT**

In all of his research, Gilbert says he’s found one important consistency in the reason the people wanted to quit in the first place.

“A family crisis or the role of a relationship,” he says. “Sometimes they quit because of a health crisis or a work crisis too, but most often the abrupt change is the result of a relationship. Maybe the person they were in a relationship with threatened to leave them; maybe they’d lose custody of their kids. But losing a relationship often prompts people to make a change.”

He hopes to answer one important question: Do people who quit on their own see quitting differently than people who go through rehab?

“It seems a lot of people who don’t get treatment have a more flexible view of recovery,” he says. “Maybe it doesn’t involve abstinence, so they allow themselves to keep drinking as long as it’s at low level, or they drink only during special events.”
INVEST Health Seeks to Improve Health of Three Iowa City Neighborhoods

The UI College of Public Health is collaborating with the city of Iowa City to promote better health among residents in three neighborhoods. The college and city are developing a strategic plan through a program called INVEST Health, which examines how neighborhoods and housing affect the health of the people who live in them.

“We know that even the ZIP code where you live influences your health and your life expectancy, so we’re trying to get a sense of how to improve health in specific neighborhoods,” says Vickie Miene, interim director of the Iowa Institute of Public Health Research and Policy in the College of Public Health and INVEST Health team member.

The team is focused on three Iowa City neighborhoods—Hilltop, Towncrest, and Broadway/Davis/Taylor—and is developing a plan to address the incidence of asthma and mental health issues there. Residents were surveyed and focus groups were conducted last winter to find out what challenges they face.

Miene says the neighborhoods were selected based on information gathered through a needs assessment and on the high number of residents visiting the UI Hospitals and Clinics with an asthma diagnosis. She adds that common issues that have come up in conversations and survey responses include limited access to health care and mental health care, affordable child care, transportation, affordable housing, and safe places for kids to play.

The team is providing the survey results through several venues and is compiling a list of ideas to increase healthier living in the neighborhoods. Over the summer, residents helped prioritize the biggest needs while generating additional ideas. The INVEST Health team will prepare a report by the end of the year that lists the residents’ ideas and priorities, as well as projects designed to improve health. The team also hopes to establish a new network of local health and housing officials who can sustain the program in the future.
IN MEMORIAM: Professor Emeritus Craig Zwerling

Craig Zwerling, professor emeritus in the Department of Occupational and Environmental Health, died August 9, 2017, after a long illness.

“Craig was instrumental in the formation of our College of Public Health, serving as the inaugural head of the Department of Occupational and Environmental Health from 1999 to 2009,” noted CPH Interim Dean Keith Mueller. “He was an esteemed occupational physician and injury epidemiologist who led groundbreaking research in areas ranging from on-the-job injuries to motor-vehicle crashes to workplace drug testing.

“Throughout his distinguished 21-year career at the University of Iowa, he collaborated extensively with colleagues at the UI and at the national level. Through these efforts, including his role as director of the UI Injury Prevention Research Center, he helped establish, build, and sustain the robust research portfolio of OEH and our college.”

Peter Thorne, CPH professor and head of occupational and environmental health, added: “Those who knew Craig regarded him as the consummate scholar, widely read both within and outside of his field. Craig was a passionate advocate for worker health and safety. He was a quiet, modest leader who was always supportive and thoughtful in his mentoring, especially of junior faculty.”

He and his wife, Nancy Sprince, professor emerita in occupational and environmental health, established the Craig Zwerling and Nancy Sprince Award for Social Justice, as well as the Craig Zwerling and Nancy L. Sprince Scholarship in Occupational and Environmental Health in the College of Public Health.

Landmark Study Discovers Genes Linked to Preterm Birth

A DNA analysis of more than 50,000 women has identified six gene regions that influence the length of pregnancy and the timing of birth. The findings, published in the New England Journal of Medicine, may lead to new ways to prevent preterm birth and its consequences—the leading cause of death among children under age 5 worldwide. The international team of researchers included Kelli Ryckman, CPH associate professor of epidemiology.

The six gene areas identified by the project serve as a launching platform for deeper research, some of which has already begun. Potential diagnostic tests, new medications, improved dietary supplements or other changes that could help more women have full-term pregnancies will require several more years of study, the authors say.
IN MEMORIAM: Professor Emeritus Bill Clarke

William “Bill” Clarke, professor emeritus in the Department of Biostatistics, died Oct. 15, 2017, following a long and courageous battle with cancer.

Clarke made major interdisciplinary contributions to improving the use of statistical methods in clinical trial design and analysis and in biomedical research. He authored or co-authored more than 125 peer-reviewed publications. He received the College of Public Health Faculty Research Award in 2001, and the college’s Faculty Service Award in 2015. In 2011, he received the Board of Regents Award for Faculty Excellence.

In 1989, he co-founded the Clinical Trials Statistical and Data Management Center (CTSDMC), which is today an internationally recognized leader in managing and coordinating randomized multi-center clinical trials. He was associate director for the CTSDMC from 1989-2000 and director from 2000-2010.

“As Bill’s colleague for over a decade, I greatly valued his positivity and optimism, as well as his indomitable spirit,” notes Joe Cavanaugh, professor and head of biostatistics. “He was always among the first to give someone a pat on the back or to provide a word of encouragement. He was the first to compliment an area of strength and the last to criticize an area of weakness.

“Bill recognized that it takes a diverse group of intellects and talents to build a Department of Biostatistics, and that faculty, staff, and students are most likely to excel and contribute when they feel appreciated and valued. This is one of the many reasons why he will always be admired and revered in our department and the CTSDMC.”

STUDY FINDS HIGH LEVELS OF LEAD IN 1 IN 5 IOWA NEWBORNS

A recent study of Iowa newborn blood samples showed that 1 in 5 newborns had high blood lead levels, regardless of whether their mother lived in a city or a rural area. The higher levels statewide likely are related to the amount of pre-1940s housing stock in Iowa, when lead paint was commonly used.

The study noted that analysis of newborn blood samples is an important tool for lead poisoning surveillance and can direct public health efforts towards specific places and populations where lead testing and case management will have the greatest impact. The research was published in the scientific journal PLOS ONE, and the study team included CPH researchers Audrey Saftlas, Jacob Oleson, Kelli Ryckman, and David Zahrieh.
Study Looks at Hospitalization Costs Associated with Gun Injuries

Hospitalization costs associated with gun injuries in the U.S. exceeded $622 million a year, according to a new study by the UI College of Public Health.

“These findings demonstrate the high health care cost burden of firearm injuries,” says Corinne Peek-Asa, lead author of the study and CPH professor of occupational and environmental health. “Efforts to prevent these injuries, particularly assaults and injuries caused by handguns, could reduce this cost burden.”

As an example of the high cost to taxpayers and the health care system, Peek-Asa points to the finding that 57 percent of all firearm hospitalization costs were either paid by Medicaid—at more than $205 million—or not paid at all, as uninsured victims accounted for $155 million of the costs.

The study looked at the National Inpatient Sample, the nation's leading database on estimating outcomes related to hospital admissions, to examine hospitalizations due to firearm injuries between 2003 and 2013. The researchers looked only at costs associated with the immediate hospitalization after a gun injury for this study, and did not consider associated costs after the victim's discharge.

The study notes that $622 million represents less than 1 percent of the overall $377 billion costs for hospital stays annually. But firearm injuries are significantly more expensive to treat than many other causes of hospitalization.

The cost of an average hospital stay during the study period was $10,400, while the stay for firearm injuries cost $17,000 to $33,400, on average, depending on the incident that led to the injury.

The study found 336,785 hospital admissions as a result of a firearm injury during the study period, an average of more than 30,000 per year. More than 60 percent of those admissions were the result of assaults, and of those, 70 percent were caused by a handgun. Assaults also accounted for the greatest share of the health care costs, at $389 million.

The study also found 23 percent of gun injuries were accidental and 9 percent were suicide attempts or other types of self-harm.

Among firearms injuries, assault weapons had the highest cost per admission, at more than $32,000 per injury. The highest total annual cost was for admissions with an unknown type of firearm, at $373 million, which Peek-Asa says indicated a need for improved data collection.

The study, published online July 19, 2017, in Injury Epidemiology, was co-authored by Brandon Butcher, UI graduate student in biostatistics, and Joseph Cavanaugh, CPH professor and head of biostatistics.
Senator Tom Harkin Honored as Visiting Scholar

Senator Tom Harkin (retired) met with students, faculty, and staff this fall as the college’s inaugural Visiting Scholar. This program, administered by the Iowa Institute of Public Health Research and Policy, invites exceptional senior scholars to the college to enrich education, research, and collaborative initiatives.

Harkin served Iowa’s 5th Congressional District in the U.S. House of Representatives from 1975 to 1985 and was a U.S. Senator from 1985 until his retirement in 2015. His legislative policy priorities have included public health, federal farm policy, civil rights for Americans with disabilities, childhood nutrition and food access, health care access and reform, labor issues, and access to and improvement of education. He crafted the Americans with Disabilities Act and helped to lead passage of the Patient Protection and Affordable Care Act, authoring the law’s many prevention provisions.
Wright Examines Role of FQHCs in Reducing Health Care Disparities

College of Public Health researchers have been awarded a $1.54 million grant from the National Institute on Minority Health and Health Disparities to study the role federally qualified health centers (FQHCs) might play in reducing disparities in potentially preventable hospital-based care among dual-eligibles. Approximately 10 million Americans are eligible for both Medicare and Medicaid. According to Brad Wright, assistant professor of health management and policy at the UI and principle investigator on the grant, these dual-eligibles are a disproportionately high-cost population with substantial and often unmet health care needs.

“Despite having two sources of insurance coverage, dual-eligibles are one of the most vulnerable populations in the country,” he says. “They often experience high rates of potentially preventable hospitalizations and emergency department visits resulting from disparities in access to primary care.”

Little is known about the relationship between primary care access and the broader continuum of potentially preventable hospital care, which includes not only emergency department visits and hospitalizations, but also observation stays, 30-day return ED visits, and 30-day all-cause readmissions.

“This grant allows us to further our understanding of how we might use FQHCs to improve access to primary care, reduce disparities along ethnic and racial lines, and reduce those costly and potentially preventable emergency department visits and hospitalizations,” Wright says.

Parker Receives Regents Award for Faculty Excellence

Edith Parker, CPH professor and head of the Department of Community and Behavioral Health, was recently honored with a 2017 Regents Award for Faculty Excellence. Given by the Board of Regents, State of Iowa, the award honors faculty members for work representing a significant contribution to excellence in public education. Parker is internationally recognized for her research in social and environmental determinants of health, with particular emphasis on the theory and practice of community-based participatory research.
Gilbert, Janssen Selected as IIPHRP Policy Fellows

The Iowa Institute of Public Health Research and Policy has selected Paul Gilbert, CPH assistant professor of community and behavioral health, and Brandi Janssen, CPH clinical assistant professor of occupational and environmental health, as its 2017-2018 Policy Fellows. The year-long Policy Fellow Program creates opportunities for primary faculty to enhance their skills for translating public health research into practice and policy.

Gilbert’s project is looking at ways to reduce underage drinking, specifically through social host liability laws. Janssen’s project will focus on partnering with agricultural lenders to improve farm safety in Iowa.

Fireworks Injuries in Iowa Doubled in 2017

Injuries related to fireworks more than doubled in 2017 and were nearly three times as serious, according to a recent study by researchers at the University of Iowa Carver College of Medicine, College of Public Health, and the UI Injury Prevention Research Center.

The Iowa Legislature legalized the sale and use of fireworks in May 2017, allowing two periods—June 1 through July 8, and Dec. 10 through Jan. 3—for sales and use statewide.

Using data from UI Hospitals and Clinics Emergency Department, researchers compared injuries involving fireworks from June 1 to July 8 in each of the years from 2014 to 2017. Compared to preceding years, 2017 showed significant increases in the number of fireworks-related injuries, the severity of those injuries, the number of minors injured while handling fireworks, and the number of bystanders injured.

The full study is at uihc.org/sites/default/files/fireworks_policy_brief_101317.pdf.
Measuring the Quality of Telehealth

The National Quality Forum (NQF) recently issued two reports that provide national guidance to advance health information technology to make health care more effective and safer for all Americans. In the first report, NQF identified critical areas where measurement can effectively assess the quality and impact of telehealth services. In the second report, NQF assessed the current state of interoperability and its impact on quality processes and outcomes.

“Telehealth is a vital resource, especially for people in rural areas seeking help from specialists, such as mental health providers,” says Marcia Ward, professor of health management and policy. Ward also directs the Rural Telehealth Research Center at the University of Iowa College of Public Health and co-chairs NQF’s Telehealth Committee. “Telehealth is health care. It is critically important that we measure the quality of telehealth and identify areas for improvement just as we do for in-person care.”

Telehealth services, which unite technology with health care, health information, and health education, have grown substantially over the past 15 years and are expected to increase due to new reimbursement strategies for Medicare providers who offer telehealth services as part of the Medicare Access and CHIP Reauthorization Act.

NQF recommends measuring the quality of telehealth in four broad categories: patients’ access to care, financial impact to patients and their care team, patient and clinician experience, and effectiveness of clinical and operational systems. The reports are available at www.qualityforum.org.

CPH Undergraduate Program Continues to Grow

In fall 2016, the College of Public Health welcomed the inaugural students to its new undergraduate program. Now in its second year, the sophomore class has 40 undergraduate majors who were joined this year by 34 new first-year students, according to Margaret Chorazy, clinical assistant professor of epidemiology and director of the undergraduate program.

Chorazy says the college will add about 25 new courses to the undergraduate curriculum by the time the initial cohort graduates in 2020. The college also is starting a variety of academic support and career-development programs to help students succeed in the classroom and prepare for the future.

Few Midwest universities offer an undergraduate public health program. Since the UI has offered graduate programs in public health for decades, Chorazy says it made sense for the college to draw from its vast resources and experience to offer the only public health major by an accredited school of public health in the state.
MICHAEL ANDERSON (17MPH) is a program analyst at the Council of State and Territorial Epidemiologists in Atlanta, Georgia.

BRIANNE BAKKEN (17MHA) is assistant director of experiential education and assistant professor in the Department of Clinical Sciences at the Medical College of Wisconsin Pharmacy School in Milwaukee, Wisconsin.

ANN (DEPRIEST) BOBST (14MPH) is an eligibility policy analyst in the Health Care Eligibility and Access Division at the Minnesota Department of Human Services in St. Paul, Minnesota.

DOUG BOYSEN (98MA) currently serves as chief administrative officer and will become president/CEO of Samaritan Health Services in Corvallis, Oregon, in January 2018.

JORDAN BRELJE (17MHA) is an administrative fellow at UnityPoint Health - Waterloo in Waterloo, Iowa.

ANNA (SAXON) CARLSON (17MHA) is a project coordinator at the Medical College of Wisconsin in Milwaukee, Wisconsin.

ZUNQIU CHEN (08MS) is a consulting research analyst at Cambia Health Solutions in Portland, Oregon.

J. DAVID COWDEN (99MS) has joined the pulmonology and critical care medicine team at UCHealth Longs Peak Hospital in Longmont, Colorado.

ANSHUL DIXIT (08MHA, 08MPH) is medical director at Blue Shield of California in Sacramento, California.

KRISTEN KIDD DONOVAN (02MPH) is an instructor in the Department of Health, Physical Education, and Exercise Science at Virginia Commonwealth University in Richmond, Virginia.

MICHAELA (BYRNE) EBERT (14MPH) is an ethics fellow at Ascension in St. Louis, Missouri.

MICHAEL GALLAGHER (13MS) is an EHS engineer for 3M Separation and Purification Sciences Division in Stafford Springs, Connecticut, and obtained the Certified Industrial Hygienist credential in spring 2017.

JANA GRIENKE (16MHA) was named president-elect of the Society for Radiation Oncology Administrators. Grienke is clinical department administrator of the Radiation Oncology Clinic of the Holden Comprehensive Cancer Center at University of Iowa Hospitals and Clinics in Iowa City, Iowa.

BENJAMIN HENKLE (09MPH) is a pulmonary and critical care medicine fellow at University of Minnesota in Minneapolis, Minnesota.

ANNA (GRINTER) KAMINSKI (13MHA) is a clinical analyst at Strategic Administrative and Reimbursement Services—a subsidiary of Advanced Radiology Services, PC, in Grand Rapids, Michigan.

ALISON KAUFMAN (17MPH) is a public health advisor at Dutchess County Department of Behavioral and Community Health in Poughkeepsie, New York.

JEREMY KURIE (84MA) is president, North Region, at Community Health Network in Indianapolis, Indiana.

RACHEL MARQUARDT (10MPH) is counsel, test security, at ACT in Iowa City, Iowa.

ALEX MILLER (15MHA) is director of network solutions at Bright Horizons Family Solutions in Denver, Colorado.

JEREMY MURDOCK (15MHA) is an associate administrator at Presbyterian Hospital in Albuquerque, New Mexico.

NABIL NATAGH (17PhD) is a postdoctoral fellow at University of Maryland in Baltimore, Maryland.

JEN NEUKIRCH (13MHA) is a project manager at Surgical Outcomes Research Center within the Department of Surgery at University of Washington in Seattle, Washington.

BLAKE SMITH (16MPH) is a community health extension volunteer with the Peace Corps in Swaziland.

STEPHEN STREED (75MS) has received the Association for Professionals in Infection Control and Epidemiology (APIC) Carole DeMille Achievement Award for his innovative contributions and commitment to education in infection control. Streed is system director of epidemiology/infection prevention at Lee Health in Fort Myers, Florida.

WENQUAN WANG (13PhD) is director of biostatistics at Sanofi Pasteur in Philadelphia, Pennsylvania.

LEAH WENTWORTH (16PhD) is the research and evaluation manager in the Sexual Violence Prevention Program at the New York State Department of Health in Albany, New York.

SAMANTHA WITTROCK (16MPH) is a community health outreach worker at Weld County Department of Public Health and Environment in Greeley, Colorado.

SUBMIT YOUR NEWS to tara-mckee@uiowa.edu with Class Notes in the subject line.
In October, a team of graduate students from the Department of Health Management and Policy put their analytical and presentation skills to the test at the national Everett V. Fox Student Case Competition.

The students were the first-ever University of Iowa team to participate in the case competition held at the Annual Educational Conference of the National Association of Health Services Executives (NAHSE) in San Antonio, Texas.

NAHSE is a non-profit association of black health care executives founded in 1968 to promote the advancement and development of black health care leaders and elevate the quality of health care services rendered to minority and underserved communities.

“This was a great opportunity for our students to practice their skills and build their professional network,” says Dan Gentry, clinical professor of health management and policy, director of the UI Master of Health Administration (MHA) program, and the team’s faculty mentor. “It’s also a way our program can nurture and support more diversity among our students and in the health care executive profession.”

The team members included Alton Croker, a third-year health services and policy doctoral student; Winnie Uluocha, a third-year MHA/JD student; and Nora Kopping, a second-year MHA student. Kylor Sorensen, a second-year MHA/MBA student, and Jamison Robinett, a first-year MHA student, served as observer and potential alternate, and observer, respectively.

The 28 teams were given a unique case study and were charged with applying their skills to analyze the diverse and real situations facing the health care organization featured in the case.

“I think it’s important that our school was represented at the case competition, not only because of the exposure that we had to minority health care executives, but also because it speaks to what we’re moving towards in the program, in terms of population health and the implications of social determinants on health,” says Uluocha.

“Being affiliated with a program like NAHSE that aims to advance minority health care leaders is great as a commitment to the broader profession, but also for our own program, and making sure that we see that reflected at all levels,” adds Croker.

The Iowa team advanced as far as the semi-final round of 10 graduate student teams.

“Our Iowa team gave a second amazing presentation in the semi-finals,” says Gentry. “This was a great win for them personally and a huge step forward for our tremendous program and department.”
Camara Jones, MD, MPH, PhD, visited the college in October as the recipient of the 2017 Richard and Barbara Hansen Leadership Award and Distinguished Lectureship. Trained as a family physician and epidemiologist, Dr. Jones is also a charismatic storyteller, using allegories on race and racism to illuminate topics that are otherwise difficult for many Americans to understand or discuss.

Her work focuses on the impacts of racism on the health and well-being of the nation. She seeks to broaden the national health debate to include not only universal access to high-quality health care, but also attention to the social determinants of health (including poverty) and the social determinants of equity (including racism). She is a senior fellow and adjunct associate professor with the Morehouse School of Medicine and immediate past-president of the American Public Health Association.

A link to Dr. Jones’ Hansen Lecture, “Achieving Health Equity: Tools for a National Campaign Against Racism,” can be found at cph.uiowa.edu/2017-hansen-award-2/.