



# Climate and Health Call to Action: An Evaluation of a Program to Engage Health Professionals

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Physicians for Social Responsibility Florida Chapter  
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# Acknowledgements

**PSR FLORIDA**  
**PHYSICIANS FOR SOCIAL RESPONSIBILITY®**



Foundation for a  
Healthy St. Petersburg

**ACEEE**  
American Council for an Energy-Efficient Economy



# Who is PSR FL?

- Non-profit organization
- Vision = a healthy, just, and peaceful world for present and future generations
- Strategy for achieving vision = educate and activate the medical and broader health community, and the public, through research, analysis, collaboration, and targeted communications and to advocate for government and societal change at the local, state and national level.



Physicians are in a unique position to advocate for their patient in times of hardship, distress, uncertainty, and vulnerability.

*“advocate for the social, economic, educational, and political changes that ameliorate suffering and contribute to human well-being.”*

- American Medical Association Professional Responsibilities



Lynn Ringenberg, M.D.  
PSR Florida



# Agenda

- **Climate Change and Health**
- **PSR-Florida Climate and Health Call to Action (CHCA) a**
- **Evaluation results**
- **Lessons Learned**

# Impact of Climate Change on Human Health



Injuries, fatalities  
Heat stress, cardiovascular failure

Asthma, cardiovascular disease



Malaria, dengue, encephalitis, hantavirus, Rift Valley fever

Injuries, fatalities

Severe Weather

Air Pollution

Vector-borne Diseases

Heat

**RISING TEMPERATURES**

**WEATHER EXTREMES**

**RISING SEA LEVELS**

Water and Food Supply

Allergies

Respiratory allergies, poison ivy

Malnutrition, diarrhea, harmful algal blooms



Hunger

Mental Health

Water-borne Diseases

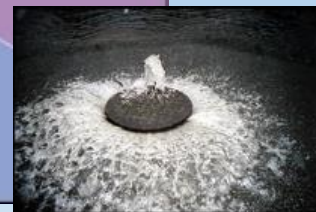
Cholera, cryptosporidiosis, campylobacter, leptospirosis



Anxiety, despair, depression, post-traumatic stress

Environmental Refugees

Forced migration, civil conflict



Adapted from J. Patz

# Climate and Health Call to Action (CHCA)

- Build capacity among health professionals in educating their patients and communities on climate change, while implementing sustainable office practices
- Propose an implementation model where organizations partner with clinics and provide peer-reviewed, science-based resources to prepare health providers to adopt changes in their practice and develop advocacy skills

# Climate and Health Call to Action Implementation

## 1. My Green Doctor materials

- 7 online workbooks
- 5 action steps including 1 educational step (total 140)
- Green Team Meetings Guides
- Incentive: Certificate of Completion



## 2. Physicians for Social Responsibility climate and health resources, e.g., ACEEE resources, CDC posters, Climate Change Makes Me Sick, etc.

- Patient education materials in Spanish and Vietnamese
- Incentives: LED lightbulbs and power strips for patients

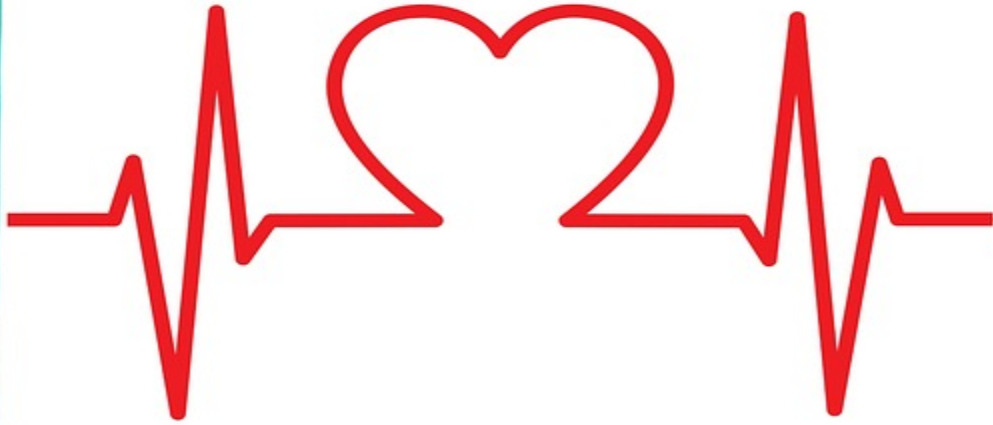


## 3. PSR Advocacy Mentors

- Green team consultations with PSR team member to improve clinic sustainability practices



## Study Purpose

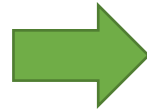


This pilot study will examine health clinics' readiness to engage in climate change issues and the outcomes of CHCA implementation.





**Community  
health  
professionals**



**↑ Climate and  
Health Advocacy  
and Education**

Purpose: Evaluate how agencies like PSR can best equip health professionals to take action on climate and health issues

Clinic readiness for change and CHCA  
Outcomes

# Methods

A mixed-methods program evaluation in St. Petersburg, Florida in 2018 (still in progress)

- Health clinics (N=3, target =10) completed pre/post surveys on climate change knowledge and resource needs AND reported behavior changes after completing CHCA educational sessions [QUANT]
- Assess clinics' experience using the Consolidated Framework for Implementation Research Theory [QUAL]

# Method Timeline

Grant funded January 2018

Initial clinic recruitment and cold calls in Feb 2018 (pediatricians, primary care, allergists, etc.) in target zip code areas

Initial “pitch” lunch meetings (45-60 minutes) with follow up within 1 week

Secondary recruitment (dentists, chiropractors, acupuncture, etc.) to expanded St. Pete area (April) and mailing packages (N=40) in August 2018

In-person recruitment & outreach at clinic offices in October 2018

Grant extension to continue recruitment and change focus to advocacy; October 2018 held first advocacy workshop (N=23)

# Results – in progress

- Pre/post surveys on climate change knowledge and resource needs
- Green Team Meeting Notes reported behavior changes after completing CHCA educational sessions
- Assess clinics' experience using the Consolidated Framework for Implementation Research Theory (still collecting)

# Clinic characteristics

- Three clinics (N=3, target N=10):
  - (1) Planned Parenthood
  - (2) Department of Health (already existing Green Team in Environmental Health Services)
  - (3) Private clinic
- Members attending Green Team meetings: 2-5
- Green Team meeting duration: 15 minutes (1/7), 20 minutes (4/7\*), and 1 hour (2/7)

# Green Team Perceptions before CHCA (N=9)

	STRONGLY DISAGREE	DISAGREE SLIGHTLY	NEUTRAL	AGREE SLIGHTLY	STRONGLY AGREE
Climate change is happening.	11.11% 1	0.00% 0	0.00% 0	0.00% 0	88.89% 8
Climate change is human caused.	11.11% 1	0.00% 0	11.11% 1	33.33% 3	44.44% 4
Climate change is affecting my patients.	0.00% 0	0.00% 0	33.33% 3	22.22% 2	44.44% 4
Climate change impacts health.	0.00% 0	0.00% 0	11.11% 1	11.11% 1	77.78% 7

# Green Team staffs' comfort level in completing CHCA tasks/goals

- Very comfortable making sustainable changes in the clinic (9/9)
- Very comfortable educating others (friend, family, colleagues) (7/9)
- Very comfortable having conversations with patients (5/9)
- Very comfortable or slightly comfortable submitting an article to a professional group (3/9);
- Slightly uncomfortable/neutral writing a letter to the editor (4/9); 3/9 not applicable



# Behavioral changes in clinics after CHCA (N=7)

## Energy

- Turn Machines off
- Use Electronic signatures
- Inquiring about thermostat settings

## Water

- Use tap water instead of bottled water

## Patient Advocacy

- Have a healthy eating poster in the waiting room

## Transport

- Create a carpooling system

“When there is an all staff event in a different city, we try to carpool. We’ve successfully done so for almost all of these events.”

“We are now using tap water for our cooking needs in the break room instead of bottled water. The lack of plastic water bottles in the trash has been noticed!”

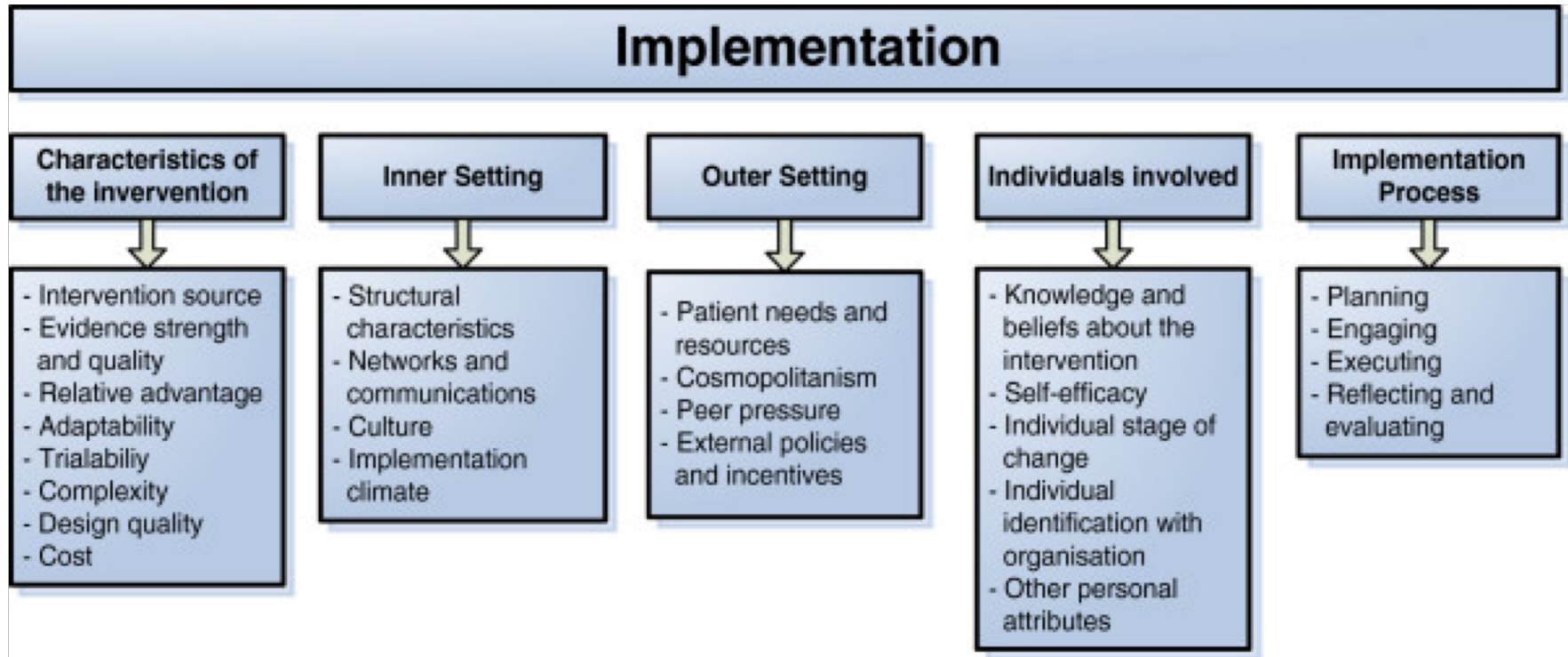
“Designated machines turned off at the end of each business day. Front and back staff are proactive about the machines now.”

# Behavioral changes in clinics after CHCA (N=7)

- 1/3 clinics conducted free energy audit (detailed flyer in resources)
- Improved recycling (paper, foam, etc.)
- Displayed MGD certificate (2/3 clinics)
- Patient education (2/3 clinics)
  - “It’s been difficult starting conversations about global warming with patients. Some are easier to talk to than others. We are working on different verbiage.”
- *Energy & Cost savings \$\$\$ ?*
- Advocacy – none reported



# Consolidated Framework for Implementation Research



# Discussion

- Most health professionals know about environmental and climate issues but are not comfortable advocating or educating others
  - AJPB Commentaries
  - Need for training, resources, and advocacy tools
  - What are the barriers for implementation and advocacy [CFIR]?
- Types of clinics (1 governmental, 1 non-profit, 1 private practice) vary by context and present unique challenges
  - Limitations of building structure and company policies, e.g., thermostat (inner setting)
  - Political atmosphere (outer setting)

## Lessons Learned

- Time constraints working with clinics (data collection burden) and difficulty in recruitment
- Need to find appropriate and valuable incentives for team (leadership credits, MOC, CME/CEU, ?)
- PSR FL is not traditionally a programming-based organization, focused on advocacy



# Implications

Using CFIR, research may find an implementation model for agencies to support health professionals to advocate for climate and health issues.



# Questions?

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