Challenge Accepted

LOUISIANA EXPANDS MEDICAID

By **Claudia S. Copeland, PhD**

Take a drive down I-10 in Louisiana, and you'll soon see billboards with smiling faces announcing the good news: starting July 1st, you may qualify for expanded Medicaid! Yes, at long last, Medicaid expansion has come to Louisiana.

For three years, Louisiana governor Bobby Jindal declined Medicaid expansion, saying it would be too expensive. The reality, though, is that all states will lose federal funding for indigent care; according to the original Affordable Care Act plan, Medicaid expansion would replace these funds in a more cost-efficient way to cover the uninsured. Without Medicaid expansion, Louisiana would lose billions. Now, with the election of Governor John Bel Edwards, Louisiana has turned on a dime—after just six months' time for organization and implementation, over 200,000 Louisianans had Medicaid cards in their hands by the target start date of July 1st, 2016.

In the past, among non-pregnant adult Louisianans, only the very poor or disabled were eligible for Medicaid. Meanwhile, wealthy residents and professionals with benefits provided by their jobs were covered by private insurance. The working poor, small business owners, and creative professionals like musicians and artists were stuck in the middle—neither wealthy enough to afford private insurance, nor poor enough to qualify for Medicaid. The original ACA was written to close this gap, but when a supreme court ruling allowed states to refuse to expand Medicaid, some states like Louisiana refused the offer to expand—even though the state would pay none of the costs in the first years, and then slowly increase to only 10% of the costs. Since the original ACA planned for moderately low income Americans to be covered by Medicaid, there was no provision for them to get subsidized health insurance through the federal Health Insurance Marketplace. This left working class residents in the paradoxical position of not qualifying for Medicaid but being too poor to qualify for the federal subsidies.

With Edwards' decision to expand Medicaid at the beginning of the year, though, Louisianans with incomes up to $16,395 per year for individuals to $33,534 for a family of four are now eligible for healthcare coverage. This is good news for the newly eligible individuals, but it's also smart in terms of state-level finances: while Gov. Edwards' primary goal was to improve the health of Louisianans, "in the process, we are saving Louisiana taxpayers more than $180 million." Unlike many hard choices he has had to make upon taking the helm from former governor Jindal, "expanding Medicaid in Louisiana was the easiest decision I've made since taking office in January, and I meet people from all walks of life who will be positively impacted by expansion."

While the decision may have been easy, implementation was another matter. Putting together a statewide health program for hundreds of thousands of people in just under six months is no small task. Luckily for Louisiana, the state had Medicaid Director Ruth Kennedy on board.

A month after Gov. Edwards took office, Kennedy left her position as Medicaid Director to concentrate all her energies on the ambitious goal of expansion in less than 6 months. As Louisiana's first Medicaid Expansion Project Director, she had her hands full: "Edwards did not say that we would start signing people up by July 1st; he said that people should have cards in their hands by July 1st. It's been highly challenging, and we are proud of what we've been able to achieve in such a compressed time frame."

This is not the first time Kennedy has expanded Medicaid. In the late 1990s, Louisiana was facing a crisis in uninsured children, and it was Kennedy who expanded Medicaid into what we know today as LACHiP, the Louisiana Children's Health Insurance Program. LACHiP, together with its sister program, the LaCHiP Affordable Plan, a

375,000

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low-cost option for residents with moderate incomes, serves to ensure that all children in Louisiana have access to healthcare. "In 1998, Louisiana had the third highest percentage of uninsured children (behind Texas and Arizona). Now, there is only one state (Maryland) that has a lower percentage of uninsured children. So, that's why I'm confident that with the [current] Medicaid expansion, this is the gateway to improved outcomes."

One of the biggest hurdles for Medicaid expansion was the practical challenge of getting such a large number of people enrolled quickly. Whereas in some states, expansion represented a relatively small change, in Louisiana it is huge. For example, in Ohio, the previous income limit for Medicaid was 100% of the Federal poverty level (FPL), and Medicaid expansion raised that limit to 138% FPL. In Louisiana, though, the Medicaid qualifying income limit for a non-disabled, non-pregnant adult was just 11% FPL. Essentially, Medicaid was just not available to working, non-pregnant adults in Louisiana. Now, after expansion, a single adult can get Medicaid if their annual income is below $16,243. "Particularly for males," says Kennedy, "this is a paradigm shift."

In reality, it's a paradigm shift for hundreds of thousands of Louisianans—an estimated 375,000 are eligible for expanded Medicaid. That's a lot of enrollees to get signed up, and at a time when there isn't any extra money lying around to help get it done. With a staggering budget deficit inherited from the previous administration, hiring a large team to enroll this eligible population was out of the question. Further, putting the state plan together took until May 27th, so enrollment did not begin until June 1st, giving them just one month to complete enrollment—cards in hand—for the July 1st goal of 200,000 people. "The previous administration was diametrically opposed to Medicaid expansion," explains Kennedy. "Until the election in November, we did not know what the direction would be. We did not begin officially working on the Medicaid expansion until the 12th of January. It was intense, it was challenging. We have done a lot of things...but not in such a compressed time period."

Facing the impossibility of enrolling hundreds of thousands of residents individually in less than 6 months, creative solutions were a must. One such solution was the use of Supplemental Nutrition Assistance Program (SNAP, formerly known as food stamps) rolls. Since SNAP data are considered very reliable, and since the income limits for the program are below those for expanded Medicaid, this was a great way to enroll a large number of people quickly and easily. Louisiana is the first state in the nation to use SNAP rolls for Medicaid enrollment. Quick enrollment was also carried out for people receiving other benefits, such as enrollees in the Greater New Orleans Community Health Connection (GNOCHC), which provided services like primary care to people with incomes below 105% FPL. Through a combination of innovative approaches and a lot of hard work, the Medicaid expansion team did it—over 200,000 newly enrolled adults had their Medicaid cards in hand by July 1st.

However, Kennedy emphasizes that this is only the first step towards a larger goal of improving the health of all Louisianans: "This will be an ongoing process. What we will be looking at as we go forward is what works, what doesn't work...this is step 1, getting people signed up with a card in their hand." What about steps 2 and beyond? "There is the recognition that enrolling people is not our endgame. To improve health outcomes, we'll be doing community outreach, but it will be dual outreach, to people not enrolled and also those newly enrolled. The health literacy of it; the options other

"Louisiana is the first state in the nation to use SNAP rolls for Medicaid enrollment."

than the emergency room, medical transportation... a focus on men's health, prevention, early detection of pre-cancer, pre-hypertension, and pre-diabetes." She expects the benefits to extend beyond individual health into greater workplace efficacy as well: "I believe this is going to make for a healthier workforce in Louisiana. It's not just about absenteeism, but about "presenteeism"–the idea that you're at work but not doing a good job because you aren't feeling well."

So, what do physicians and patients think about the expansion? Patients seem universally happy. In an informal survey in the St. Roch neighborhood–characterized by a mix of creative professionals and low wage employees–residents were very happy about qualifying for expanded Medicaid. The only negative comment regretted was that not all people could have the option of public insurance (that is, a national healthcare option with middle-to-higher income people paying premiums according to income). Many were surprised that they qualify. "I had no idea; I have a Marketplace plan, but it has a high deductible, so I don't really feel like I have health insurance," said one musician and dancer, "I think I'll cancel my Marketplace plan and enroll." In fact, she may not have a choice. Residents with Marketplace plans who are now eligible for Medicaid cannot continue to receive the tax credits that subsidize the private plans. They do not have to cancel their Marketplace plan, but if they do not, they will have to pay full price for it, with the bill due around tax time next year.

For physicians, it's more complicated. A 2014 Deloitte poll of physicians throughout the U.S. found that 44% were treating an increased number of newly enrolled patients. The increase in demand was particularly high for states that expanded Medicaid. (At the time of the survey, Louisiana was not one of these.) Most affected by the increased patient load were primary care physicians, and many felt that the influx was straining resources. Adapting to the new demand presents challenges, which will need to be addressed by changing delivery systems, such as possibly expanding the role of nurse practitioners in primary care. One factor that may help is the growth of retail clinics, such as CVS's Minute Clinic. These clinics, along with urgent care clinics, can help deal with the increase in low-severity cases, allowing PCPs to focus on health management for overall wellness in their patients, especially those with chronic conditions.

William Carter, MD, an internist at Ochsner, takes a pragmatic view. "Being in the hospital, we are required to treat all patients who come to the ER no matter their insurance status." For hospital managers and case workers, though, he says that it makes quite a difference; now, they actually have somewhere they can refer their patients. "Sometimes that 'somewhere', such as the LSU clinic, takes awhile to get into, but it is at least something. Also, patients are more likely to fill their prescriptions now that they have insurance." He also points out another side to Medicaid expansion, and that is the perspective of the hospitals themselves. No matter how idealistic, hospitals cannot pay their staff if they do not receive income. "The hospital administrators are happy for the Medicaid expansion so they can get someone to pay the hospital bills. When the Affordable Care Act was passed, part of the way to pay for the Medicaid expansion was to get rid of indigent subsidies [DSH funds, paid to hospitals with a disproportionate share of uncompensated ER treatment] to pay for the uninsured. For a while, the hospital was not getting reimbursed much for

"For philanthropy-funded clinics, Medicaid expansion can be a godsend. The New Orleans Musicians' Clinic, funded through donations and grants to the New Orleans Musicians Assistance Foundation, has been providing healthcare for New Orleans musicians and other performers since before the ACA. Medicaid payments allow them to stretch their donors' dollars and provide more care."

From the New Orleans Musicians' Clinic, pictured, Margeurite Clark, LPN; Megan McStravick, MSW; Catherine Lasperches, FNP; and Felice Guimont, RN.

the uninsured, but now many can enroll in Medicaid, which will pay for hospitalization."

For philanthropy-funded clinics, Medicaid expansion can be a godsend. The New Orleans Musicians' Clinic, funded through donations and grants to the New Orleans Musicians Assistance Foundation, has been providing healthcare for New Orleans musicians and other performers since before the ACA. Medicaid payments allow them to stretch their donors' dollars and provide more care. Megan McStravick, Social Services Intake Coordinator for the Clinic, says "It's fantastic, actually. Before, a lot of patients had GNOCHC–partial Medicaid. They could get their free care here every 6 months, but had to go to University Hospital to get their labs done–biopsies, X-Rays, mammograms. They had trouble getting the care, getting all their paperwork together." They also just did not feel good about having to detail their income at every step, with some feeling ashamed that they did not earn more money. "Now, it's a lot easier; they can get all that done right here." All of the GNOCHC musicians were automatically enrolled, but there were a substantial number who had incomes above that limit, but below 138% FPL. Many of these do not know they are eligible, so McStravick has sent out postcards to all Musicians' Clinic patients, with clear instructions on how to apply, income limits for different family sizes, and her personal contact information for questions. She said they were initially a bit concerned that musicians might go elsewhere, since now they could get their care anywhere. "We thought we'd be kind of slow, but actually, we are a little bit busier than we were before." The Musicians' Clinic plans to use the money they save through Medicaid reimbursements to pay for things that aren't covered, such as expanding counseling or dental coverage.

And the patients? McStravick doesn't hesitate: "They're really excited about it. We're seeing a pretty positive response, in terms of involvement, people coming back in who haven't come in for three or four years. The only thing that seems to be not up to par is the dental. It was also retroactive, which was amazing. A lot of people had bills, for example from the emergency room, from before [July 1st]. Medicaid is taking care of the bills from the last three months."

One group of patients who may particularly benefit from expanded Medicaid is people living with HIV (PLWH). Dorian-Gray Alexander, Policy Fellow at the CHANGE Coalition, chair of the NO/AIDS Task Force community advisory board, and member of the LSU Health Sciences Center HIV Malignancy Consortium Advisory Board, says that, while it's too early to measure impact, they have seen an outstanding level of enrollment. "Sadly, in Louisiana, most PLWH, approximately 67%, lived below 138% FPL and many had never been insured before or have been uninsured from lack of steady employment." HIV is an expensive disease. Almost all currently prescribed anti-retrovirals cost $1800 - $3200 per month, and that is just the cost of the medications themselves. Crucial to the care of HIV-positive patients has been the Ryan White Care Act (RWCA), which provides "payer of last resort" funding for HIV care. The original intention of Ryan White "was as an emergency measure at a time when HIV/AIDS still had high mortality and

treatment options were fewer." Today, RWCA serves as a wrap-around safety net for HIV treatment and care coordination.

However, while RWCA funds have been critical for HIV+ patients, "all care must be tied to their HIV disease with few exceptions." This can be especially problematic when it comes to comorbid conditions, such as hepatitis C, highly prevalent in Louisiana, as well as day-to-day medical problems. "RWCA can only address HIV concerns, not the bad knee or a hernia in need of repair. Another restriction is that services must be outpatient or ambulatory. RWCA funds cannot be used for hospitalizations." Alexander believes that Medicaid expansion will help smooth out these gaps. "Medicaid expansion gives PLWH, for the first time, greater options to access care, more choice in choosing where they receive care, and the ability to not only manage their HIV disease but also other health needs requiring specialized care. The current systems of care have been from ASO [AIDS service organizations] clinics or State-operated public facilities with HIV-specific clinics. PLWH have been at the mercy of shifting access points for care and dwindling funding, often leading to reduced hours of services, lengthy appointment settings, and long waiting room times."

On the other hand, RWCA has provided such comprehensive HIV care coordination that it "has insulated PLWH from the 'real world' when they access HIV care, with coordination done by both medical case management and non-medical case managers. Many PLWH have complex needs depending on the level of HIV disease, but also timing. For example, a newly diagnosed person with HIV may have adjustment issues in understanding what HIV is, may need behavioral counseling, and assistance in navigating healthcare. An adolescent who was born with HIV may be dealing with medication adherence and disclosure issues. Someone who is a long-term survivor living with HIV may have a complex medical history, including long-term side effects of prior ARV [anti-retroviral] treatment and/or aging or inconsistent HIV disease management. When a PLWH accesses care outside the RW system, they are reminded that the 'hand-holding' of case management rarely exists." Medicaid is more streamlined than most private insurance systems, sparing patients the confusing and voluminous bureaucracy inherent in most private plans. A key concern for Medicaid expansion, though, is the level of case management and quality of Medicaid-based care. "What training do they need to effectively and compassionately deal with a disease still fraught with stigma and misperceptions even among health care professionals?" Also, "Great efforts are being made to make sure PLWH, who are eligible for Medicaid, don't experience treatment interruption or delays in services, chemotherapy, or planned surgeries during a transition from RW care to Medicaid."

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–Ruth Kennedy,

Megan McStravick of the Musicians' Clinic also favors a "whole-person" approach. The Musicians' Clinic offers counseling, and has unique approaches such as an "emergency fund" for issues that are not technically medical, but affect patients' health. Depending on how much savings Medicaid expansion can give, they would like to expand these types of programs. "It would be great to make a financial stability impact on people as well." Basic medical care is an important first step, but the overall goal is wellness and good health.

Kennedy feels the same way. Even while still in the thick of enrolling eligible residents, her eyes are on the future–how to not just get patients into Medicaid, but to also make sure the system leads to genuine health improvements. "The real success is not just achieving 375,000 enrollees, but improving people's health outcomes, their well-being, and their productivity." ■

"One group of patients who may particularly benefit from expanded Medicaid is people living with HIV (PLWH)."

Donald Trump's HEALTHCARE PLATFORM

- Completely repeal Obamacare. Our elected representatives must eliminate the individual mandate. No person should be required to buy insurance unless he or she wants to.

- Modify existing law that inhibits the sale of health insurance across state lines. As long as the plan purchased complies with state requirements, any vendor ought to be able to offer insurance in any state. By allowing full competition in this market, insurance costs will go down and consumer satisfaction will go up.

- Allow individuals to fully deduct health insurance premium payments from their tax returns under the current tax system. Businesses are allowed to take these deductions so why wouldn't Congress allow individuals the same exemptions? As we allow the free market to provide insurance coverage opportunities to companies and individuals, we must also make sure that no one slips through the cracks simply because they cannot afford insurance. We must review basic options for Medicaid and work with states to ensure that those who want healthcare coverage can have it.

- Allow individuals to use Health Savings Accounts (HSAs). Contributions into HSAs should be tax-free and should be allowed to accumulate. These accounts would become part of the estate of the individual and could be passed on to heirs without fear of any death penalty. These plans should be particularly attractive to young people who are healthy and can afford high-deductible insurance plans. These funds can be used by any member of a family without penalty. The flexibility and security provided by HSAs will be of great benefit to all who participate.

- Require price transparency from all healthcare providers, especially doctors and healthcare organizations like clinics and hospitals. Individuals should be able to shop to find the best prices for procedures, exams or any other medical-related procedure.

- Block-grant Medicaid to the states. Nearly every state already offers benefits beyond what is required in the current Medicaid structure. The state governments know their people best and can manage the administration of Medicaid far better without federal overhead. States will have the incentives to seek out and eliminate fraud, waste and abuse to preserve our precious resources.

- Remove barriers to entry into free markets for drug providers that offer safe, reliable and cheaper products. Congress will need the courage to step away from the special interests and do what is right for America. Though the pharmaceutical industry is in the private sector, drug companies provide a public service. Allowing consumers access to imported, safe and dependable drugs from overseas will bring more options to consumers.

The reforms outlined above will lower healthcare costs for all Americans. There are other reforms that might be considered if they serve to lower costs, remove uncertainty and provide financial security for all Americans. And we must also take actions in other policy areas to lower healthcare costs and burdens. Enforcing immigration laws, eliminating fraud and waste, and energizing our economy will relieve the economic pressures felt by every American. It is the moral responsibility of a nation's government to do what is best for the people and what is in the interest of securing the future of the nation.

Providing healthcare to illegal immigrants costs us some $11 billion annually. If we were to simply enforce the current immigration laws and restrict the unbridled granting of visas to this country, we could relieve healthcare cost pressures on state and local governments.

To reduce the number of individuals needing access to programs like Medicaid and Children's Health Insurance Program we will need to install programs that grow the economy and bring capital and jobs back to America. The best social program has always been a job – and taking care of our economy will go a long way towards reducing our dependence on public health programs.

Finally, we need to reform our mental health programs and institutions in this country. Families, without the ability to get the information needed to help those who are ailing, are too often not given the tools to help their loved ones. There are promising reforms being developed in Congress that should receive bi-partisan support.

Excerpted from: https://www.donaldjtrump.com/positions/healthcare-reform

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Hillary Clinton's
HEALTHCARE PLATFORM

- Defend the Affordable Care Act and build on it to slow the growth of out-of-pocket costs.

- Crack down on rising prescription drug prices and hold drug companies accountable so they get ahead by investing in research, not jacking up costs.

- Protect women's access to reproductive health care, including contraception and safe, legal abortion.

- Make premiums more affordable and lessen out-of-pocket expenses for consumers purchasing health insurance on the Obamacare exchanges. Her plan will provide enhanced relief for people on the exchanges, and provide a tax credit of up to $5,000 per family to offset a portion of excessive out-of-pocket and premium costs above 5% of their income. She will enhance the premium tax credits and ensure that all families purchasing on the exchange will not spend more than 8.5 percent of their income for premiums. Finally, she will fix the "family glitch" so that families can access coverage when their employer's family plan premium is too expensive.

- Support new incentives to encourage all states to expand Medicaid. Hillary will follow President Obama's proposal to allow any state that signs up for the Medicaid expansion to receive a 100 percent match for the first three years, and she will continue to look for other ways to incentivize states to expand Medicaid to meet the health needs of their most vulnerable residents.

- Invest in navigators, advertising, and other outreach activities to make enrollment easier. Hillary will ensure anyone who wants to enroll can understand their options and do so easily, by dedicating more funding for outreach and enrollment efforts. She will invest $500 million per year in an aggressive enrollment campaign to ensure more people enroll in these extremely affordable options.

- Expand access to affordable health care to families regardless of immigration status. Hillary sponsored the Immigrant Children's Health Improvement Act in the Senate, which later became law and allows immigrant children and pregnant women to obtain Medicaid and CHIP. She believes we should let families—regardless of immigration status—buy into the Affordable Care Act exchanges.

- Continue to support a "public option"—and work to build on the Affordable Care Act to make it possible. Hillary supports a "public option" to reduce costs and broaden the choices of insurance coverage for every American. To make immediate progress toward that goal, Hillary will work with interested governors, using current flexibility under the Affordable Care Act, to empower states to establish a public option choice.

- Defend the Affordable Care Act. Hillary will continue to defend the Affordable Care Act (ACA) against Republican efforts to repeal it. She'll build on it to expand affordable coverage, slow the growth of overall health care costs (including prescription drugs), and make it possible for providers to deliver the very best care to patients.

- Lower out-of-pocket costs like copays and deductibles. The average deductible for employer-sponsored health plans rose from $1,240 in 2002 to about $2,500 in 2013. Hillary believes that workers should share in slower growth of national health care spending through lower costs.

- Reduce the cost of prescription drugs. Prescription drug spending accelerated from 2.5 percent in 2013 to 12.6 percent in 2014. Hillary believes we need to demand lower drug costs for hardworking families and seniors.

- Transform our health care system to reward value and quality. Hillary is committed to building on delivery system reforms in the Affordable Care Act that improve value and quality care for Americans.

Hillary will also work to expand access to rural Americans, who often have difficulty finding quality, affordable health care. She will explore cost-effective ways to broaden the scope of health care providers eligible for telehealth reimbursement under Medicare and other programs, including federally qualified health centers and rural health clinics. She will also call for states to support efforts to streamline licensing for telemedicine and examine ways to expand the types of services that qualify for reimbursement.

As president, she will continue defending Planned Parenthood, which provides critical health services including breast exams and cancer screenings to 2.7 million women a year. And she will work to ensure that all women have access to preventive care, affordable contraception, and safe, legal abortion—not just in principle, but in practice, by ending restrictions like the Hyde Amendment.

Excerpted from: https://www.hillaryclinton.com/issues/health-care/

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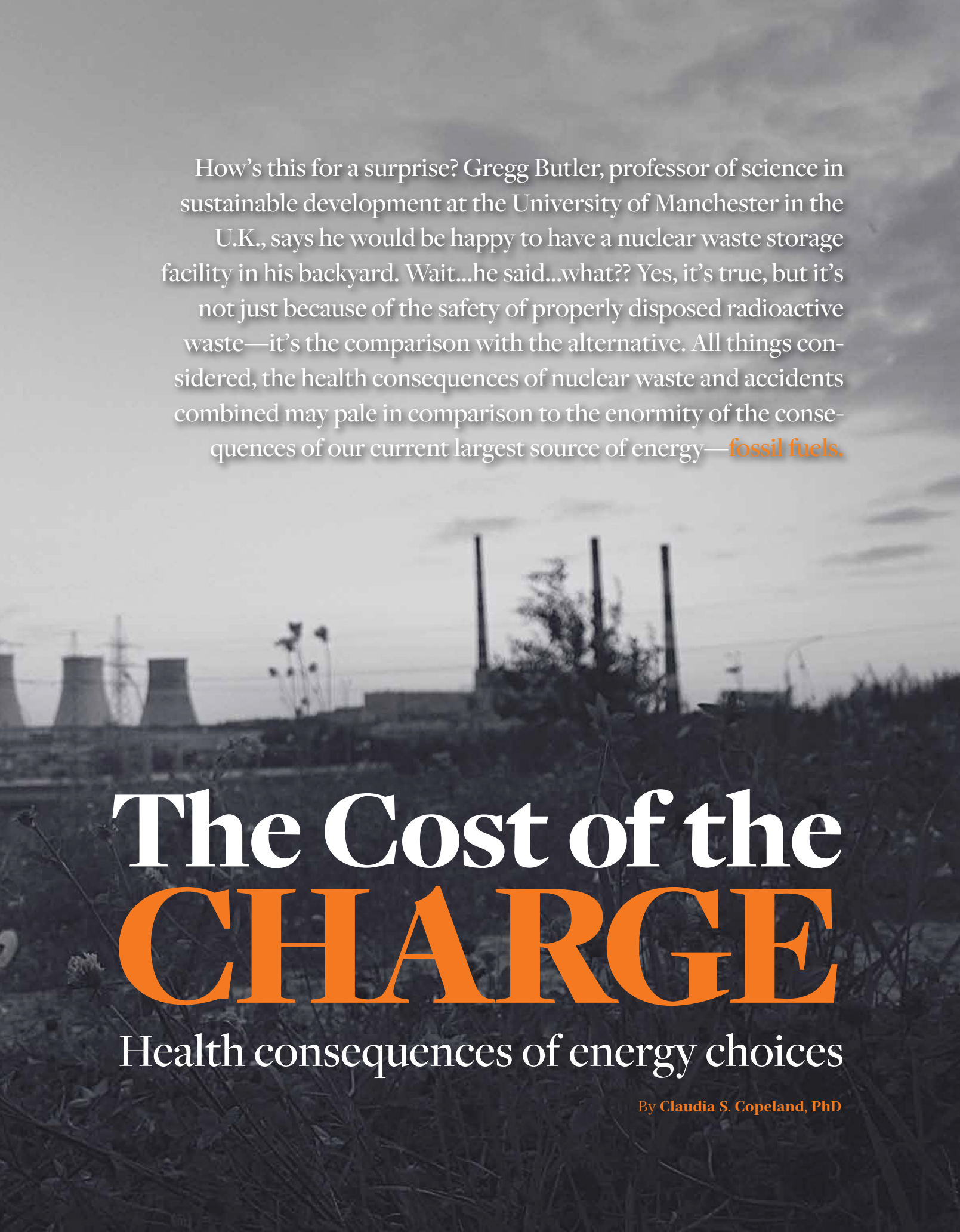


How's this for a surprise? Gregg Butler, professor of science in sustainable development at the University of Manchester in the U.K., says he would be happy to have a nuclear waste storage facility in his backyard. Wait...he said...what?? Yes, it's true, but it's not just because of the safety of properly disposed radioactive waste—it's the comparison with the alternative. All things considered, the health consequences of nuclear waste and accidents combined may pale in comparison to the enormity of the consequences of our current largest source of energy—fossil fuels.

The Cost of the CHARGE

Health consequences of energy choices

By **Claudia S. Copeland, PhD**

FOR MANY, THE IDEA OF NUCLEAR ENERGY BRINGS with it fear and distrust. The symptoms of radiation sickness are horrific, and the potential impact of accidents is tremendous, and terrifying. The Chernobyl meltdown, with radiation fallout as far as Western Europe, and the Fukushima Daiichi nuclear disaster, which displaced 160,000 people, are alone enough to win nuclear power the crown for scariest source of energy. Add to this the fact that, for all practical purposes, nuclear waste lasts forever, and it certainly seems that nuclear energy must be the worst way to power our lives, in terms of human health.

In reality, though, major failures of civilian nuclear power plants are few and far between: the Fukushima disaster in 2011, the Chernobyl disaster in 1986, the Three Mile Island partial meltdown in 1979, which resulted in no deaths and no significant increases in cancer afterwards, and the 1961 explosion and meltdown of SL-1, a remote army nuclear power reactor near Idaho Falls, that killed three operators. In contrast, deadly disasters in coal mining have been a steady constant throughout its history, with more than 100,000 miners killed in the past century in the U.S. alone, and almost double that number killed in China. Globally, an estimated 12,000 coal miners die every year from accidents, according to the BBC. But accidents in the coal mine are only the

"...accidents in the coal mine are only the beginning. The current number of Chinese pneumoconiosis (black lung) cases exceeds 700,000, according to *China Daily*, and U.S. black lung cases are on the rise in Appalachia as well, according to a January report in *Environmental Health Perspectives*."

IMAGE VIA WIKIMEDIA COMMONS

FUKUSHIMA DAIICHI NUCLEAR DISASTER
Radiation hotspot in Kashiwa.

beginning. The current number of Chinese pneumoconiosis (black lung) cases exceeds 700,000, according to *China Daily*, and U.S. black lung cases are on the rise in Appalachia as well, according to a January report in *Environmental Health Perspectives*.

Burning coal affects health almost as dramatically as mining it. An unintended de facto experiment in China, in which officials gave free coal for heating to northern regions, but not southern ones, allowed the consequences of increased coal burning to be measured. According to a regression analysis reported in PNAS in 2013, the impact of the increased total suspended particles (TSPs) translated into a decreased life expectancy of 5.5 years among northerners due to cardiorespiratory diseases associated with the higher use of coal. Of course, oil and natural gas are cleaner than coal, but also generate substantial pollution, as well as accidents.

Whereas radioactive waste from nuclear power plants can be vitrified into glass, coated in concrete, and buried deep underground, there is no such solution for the waste generated by fossil fuels. It enters our air, water, and soil. Filters can help, as can increases in fuel efficiency through technology, but the fact remains that pollution from fossil fuels is a huge health issue. In the U.S. alone, each year sees over 16,000 hospital admissions for asthma, pneumonia, and cardiovascular conditions linked to pollution from fossil-fuel power plants. In addition, such pollution is implicated in more than 7,000 emergency room visits for asthma, more than 18,000 cases of chronic bronchitis and 59,000 cases of acute bronchitis, more than 1 million lower and upper respiratory infections, and more than 30,000 premature deaths. Annual lost work days due to air pollution number over 5 million.

Outside the developed world, with fewer regulations and weaker enforcement, air pollution from fossil fuels is far worse, as any traveler to big cities in Latin America, southeast Asia, or Africa can tell you. Africa not only hosts the world's most air-polluted city (in Nigeria), but also suffers from widespread oil-related water pollution that affects drinking water and fishing, a staple source of food and income for villagers. A United Nations Environmental Programme report documented extensive oil-related contamination of soil and water in the Niger Delta region; in the most serious case, they found an 8-cm thick layer of refined oil floating on the groundwater serving the community wells. In one community, drinking water in wells was contaminated with levels of benzene over 900 times the WHO upper limit.

Latin America also suffers from oil-related environmental health problems. A 2004 Pan-American Health Organization report on the oil industry in the Amazon basin of Ecuador documented a range of toxicological effects associated with oil exposure. Spontaneous abortions were 2.5 times higher in women

living near oil fields, and the rates of several forms of cancer were elevated: cancers of the stomach, rectum, skin melanoma, soft tissue, and kidney in men, cancers of the cervix and lymph nodes in women, and hematopoietic cancers in children. In China, outdoor air pollution contributes to 1.6 million deaths per year, according to a 2015 study by Berkeley scientists Rohde and Muller, reported in *PLoS*; this number represents 17% of all the deaths in China.

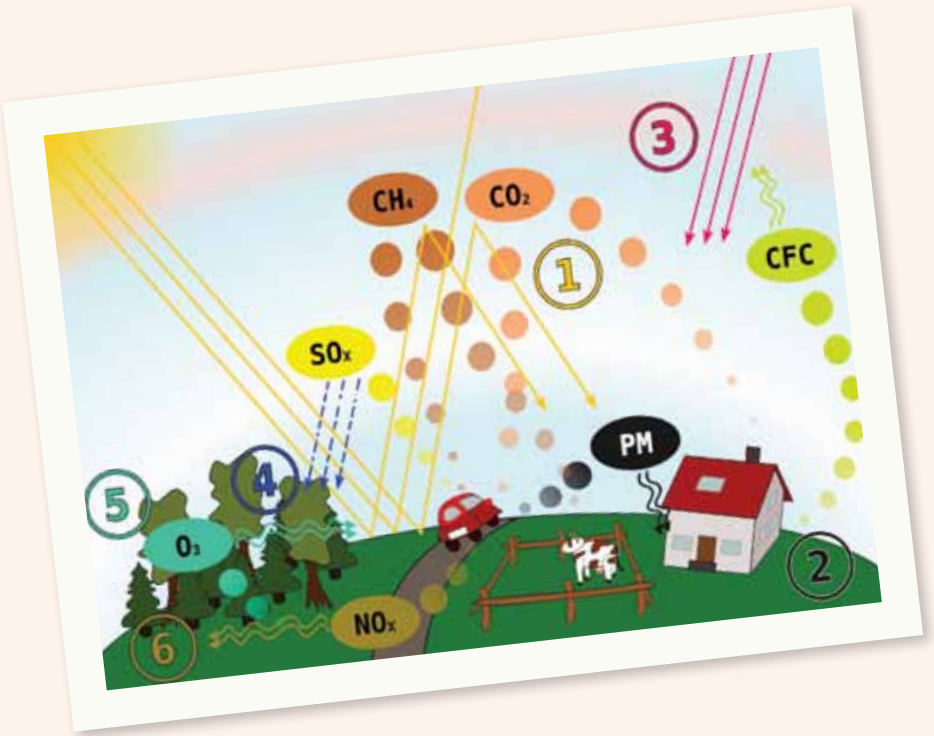
CLIMATE CHANGE

Beyond the effects of pollution looms the potential global catastrophe of climate change. Excessive and rising carbon dioxide in the atmosphere from fossil fuels emissions is predicted to lead to global warming, acidification of the ocean, changes in rainfall, sea level rise, and increases in the frequency or severity of extreme weather effects. How might this affect our health locally?

Hot temperatures can lead to heat stroke, dehydration, and increased cardiovascular, cerebrovascular, and respiratory disease. According to the EPA, heat-related deaths in the United States could reach the thousands to tens of thousands of additional deaths each year by the end of the century during summer months. Rising temperatures also adversely affect air quality, which increases asthma and other respiratory illnesses. Among the most problematic predicted air quality issues linked to climate change is an increase in the amount of ground-level ozone, which can damage lung tissue and inflame airways, aggravating asthma and other respiratory conditions. According to the US Global Change Research Program (USGCRP), by 2030, ground-level ozone-related illnesses and premature deaths due to climate change could number in the thousands if no mitigating air quality policy changes are put in place.

Rising temperatures can also adversely affect water quality, through increased runoff leading to pollution of recreational and drinking water sources, and through infectious disease. Disease-causing microbes expected to increase with rising temperatures include Vibrio bacteria and other pathogenic bacteria, toxin-producing algal blooms, and waterborne parasites like Cryptosporidium and Giardia.

In addition to waterborne diseases, climate change is also predicted to affect vector-borne diseases. The activity of ticks that transmit Lyme disease, for example, is restricted by climate. As temperatures rise, these ticks are likely to become active earlier, and their geographic range is expected to expand. Mosquitoes transmit a great



REASONS AND EFFECTS OF AIR POLLUTION

- Carbon dioxide from exhausts and energy production
- Methane from cattle breeding
- Sulfur oxides from exhausts and industry
- CFCs from refrigerants and propellants
- Nitrogen oxides from exhausts and industry
- Ozone from air with high oxygen level, catalysed by nitrogen oxides
- Soot and particulate from exhausts and industry

1. Greenhouse effect by keeping sun warmth and light from reflecting back into space
2. Particulate contamination affecting respiratory systems
3. Raised UV radiation levels by destruction of the ozone layer
4. Acid rain leads to acidification and forest dieback
5. Increased ozone levels affecting respiratory systems
6. Contamination by nitrogen oxides affecting respiratory systems

Hydroelectric power is a relatively clean energy source, and it is not highly accident-prone.

number of diseases, many deadly. Currently, mosquito-transmitted viruses like Dengue and Zika are not seen in temperate and northern climates because the mosquitoes that transmit them cannot survive the northern winter, curtailing the infection cycle. The more warming, the greater the range of these mosquitoes, potentially affecting large numbers of people. Globally, temperature increases of 2-3°C would increase the number of people who are at risk of malaria by several hundred million, according to the World Health Organization.

Beyond infectious diseases, climate change may affect general health through impacts on food quality. This can be through toxins–higher sea temperatures are expected to lead to an increase in mercury in seafood–or pathogens; for example, food poisoning caused by Salmonella increases with heat. In addition, nutrition can be affected by an increase in carbon dioxide, with lowered levels of proteins and essential minerals in crops such as wheat, rice, and potatoes. The relationships between climate change and agriculture are well-documented, according to the USDA, with risks to food security increasing with higher concentrations of greenhouse gases and extending "beyond agricultural production to other elements of global food systems that are critical for food security, including the processing, storage, transportation, and consumption of food."

One effect of particular concern to Gulf Coast residents is a predicted increase in extreme weather events. Storm-related damage to roads and communication infrastructure disrupts access to healthcare services, especially impacting the elderly and people with disabilities. Carbon monoxide poisoning due to improper use of generators increases during storm-related outages, and mental health effects such as depression or PTSD increase following storm-related trauma or loss.

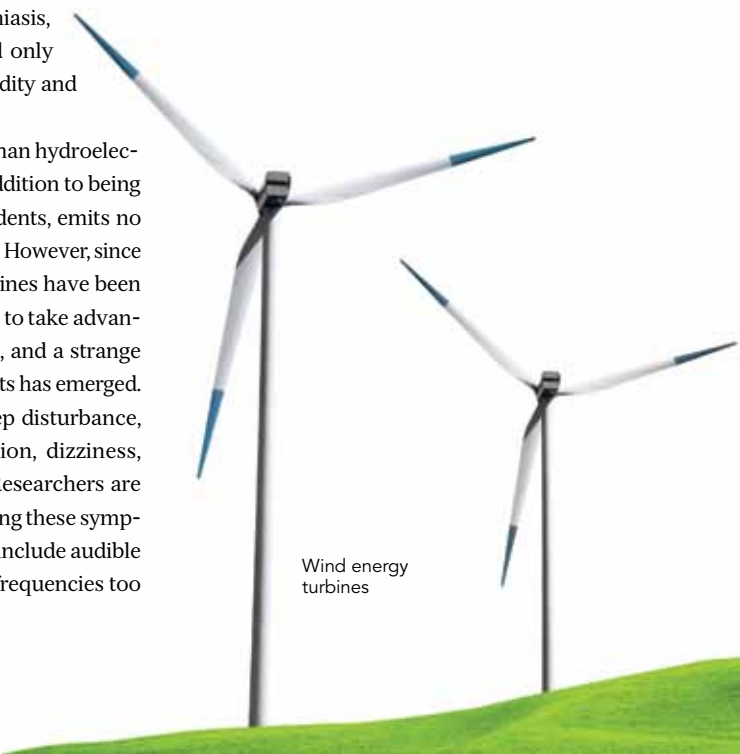
ALTERNATIVES

Clearly, the health effects caused by fossil fuels are dramatic and far-reaching, even here in the U.S. Other than nuclear energy, though (which many still do not feel comfortable with), how else can we power our modern world? Hydroelectric power is a relatively clean energy source, and it is not highly accident-prone. However, when accidents do happen, they are extremely deadly: for example, in 1975, a single typhoon destroyed 62 poorly constructed dams in the Banqiao Reservoir in China, killing 171,000 people and leaving 11 million more homeless. Dams can also lead to increases in water- borne diseases, such as schistosomiasis, a parasitic infection second only to malaria in terms of morbidity and mortality.

Considered even cleaner than hydroelectric power, wind energy, in addition to being low in mortality due to accidents, emits no water, ground, or air pollution. However, since wind energy is so clean, turbines have been built very close to residences to take advantage of power infrastructure, and a strange syndrome of health complaints has emerged. The complaints include sleep disturbance, headache, anxiety, depression, dizziness, and cognitive dysfunction. Researchers are not sure what exactly is causing these symptoms, but speculated causes include audible noise, infrasound (sound at frequencies too low to be consciously heard), ground current, and shadow flicker. Shadow flicker is the phenomenon of the moving shadow of the blade of a wind turbine creating a slow flickering light effect as the shadow moves over windows, akin to someone continuously switching a light switch off and on every couple of seconds.

In spite of the large number of complaints, valid studies have revealed no scientific evidence for a direct link to human health. So, what is causing the symptoms? One explanation is a "nocebo" effect. Akin to a placebo effect, which improves people's health through purely psychological effects, nocebos are phenomena that lead to adverse health symptoms due to the psychological effect of the belief that they are harmful. Some have asserted that wind turbine health complaints are correlated not with wind turbines, but with media attention to adverse effects, and accusations have even been made that fossil fuel industry proponents have fanned the flames of Wind Turbine Syndrome.

A critical review published in late 2015 in the *Journal of Occupational and Environmental Medicine* found no evidence of direct harm by wind turbine noise and no correlation of complaints with objective



Wind energy turbines

Another clean energy source, well-suited to our sunny climate is solar energy.

measures of sound pressure. Instead, indirect harm appeared to stem from stress due to annoyance, and this was significantly correlated with factors such as residents' opinions of the aesthetics of the wind turbines in the surrounding scenery. A similar scenario is seen with shadow flicker; the frequency of shadow flicker brought about by commercial wind turbines is too slow to cause epileptic seizures, but it does cause annoyance. Studies of quality of life (QOL) using physical and mental health scales found contradictory results. One small study (38 participants living within 2 km of a wind turbine) found lower QOL in residents living near wind turbines, while another, large study (853 residents living within 1.5 km of a wind turbine) found significantly higher QOL levels in those living closer to a turbine. All in all, wind energy appears to be a healthy energy source, but in light of the number of complaints—regardless of whether they represent a nocebo effect— wind turbines should best not be positioned in close proximity to residences.

This brings us to another clean energy source, one that's well-suited for our sunny climate here in New Orleans and ideal for positioning close to the people using it—solar energy. Solar has the lowest impact in terms of accidents per kilowatt hour produced, after nuclear energy (which is low due to the high amount of energy produced, not to a low total number of accident-associated deaths), and operation of solar panels does not produce pollution. However, the production of solar panels does involve potentially hazardous materials, including lead, arsenic, copper, and a number of other toxic chemicals, and improper disposal can lead to health hazards—about the same as those associated with the general microelectronic industry. Recycling can mitigate much of the impact of solar cell components, and as the components are valuable, companies are motivated to recycle them. (Of course, it is important that conditions in recycling plants are protective of workers' health.) As technology improves, these issues are also steadily improving. The Australian independent think tank TAI, in a report on the costs and benefits of solar energy, quantified the health impacts as 0.5 cents/kWh vs. 1.9 cents/kWh for natural gas, the healthiest of the fossil fuels. Some concern has been expressed about electromagnetic fields associated with solar panels, but these fears are not supported by any valid scientific studies.

All things considered, solar energy and wind energy appear to be the clear winners in terms of human health—except for one additional source: the human body itself! New Orleans has an ideal climate for bike riding. While riding a bike in traffic can lead to morbidity due to accidents, if you can find a route that is free of traffic hazards, using the energy your own body generates from food calories is not only clean, but can provide a net increase in wellness due to the health benefits of exercise. Getting the benefits of exercise together with human-powered clean energy aren't confined to bikes, either: Adam Gilmore of the University of Guelph in Canada found that harnessing electricity produced by people working out in a fitness center could recover 7.9% of the facility's energy demand. (It was not economically feasible, considering the cost of fitting pedal devices to electricity generators, but decreases in the cost of the technology or rising fuel prices could tip the scales at some point in the future.)

Researchers Suhalka et al., from Jaipur, India, and Romanian researchers Mocanu et al. have designed bicycle-powered generators, capable of providing light or powering other small devices—quite useful in off-the-grid villages. Of course, if you've ever watched a playground full of kids, you may have marveled at "how much energy" they all have. Well, Tulane electrical engineering professor S. R. Pandian has developed a system for harnessing all that playground energy using pneumatic cylinders. Low-cost systems like this have lower energy harvesting efficiency, but in the case of playground energy, efficiency is not as important, since kids want to play regardless! After the low installation cost, it's free energy, free fitness, and free fun. Now, how's that for healthy?! ■

"All things considered, solar energy and wind energy appear to be the clear winners in terms of human health—except for one additional source: the human body itself!"

healthcarebriefs

NEWS | PEOPLE | INFORMATION

LSU DENTAL SCHOOL COOKS FOR FIRST RESPONDERS

More than 100 LSU Health New Orleans dental and dental hygiene students, faculty, staff, and volunteers brought out their cooking pots to make a New Orleans-style lunch for first responders on Sunday, August 14, 2016, at the LSU Health New Orleans School of Dentistry. They served up jambalaya, vegetables, and sides, along with desserts to thank those who serve and protect us. *See story on page 43*

HealthcareBriefs

STATE

Expanded Medicaid Enrollment Reaches 250,000

The Louisiana Department of Health announced the landmark enrollment of 250,000 new adults into Healthy Louisiana, the state's expanded Medicaid program. Enrollment began on June 1 and coverage started July 1.

Healthy Louisiana will bring health insurance coverage to an estimated 375,000 working Louisianans. In the first month and a half of enrollment, an average of 2,500 residents per day have signed up for Medicaid coverage.

One contributor to the state's success has been the Department's use of creative enrollment strategies. Enrollees of two limited-coverage programs, Take Charge Plus and the Greater New Orleans Community Health Connection, automatically gained full Medicaid coverage under Healthy Louisiana. Additionally, the Centers for Medicare and Medicaid Services granted Louisiana special permission to enroll residents using data from the Supplemental Nutrition Assistance Program (SNAP), more commonly known as food stamps. This innovative approach saves the State an estimated $1.5 million and 52,000 man hours.

Expanded Medicaid coverage is available for adults ages 19 to 64 with a household income of up to 138 percent of the federal poverty level, or $33,534 for a family of four. Applicants must meet citizenship requirements and cannot already be covered by Medicaid or Medicare. Residents who think they may be eligible can apply in person, by phone or online at healthy.la.gov. Enrollment is ongoing.

Blue Cross Mobile App Now Includes Symptom Checker

Customers using the Blue Cross and Blue Shield of Louisiana mobile app can now search their symptoms by keyword or body area and see a suggested diagnosis and list of recommended treatments. The app also helps customers decide when they should call 911, go to the emergency room or visit their family doctor.

Other features of the app include:

•Find a Doctor or Urgent Care: Customers can use the app to get a map and directions to a nearby doctor's office or facility that is in their network, easing their access to care.

•View Benefits and Claims: Customers can see important information about their healthcare coverage benefits, including the status of their claims, deductibles, copayment amounts, coinsurance, and balances.

•Save Doctors and Claims: Customers can save doctor or claims details to a favorites list for easy access upon return visits. Customers can also save doctor information, including name, phone number and address-to their contacts list.

•Contact Us: Customers can click-to-call Blue Cross customer service or submit questions securely with claims data attached, allowing for a streamlined response. Customers can also find phone numbers, maps and directions to any of our eight local offices.

Users can find the app by searching "BCBSLA" in the Apple App Store or Google Play Store. The apps can also be found by visiting bcbsla.com/mobile from any mobile device.

Mark Berger

Berger Named LNHA Executive Director

The Louisiana Nursing Home Association (LNHA) Board of Directors announced on Wednesday the selection of Mark Berger to succeed its long-serving executive director Joe Donchess. Donchess will continue as executive director until his retirement on December 31.

Mr. Berger currently serves as LNHA's Reimbursement Director and his experience at LNHA spans 26 years. Mark Berger has been a certified public accountant for 31 years. Beyond his accounting skills, Berger is actively involved with the legislative and regulatory processes. He has played an integral role in several major successes of LNHA, most notably the design and implementation of the case mix reimbursement system and legislative measures to advance quality care for residents of nursing facilities.

AG Makes Two Medicaid Arrests

Attorney General Jeff Landry announced that his Medicaid Fraud Control Unit arrested two people.

Donyelle Chaney, 29 of Baton Rouge, was arrested on Medicaid Fraud. Chaney allegedly provided services to multiple Medicaid recipients after being terminated by the servicing company.

Christopher Cador, 26 of Baton Rouge, was arrested on Simple Battery of Persons with Infirmities. Cador allegedly struck a disabled individual repeatedly with a closed fist.

Chaney was booked into the East Baton Rouge Parish Prison. Cador was booked into the East Feliciana Parish Prison.

Medicaid fraud occurs when providers use the Medicaid program to obtain money to which they are not entitled. To report Medicaid fraud or abuse and neglect in residential care facilities, please contact Attorney General Jeff Landry's Medicaid Fraud Hotline at 888-799-6885 or www.AGJeffLandry.com.

Department of Health Launches Online Data Tool

A new site developed by the Department of Health and Hospitals will provide healthcare officials and researchers with information like the number of uninsured Louisianans, the rates of those with chronic illnesses or obesity, environmental statistics, and even which communities have access to healthy foods.

The Department of Health's (LDH) Center for Population Health Informatics and the U.S. Centers for Disease Control and Prevention's National Tracking Network have partnered to create Health Data, a public data portal that provides longitudinal analyses of Louisiana health data. The site will be accessible to the general public, and will prove especially useful to researchers, scientists, educators, students, health officials, and individuals seeking to learn more about the health issues affecting their community.

Dr. Rebekah Gee, secretary of the Department of Health, said the portal is fully interactive and allows users to access health, population, environmental and exposure data, and visualizations in one place.

Quick access to associated information and links is also provided. The data will be downloadable and continually curated to ensure the best and most current information is available. New data sources will be added as they are identified.

"We hope that, by allowing free and ready access to health data, residents will become more aware of the health issues facing Louisiana and community workers and health researchers will have the information they need to better understand and improve the health of Louisiana's families and communities," said Joseph Foxhood, director of the Center for Population Health Informatics.