



**HCAC 2023**  
7<sup>TH</sup> QUALITY HEALTH CARE  
CONFERENCE AND EXHIBITION  
Nov 13<sup>th</sup>-15<sup>th</sup> 2023

Globalization Toward Quality & Patient Safety  
A Future Perspective

الجودة من منظور عالمي - تطلعات مستقبلية

# Ten Innovations in Healthcare Quality Improvement and Patient Safety

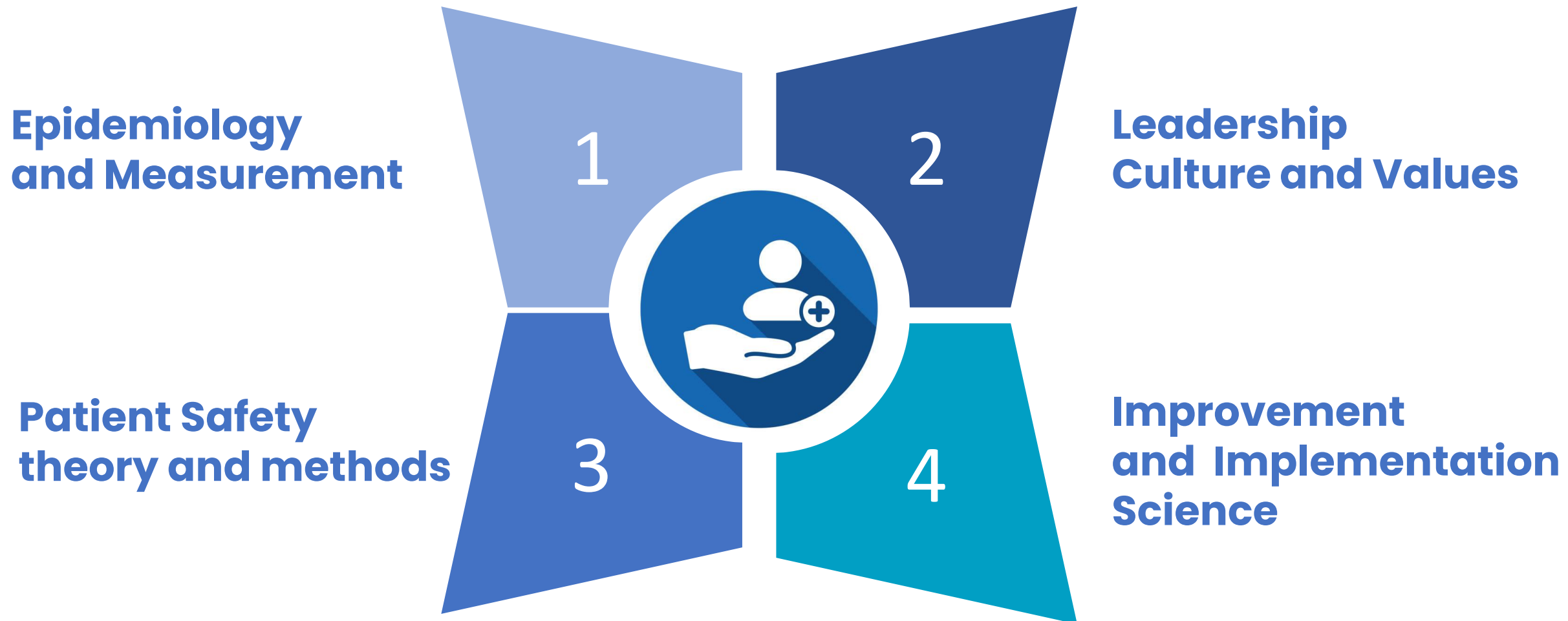
**Peter Lachman**



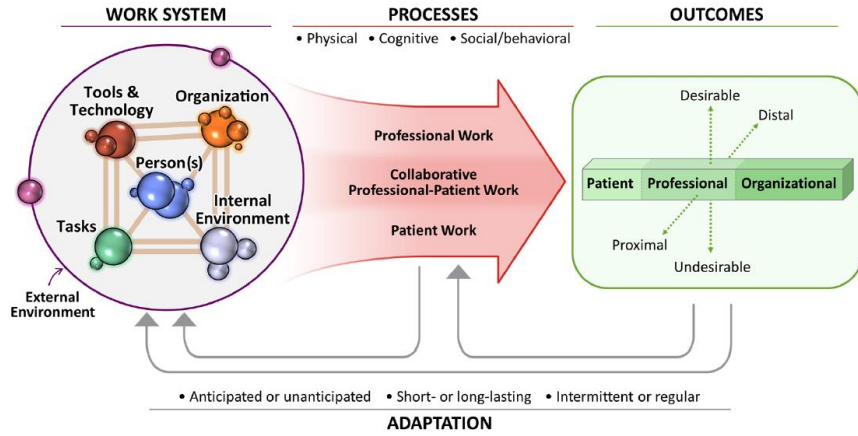


# **Innovation 1 Integrating Improvement, Safety and Implementation Science**

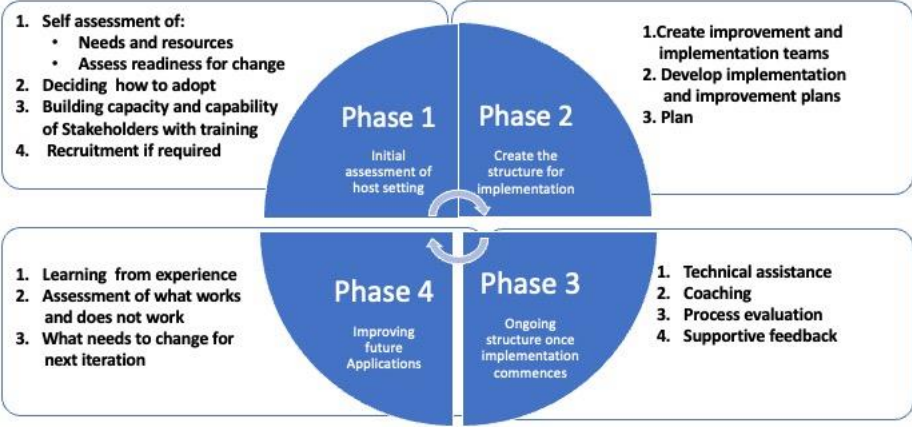
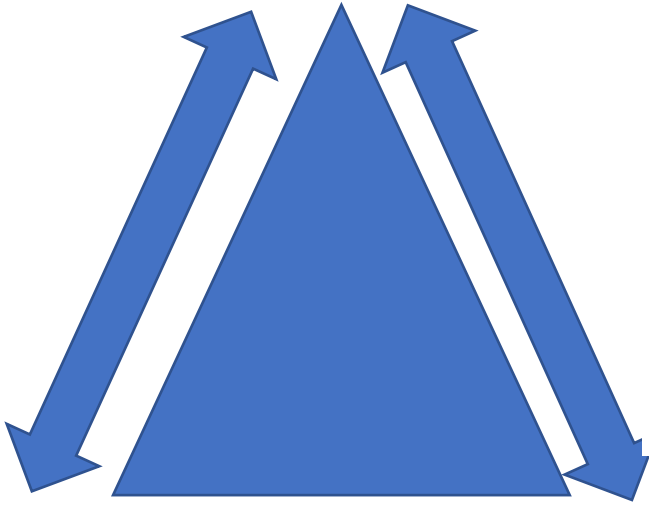
# Make implementation a strategic focus



# Systems + Process = Outcomes

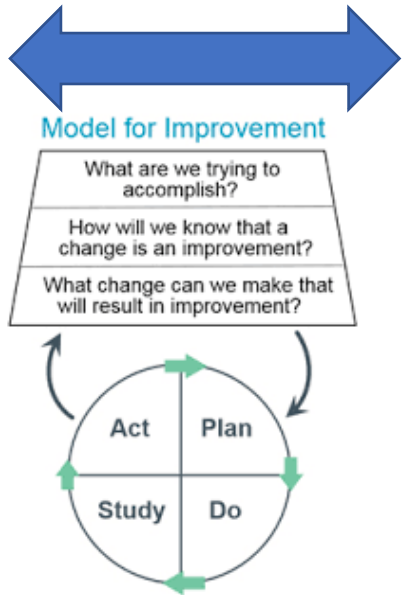


# Design



Based on Meyers, D.C., Durlak, J.A. & Wandersman, A. The Quality Implementation Framework: A Synthesis of Critical Steps in the Implementation Process. *Am J Community Psychol* 50, 462-480 (2012). <https://doi.org/10.1007/s11264-012-9422-4>

# Improvement



# Implementation

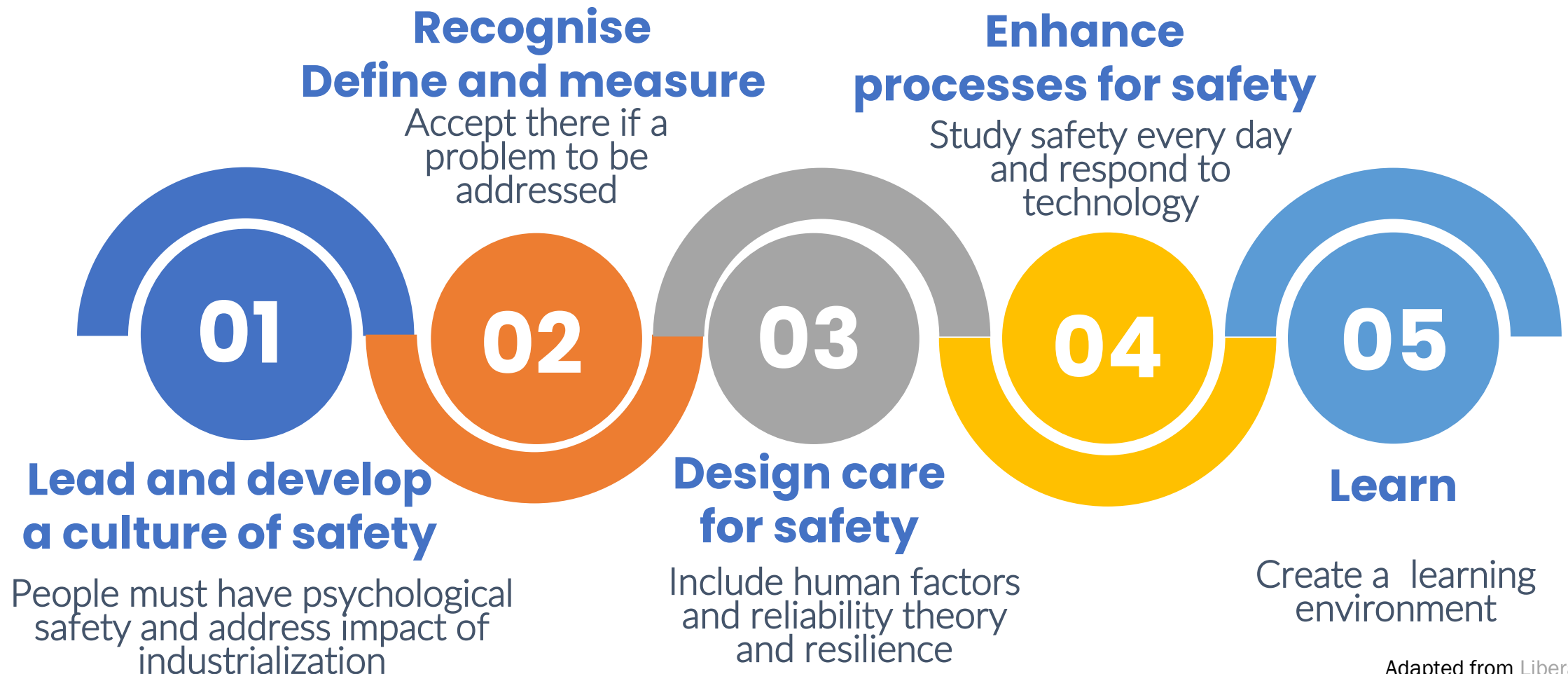


A collection of colorful geometric shapes including a blue circle, a green triangle, a blue vertical bar, two yellow dashes, an orange semi-circle, a blue circle, a green square, a large orange circle, and several yellow dashes scattered across the left side of the page.

## **Innovation 2**

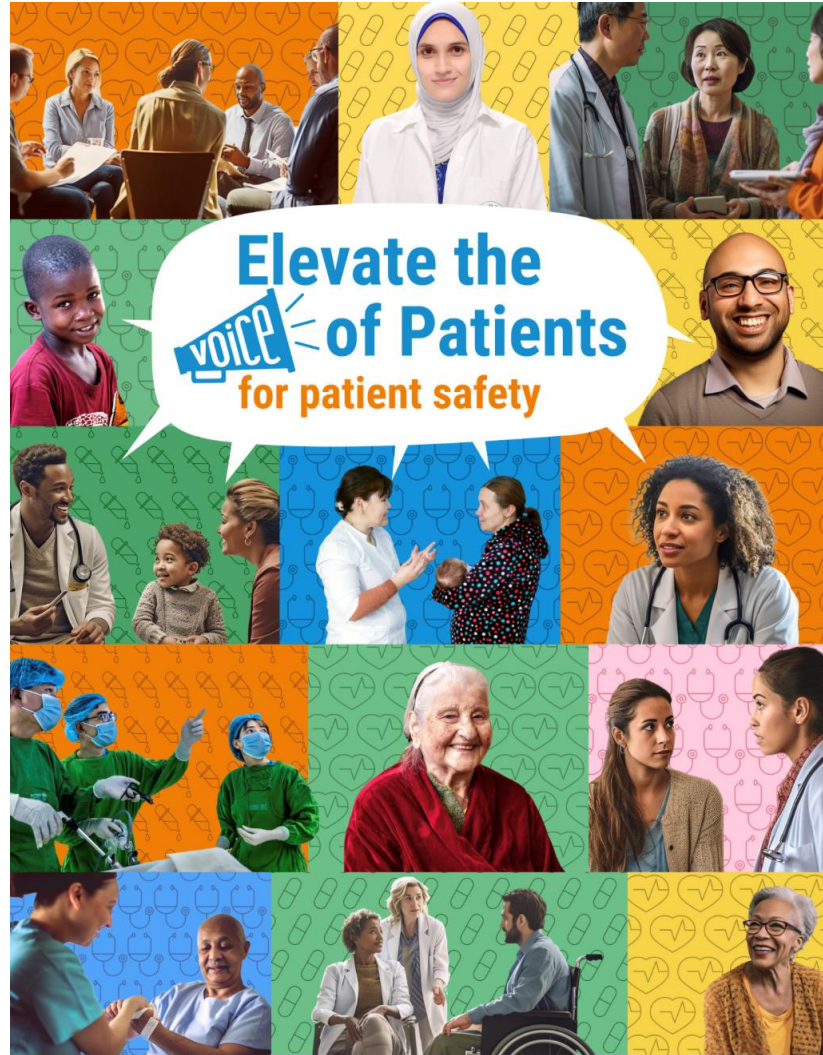
# **Translating theory to action**

# The safer care and quality journey



A collection of colorful geometric shapes including a blue circle, a green triangle, a blue vertical bar, two yellow dashes, an orange semi-circle, a blue circle, a green square, and a large orange circle with four yellow dashes around it.

## **Innovation 3 Partnering with patients equally**



**Elevate the  
voice of Patients  
for patient safety**

**Elevate the voice of Patients for patient safety**

**Unsafe care is one of the leading causes of death and disability worldwide, with millions of patients harmed every year.**

**Patient and family engagement is a key strategy to developing safer health systems.**

**Patients and families should be involved at every level of health care, from fully informed consent and shared decision-making at the point of care, to policy-making and planning.**

**No one should be harmed in health care. We must elevate the voice of patients, and we must listen and learn.**

World Health Organization **75** HEALTH FOR ALL

World Patient Safety Day 17 September 2023



# Placing person centred care into Safety

- **Broaden the definition of safety**
  - E.g. feeling cared for, listened to, supported, and free from stigma, bias, and concern during their treatment.
- **Elevating family caregiver status as equal partners**
- **Engaging with stakeholders in all decision making**

*International Journal for Quality in Health Care*, 2023, **35(3)**, 1–2

DOI: <https://doi.org/10.1093/intqhc/mzad061>

Advance Access Publication Date: 9 August 2023

**Editorial**



---

**Patient-centered care: the North Star to guide us during uncertainty into a better day**

# Addressing emotional safety

“Traditional patient safety meanings and measures frequently miss the mark in serving patients and families by ignoring or denying harms that patients and community members continually call us to acknowledge and address.”

EDITORIAL

## Emotional safety *is* patient safety

Audrey Lyndon <sup>1</sup>, Dána-Ain Davis,<sup>2</sup> Anjana E Sharma <sup>3</sup>,  
Karen A Scott <sup>4</sup>

Lyndon A, Davis D-A, Sharma AE, *et al.*  
*BMJ Qual Saf* 2023;**32**:369–372.

The left side of the slide features a collection of colorful geometric shapes: a blue circle at the top left, a green triangle at the top center, a blue vertical bar on the far left, two yellow vertical dashes below it, a large orange semi-circle in the middle left, a blue circle in the middle right, a green square outline at the bottom left, and a large orange circle at the bottom center with several yellow dashed lines radiating from its top edge.

**Innovation 4  
Acknowledging  
inequity in patient  
safety**

# The challenge of inequity

- Marginalised patient groups have more patient safety incidents which exacerbate health inequalities
- Implicit biases embedded in the healthcare system, drive these differences in risk of harm
- Health inequalities identifies an additional line of action in patient safety

COMMENTARY

## Achieving Zero Inequity: Lessons Learned from Patient Safety

Tejal Gandhi, MD, MPH, CPPS  
May 27, 2021

Numerous lessons and strategies that have evolved over the last 20 years in the realm of patient safety can now be applied to inform strategic efforts to improve equity in health care.

ANALYSIS

OPEN ACCESS | Check for updates | [Wade et al](#)

## Action on patient safety can reduce health inequalities

Providers and health systems should use ethnic differences in risk of harm from healthcare to reimagine their role in reducing health inequalities, write **Cian Wade and colleagues**

Cian Wade,<sup>1,2</sup> Akanksha Mimi Malhotra,<sup>3</sup> Priscilla McGuire,<sup>1</sup> Charles Vincent,<sup>4</sup> Aidan Fowler<sup>1</sup>

Health inequalities are widening in many high income countries and have been thrown into focus by the covid-19 pandemic.<sup>1-4</sup> Not only have black, Hispanic, Asian, and other marginalised ethnic

- General harms: dehydration, falls, hospital acquired infection, delayed detection and response to clinical deterioration

<sup>1</sup> NHS England and NHS Improvement, London, UK  
<sup>2</sup> Harvard T H Chan School of Public Health, Boston, MA, USA  
<sup>3</sup> Health Foundation, London, UK  
<sup>4</sup> Department of Experimental Psychology, University of Oxford, UK  
Correspondence to: C Wade  
cianwade@hsph.harvard.edu

# Coproducing to decrease inequity in safety

## Create a culture of Equity

## Measure, segment data and stratify

Address biases  
Identify system structures that facilitate inequitable care

Ensure data tells the true picture

01

02

03

04

05

## Vision and strategy

Commit to equitable care

## Equip the workforce to address inequity

## Partnerships with people

Link with people and partner across sectors to co-create equity

[Based on Chin](#)



**Innovation 5**  
**Addressing**  
**burnout**

# Impact of burnout on patient safety 2023

Physicians with burnout are twice as likely to be involved in patient safety incidents and show low professionalism, and over twice as likely to receive low satisfaction ratings from patients.

170 observational studies with 239246 physicians



OPEN ACCESS



## Associations of physician burnout with career engagement and quality of patient care: systematic review and meta-analysis

Alexander Hodkinson,<sup>1,9</sup> Anli Zhou,<sup>1</sup> Judith Johnson,<sup>2,3</sup> Keith Geraghty,<sup>1</sup> Ruth Riley,<sup>4</sup> Andrew Zhou,<sup>5</sup> Efharis Panagopoulou,<sup>6</sup> Carolyn A Chew-Graham,<sup>7</sup> David Peters,<sup>8</sup> Aneez Esmail,<sup>1</sup> Maria Panagioti<sup>1,9</sup>

For numbered affiliations see end of the article

Correspondence to: A Hodkinson  
alexander.hodkinson@manchester.ac.uk  
(or @drAlexHodkinson on Twitter;  
ORCID 0000-0003-2063-0977)

Additional material is published online only. To view please visit

### ABSTRACT

#### OBJECTIVE

To examine the association of physician burnout with the career engagement and the quality of patient care globally.

#### DESIGN

Systematic review and meta-analysis.

heterogeneity, and meta-regressions assessed for potential moderators with significance set using a conservative level of  $P < 0.10$ .

#### RESULTS

4732 articles were identified, of which 170 observational studies of 239 246 physicians were included in the meta-analysis. Overall burnout in

# Making wellness a strategic priority



- 1 Leadership for wellness  
Wellness Officer**
- 2 Policy and Practice**
- 3 Focus on workplace  
conditions**
- 4 Workplace efficiency**
- 5 Culture of wellness**
- 6 Commitment and action**

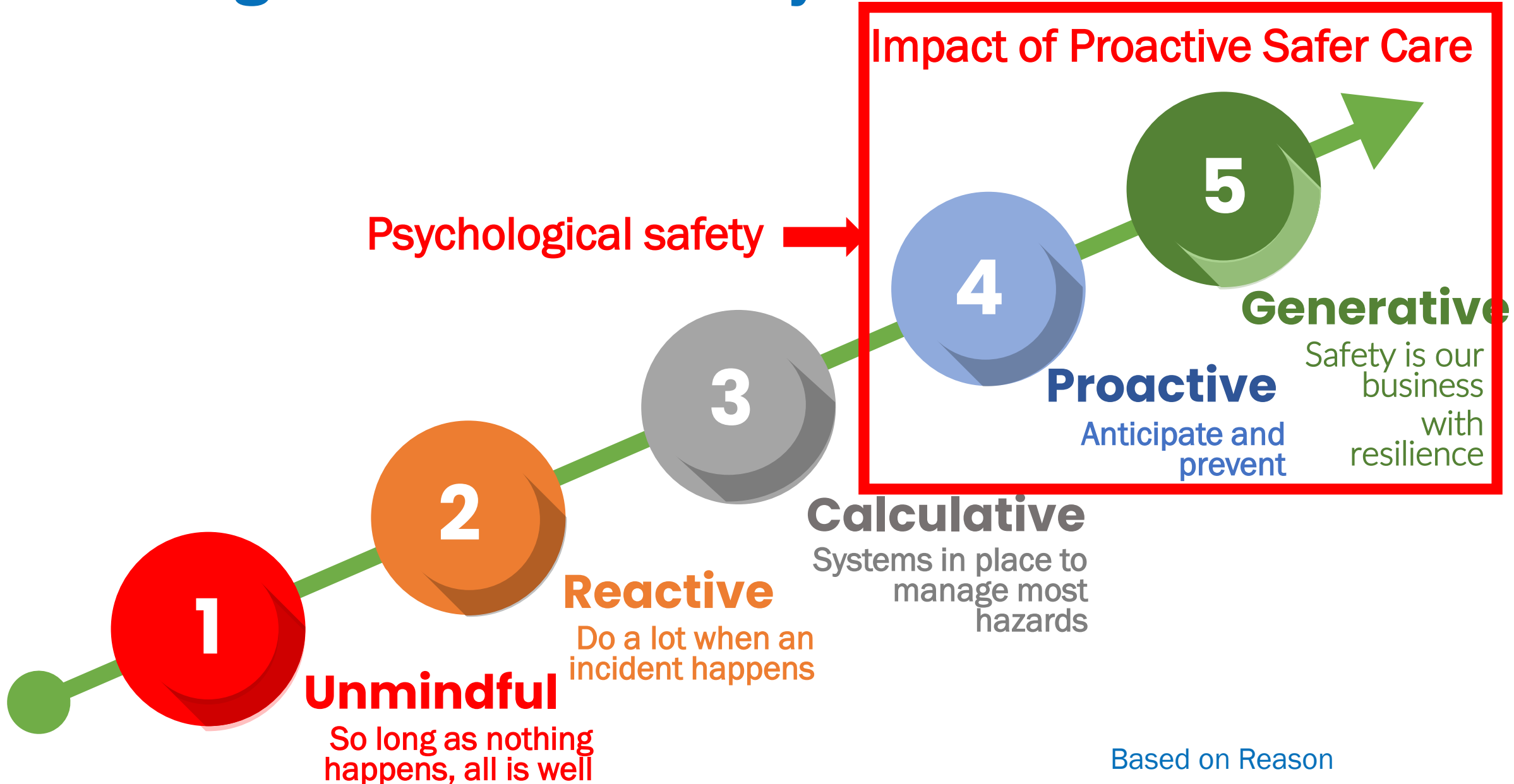




# **Innovation 6**

## **Improving culture**

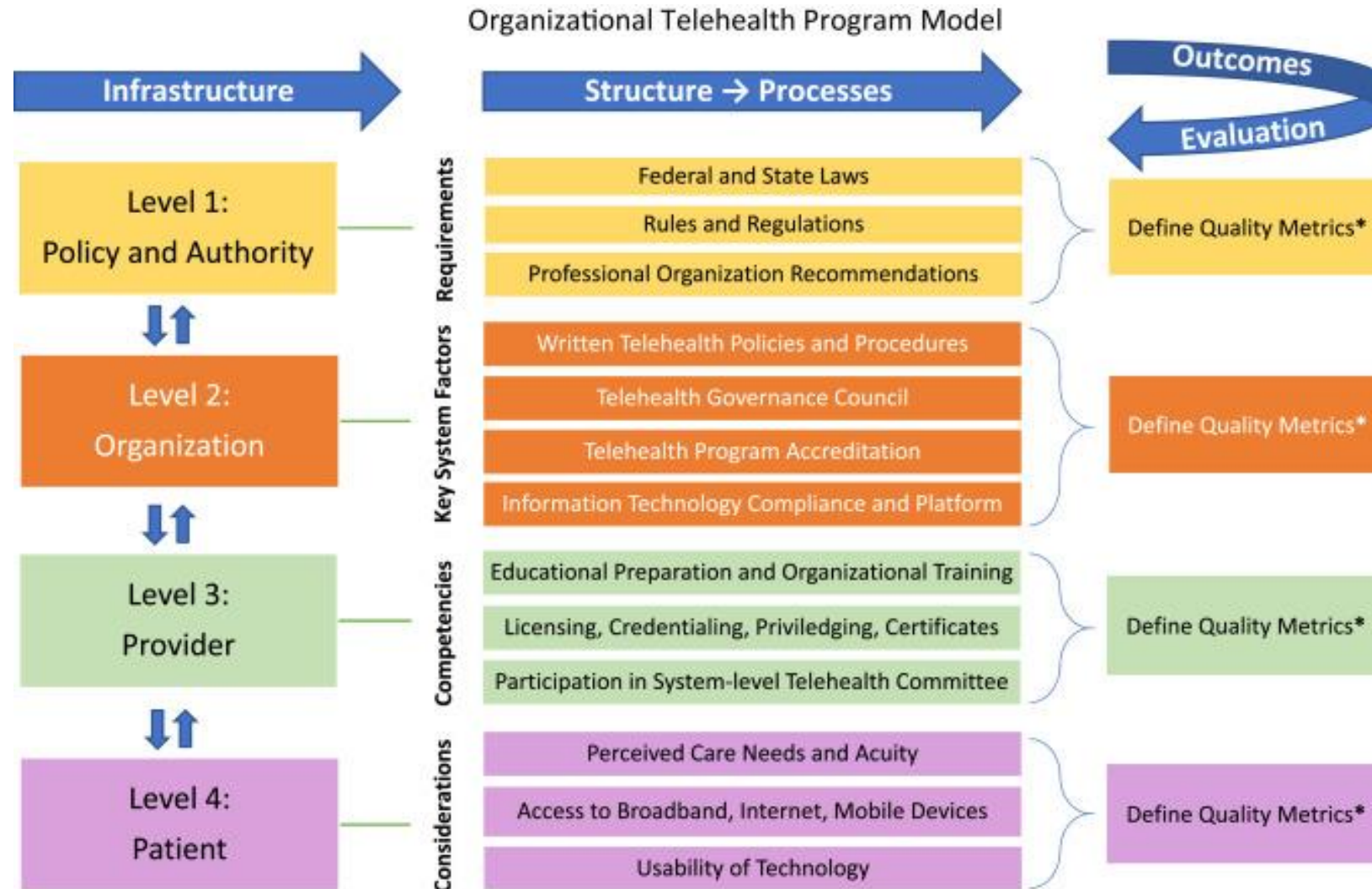
# Enhancing a Culture of Safety



The left side of the image features a collection of colorful geometric shapes: a blue circle at the top left, a green triangle at the top center, a blue vertical bar on the far left, two yellow vertical dashes below it, a large orange semi-circle in the middle left, a blue circle in the middle right, a green square outline at the bottom left, and a large orange circle at the bottom center with several yellow dashes above it.

# **Innovation 7 Embracing telehealth**

# Developing a safe Telehealth Programme



\*Areas for evaluation should be meaningful to the organization and can be based on national standards and local areas of interest

The Joint Commission Journal on Quality and Patient Safety 2023; 49:213-222

An Infrastructure to Provide Safer, Higher-Quality, and More Equitable Telehealth

Mahrokh M. Kobeissi, DNP, APRN, FNP-C, Joanne V. Hickey, PhD, ACNP, FAAN

[Link](#)

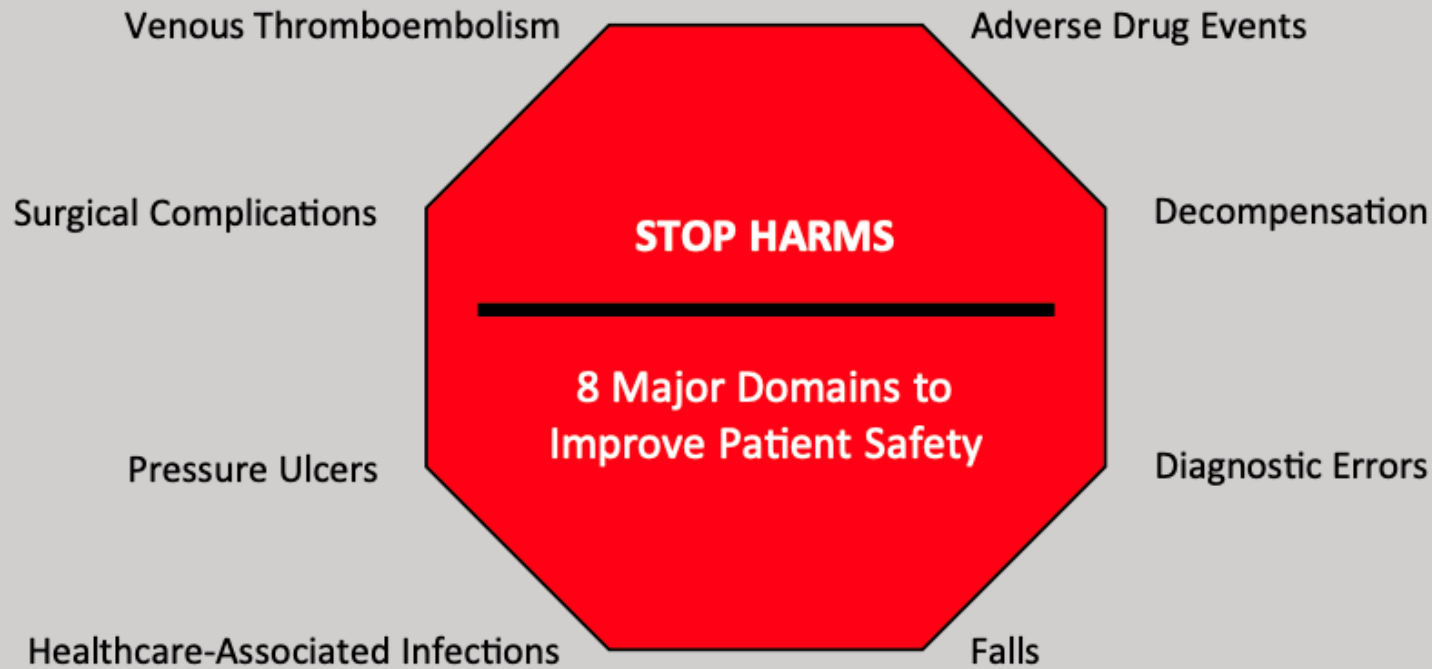


# Innovation 8 Using the Potential of AI

AI refers to a computer applying human intellectual characteristics to problem solve, namely the ability to reason, make generalizations, and to learn from previous experiences

# Using AI to stop harm

Artificial intelligence (AI) represents a valuable tool that could be used to improve the safety of care. Major adverse events in healthcare include: healthcare-associated infections, adverse drug events, venous thromboembolism, surgical complications, pressure ulcers, falls, decompensation, and diagnostic errors. The objective of this scoping review was to summarize the relevant literature and evaluate the potential of AI to improve patient safety in these eight harm domains. A structured search was used to query MEDLINE for relevant articles. The scoping review identified studies that described the application of AI for prediction, prevention, or early detection of adverse events in each of the harm domains. The AI literature was narratively synthesized for each domain, and findings were considered in the context of incidence, cost, and preventability to make projections about the likelihood of AI improving safety. Three-hundred and ninety-two studies were included in the scoping review. The literature provided numerous examples of how AI has been applied within each of the eight harm domains using various techniques. The most common novel data were collected using different types of sensing technologies: vital sign monitoring, wearables, pressure sensors, and computer vision. There are significant opportunities to leverage AI and novel data sources to reduce the frequency of harm across all domains. We expect AI to have the greatest impact in areas where current strategies are not effective, and integration and complex analysis of novel, unstructured data are necessary to make accurate predictions; this applies specifically to adverse drug events, decompensation, and diagnostic errors.  
*npj Digital Medicine* (2021)4:54; <https://doi.org/10.1038/s41746-021-00423-6>



## KEY POINTS

- There are significant opportunities to leverage artificial intelligence and novel data sources to improve patient safety across all eight harm domains.
- Adverse drug events, decompensation, and diagnostic errors were identified as attractive early targets.
- The most common novel data were collected using different types of sensing technologies: vital sign monitoring, wearables, pressure sensors, and computer vision.



# **Innovation 9**

## **Addressing climate change**

# Climate change is a safety issue

- Access and supply chains shortage
- Cancer management and prognosis
- Infection spread
- Medical errors – workplace environment
- New diseases emerging
- Drug safety
- People vulnerability

Al-Marwani  
*Bulletin of the National Research Centre* (2023) 47:51  
<https://doi.org/10.1186/s42269-023-01026-9>


Bulletin of the National  
Research Centre

REVIEW

Open Access

## Climate change impact on the healthcare provided to patients



Sabah Al-Marwani<sup>1\*</sup> 

[Al-Marwani, S. Climate change impact on the healthcare provided to patients. \*Bull Natl Res Cent\* 47, 51 \(2023\)](#)



The left side of the image features a collection of colorful geometric shapes: a blue circle at the top left, a green triangle at the top center, a blue vertical bar on the far left, two yellow vertical dashes below it, a large orange semi-circle in the middle left, a blue circle in the middle right, a green square outline at the bottom left, and a large orange circle at the bottom center surrounded by several yellow dashes.

**Innovation 10**  
**Leading for safer**  
**care**



# THANK YOU

Peter Lachman  
[peterlachman@rcpi.ie](mailto:peterlachman@rcpi.ie)

 peterlachman

