

“Greening Physical Therapy”

Application of Sustainability Concepts into a DPT Curriculum

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Introduction

- Sustainability is generally defined as meeting the needs of the present generation without compromising the needs of future generations.¹ In particular to healthcare, climate change has been designated as the “biggest global health threat of the 21st century.”²
- Recognizing our progressive global health role and commitment to society, the physical therapy profession must learn skills to effectively balance economic, social and environmental priorities to meet the demands of the world’s population.
- The American Physical Therapy Association *Vision Statement* (2013) specifically identifies innovation as a guiding principle to foster “creative and proactive solutions to transform health services delivery” and forward thinking to cultivate new educational models to anticipate the needs of society.³
- While traditional physical therapy curricula incorporate health wellness and prevention strategies and emphasize service learning, few institutions actively integrate concepts of sustainability in their educational content.
- Voted the “Best Higher Education Institution – Green Schools” in 2013 by the National Center for Green Schools, Emory University has identified sustainability as one of its top priorities.¹ Evolving out of this initiative, the *Piedmont Project* was developed to train faculty in curriculum development and has become a national model in providing a community for intellectual dialogue around sustainability issues in both local and global arenas.

Purpose

The goal of this descriptive study is to illustrate strategies that emerged out of the Piedmont Project to broaden understanding of the concepts of sustainability in the physical therapy profession. Methods of integrating sustainability content into the Emory University Doctor of Physical Therapy (DPT) curriculum are reviewed and current initiatives implementing sustainability within the Emory Healthcare system are described.

Description

Aligning with the broader University vision, the Emory DPT program has developed several methods to implement sustainability initiatives. Goals of these efforts are to:

1. Provide introduction to theoretical constructs of sustainability with emphasis on individual, professional and civic roles
2. Support Emory University as a national leader in sustainability
3. Cultivate mindful practice and “citizen of place” perspectives in the healthcare setting
4. Foster innovation in the physical therapy profession towards sustainable practices

Education Content

All educational content is structured to address sustainability on four levels: Individual, Emory DPT program, Community and Professional

Current Efforts in Development:

Independent Self-Study Exercise

All students complete an assignment during their first year of coursework that serves to introduce them to Emory’s sustainability vision, the role of sustainability in healthcare, self-evaluation of their individual practices and development of creative ideas for sustainability efforts within DPT curriculum or community.

Additional opportunities for further individual study:

1.Consultative Projects- program evaluation and education on clinical rotations related to sustainability initiatives (EXAMPLE: introduction of clinical staff to healthcare focused *Go Green Campaign* to encourage “three R’s – reduce, reuse and recycle”).

2.Service Learning- group projects geared towards sustainable projects (EXAMPLE: donations of used equipment to pro-bono clinic).

3.Structured Directed Study Elective- Sustainability Concepts in Physical Therapy Education and Clinical Care. Student has creative freedom to identify a specific issue and patient population and is required to use interdisciplinary approaches, have a PT and non-PT co-advisors, and use engaged learning on campus or in Atlanta.

Healthcare Initiatives

Healthy Food in Health Care Pledge outlines commitment to continue to enhance efforts of providing locally sourced, nutritious and sustainably produced food.

Composting all pre-consumer waste from Emory University Hospital (EUH) and using compostable take out containers in all EUH cafeterias.

Community supported agriculture (CSA) pick up spots on Emory campus for employees.

rBHG-free milk served in cafeterias.

Fair trade coffee options offered across healthcare campus.

Emory Office of Sustainability Initiatives staff position co-funded by Emory Healthcare and Emory University to address healthcare focused needs.

Waste reduction programs

1. EUH “Greening the OR” initiative (spring, 2014) - reusable sharps containers, reusable linens, reusable OR wrap.
2. Emory University Hospital Midtown (EUHM) commitment to reduce energy and water consumption by 20% by 2020 as part of the Atlanta Better Buildings Challenge (only one of two healthcare facilities in Atlanta to join the challenge).
3. EUH and EUHM signed the Healthier Hospital Initiative’s Less Waste Challenge and Leaner Energy Challenge: Goal of diverting landfill waste by 65% by 2015 through recycling and composting programs.

Implications

- Sustainability provides a framework to understand eco-centric models of care, and the realization that the health of an individual and society cannot be effectively addressed out of context of the environment.⁴
- The purpose of these efforts is to create a rich breeding ground for innovative ideas to implement sustainability strategies both locally and globally, and provide opportunities for interdisciplinary collaboration to implement these strategies.
- Ultimately, this work may empower students to develop their own course of study involving health and sustainability that contributes to Emory’s commitment to positive transformation in the world.

Future Considerations

- Process evaluation (in development) to assess impact of curriculum changes
- Development of website to house student lead initiatives, highlight ongoing projects and scholarship.
- “Leave course better than you found it” philosophy - Foster empowerment of students to drive changes within curriculum, improving electives, enriching course content and broadening resources for next class

Conclusions

- Using methods of self-study exercises, consultative projects, service learning and structured directed study electives, concepts of sustainability are being integrated into physical therapy curricula in such a manner to build student’s critical thinking skills and foster understanding of the complex interaction of social, economic and environmental impacts on health and wellness in healthcare. *Underscoring these efforts is a collaborative approach between student and faculty to foster creative solutions to challenging and complex problems, with the expectation that the majority of innovations are student initiated, student driven and student sustained.*
- By integrating sustainability educational content with healthcare initiatives, students are becoming drivers of change to transform the traditional role of the physical therapist to facilitate a multidimensional approach to public health and eco-centric models of care.

Student Examples

1. Individually

- Emory Pledge –Personal pledge to address energy, sustainable food, water conservation, green space, commuting, recycling and other sustainability issues when at Emory and at home

2. Within DPT Curriculum/Program Activities

- Students evaluating options for fully digital class handouts reducing paper use throughout program
- Development of student sustainability committee

3. Professionally

- Identify sustainable practices of reuse and recycling equipment within PT clinic environments

4. Civic/Community

- Support Local Farms: Encouraging Emory DPT program to use local farmers who promote sustainability and natural products when hosting events



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