Climate Action Plan for the Nell Hodgson Woodruff School of Nursing

June, 2014

Introduction

The Faculty and Administration of the Nell Hodgson Woodruff School of Nursing (NHWSN) have a commitment to the health of our local and global community as reflected in our mission, *to educate nurse leaders and scholars, generate new knowledge, and improve health and health care, all in service to the global community*. This commitment is also evident in our statement of core values, that *the faculty, staff, and students of the Nell Hodgson Woodruff School of Nursing are dedicated to the values of scholarship, leadership, and social responsibility in shaping our current and future work as members of a leading private school of nursing. The school is committed to promoting and nurturing an organizational culture in which all of its members are dedicated to the improvement of global health through the advancement of science, education, and practice*.

Our mandate to improve global health obliges us to address global climate change and the concomitant threats to human health. Nursing has both the responsibility and opportunity to be a leader within our institution and the academy in setting forth bold and aggressive goals to reduce our own significant contribution to climate change. Environmental health advocacy is in fact fundamental to our heritage; in 1860, the mother of modern nursing, Florence Nightingale, provided the foundation for our understanding of the health effects of the environment when she wrote about patients' need for fresh air and clean water in her now famous treatise, *Notes on Nursing*. The 1995 Institute of Medicine report titled *Nursing, Health and the Environment* further cemented our critical responsibility in caring about environmental threats. As we continue to be the nation's most trusted profession (by Gallup poll for fourteen years), we have an obligation to that trust to be good stewards of our environment and outspoken educators of the effects of climate change on human health. The most vulnerable of our patients will be the most affected by climate change and deserve our special protection: the young, the elderly, and the chronically ill. *Climate change is the biggest global health threat of the 21st century,* according to the editorial board of The Lancet, "*the impacts will be felt all around the world, not just in some distant future but in our lifetimes and those of our children*."

Climate change will directly affect our environment in several ways that affect human health. We will experience more extreme temperatures, an increase in the sea level, stronger hurricanes and storm surges, increased precipitation and flooding, increased drought and water scarcity, more frequent and severe wildfires, diminished air quality and increased ozone concentrations, increased pollen and natural air pollutants and an increased range for disease vectors such as mosquitoes. These environmental impacts will affect human health in increasing illness, injury and mortality, aggravation of preexisting conditions, increases in infectious diseases, increases in water and food-borne diseases, declines in mental health, population displacement, food insecurity, instability and even armed conflict. Our patients will be greatly affected by the increase we are already seeing locally in a reemergence and prolonged transmission cycle of zoonotic and vector borne disease including Lyme, West Nile Virus, Dengue Fever, Malaria, Chikungunya, Tularemia and Rabies. Extreme temperatures such as heat waves

will disproportionately affect the elderly and young. Over 20% of the population will be 65 or older by the year 2030 and with this aging population comes an inability to regulate temperature, changes in metabolism and excretion and they often are on multiple medications. The 2006 California heat wave resulted in 16,000 additional ER visits, an estimate of between 150-450 deaths due to heat and 1000 extra hospitalizations. Our healthcare system is at a straining point now and this additional burden we are ill prepared for.

According to a 2003 Department of Energy document, the health care industry has a critical role to play in climate change mitigation. Energy usage in medical facilities is highly intensive. In fact, *hospitals expend about twice as much total energy per square foot as traditional office space.* The health care industry ranks second only to the food service industry in intensity of energy use and medical facilities are high greenhouse gas emitters and spend over $5.3 billion/year on energy. The health care sector has a large national impact, comprises 1/7th of the US economy and 100 million sq. ft. of medical building space is constructed annually.

Nurses can play a key role in combating climate change. It is incumbent upon us to encourage and indeed demand green practices and energy efficiency in all clinics and hospitals, school buildings and labs. We can provide brochures, relevant literature and informational posters in waiting areas and lobbies to educate patients and their families about how they can reduce climate change. We can make recommendations to patients that improve health and reduce greenhouse gas emissions (such as eat less meat, walk and bike more, use public transit). That will not be enough.

The Faculty and Administration of the Nell Hodgson Woodruff School of Nursing have developed this Climate Action Plan to lead the way in sustainability and reduction of greenhouse gas emissions. We fully endorse the University goals of:

- By 2020: a 20 percent reduction in total emissions; 35 percent per square foot (based on projected growth in square footage).
- By 2036: a 36 percent reduction in total emissions; 50 percent per square foot (based on projected growth in square footage).
- By 2050: a 50 percent reduction in total emissions; 85 percent per square foot (based on projected growth in square footage).

In addition, we hope to be a campus leader in environmental practices and policies to reduce our carbon footprint. We hope to be the campus leader in a very aggressive climate action plan that celebrates our commitment and challenges other units in the university to become competitive in our race to a healthier future.

Membership of Climate Action Plan Task Force

This report was developed by Maeve Howett, Associate Professor, and Steve Ellwood, Director of Instructional Communications, who were co-chairs and charged by Rob Hoover, past Associate Dean for Finance and Operations. Members of the Climate Action Plan task force who contributed to the report include Jenny Foster, Associate Professor, and Ashley Darcy Mahoney, Assistant Professor. The original task force members had representation from all facets (students, staff and faculty) of the NHWSN

community and were Ashley Darcy Mahoney, Steve Ellwood, Jenny Foster, Sarah Franklin, Maeve Howett, Abby Joslin, Kathy Kite, Rebecca Palka, Maryam Robinson, Annie Rowland and Loraine Van Slyke.

Methods

In November 2012, the NHWSN Climate Action Plan task force was first formed. Charged by Rob Hoover at the request of the Dean, the task force was presented with the University's Climate Action Plan and asked to consider how we will as a unit, contribute to meeting the university's climate action goals. The task force met first in 2013 to develop the recommendations. We met face-to face on two occasions to survey the membership about concerns and used the working session of the environmental health conference to further develop strategies. The draft was then prepared and sent around for comments and edits. A draft was sent to all units last fall and then the chairs met regularly with the Office of Sustainability to prepare the final document. This document will then go to our Dean for review and comment before it goes to the Provost and becomes part of the university's Climate Action Plan. We will be glad to submit regular progress to the Dean and Provost as required.

Recommendations

The task force recommends that an annual review of sustainability practices be put in place and that the task force be changed into a Sustainability Committee, charged with moving these recommendations into practice and with faculty, staff and student representation. Some of the recommendations can be put into place over the next year and others will need to be on a longer time frame (such as building remodeling for LEED certification). Each of the units represented on the school's Leadership Council should incorporate a baseline assessment and regular measures of sustainable practices in their reports to the Dean.

The following areas will be directly affected:

1. Office of Educational Innovation

    a. Curriculum commitment- elective offered in environmental health, content in all specialty areas about the effect of the environment on human health.
    b. Addition of sustainable content and education into all curriculum.
    c. Orientation to sustainable practices for all faculty, staff and students from the Associate Dean of Educational Innovation.
    d. Continuing Education in sustainability and reward sustainable ideas and behavior among faculty.
    e. Support annual participation by a faculty member in the Piedmont Project.
    f. Support annual Nursing Environmental Health Conference; encourage student participation.
    g. Creation of a virtual sustainable nursing unit demonstrating best practices and used to train students and faculty.

2. Office of Research

a. Research commitment to health effects of climate change.
b. Research commitment to sustainable healthcare design for the future for: space, transportation, medical waste, etc.
c. Support DNP capstones and BSN honors projects that address sustainable health care.

3. Office of Admissions and Student Services

a. Move to all paperless student files from admissions to graduation.
b. Use video visits and electronic interviewing to reduce applicants flying to campus.
c. Examine use of 'give-away' items at conferences so sustainability is considered.

4. Lillian Carter Center for Global Health and Social Responsibility

a. Prepare impact statements that will consider how international trips will impact the environment of the communities we serve.
b. Support student research into how sustainable practices can be woven into service learning trips or activities.

5. Office of the Dean

Standing Committee for Sustainability

a. Faculty-Staff program guidance- orientation to campus sustainable behaviors such as transportation, bike program, recycling, etc.
b. Yearly evaluation and reporting of efforts so that every SON employee is evaluated on their support of sustainable practices.
c. Semester/yearly celebrations for sustainability
d. Annual goals and incentives

Energy Conservation

a. Reduce air and car transportation usage by providing incentives for healthy commute options.
b. Increase transportation efficiency- students and faculty traveling together to clinical sites, to improve safety, address parking limitations and encourage ride sharing.
c. Reduce building energy usage- install timers on lights, rely on natural lighting from windows, and plan a renovation to be LEED certified.
d. Encourage energy saving behaviors (teleconference, work from home, ride share, public and alternative transportation) by setting goals, yearly evaluation and using incentives.
e. Examine interviewing practices to restrict visitors flying to campus and do more skype or online interviewing.
f. Install energy use monitors; publicize data for community awareness.

g. Work with IT to discuss costs and benefits of setting up power switches that completely cut power to office equipment.

Sustainable Food

a. Require permission to use a caterer besides Emory Catering.
b. Adopt policies and practices that encourage local sustainable food supplies such as catering vendors that provide recyclable and compostable materials.
c. Make our building a “no disposable plastic water bottle” zone.
d. Install hydration stations to fill reusable drinking bottles.
e. Encourage healthy eating in all School related events so that we model health behaviors among students, faculty and staff.
f. Change vending to a paper cup model and sustainable, healthy food choices.

Green Building

a. Adopt Green Office standards.
b. Move building towards LEEDS certification.
c. Continue to participate in building temperature standards and set-backs.
d. Offices should not have individual-use equipment such as printers, refrigerators, etc.
e. Plan a space utilization study to avoid the need for a larger building as we anticipate growth.

Green Space

a. Adopt a green space standard: no scheduled pesticide use, herbicide use, etc.
b. Expand gardens and outside spaces for fresh air and exercise. Extend usable outdoor space to Clifton Rd. entrance and the Houston Mill side of the building by installing paths, vegetable and fruit trees and plants, and pleasant sitting spaces.
c. Adopt an integrated pest management system that uses pesticides only when there is an infestation and does no monthly application of chemicals in or around the building.

Water Conservation

a. Adopt policies that promote conservation, such as recycling run-off, low flow toilets, addressing leaks quickly, etc.
b. Installation of low flow devices.
c. Centralized hydration stations.
d. Installation of equipment to capture grey water run-off for irrigation.

Recycling/Waste

a. Every office should have a recycling bin with much smaller trash receptacle.

b. Adopt and implement recycling guidelines for offices and public spaces.
c. Expand “zero waste” status to all events.
d. Hold periodic waste audits at desks, and in communal trash cans and publicize alternate ways to deal with most common types of trash.
e. Encourage faculty and staff to participate in ‘Green Office’ Certification process.
f. Move toward hosting documents online and encourage double sided printing when printing is unavoidable.
g. Adopt policy for zero waste events (Green Events Plan); have events own recycling efforts and include in evaluations.
h. Adopt purchasing policies that encourage recycled materials.
i. Pilot the use of more sustainable products for clinical settings.
j. Educate on the importance of “just-in-time” purchasing, and the harms of stockpiling.
k. Develop and test systems for more efficient purchasing and use of supplies, and sharing between units to decrease over-purchasing and stockpiling.
l. Conduct a waste audit of a test nursing unit, and develop recommendations for more complete waste management, such as integrated recycling of non-traditional products and identifying products that are heavily used but could be repurposed & recycled.
m. Increased education on what goes in red bag waste, landfill waste, and recycling.

Staff and Faculty Development

a. Hiring and promotion policies that evaluate leadership and commitment to climate action plan. Include sustainable efforts in job descriptions of key personnel and all leadership positions.
b. Develop flexible work models for nursing faculty and staff.
c. Develop incentives program.
d. Continuing annual sustainable education for faculty and staff.
e. Encourage faculty, staff, and students to take the Sustainability Pledge.

Next Steps

In summary, we are grateful for the university’s leadership and specifically, our Dean’s, in this important strategy to improve human health and minimize the negative impact of healthcare on our climate and environment. We want to reiterate the importance of training nurses in sustainable methods as they will provide the leadership for greening our hospitals, clinics, daycares and schools. We believe these recommendations will help our leadership at NHWSN achieve Emory University’s very exciting goals to accomplish a sustainable, healthy university and want to thank Dean Linda McCauley and the Office of Sustainability Initiatives for their support and assistance in preparing this document.