

# RETHINKING LABORATORY OF CARE:

## ATOMIC HABITS TOWARD A SUSTAINABLE HEALTHCARE SYSTEM

-BUNTHICHA LARLARB

MSC GLOBAL & PLANETARY HEALTH



Image source: <https://www.newsecuritybeat.org/2020/11/mountain-molehills-medical-waste-china-u-s/>

### Introduction

Climate change, pollution, biodiversity loss, and resource scarcity are not abstract threats, but they are real. These are not only affecting the environment but also our health, safety, and survival (Landrigan et al., 2018). Increasingly, governments, media, and citizens are aware that environmental conditions related to human well-being: **(un)healthy environments produce (un)healthy people**. Health is not simply biological but planetary, shaped by social and ecological systems (Whitmee et al., 2015). This recognition has made sustainability an urgent concern in healthcare. **If we are to protect human health, we must also protect the environmental systems that sustain it.**

With a background in medical technology and experience in Thai hospitals and laboratories, I saw **how medical waste management is often overlooked, which plays a central role in healthcare sustainability**. My dissertation examined this issue, comparing a UK leader, Newcastle upon Tyne Hospitals NHS Foundation Trust, with Thai private hospitals.

My original aim was to identify challenges in sustainable waste management. Yet during fieldwork at Newcastle's Freeman Hospital, staff did not describe waste management as a "challenge." Instead, I observed **how environmental responsibility was integrated into daily routines and patient safety protocols**. This shift in focus allowed me to explore how sustainability is lived and made meaningful by frontline technicians, managers, and waste handlers. Through observation, semi-structured interviews, and autoethnography, I came to view **sustainability not only as policy but as a set of social relations, moral commitments, and bodily routines**.



Image source: <https://sustainability.crownoil.co.uk/news/carbon-neutral-vs-net-zero/>

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### Making Green Normal: The Laboratory as a Social System

In Newcastle, sustainability was normalized, embedded in routines and identities rather than treated as an extra duty. One participant explained:

**"That's now all embedded in our patient safety processes... It's part of everybody's protocol."**

This normalization was not accidental but cultivated through visible infrastructure, recognition, and collective ownership. Drawing on James Clear's Atomic Habits (Clear, 2018), I framed my findings through four laws of habit formation.

### Making It Obvious - Visibility and Environmental Signages

Sustainability was visible everywhere: SHINE (Sustainable Healthcare in the Newcastle) responsibilities listed on job boards, posters promoting Green Champions, award certificates displayed at entrances, and reusable transport boxes at collection points. **The physical environment itself communicated that sustainability was part of the job, not an optional add-on.**

### Making It Attractive - Embedding Moral and Social Value

Staff engaged because **sustainability carried social pride and moral resonance**. Green Champions influenced peers, and teams celebrated recognition through awards. Creative solutions such as recycling coffee pods were framed as both environmentally friendly and resource-smart. Actions were valued not only for their carbon savings but for supporting colleagues, saving money, and feeling "right."

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## Making It Easy - Redesigning Systems Around Behavior

**Workflows were adapted to align green practice with convenience.** For example, sharing one agar plate between three patients saved materials, reduced waste volume, and eased physical workloads. Staff embraced these habits because they improved efficiency and comfort as well as sustainability.

## Making It Satisfy - Recognition and Feedback

Feedback came through SOP updates, meetings, and visible successes. **Rather than punishing errors, supervisors reinforced correct behaviors through dialogue.** Sustainability awards reinforced collective pride. As one participant noted:

**"Regular meetings are important... staff can raise concerns or propose changes."**

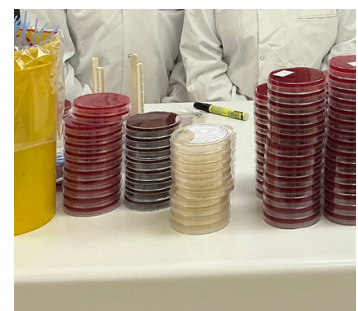


Photo credit: Taken by the researcher at NHS Newcastle Upon Tyne: Integrated Laboratory, May 2025.

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## Cross-Cultural Contrast: Thailand and the Limits of Policy

Reflecting on my Thai healthcare experience, I recognized not a lack of environmental awareness but **a gap in institutional integration**. Staff often engaged in sustainable behaviors such as recycling bottles, reusing paper but these were **framed as personal virtues rather than professional duties**. Sustainability was present in individual ethics, but less so in organizational identity.

This disconnect appeared in everyday practices. **Waste systems sometimes lacked signage or consistency, and responsibilities for disposal varied**. From staff perspectives, however, the system felt adequate; without an external reference point like my UK fieldwork, there was little reason to question it.

Policies promoting sustainability existed but remained abstract, not translated into daily routines. As an insider-outsider—a Thai technologist and researcher, I saw how policy alone cannot shift practice. **Sustainability requires cultural resonance, relational commitment, and infrastructure that supports behavior change**. Systems transform when values become habits, and habits are reinforced by shared meaning, stories, and everyday routines.

Thus, **sustainability is not purely technical. It is social and symbolic, shaped as much by belief, identity, and collective culture as by procedures or technologies**.

## Conclusion: From Policy to Practice, from Action to Meaning

My dissertation was not simply a comparison between the UK and Thailand but an exploration of how sustainability becomes lived practice. In Newcastle, I observed how environmental responsibility was embedded into everyday clinical work, but normalized through habits, feedback, and collective pride.

This has changed how I see my role as a healthcare worker. Sustainability is not just about saving the planet or patients; **it's about rethinking how we relate to materials, bodies, time, and each other. Sustainability is not an add-on; it's care in another form**.

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