

Climate Change and Renal Health: The Development and Evaluation of a Toolkit for Healthcare Professionals

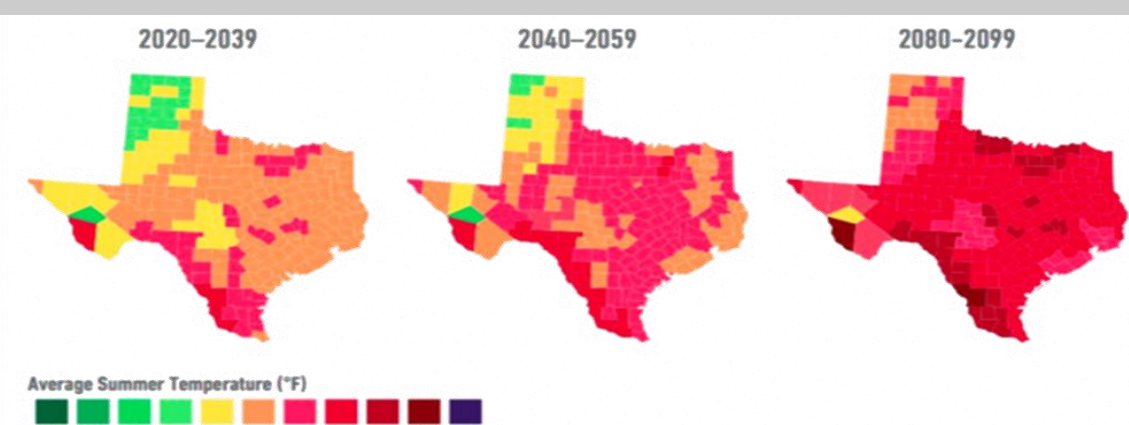
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INTRODUCTION

- Climate change is causing adverse health effects through its impacts of rising temperatures on renal health.
- Individuals like the elderly, young outdoor workers and those residing in communities with inequitable living conditions are some of the most vulnerable to extreme heat events.^{1,2}
- There is no well-accepted consistent approach to guide care and communications for addressing climate change with patients in the clinic setting.
- The lack in readily available educational resources and training in the primary care setting, makes it challenging for health care professionals (HCPs) to play an active role in addressing this issue with patients.

TEXAS: Average Summer Temperature

Source: American Climate Prospectus



1 and 3 adults are at risk for developing kidney disease



OBJECTIVES

Goal. This Doctorate of Nursing Practice (DNP) project will develop and implement a climate change and renal health toolkit and evaluate its effectiveness as a knowledge translation strategy for facilitating a practice change among HCPs; therefore, optimizing renal health.

AIM 1 To develop a climate change toolkit with an emphasis on high stress and kidney disease for HCPs in the clinical setting.

AIM 2. To pilot the educational toolkit and evaluate its effectiveness as a knowledge translation strategy for facilitating a practice change.

AIM 3. To identify and recommend strategies for promoting use of the toolkit across the health system.

★This project is an exploratory step in an initiative to promote renal health by expanding prevention efforts through the lens of climate change.

METHODS

The DNP project will take place in Temple, Texas. Texas has an average of 43 days per year of temperatures above 95 F.³ Heat studies project that between 2040 – 2059, this number will likely reach between 80 and 106 days per year.

Project Site. An outpatient, primary care clinic within the Olin E. Teague Veterans' Medical Center.

Target Audience. HCPs, defined for the purpose of this project as any health care team member supporting Veteran care.

AIM 1. To develop a toolkit for HCPs on climate change and health with an emphasis on heat stress and renal disease.

An evidence-based clinical toolkit that will have a user-centered design and provide multiple interactive links, practical guidelines, and resources to provide education with a specific focus on climate change and renal health.

A rigorous review of climate change and renal health care.

Expert Panel Members include Dr. Fredric Finkelstein, Yale School of Medicine and Jason Glaser, CEO of La Isla. Network.

AIM 2. To pilot the educational toolkit and evaluate its effectiveness as a knowledge translation strategy for facilitating a practice change among HCPs.

Targeted implementation date, July 19 – August 2, 2021.

The pre-and post test questions will assess change in knowledge, attitude, and skills. A paired samples t-test will be used to compare individual pre-to post responses.

AIM 3. To identify and recommend strategies for promoting use of the toolkit across the health system.

A detailed report of the outcomes of the project with an executive summary will be provided to key leadership members and project champion.

RESULTS

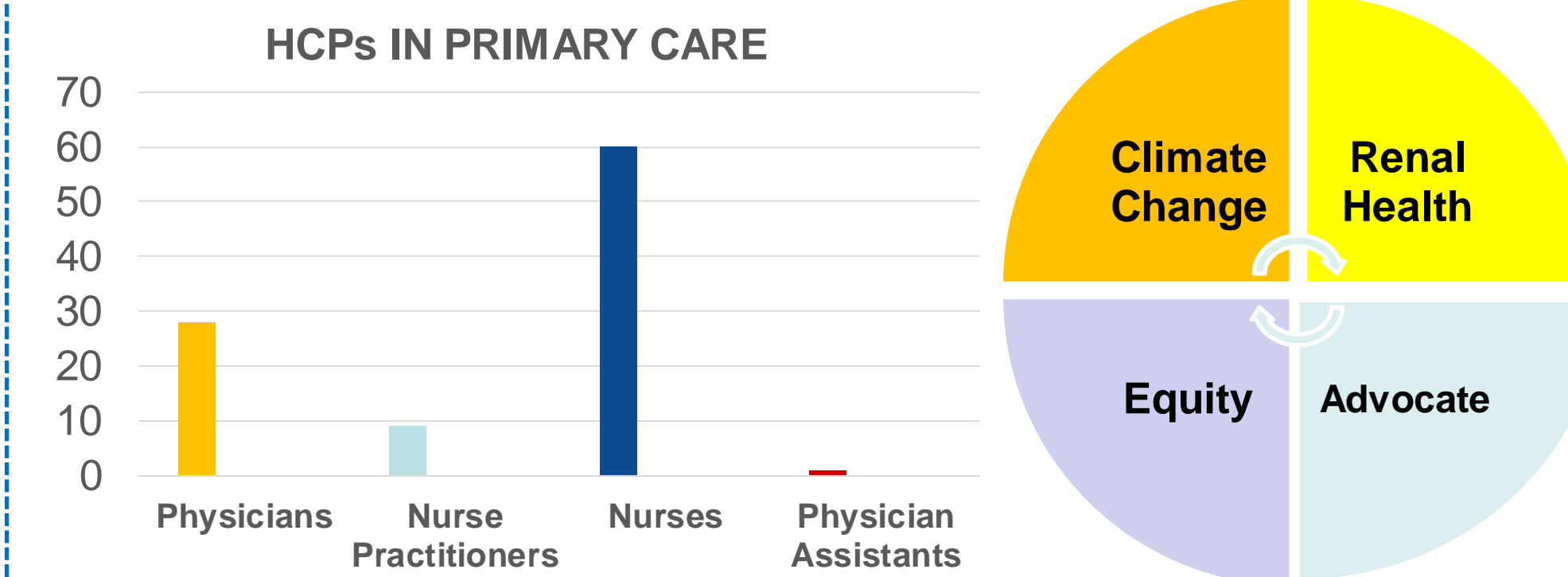
This DNP project is currently in the planning phase with the project defense in progress. Once the project is approved, a needs assessment will be initiated to determine the “gaps” in care in order to effectively develop the contents of the toolkit for organizational improvements in renal care.

NEEDS ASSESSMENT

1. How informed do you feel about topics of climate change and health?
2. Providers should have an active role in addressing climate change with their patients.
3. How comfortable are you counseling your patients about climate change and renal health?

CLINICAL IMPLICATIONS

The findings of the project have the potential to support the fact that health systems need to make significant investments of time and resources on climate change and health education for HCPs.



REFERENCES

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3. Hoerling, M., Kumar, A., Dole, R., Nielsen-Gammon, J.W., Eischeid, J., Perlwitz, J., Quan, X., Zhang, T., Pegion, P., Chen, M. (2013). Anatomy of an extreme event. *Journal of Climate*, 26, 2811-2832. doi: 10.1175/JCLI-D-12-00270.1