

Care pathways for children and young people with head injuries

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University of the
West of England

bettertogether

- A public health approach to tackling care pathways for brain injured children and young people
- Reflections on where we've got to in Bristol

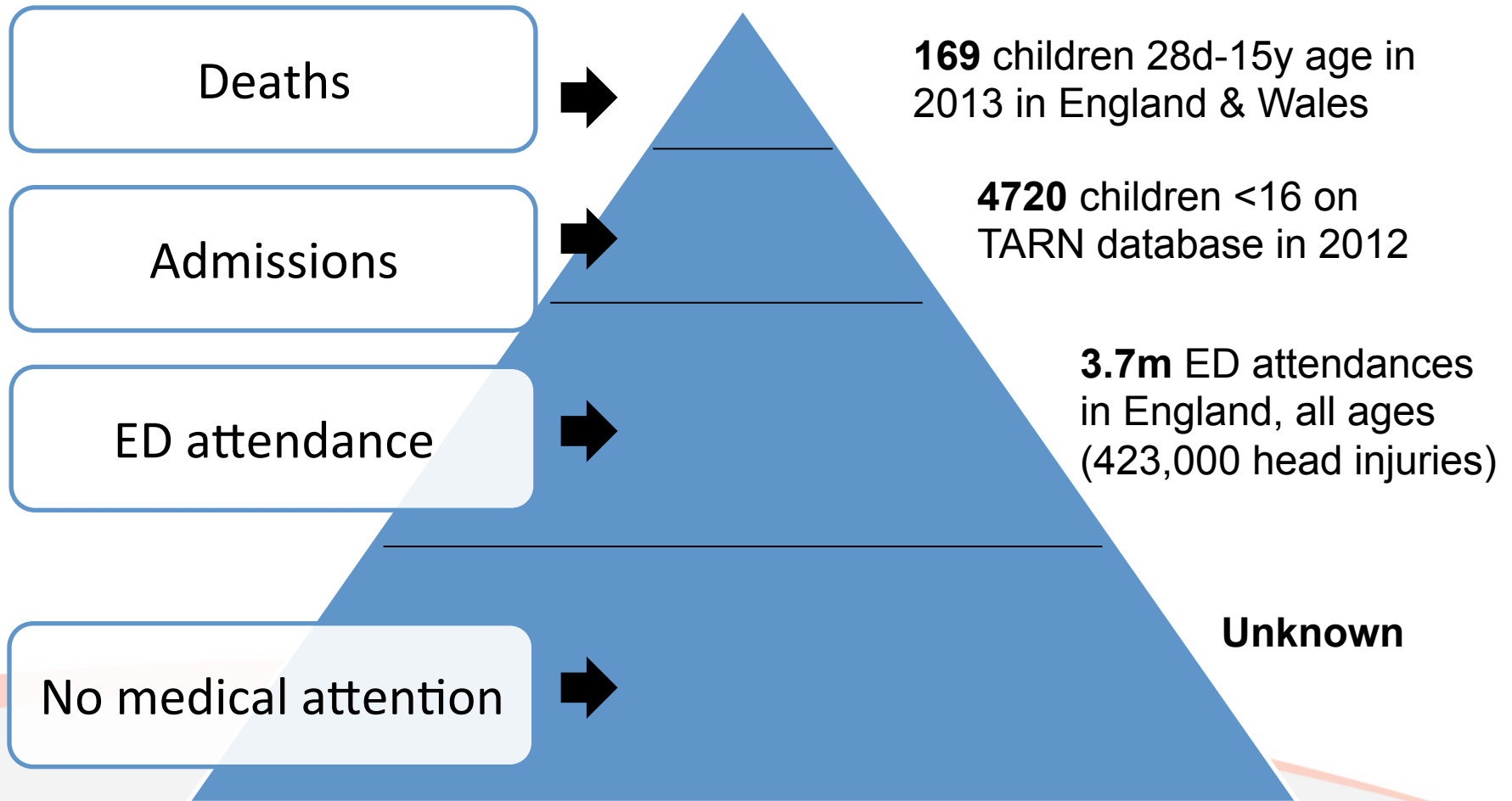
Changing systems of care



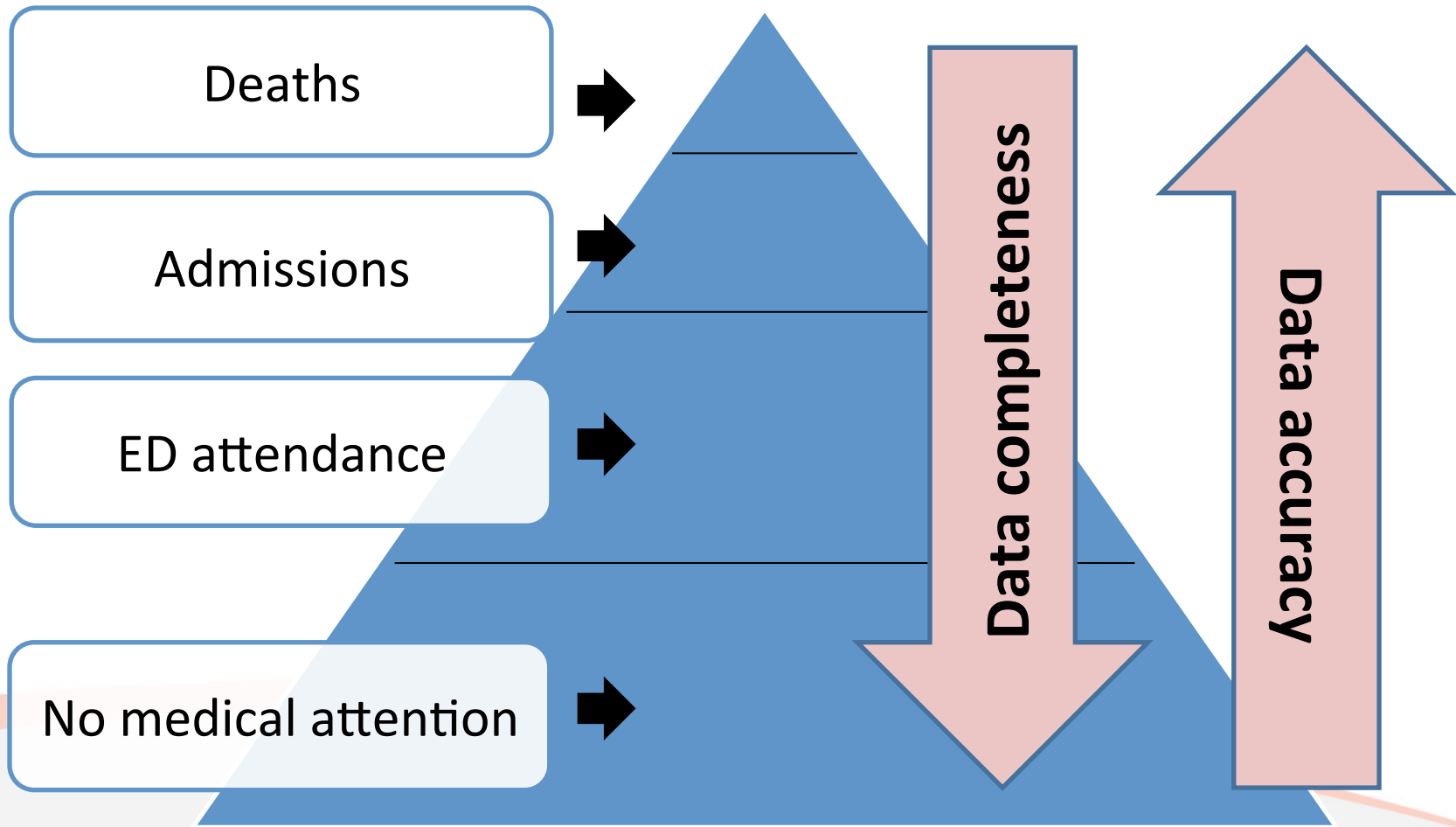
Where are we now?

- 'We' = providers, users, commissioners, others
- What is working well? What's not?
- Information & data (existing & new)
- Mapping services (location, structure, capacity)
- Current processes / pathways

Injury data pyramid



Injury data quality



Warning! Head Injury data ahead



- Do you have an agreed definition of head injury?
 - What age group? What geography?
- How good is the quality of your data?
 - Complete? Accurate? Representative? Timely?
- Can you follow patients through the system?
- Usually very little on mechanism of injury

Difficult to collect, collate and interpret

Where do we
want to get to?

- What outcomes are important?
- What is best practice?
 - Exemplar services elsewhere
 - Evidence based interventions
 - Value for money
- National drivers & local context

Evidence for change

- Absence of evidence doesn't mean evidence of no effect
- Innovation is good if
 - It has a theoretical basis
 - It is evaluated

NICE National Institute for Health and Care Excellence

Strategies to prevent unintentional injuries among the under-15s

Issued: November 2010

NICE public health guidance 29
guidance.nice.org.uk/ph29

Head injury

Triage, assessment, investigation and early management of head injury in children, young people and adults

Issued: January 2014

NICE clinical guideline 176
guidance.nice.org.uk/cg176

How will we get there?

- Sound argument for change
- Develop the new pathway / system
 - Group and leader
 - Who needs to agree?
 - Pilot?
- How do you make it happen?
 - Business case timescales & processes
- Planned implementation

How will we know we've arrived?

- **Outputs**
 - Targets, HES, Length of stay etc
- **Outcomes**
 - Patient and professional reported
 - Long term as well as short term
 - Educational and social, not just health
- **Unethical not to evaluate**

Prevention of injuries & reduction in harm

PRIMARY

- Action to prevent the injury from happening in the first place

SECONDARY

- The injury event is going to happen, action to reduce the injuries sustained during the event

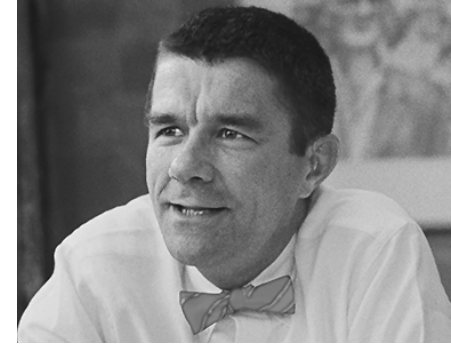
TERTIARY

- The injury has been sustained, action to reduce the consequences of the injury



Accidents don't
happen by accident

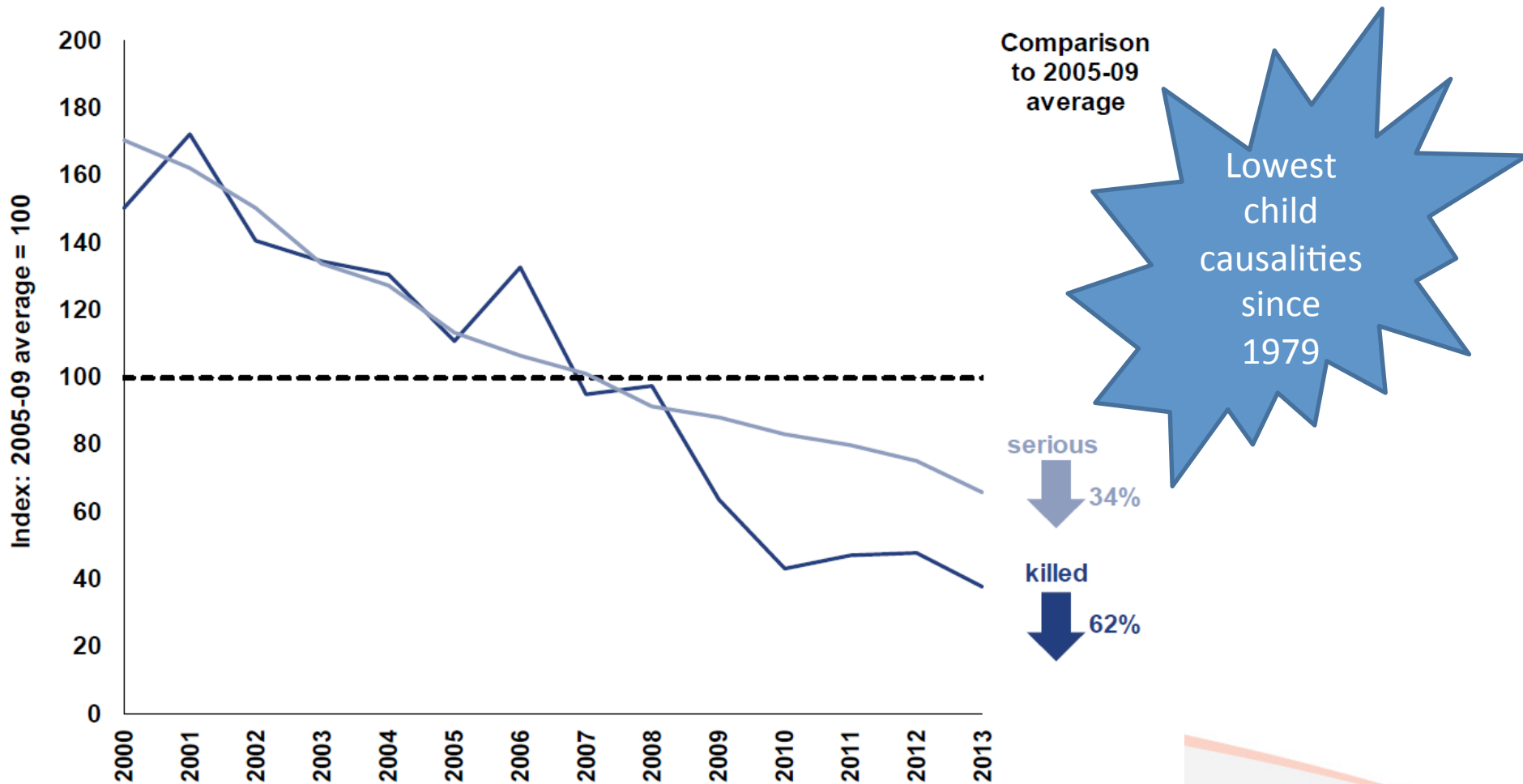
Haddon's matrix: Road injury harm reduction



	Human factors	Vehicle / equipment	Environment
Pre-event (Primary)	Education Reflective clothing Alcohol / drugs Eyesight testing	Car road worthiness tests Speed limiters	Road planning Traffic calming Speed limits Safe routes to school
Event (Secondary)	Speeding behaviour Use of seatbelt Use of mobile phone	Air bags Impact bars Bumper design	Crash barriers
Post-event (Tertiary)	Pre-trauma health of victim Trauma care	Response of emergency services	Access for emergency services

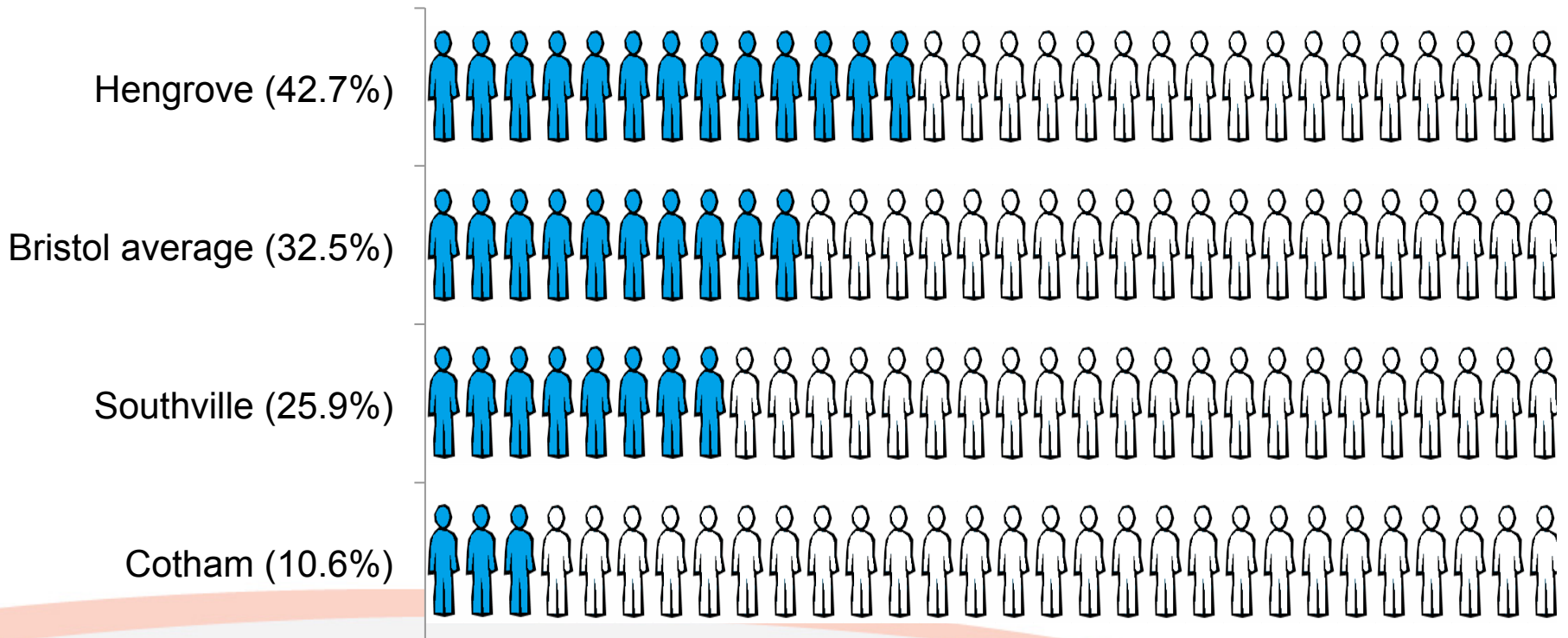
Used for both conceptualising aetiology and for strategic planning

Changing epidemiology; children ($\leq 15y$) killed or seriously injured, GB, 2000-2013



DfT (2014). Statistical Release. Reported road casualties in Great Britain: Main results 2013.

Prevalence of overweight and obesity in Bristol children, age 11y



3yr average 2009/10 to 2011/12

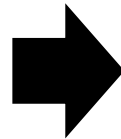
Based on ward of residence of child: Highest, lowest, Southville and Bristol average

Source: Bristol Public Health Intelligence Unit

Exposure to injury risk

Children's leisure activities have changed

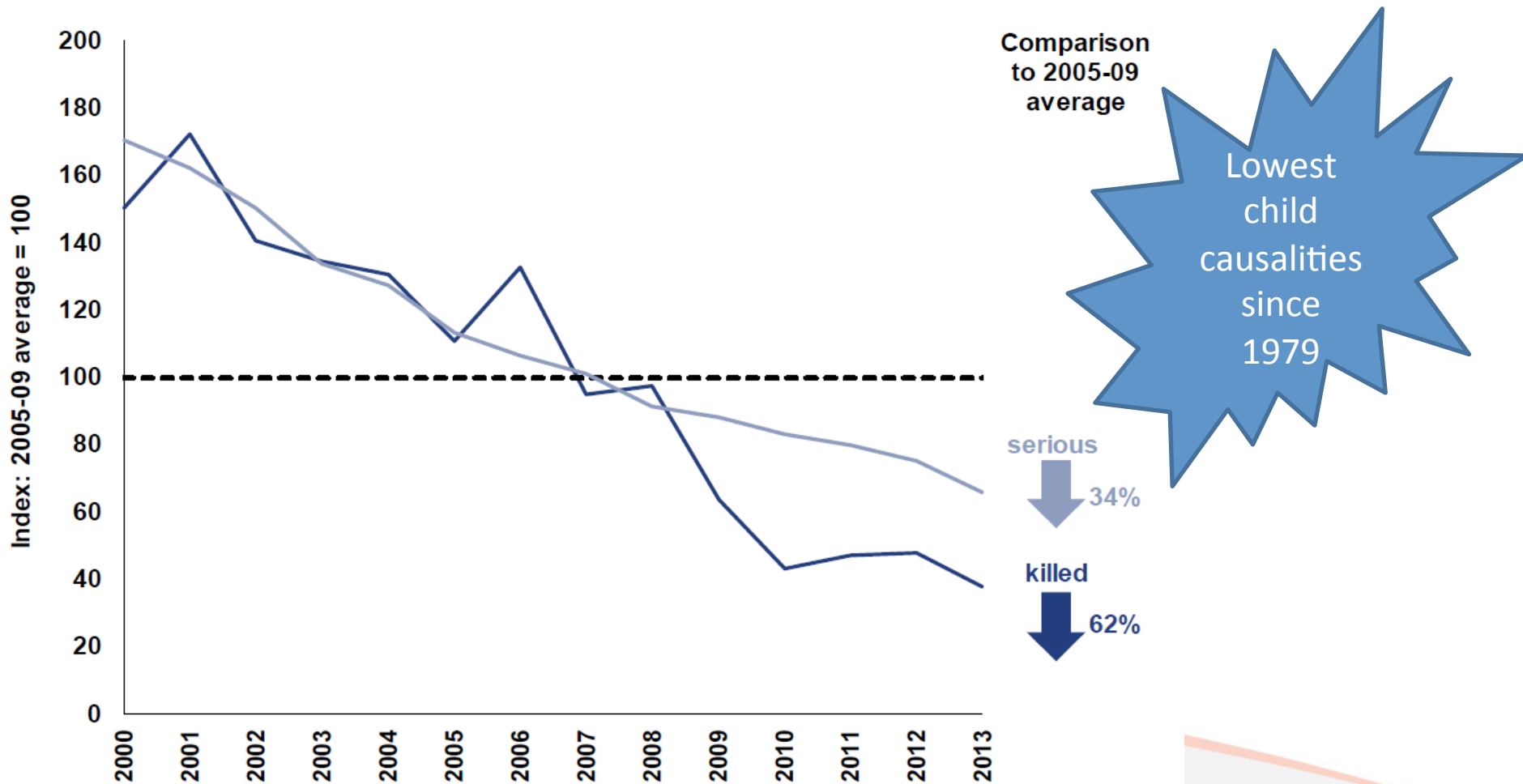
Green play



Screen play

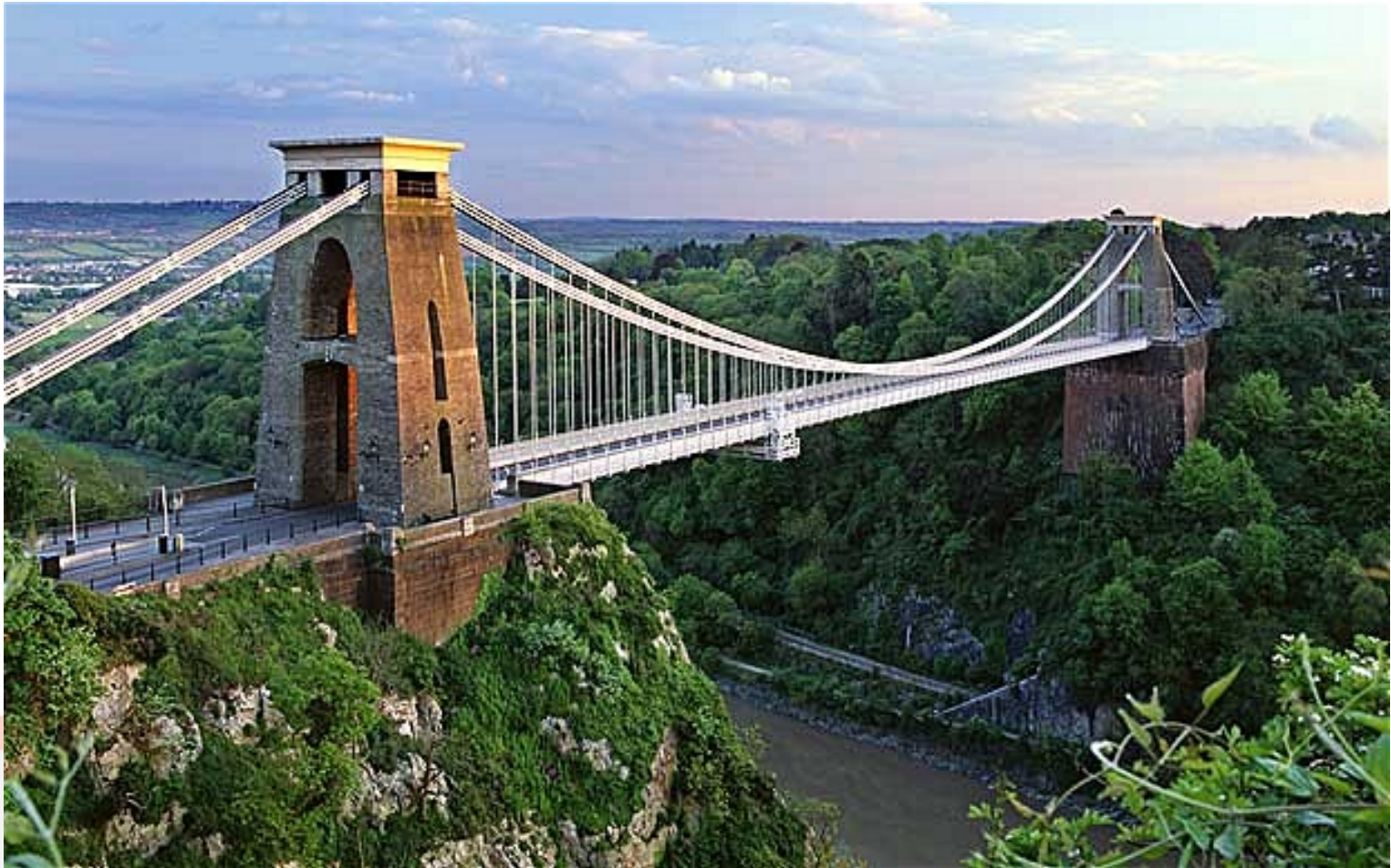


Changing epidemiology; children ($\leq 15y$) killed or seriously injured, GB, 2000-2013



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A perspective on where we are with ABI in Bristol



Bristol Health Partners



Child Injury Prevention & Injury Care Health Integration Team

www.bristolhealthpartners.org.uk



*Avon and Wiltshire Mental Health Partnership NHS Trust
Bristol Clinical Commissioning Group
North Bristol NHS Trust
North Somerset Clinical Commissioning Group
South Gloucestershire Clinical Commissioning Group
University Hospitals Bristol NHS Foundation Trust*

What is a health integration team?

Scientists

Academics

Commissioners

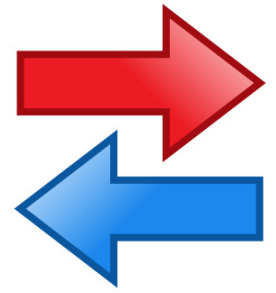
Clinicians

Public

Collaborate on a key local health issue

Improve population health and wellbeing

Drivers for a child injury HIT



- National calls for coordination of trauma care and rehabilitation
- Financial pressures encourage keeping care out of hospital where appropriate
- Growing and diverse child population in Bristol
- Major redesign of children's trauma services in 2014

The challenge

High volume - Low impact



Minor head injuries
Cuts and wounds
Ingestions

Usually quick and full recovery

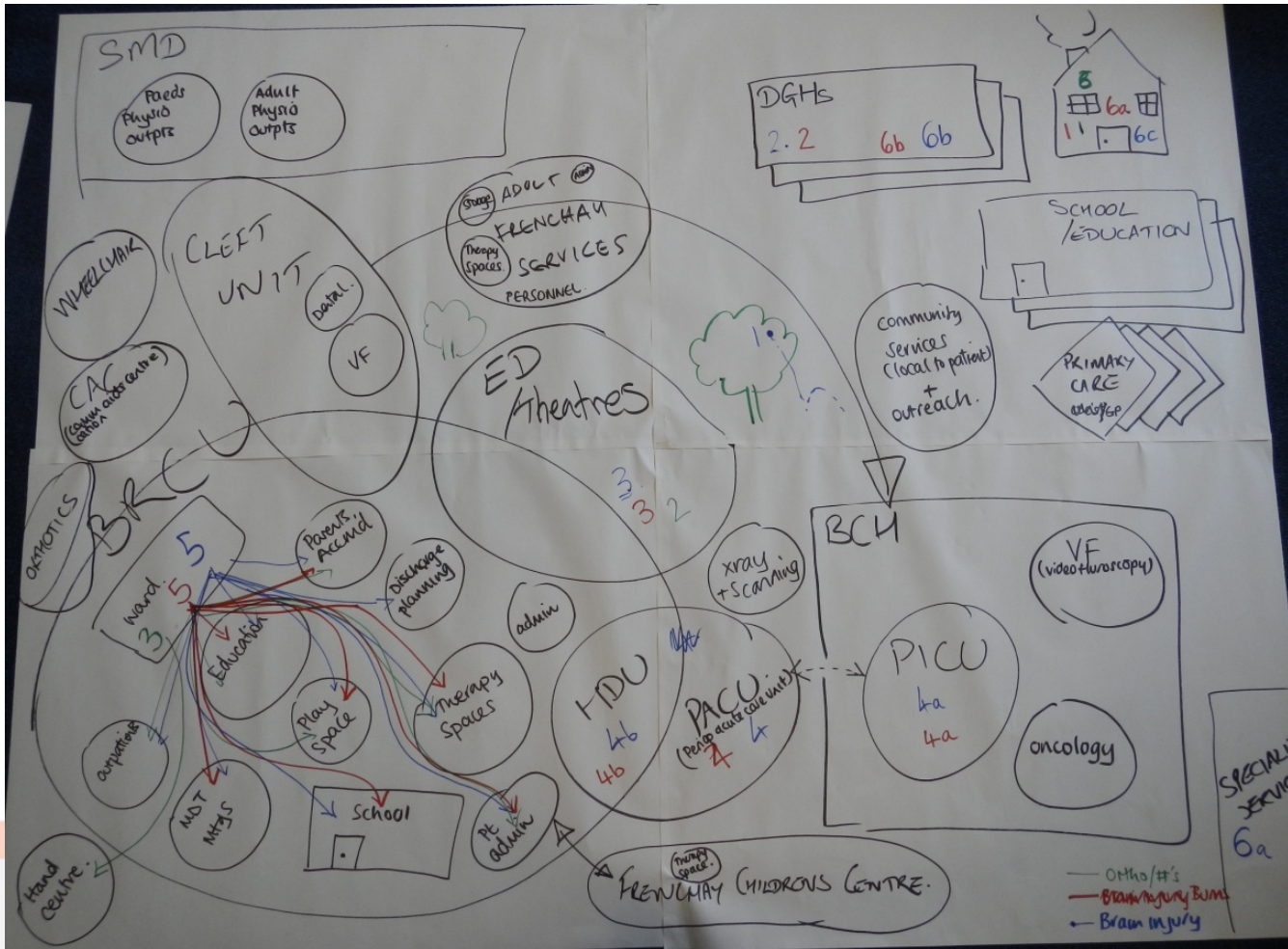
Low volume – High impact



Road traffic injuries
Major head trauma
Extensive burns

Long admission, slow recovery
+/- long term consequences

The challenge - rehabilitation

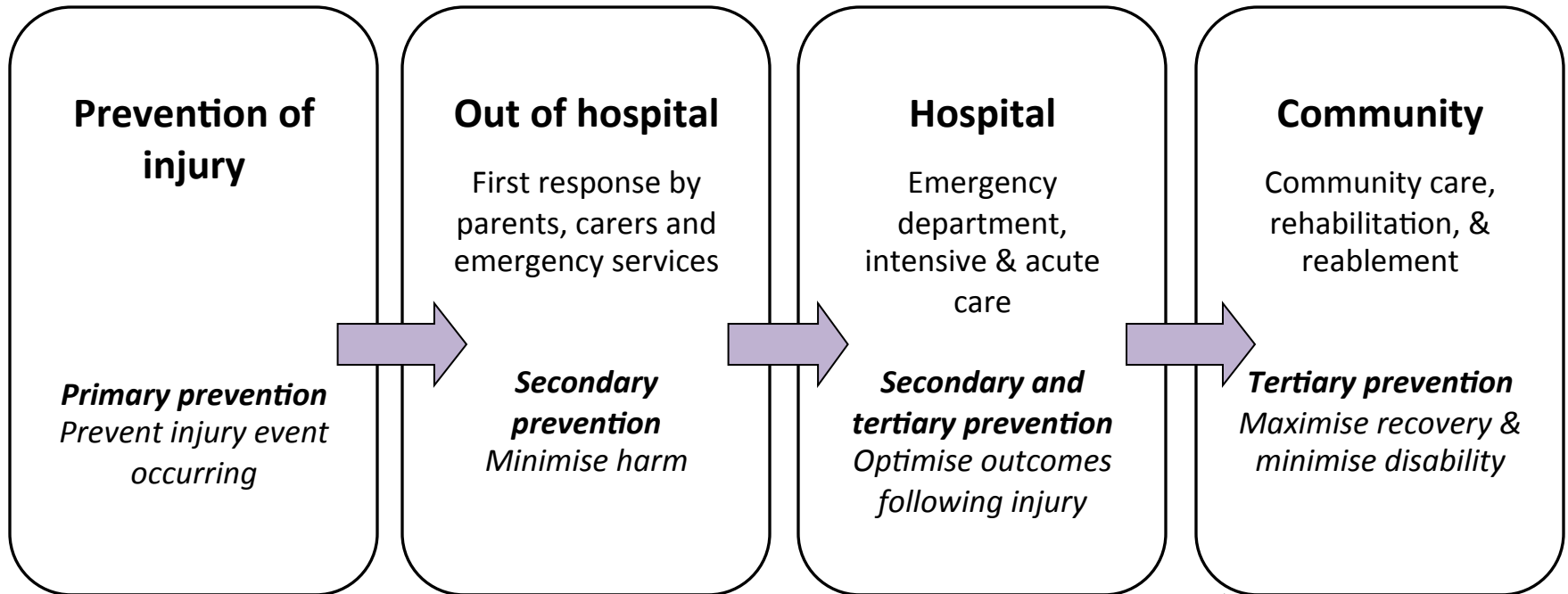


Current provision of services is complex

Little knowledge of long term impact

A solution?

Child Injury Prevention and Injury Care HIT

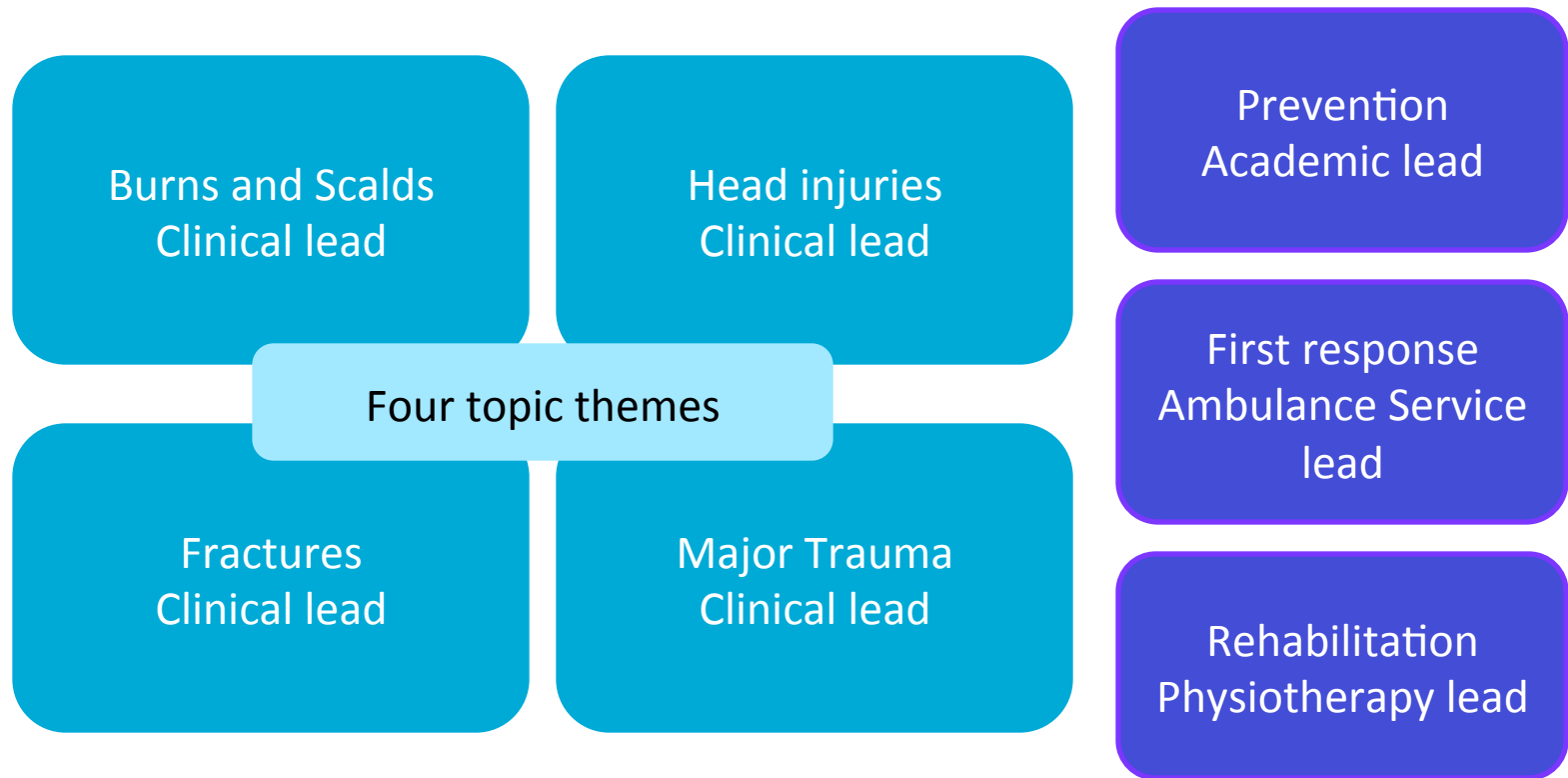


Child, young person & parent user involvement

Student, practitioner & professional education + public information

Research and innovation

Who is involved?



Who is involved?

Physiotherapy

Orthopaedics

Commissioners

Voluntary sector organisations

Environment experts

Special educational needs

Burn team

Psychology

Emergency Department

Children's Centre managers

Local Authority

Researchers

Occupational therapy

Fire and rescue service

Ambulance service

Acute and community Nurses

Neurology

Avonsafe

Speech and Language therapy



**Child Injury Prevention
& Injury Care**
Health Integration Team

Head injuries



Preventing post -concussion syndrome through the ED
(UHB RCF funding)

Faculty of Paediatric Neuropsychology Annual
Symposium (March 2015)

Collaborations within and outside Bristol

bettertogether

Bristol Health Partners

Challenges

Clinical workload

Data

Education and training

Sustainable PPI



Child Injury Prevention
& Injury Care
Health Integration Team



Thank you



Child Injury Prevention
& Injury Care
Health Integration Team

- Save the date
 - **CIPIC HIT showcase event**
 - 17th March 2016
 - University Hospitals Bristol Education Centre
- Julie.Mytton@uwe.ac.uk