



enda
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safety, health
& environment
management
conference

Session 2

Occupational Health Culture

Safety, Health and Environment (SHE)
Management Conference 2023

Hosted by



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The future of healthy and productive work

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*Independent Advisor on work and health,
World Economic Forum*

Energy Industry SHE management Conference, 2023
Croke Park, Dublin, 24-25th may 2023

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Let's consider four questions...

1. What is a healthy organization?
2. Does the past (help) predict the future?
3. What might good look like for growth and wellbeing?
4. Who decides.....

What is Health?

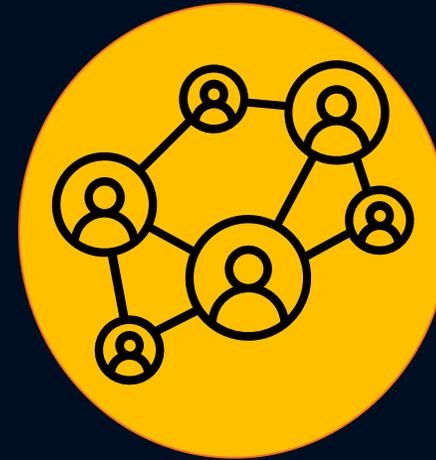
A state of total.....



Physical



Mental



Social

wellbeing

And wellbeing is?

A state of total.....



Physical



Mental



Social

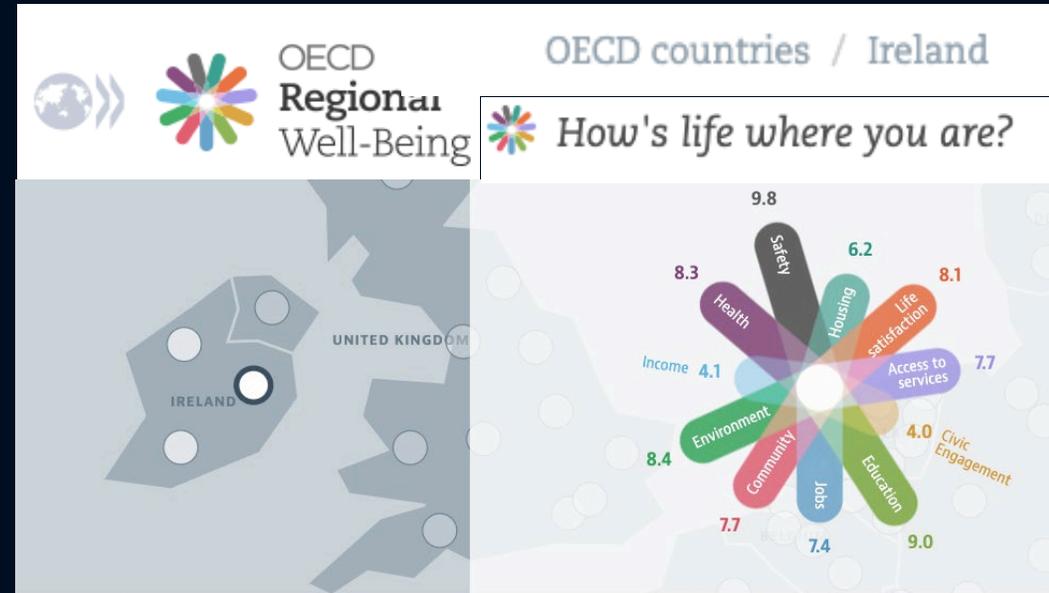
...feeling good, functioning well,
satisfaction with life as a whole

Social Determinants of Health



Social Determinants of Health
Copyright-free

 Healthy People 2030



<https://www.oecdregionalwellbeing.org/UKJ.html>

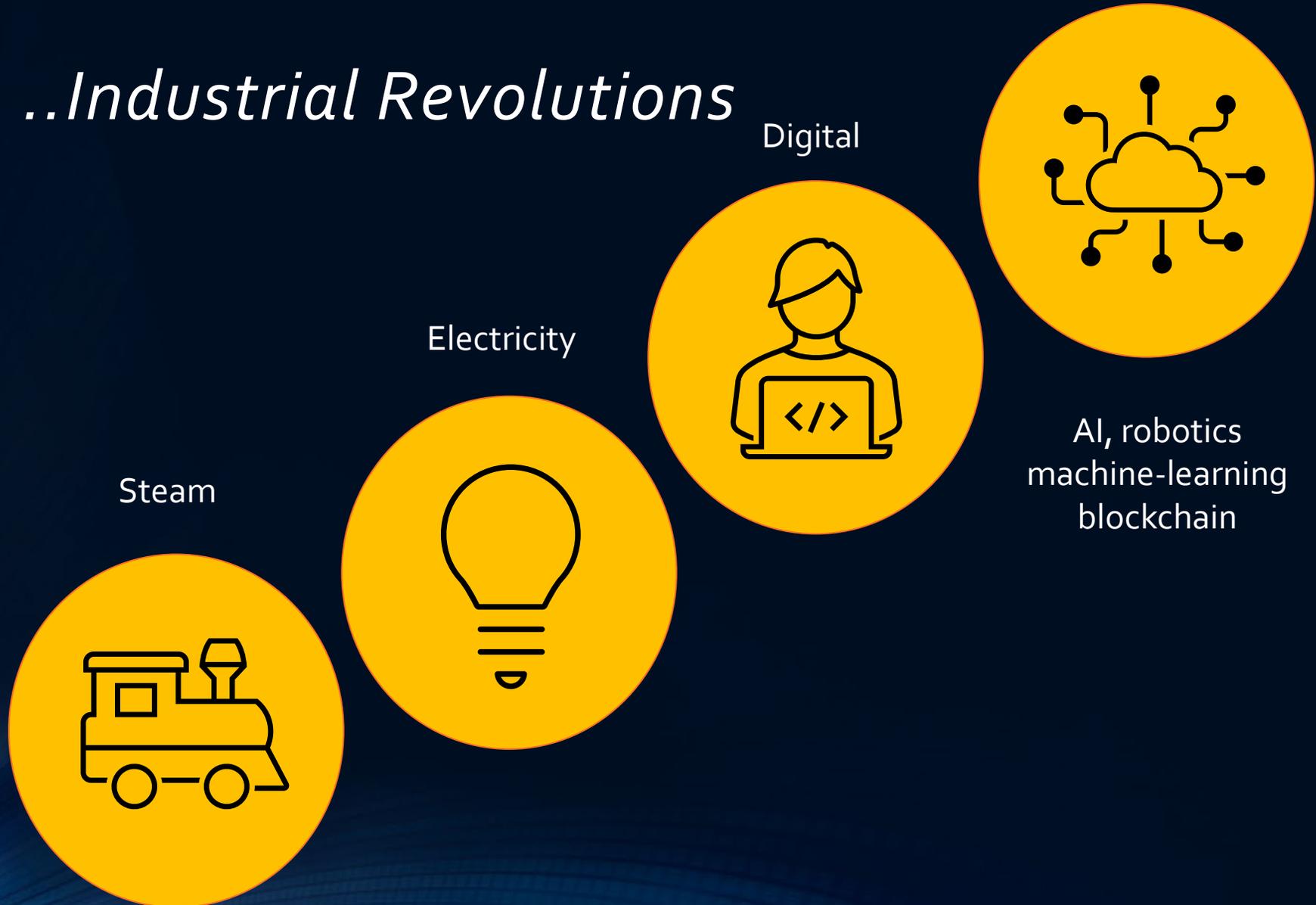
An Organization is..

*"An organized group of **people** with
a particular **purpose**"*

Oxford English dictionary

Does the past (help) predict the future?

..Industrial Revolutions



The “determinants of speed to reach economic bliss”:

- Power to control population
- Determination to avoid wars and civil dissensions
- Entrust to science the direction of those matters which are properly the concern of science
- The margin between our production and our consumption”

JM Keynes 1930

Insights from Industrial Revolutions

- Power to control population
 - **Equitable access to Human Capital?**
- Determination to avoid wars and civil dissensions
 - **Equitable Access to materials & energy**
- Entrust to science the direction of those matters which are properly the concern of science
 - **Evidence-based practice over populism?**
- Margin between our production and our consumption
 - **Sustainability for people and planet?**

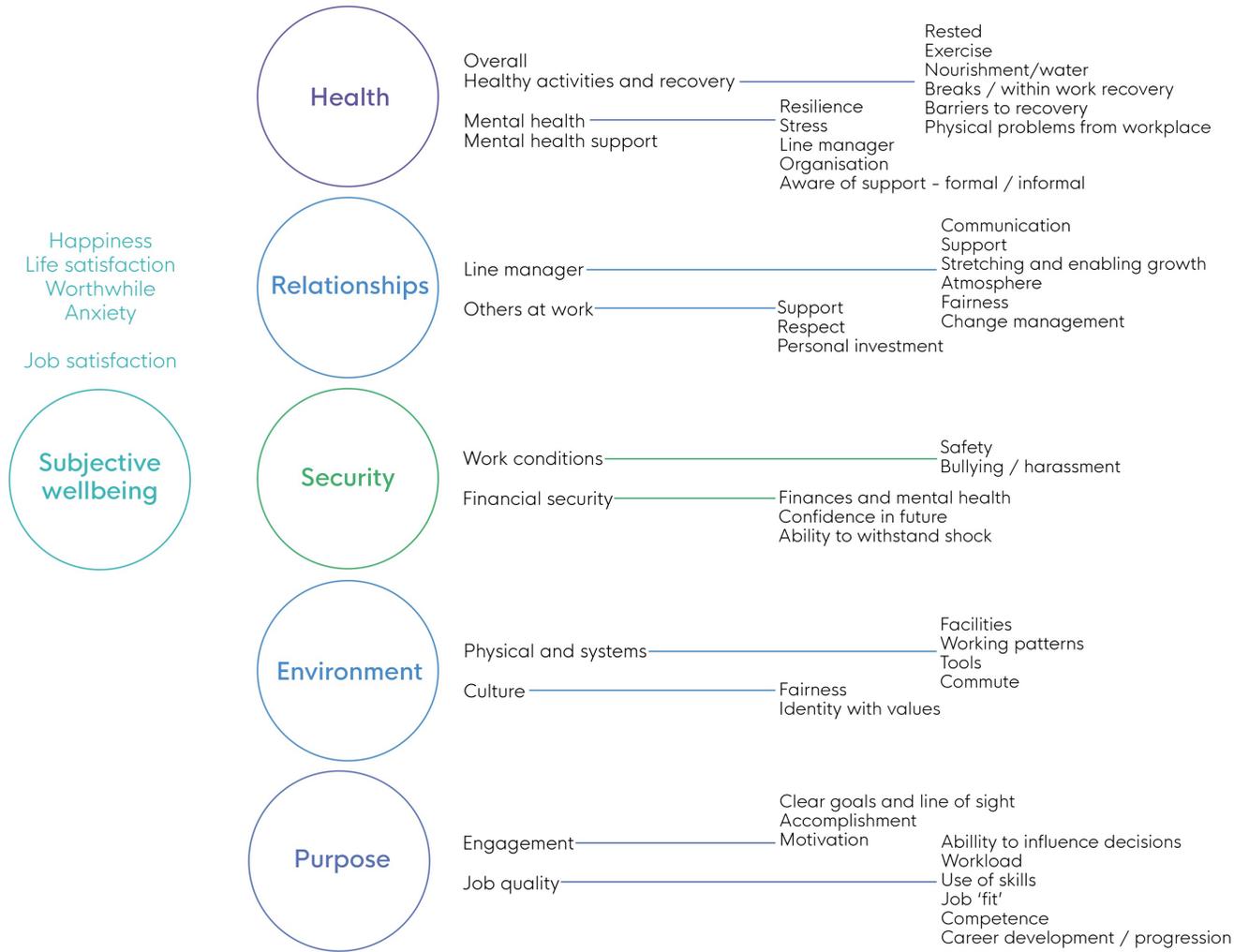
JM Keynes 1930

So does the past (help us to) predict
the future?

"The best way to predict the future is to create it"

Abraham Lincoln

The Five Key Drivers of Workplace Wellbeing



What could good look like?

Where can investment differentiate employers?



Can we align purpose and goals?

More Committed
More Reliable
More Productive
Higher Quality
& More Profit!

Safer
More Interesting/purposeful
More flexible
More Fulfilment
& More Money !

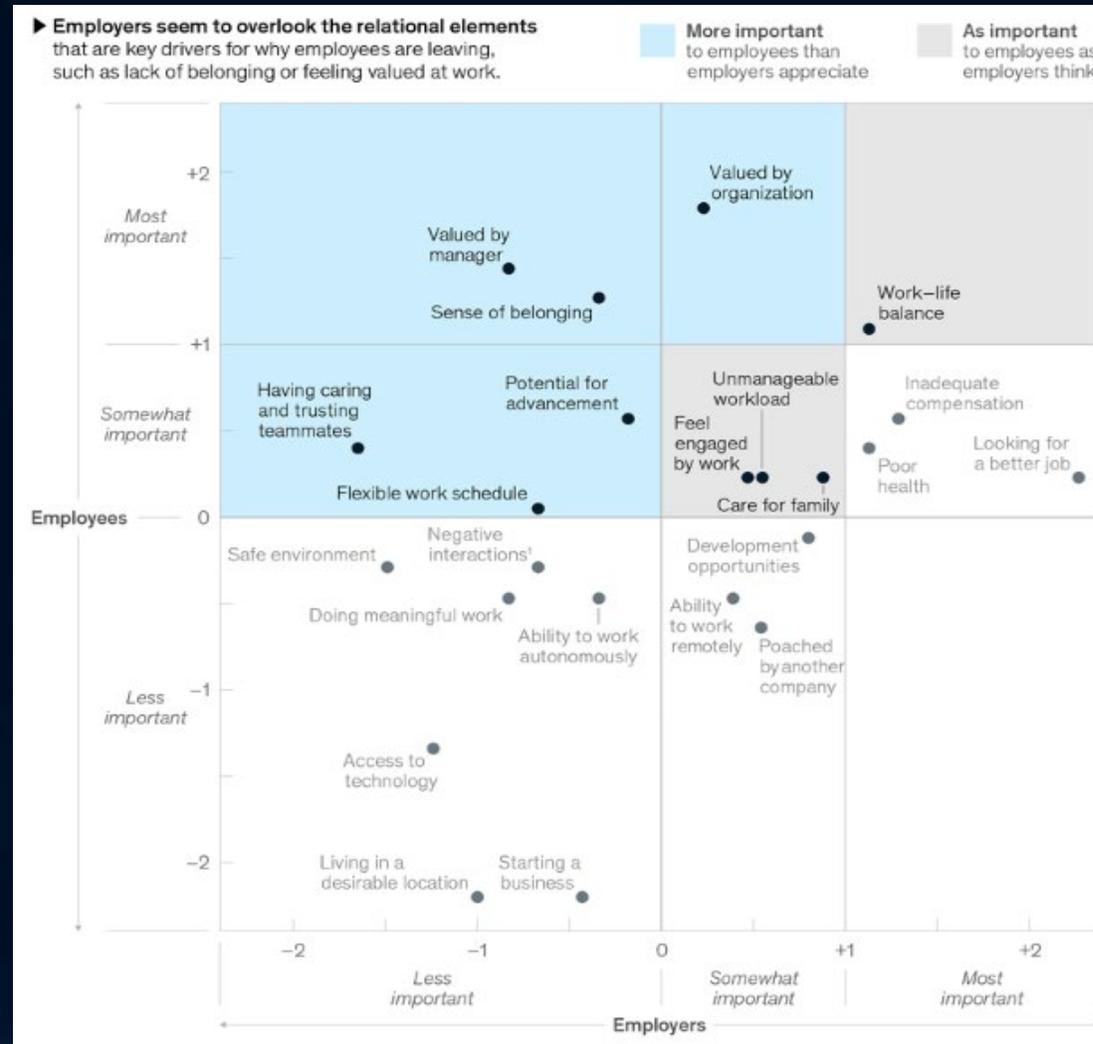
Aligned Goals

Worker

Employer



Who is listening, hearing?



Stay curious, find 3 stars, set your compass and course correct to reach a better place?



INSTITUTE OF OCCUPATIONAL MEDICINE

How to integrate health management into the workplace

David R Flower

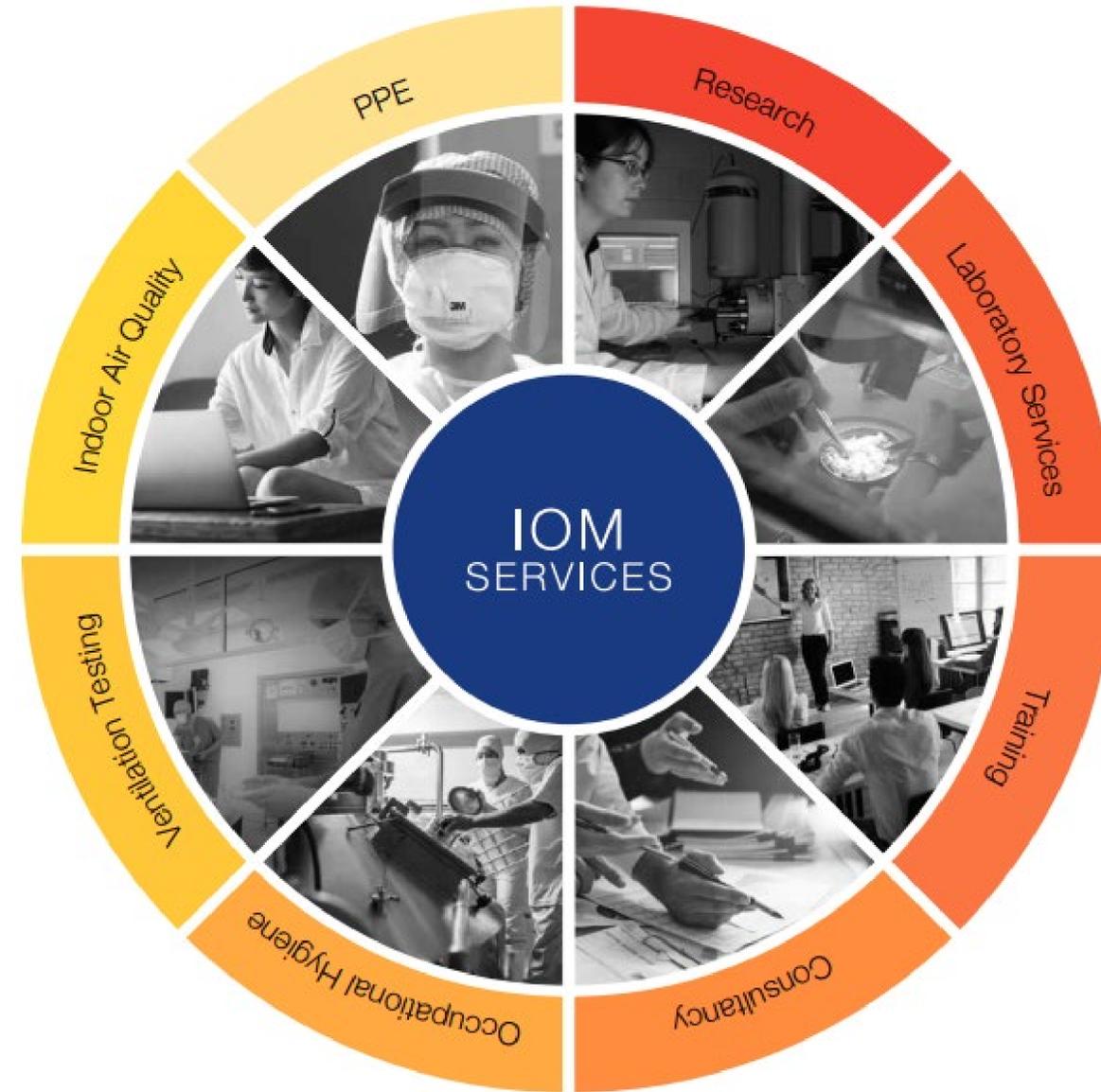
Senior Occupational Hygienist, IOM



www.iom-world.org



Who are IOM



How to integrate health management into the workplace.



Lets start with WHY?

The facts are startling:

1.8 million or 5.4% workers suffering from work-related ill health (new or long-standing) in 2021/22.

12,000 lung disease deaths each year estimated to be linked to exposures at work

In 2021/22, an estimated 48,000 workers in Great Britain were suffering from a work-related breathing or lung problem (either new or long-standing).

Estimated 36.8 million working days were lost due to work-related illness and non-fatal workplace injuries in Great Britain; 30.8 million days due to work-related illness and 6 million days due to workplace injury. This is equivalent to 1.38 working days per worker over the year.

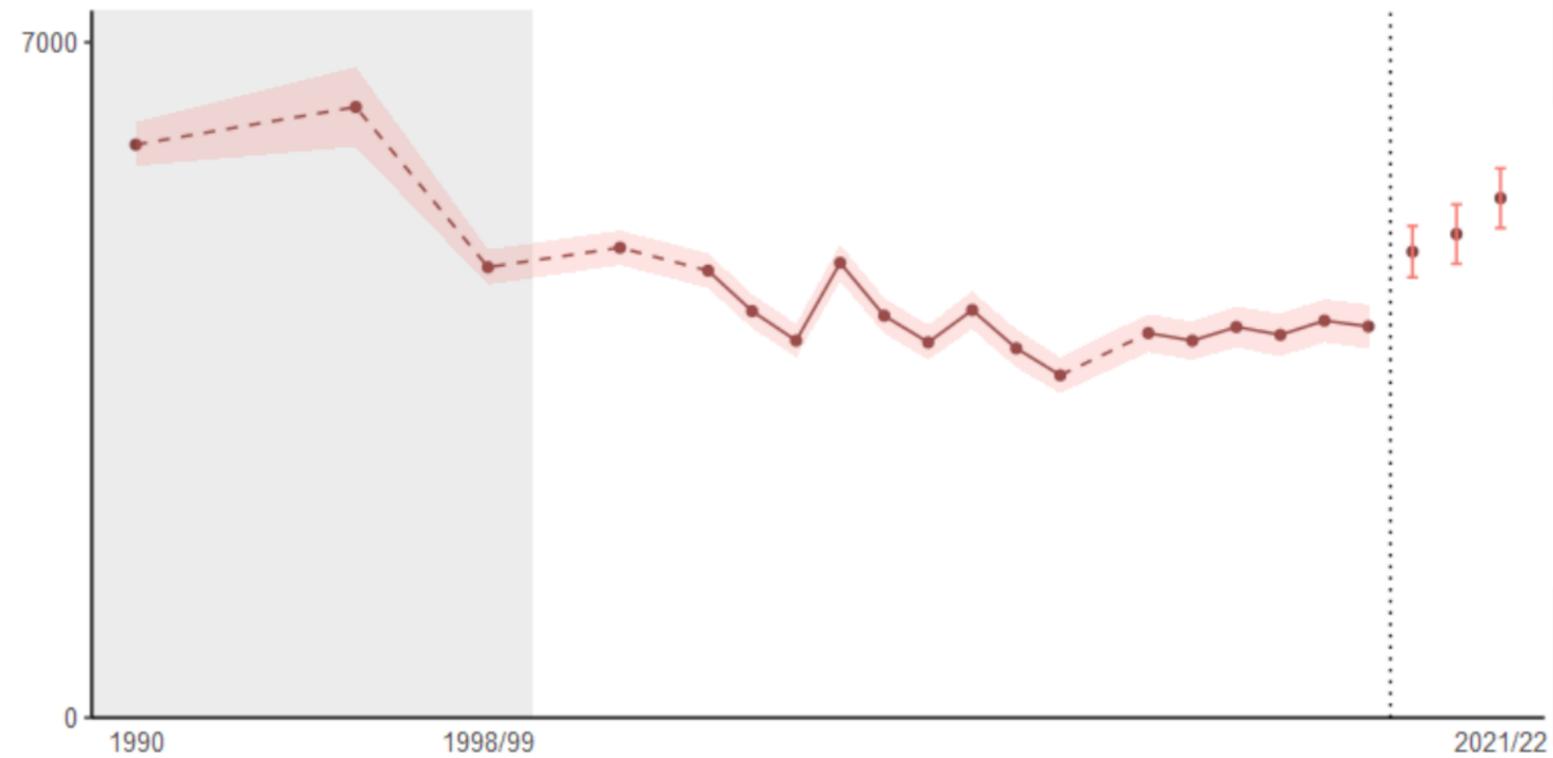
Source: HSE



The trends are alarming

Figure 1: Estimated rate of self-reported work-related ill health per 100,000 workers, Great Britain (new and long-standing cases)

Source: Labour Force Survey



How can we reduce this?

By applying the science



Consider the impact of technology on work-life balance

Communicate working hours to colleagues internally and externally



1 COMMUNICATION

Maintain connection with others through zoom/teams calls, phone calls, instant messenger



2 CONNECTIONS

Take breaks during the day away from the desk (including lunch breaks)



3 BREAKS

Create a **working from home routine** including a transition to work



4 ROUTINE

Create **separate spaces**, areas or resources where possible for work and home life



5 SPACES

Avoid **work technology** when not working



6 AVOID

Respect the **work-life balance** preferences of others at work and those at home



7 RESPECT

81% expected to work from home at least one day in the future

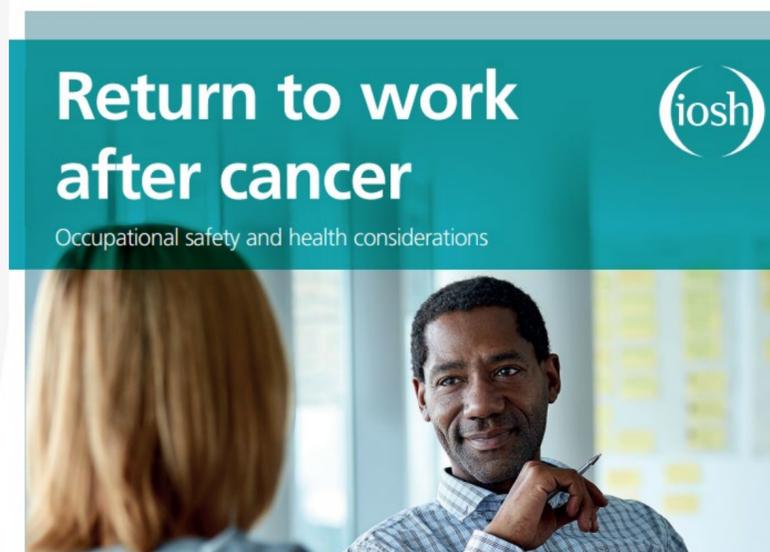
70% of employers will expand working from home



Consider individual occupational safety and health

Health and business benefits to keeping people in work

International evidence	UK evidence
<ul style="list-style-type: none">• Lack of support• Illness recurrence/progression• Job demands• Challenging social interactions	<ul style="list-style-type: none">• Disruption to sick pay entitlement• Job demands• Lack of 'reasonable' change to support continuation of work



Practical evidence-based advice for Occupational Health and Safety (OSH) professionals:

- **support for employees**
- **advice for employers**
- **good practice in rehabilitation**



Ensure policy/process supports practice



Workers asked to **test for COVID-19** and **do not attend work if positive**

“...So, without people, we’ve got nothing [...] we have massively, massively increased our value of our people. We’ve had a change in terms of our policies, whereby everybody gets the same sickness absence and flexible working for as many people as possible.” (Construction)

Ensure **policy and practice are complementary** and not contradictory. Common disconnect found in relation to:

- Sickness absence
- Maternity/paternity
- Flexible working
- Incident/near miss reporting



Embedding behaviours to protect everyone

- Taking into account the human exposome
- Safe by design



People are instrumental to creating, reviewing and refining effective **systems** and approaches to managing risk.

Systems are important to guide expectations and parameters for **people's** behavior in different situations/circumstances.

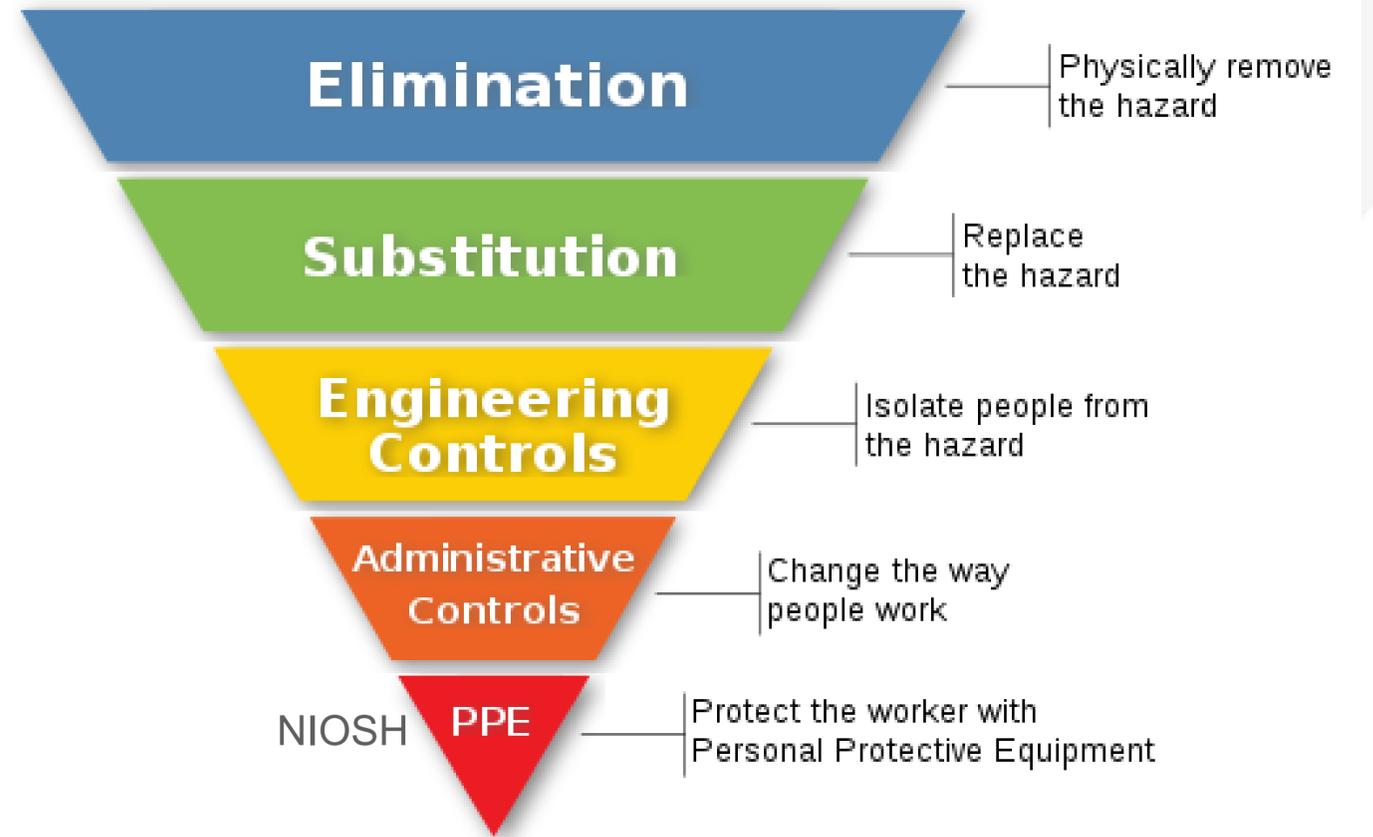


How can we reduce the risk?

Assessment,
Measurement,
Procedures
&
Reassurance

Hierarchy of Controls

Most effective
Least effective



Five Stages to Assess Risk



What is Occupational Hygiene ?

"The discipline of anticipating, recognising, evaluating and controlling health hazards in the working environment with the objective of protecting worker health and well-being and safeguarding the community at large."



© BOHS 2016
www.bohs.org.uk



Values of Occupational Hygiene

Anticipating

Identifying potential hazards in the workplace

Recognising

Identifying the threat a potential hazard poses, e.g. chemical agent, physical agent, biological agent, ergonomic factor or psychosocial factors

Evaluating

Measuring the personal exposure of the worker to the hazard, with assessment to published occupational limits (e.g. EH40)

Controlling

Minimising the worker's exposure, usually through preventative measures



Summary

- **Worker health issues have not gone away, with too many peoples health effected by work and work related exposures**
- **Simple improvements can result in great benefits for the workers and the company**
- **Get a LIFE work balance**
- **Risk Assess and quantify the risk is controlled**
- **People need systems to work with and systems are only as good as the people using them**
- **The value of Occupational Hygiene and its place in the workplace**



Thank you

In a hurry but have questions for us?

Contact us at info@iom-world.org





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Fatigue Risk Management and links to Organisational Culture

Professor Fiona Earle
Centre for Human Factors, Lampada
University of Hull





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Human Factors perspective of fatigue

Human Factors

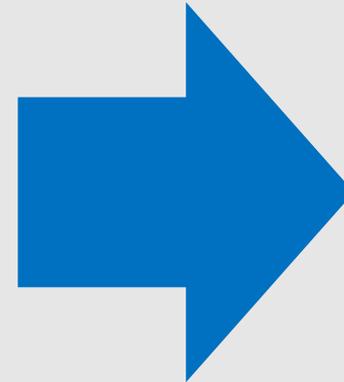
Broad multidisciplinary field –
applying psychology and
physiology to design

Psychology in Human Factors

Utilising knowledge of human
characteristics, performance,
behaviour and limitations in design

Area of expertise

Exploring workplace risks to enhance positive work design



Fatigue

Important
mediator between
risks and health
and safety
outcomes

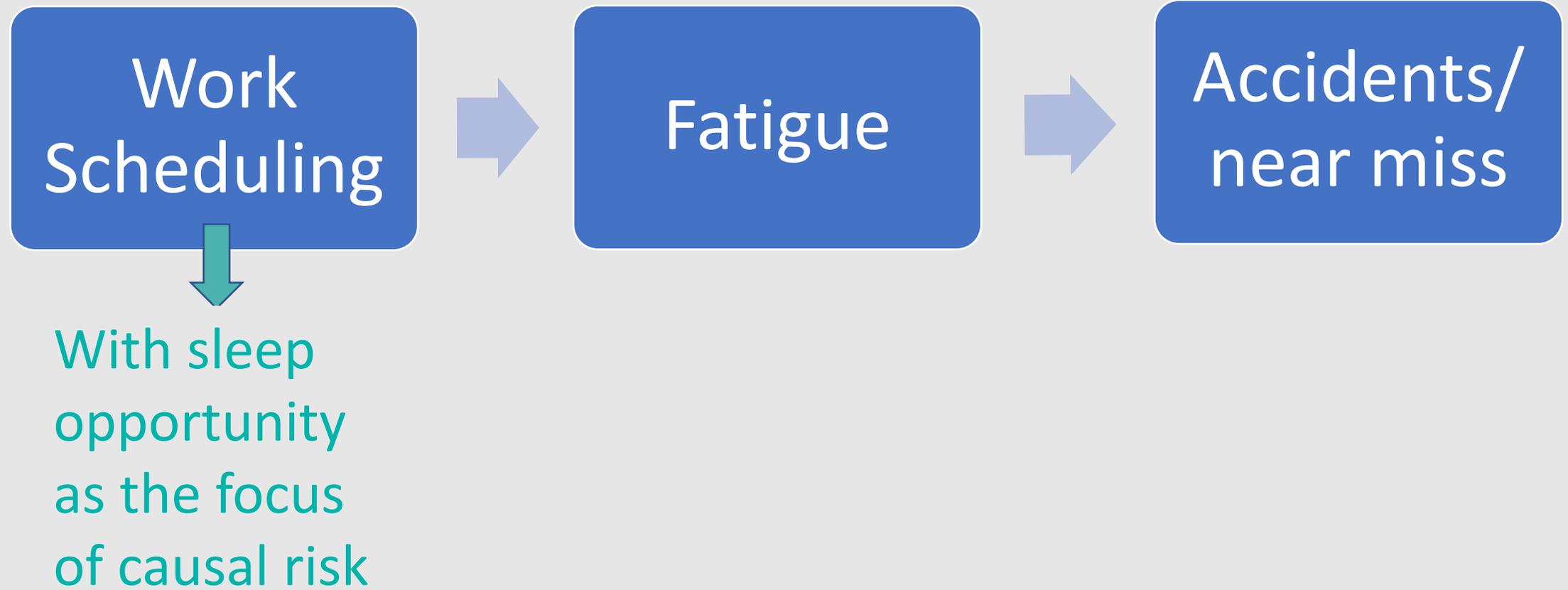
Typical models of FRM

Fatigue as an important work-related H&S mediator is well recognised

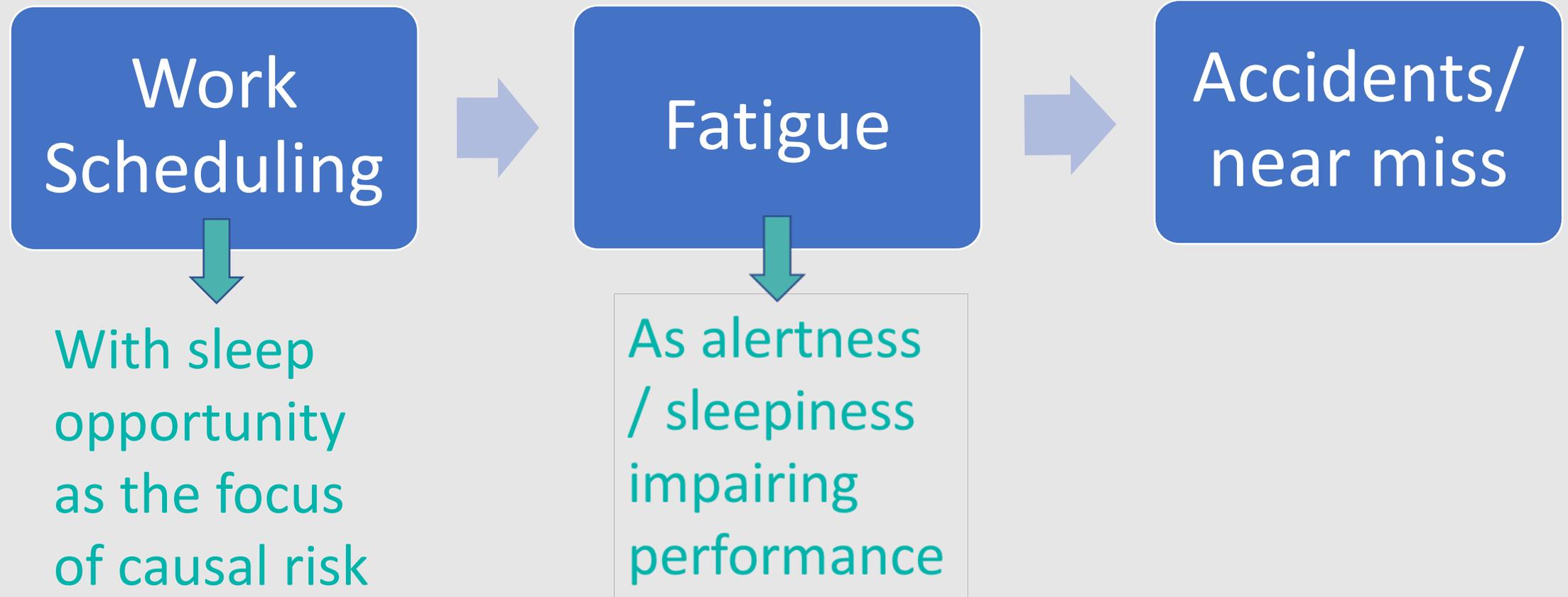


But the approach is narrow...

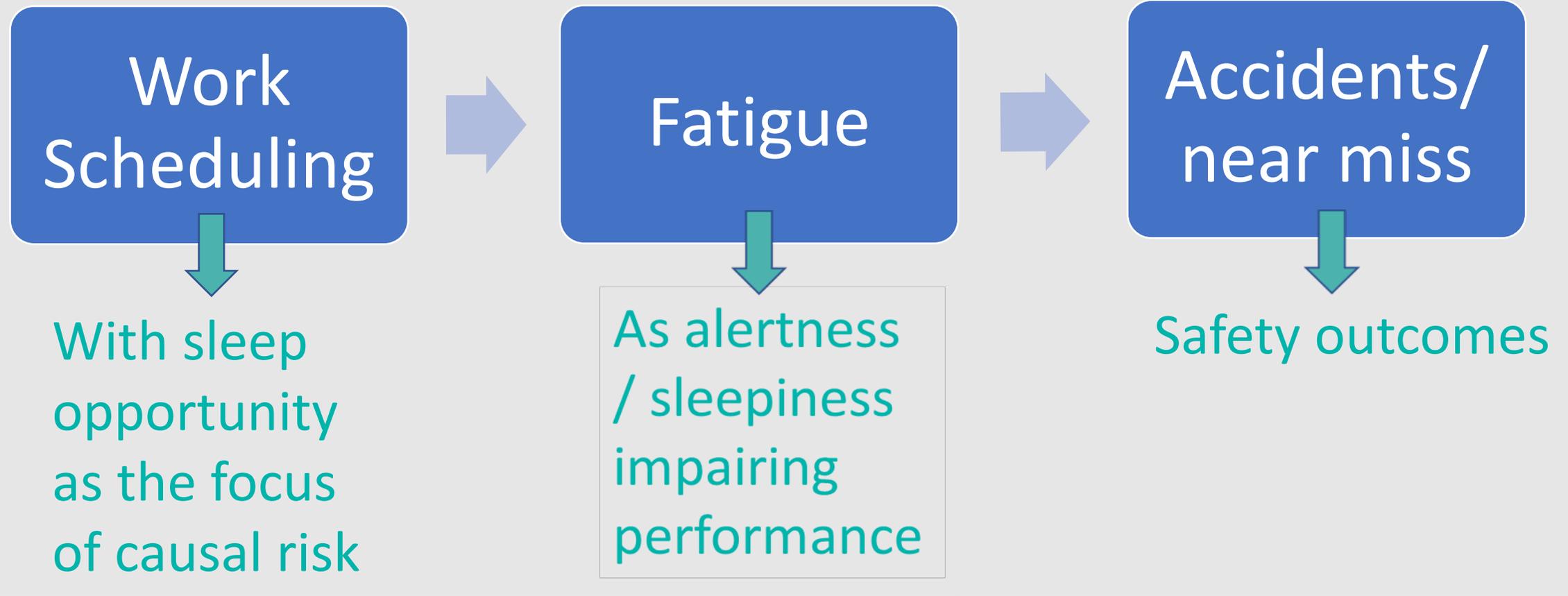
Typical models of FRM



Typical models of FRM



Typical models of FRM





Mathematical models of FRM

This approach is underpinned by the mathematical model of FRM

- Based on **sound scientific models** of sleep
- Effective in **control of working hours and scheduling**
- Dominant models from **aviation**
- BUT - very strong emphasis on **fatigue as a consequence of shift design/work scheduling** and impact on sleep patterns
- Do not tend to address the **multiple sources of fatigue**

Focus on sleep and work scheduling is ...

“Necessary but not sufficient”



Why has this approach dominated?



Shifts patterns
are measurable /
regulated/
understood

Alertness has relatively
reliable relationship to
performance

Very complex state with many causes and effects

Mental demands
Time pressure

Physical demand

Emotional demands

Prolonged work

Shift work



Fatigue

1. Subjective tiredness
2. Aversion to further effort
3. Impaired processing



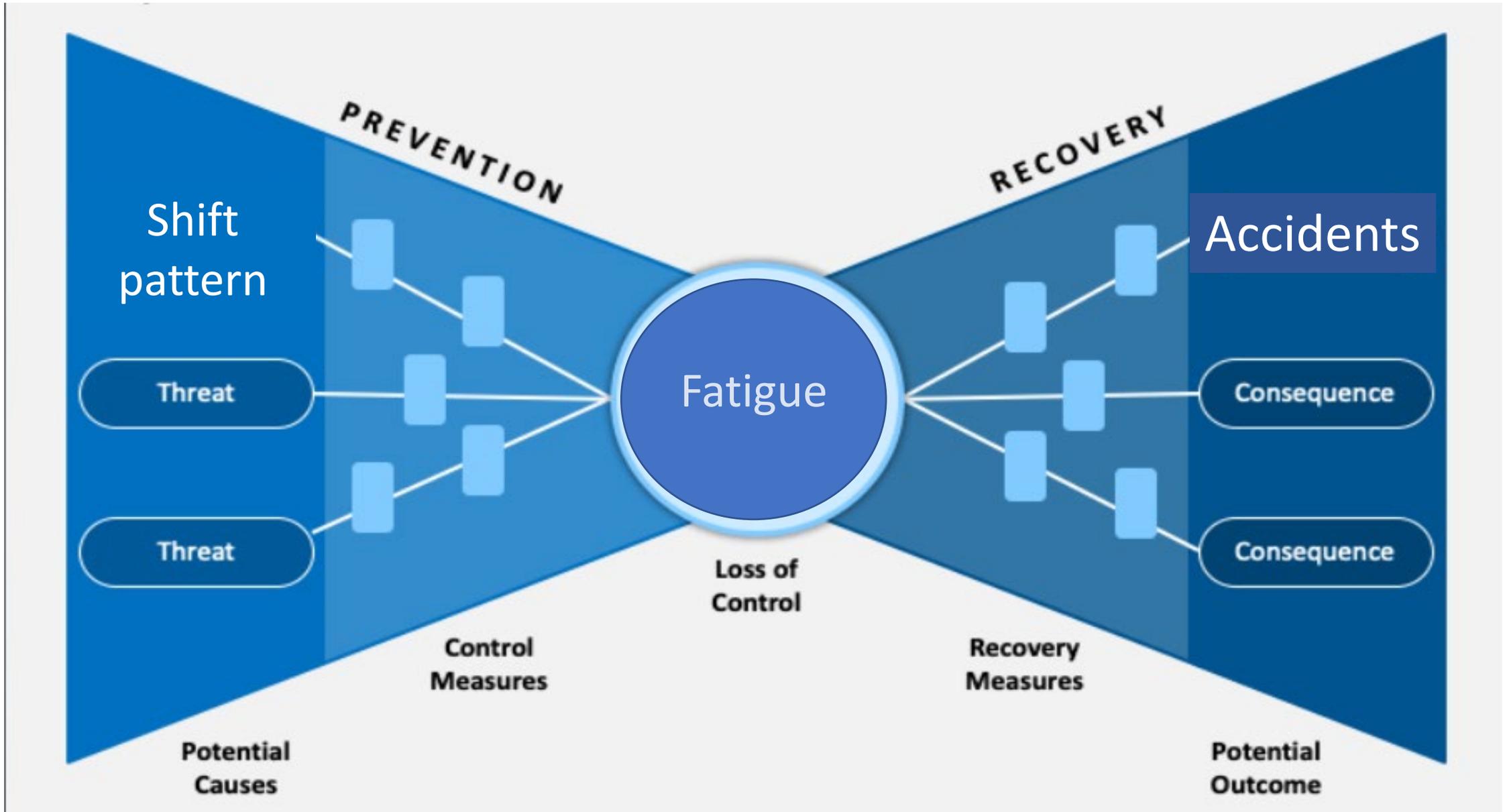
Associated with
risks to

Performance

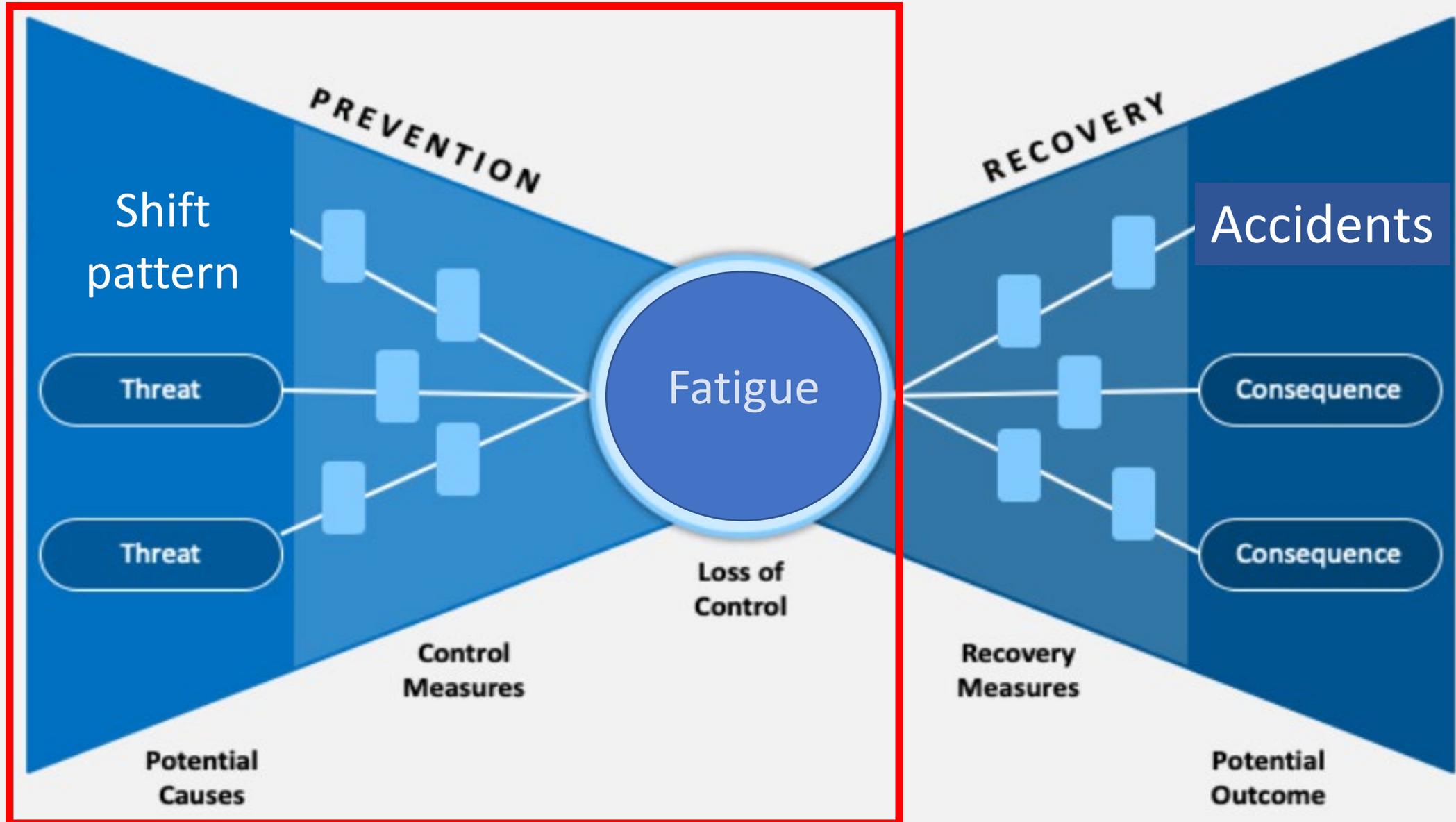
Safety

Health &
Well being

Our approach to FRM



Our approach to FRM



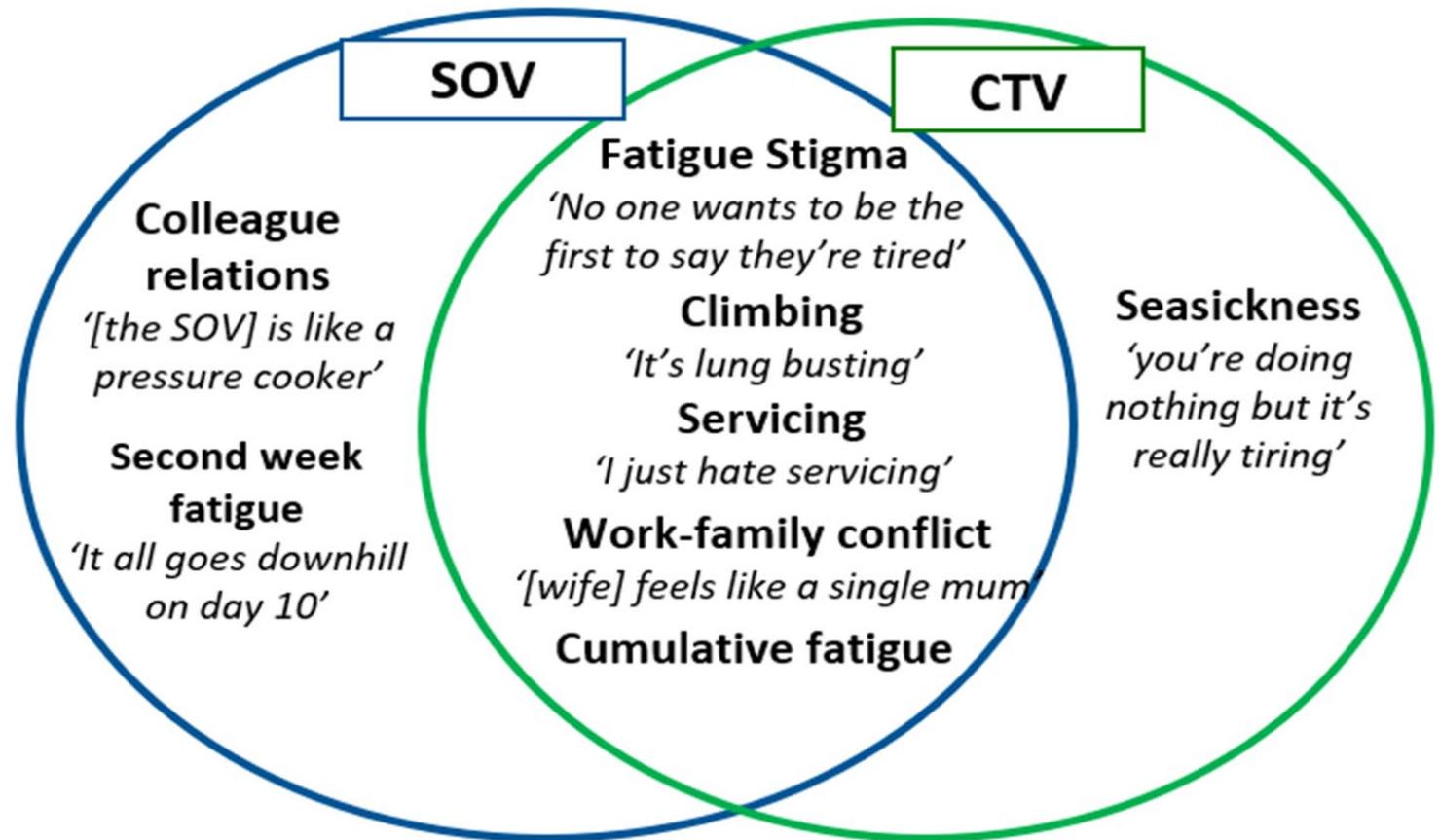
Proactive fatigue risk management

Case study 1

Holistic fatigue risk
exploration and management

1. **Subjective exploration of the range of fatigue risks** facing two distinct OSW groups
2. **Assessing the gap** between the existing risks and current fatigue risk controls and then address the risk
3. **address the risk**

Sample fatigue risks in OSW





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SPOWTT FINAL PROJECT REPORT

THE SPOWTT STORY, FINDINGS



Sea
state



Vessel
motion



Person
motion



Seasick-
ness



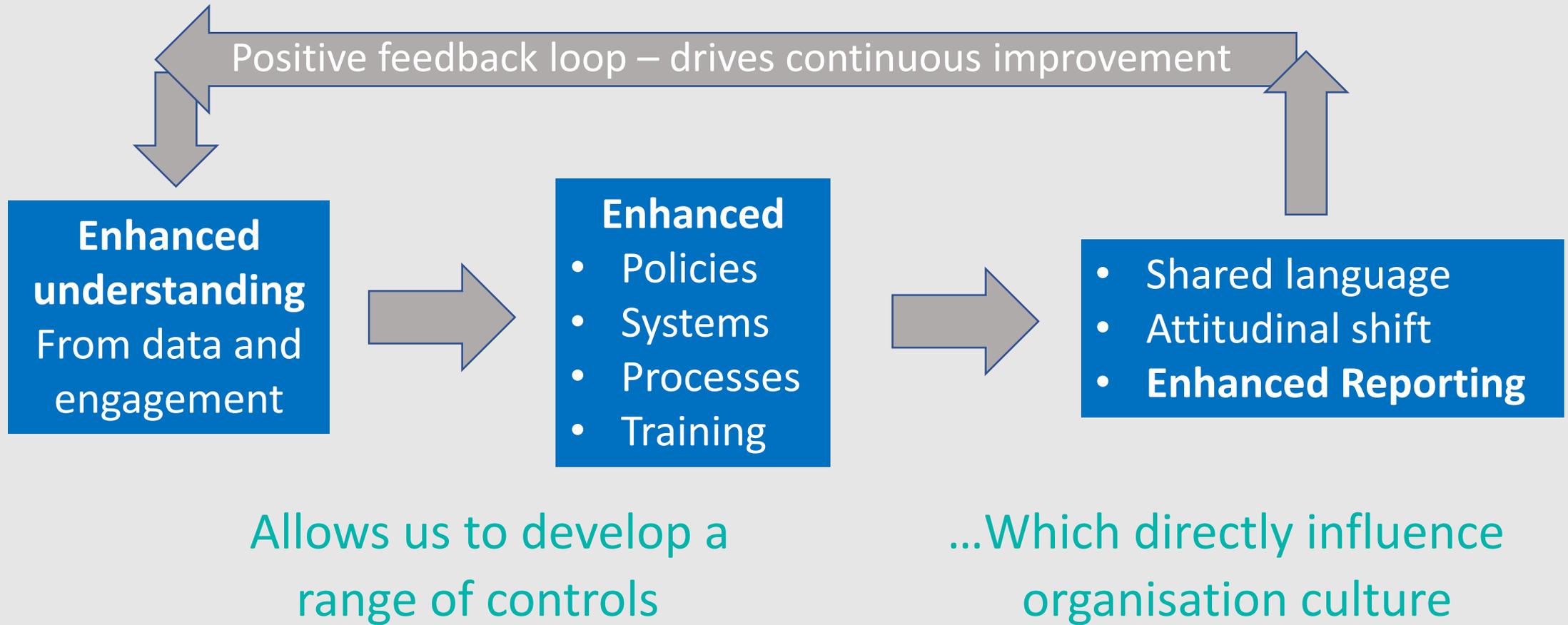
Fatigue

(Full report on ORE Catapult website)

Fatigue risks emerging Case Study 2

- Project set out to explore causes and effects of seasickness - Aim to understand role of sea state
- European collaboration (H2020: DemoWind funded)
- **Seasickness emerged as a cause of work-related fatigue (specific fatigue risk)**
- **Controlling seasickness manages specific fatigue risk**

Role of M-FRM in Organisational Culture



What can you do?

1. Gain an understanding of the **range** of risks through engagement and/or survey

2. Undertake a gap analysis with managers and workers

3. Plan risk controls

4. Review efficacy of control (with fatigue survey)

Current ENA collaboration

1. Gain an understanding
of the range of risks
through engagement
Focus Groups

2. Undertake a gap
analysis with managers
and workers

3. Plan risk controls
Manager and Operational
Training (informed by 1)

4. Review efficacy of
control (with fatigue
survey)



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Thank you

If you have any questions please contact

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