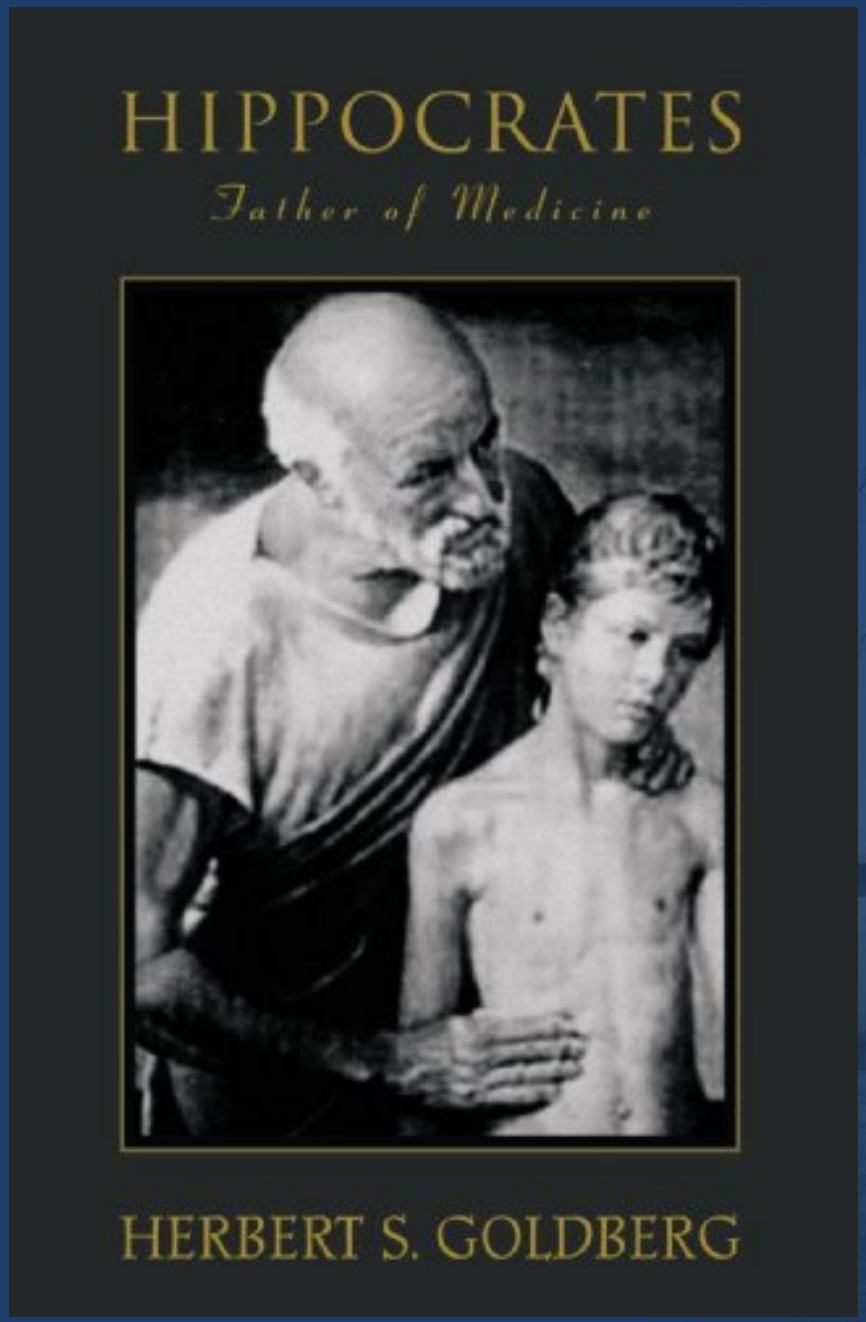
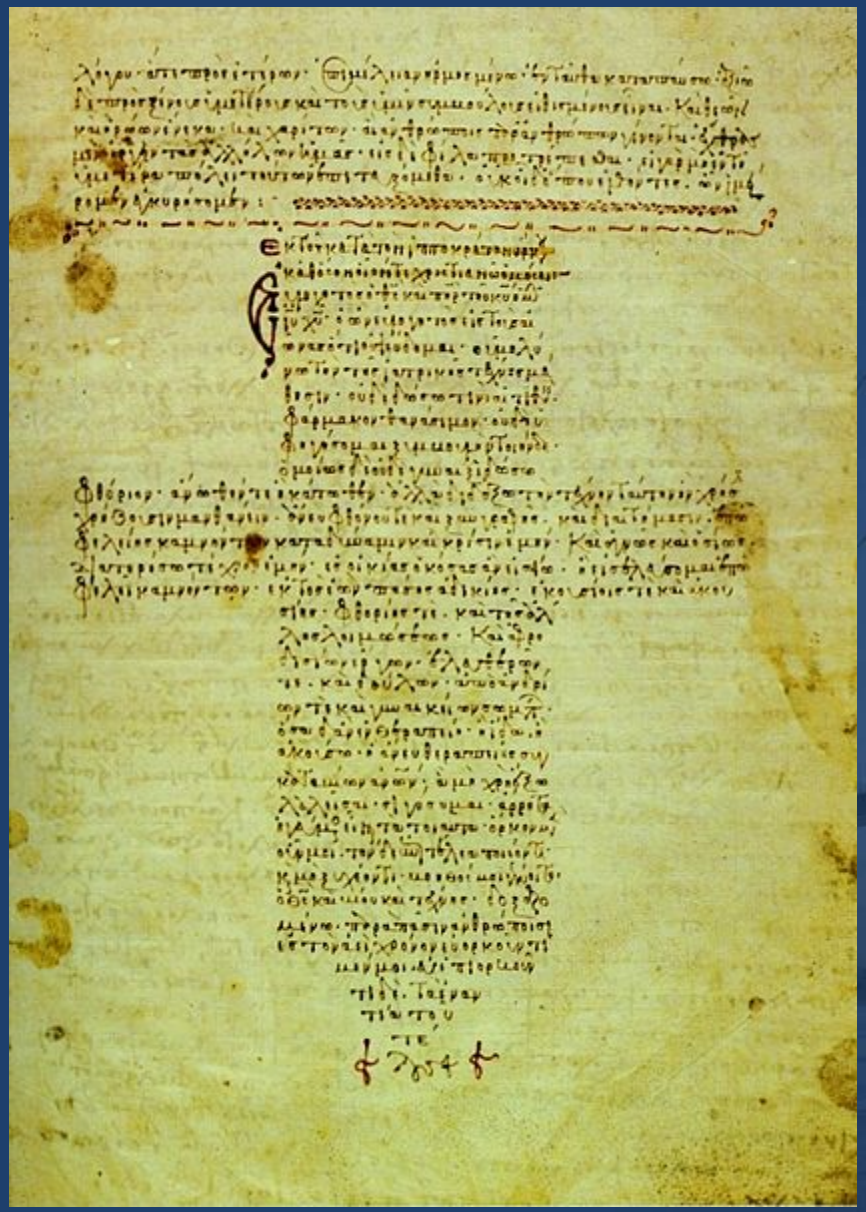
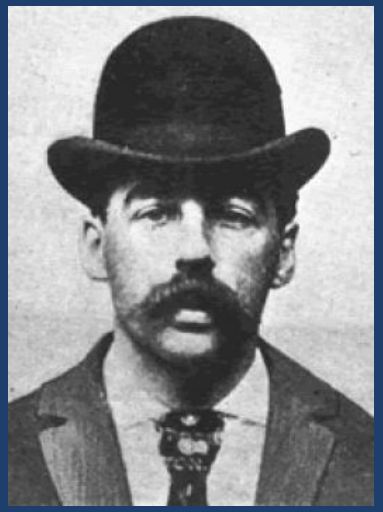
Specialist Rehabilitation Services – Where to from here?

Áine Carroll

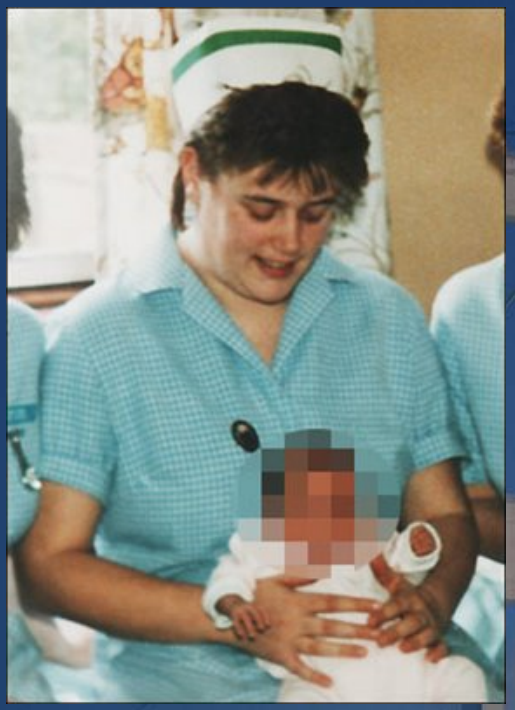
Clinical Lead of the Rehabilitation Medicine Programme,
National Clinical Strategy and Programmes Directorate,
HSE


HIPPOCRATES
Father of Medicine
HERBERT S. GOLDBERG

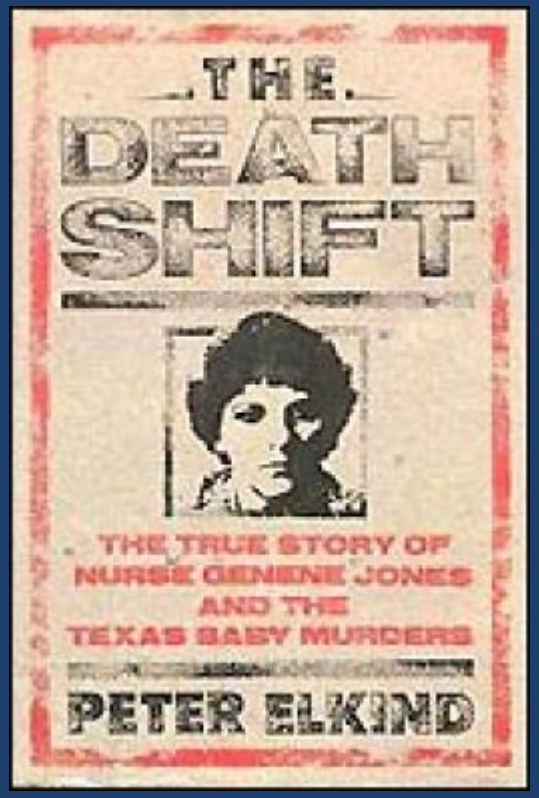




Henry Holmes



John Bodkin Adams



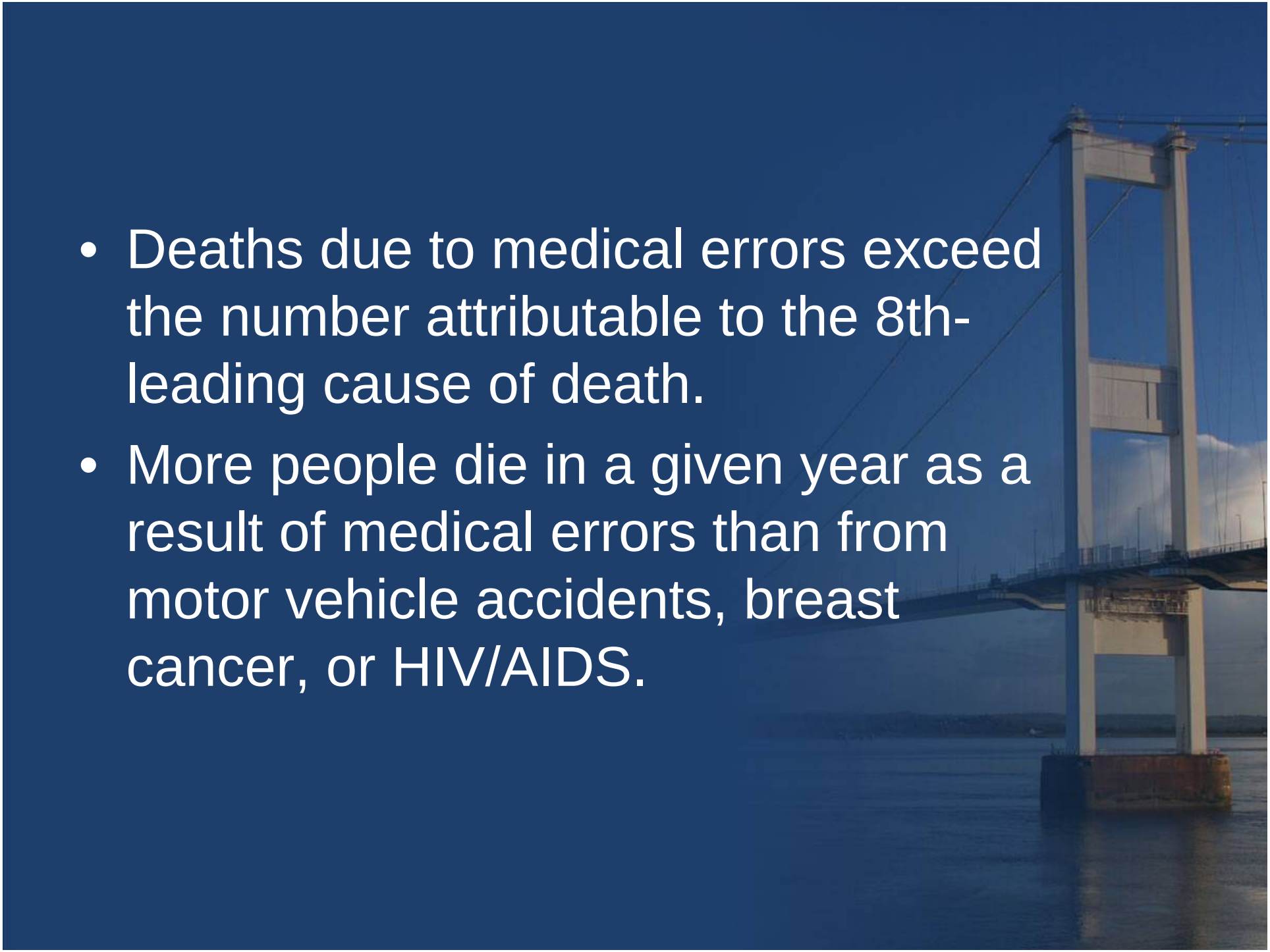
Joseph Michael Swango

The number one killer in a society is the health care system

World Health Organization

Health care errors seriously harm one in every 10 patients around the world

Perception that medical errors not a major issue

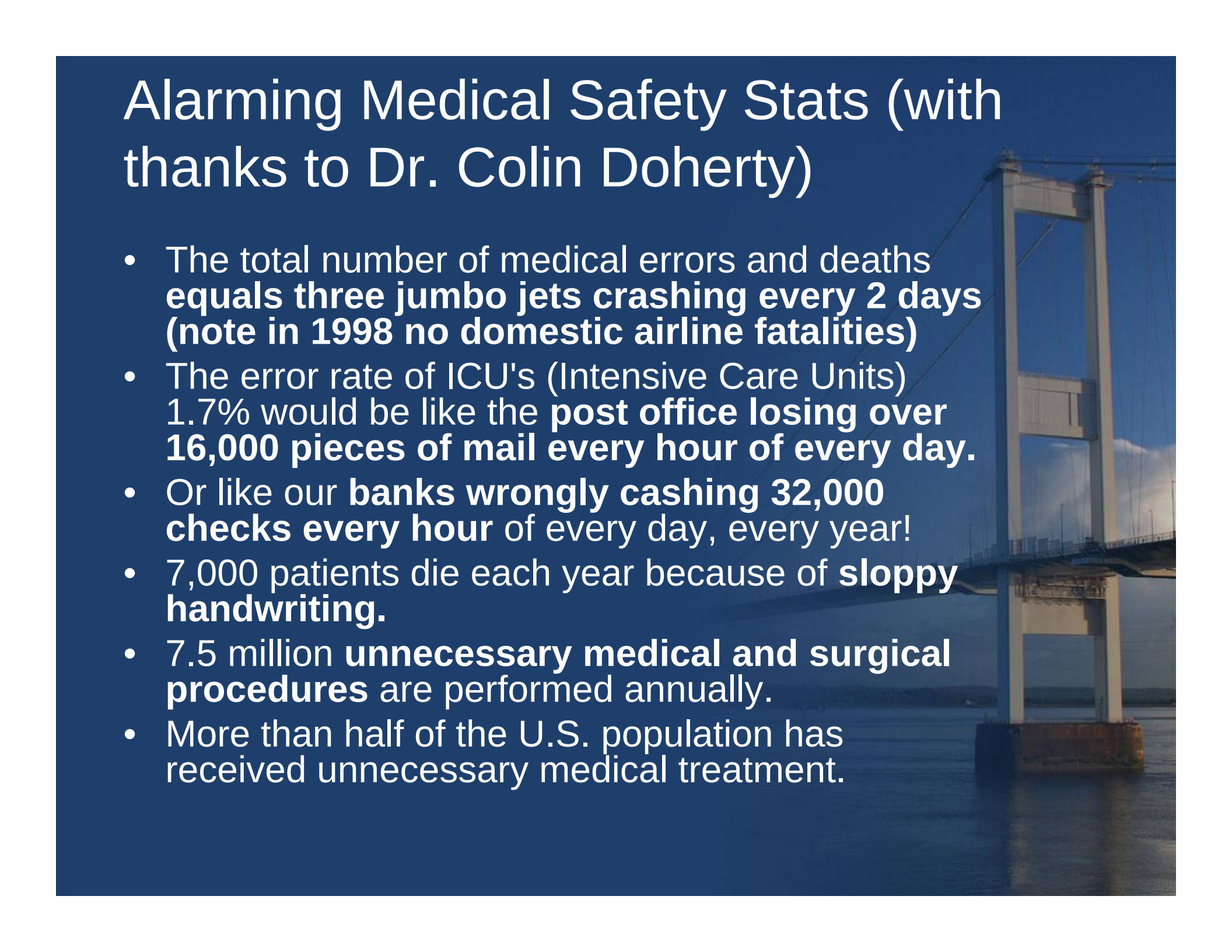


- Deaths due to medical errors exceed the number attributable to the 8th-leading cause of death.
- More people die in a given year as a result of medical errors than from motor vehicle accidents, breast cancer, or HIV/AIDS.

Estimated Annual Mortality and Economic Cost of Medical Intervention

Condition	*Deaths*	*Cost*
Adverse Drug Reactions	106,000	$12 billion
Medical error	98,000	$2 billion
Bedsores	115,000	$55 billion
Infection	88,000	$5 billion
Malnutrition	108,800	
Outpatients	199,000	$77 billion
Unnecessary Procedures	37,136	$122 billion
Surgery-Related	32,000	$9 billion
Total	**783,936**	**$282 billion**

Alarming Medical Safety Stats (with thanks to Dr. Colin Doherty)



- The total number of medical errors and deaths **equals three jumbo jets crashing every 2 days (note in 1998 no domestic airline fatalities)**
- The error rate of ICU's (Intensive Care Units) 1.7% would be like the **post office losing over 16,000 pieces of mail every hour of every day.**
- Or like our **banks wrongly cashing 32,000 checks every hour** of every day, every year!
- 7,000 patients die each year because of **sloppy handwriting.**
- 7.5 million **unnecessary medical and surgical procedures** are performed annually.
- More than half of the U.S. population has received unnecessary medical treatment.

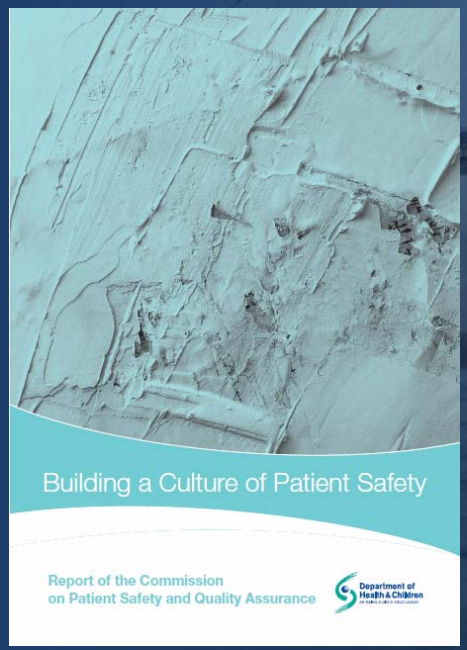
Healthcare transformation and Quality improvement

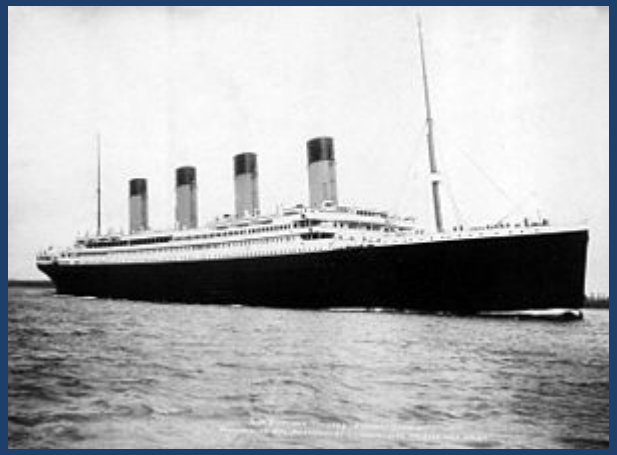

An Roinn Sláinte
DEPARTMENT OF HEALTH


Comhairle na nDochtúirí Leighis
Medical Council
Making a complaint about a doctor
A guide for patients


7th Edition 2009
Comhairle na nDochtúirí Leighis
Medical Council
GUIDE TO PROFESSIONAL CONDUCT AND ETHICS
FOR REGISTERED MEDICAL PRACTITIONERS
professional conduct
responsibilities to patients
medical records and confidentiality
consent to medical treatment
professional practice


Draft National Quality Standards
Residential Services for People with Disabilities

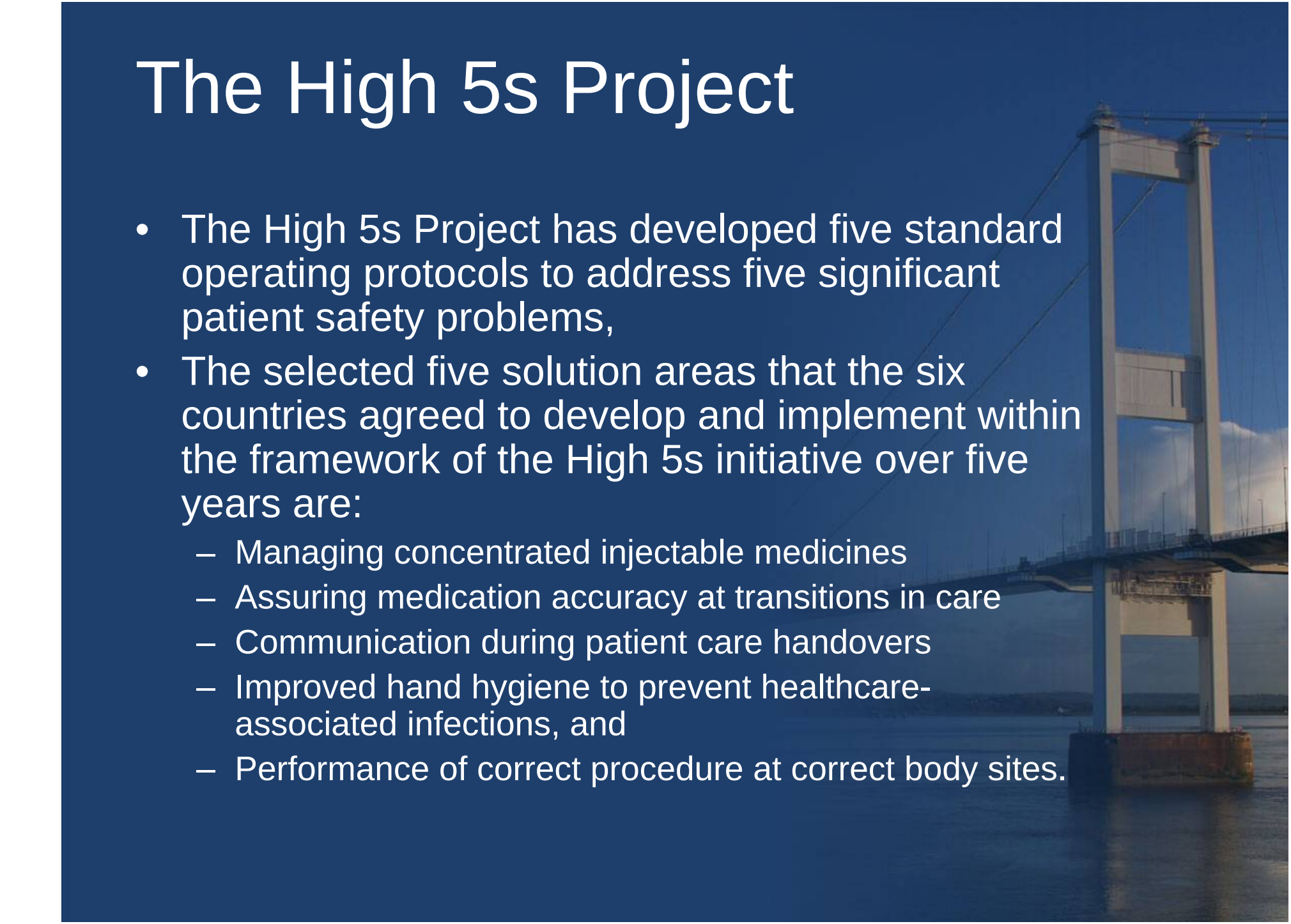

Building a Culture of Patient Safety
Report of the Commission on Patient Safety and Quality Assurance
Department of Health & Children



WHO Patient Safety Programme

- Patient safety is a fundamental principle of health care. Every point in the process of care-giving contains a certain degree of inherent unsafety.
- Adverse events may result from problems in practice, products, procedures or systems.
- Patient safety improvements demand a complex system-wide effort, involving a wide range of actions in performance improvement, environmental safety and risk management, including infection control, safe use of medicines, equipment safety, safe clinical practice and safe environment of care.

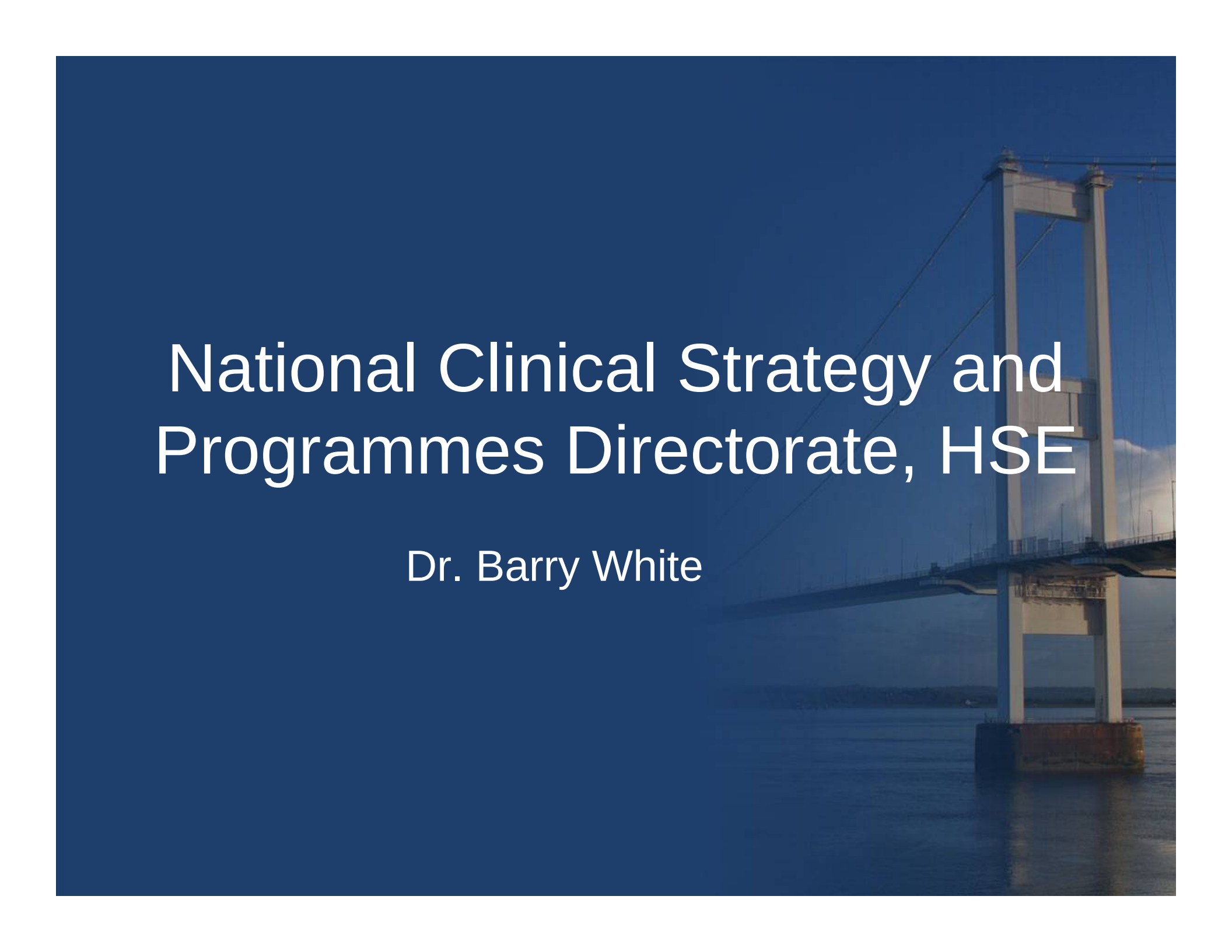
The High 5s Project



- The High 5s Project has developed five standard operating protocols to address five significant patient safety problems,
- The selected five solution areas that the six countries agreed to develop and implement within the framework of the High 5s initiative over five years are:
  - Managing concentrated injectable medicines
  - Assuring medication accuracy at transitions in care
  - Communication during patient care handovers
  - Improved hand hygiene to prevent healthcare-associated infections, and
  - Performance of correct procedure at correct body sites.

National Clinical Strategy and Programmes Directorate, HSE

Dr. Barry White



Mission

- Better care and better use of resources
- If patients get the right treatment we can save lives and money

Why take a programmatic approach to change?

•The advantages of developing chronic disease management programs are:

- Structured approach
- Change is led by experienced clinicians.
- Generates clinical buy-in and ownership from the start
- Engages Colleges and professional bodies.
- Enables greater organisational responsiveness i.e. frontline staff can access the top of the organisation in one step via the national lead.
- Sustained focus

What are the clinical programs & initiatives?

1. Primary Care Program

- 2. Chronic disease management programs
  - Stroke
  - Acute coronary syndrome
  - Heart failure
  - Asthma/COPD
  - Diabetes
  - Epilepsy
  - Mental health
- 3. Outpatient management programs
  - Dermatology
  - Neurology
  - Rheumatology
  - Orthopaedics
- 4. Emergency function related programs
  - Acute Medicine
  - Elective surgery
  - Diagnostic Imaging
  - Care of the elderly
- 5. Key Quality Safety and Risk initiatives
  - Governance
  - Underperforming clinician process
  - Patient safety bundles
  - Incident reporting
  - Audit
- 6. Other Clinical program areas
  - Obstetrics
  - Paediatrics
  - ICU
  - HCAI
  - Palliative care
  - Rehabilitation Medicine
- 7. Enabling programmes
  - Development of a resource allocation model
  - Pharma strategy
  - Implementation of Clinical Directorates
  - Defining a standard approach to delivering change

Overall principles

- Set goals that achieve gains in cost, quality, access and compliance
- Set goals that are simple and meaningful
- Nationalise existing local good practice - do not reinvent the wheel
- Ensure local ownership (authority, accountability and responsibility)
- Ensure patient involvement
- Embed data at the centre of all assessments and decisions
- Local implementation and communication plans

1. Key Change Themes

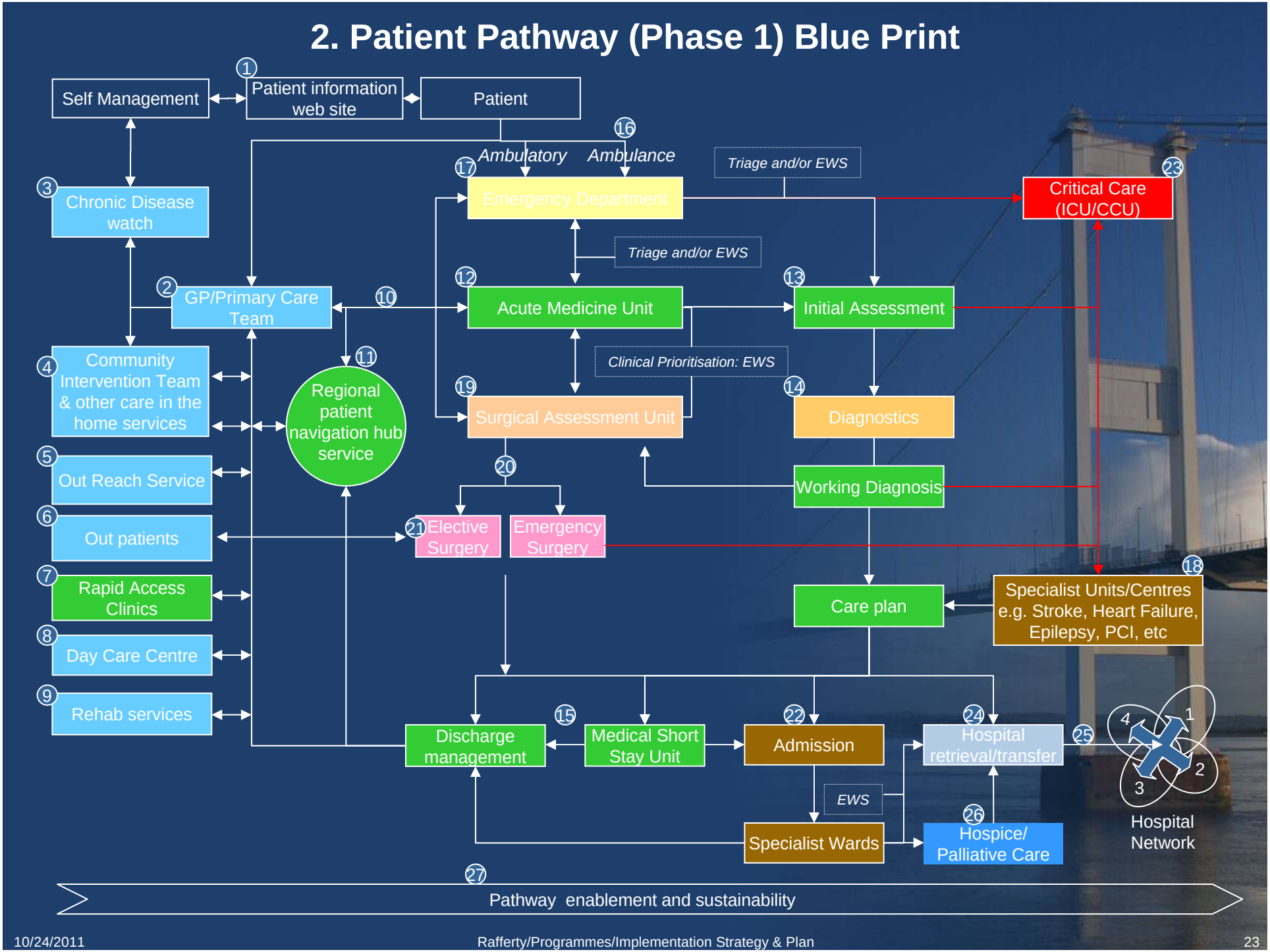
What is the **R**ight thing to do?

1. **Outpatients**
2. **Hospital Access (inpatient)**:
3. **Integration of chronic disease management**
4. **Clinical related costs savings**
5. **Regional/network alignment and enhancement of model 2 hospitals:**
6. **Patient self management**

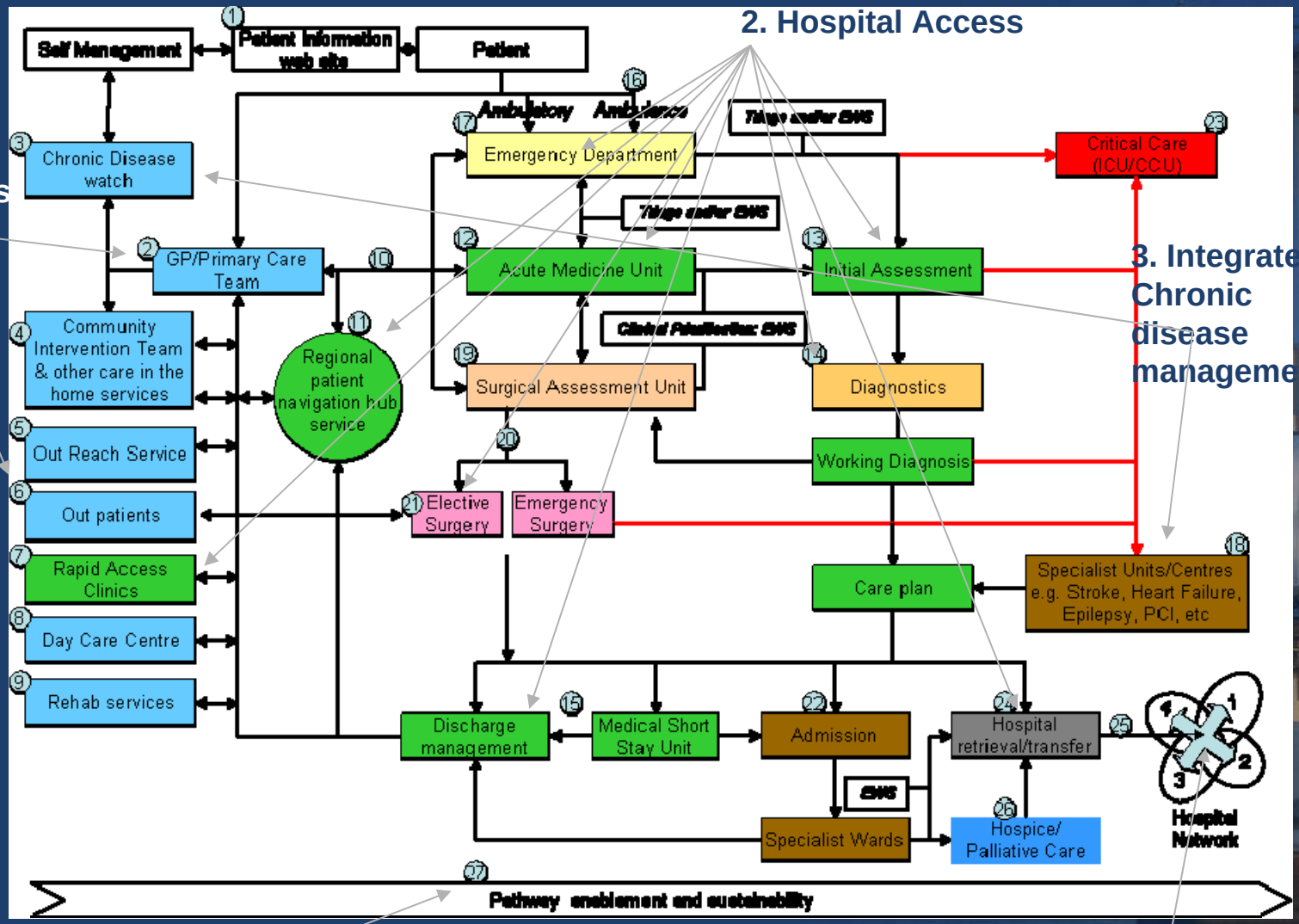
What is the **R**ight way to do it?

1. **Clinical Leadership & management**
2. **National change framework with local ownership and leadership**:
3. **Alignment of HSE management resources and structures**
4. **Effective financial and cost management:**
5. **Enhance and consolidate performance reporting:**

2. Patient Pathway (Phase 1) Blue Print



Mapping Change Themes to Pathway Blue Print



1. Outpatients

2. Hospital Access

3. Integrated Chronic disease management

4. Clinical related cost savings

5. Regional/Network alignment & enhancement of model 2 hospitals

Hospital – OPD

Solutions

- Target 4 areas (neurology, dermatology, rheumatology, and orthopaedics)

Gain

- Waiting lists <3 months and increase in new patients seen by >30%

Implementation

- Referral guidelines in place to ensure appropriate referral by Q2
- Proposals completed based on backlog, supply and demand, capacity with new targets for consultants/physiotherapists, new capacity with additional resource, demographics and international comparators) - complete
- Sites identified based on demographics - complete
- New post to be advertised by Q1 for sites compliant with conditions
- Cost savings achieved by Q4

Hospital –surgery anaesthesia

Solutions

- Guidelines for surgery (day surgery, day of surgery)
- Ring fence beds and decrease bed usage by DOSA, DS, and target AVLOS
- Productive theatre – theatre utilisation of 90% (associated WHO checklist)
- National surgical audit

Gain

- Save 100 lives per annum
- Save >200 beds
- Remove waits
- Save on stock, and wastage due to cancellation (based on UK experience it represents €80m

Implementation

- Guidelines available within next 8 weeks
- Potential bed day savings per site to be calculated by end of June 2011
- Budget adjustments 2012
- 5 productive theatre sites already underway with further 5 for later in year
- National audit office established 2011 July

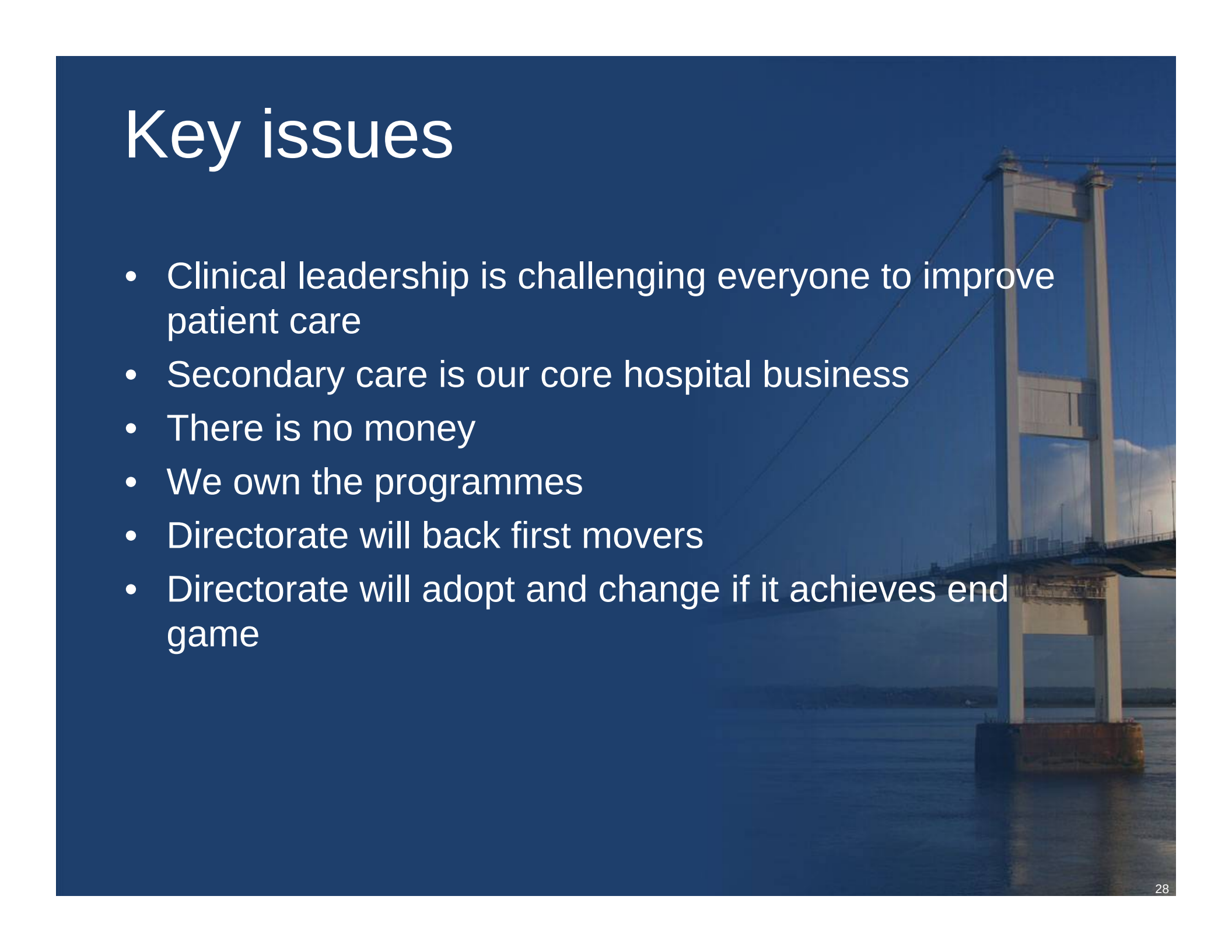
Hospital - Acute medicine

Linked programmes

- Clinical Governance
- Emergency Medicine
- Stroke
- COPD outreach
- Heart Failure
- ACS
- Epilepsy
- Diabetes
- OPAT
- HCAI
- Elderly
- Radiology
- Palliative care
- Rehabilitation Medicine
- Pathology

Key issues

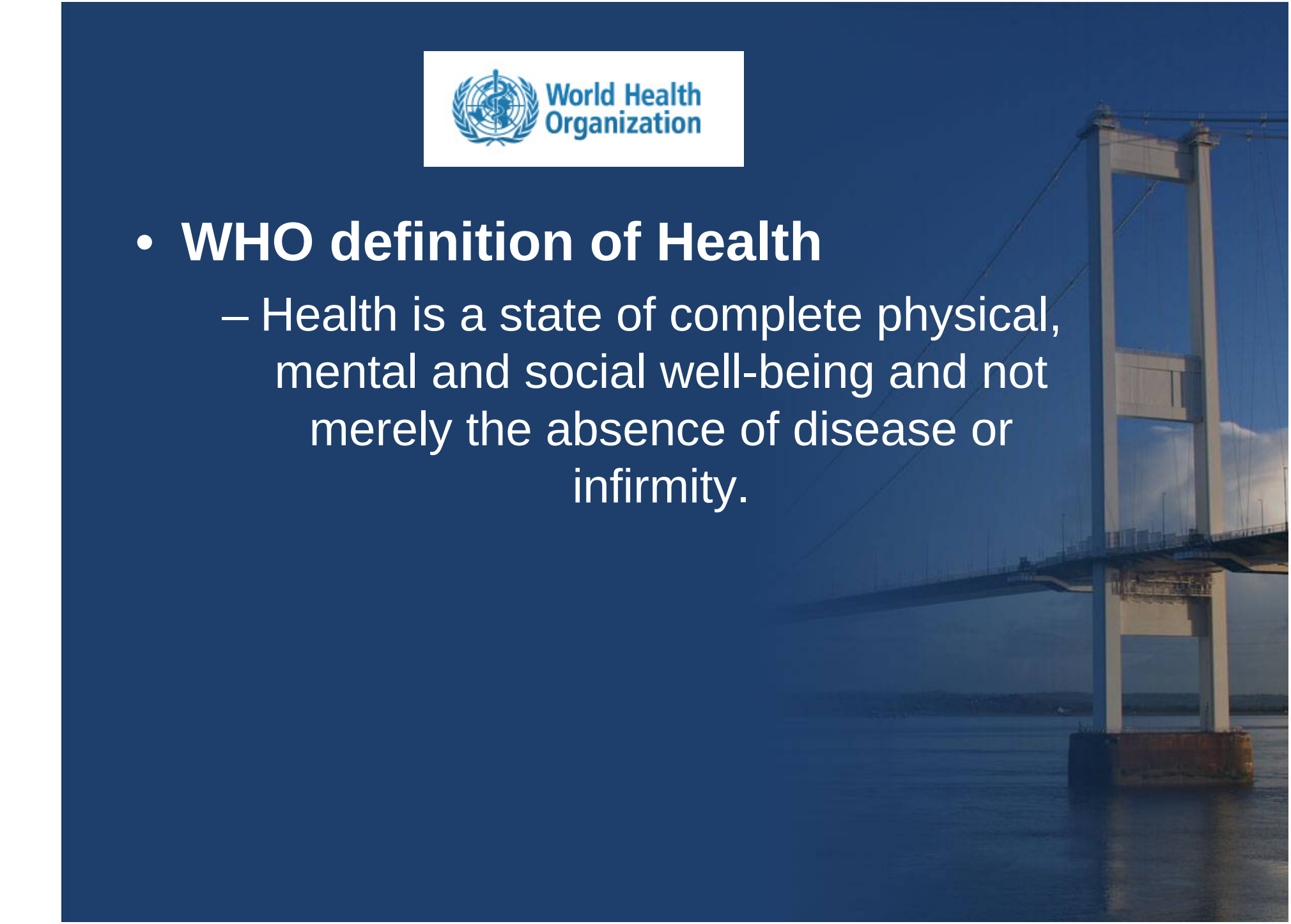
- Clinical leadership is challenging everyone to improve patient care
- Secondary care is our core hospital business
- There is no money
- We own the programmes
- Directorate will back first movers
- Directorate will adopt and change if it achieves end game



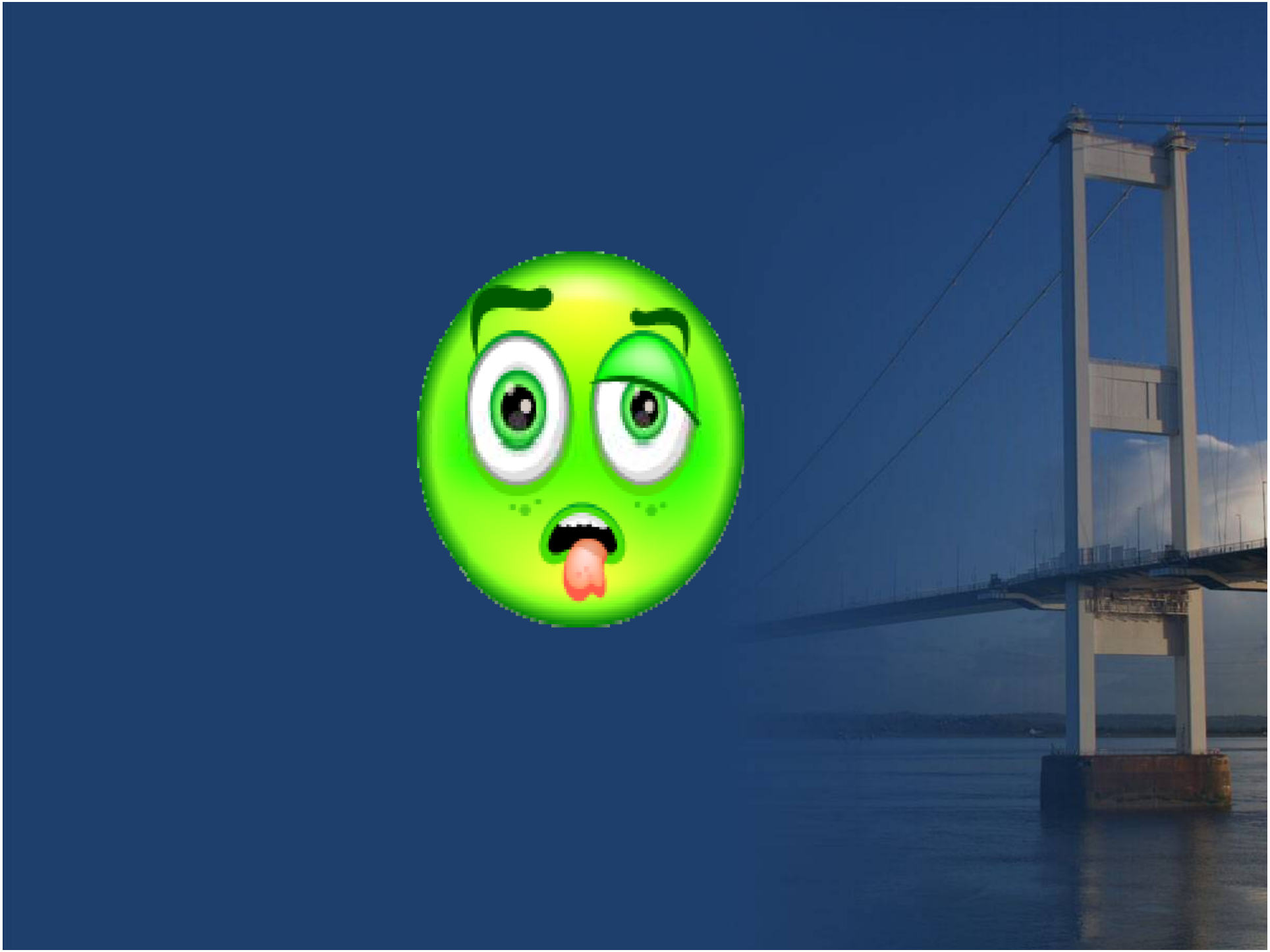
Risks

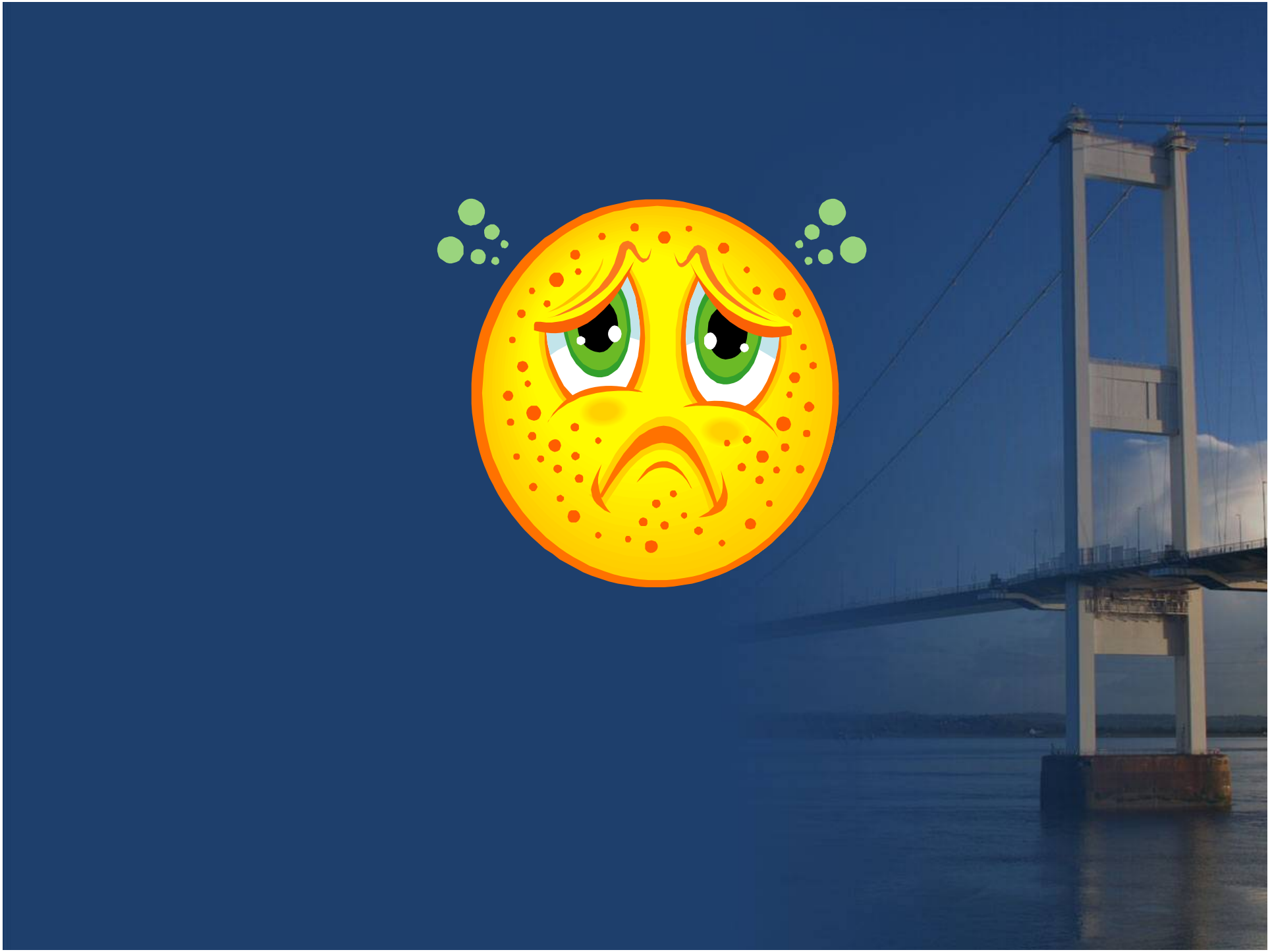
- Poor local financial management
- Closing beds outside of programme plan
- Loss of nursing staff
- Alignment of organisation
- Crisis intervention
- Model 2 Hospitals and local political pressure
- HIQA requirements

Rehabilitation Medicine



- **WHO definition of Health**
  - Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

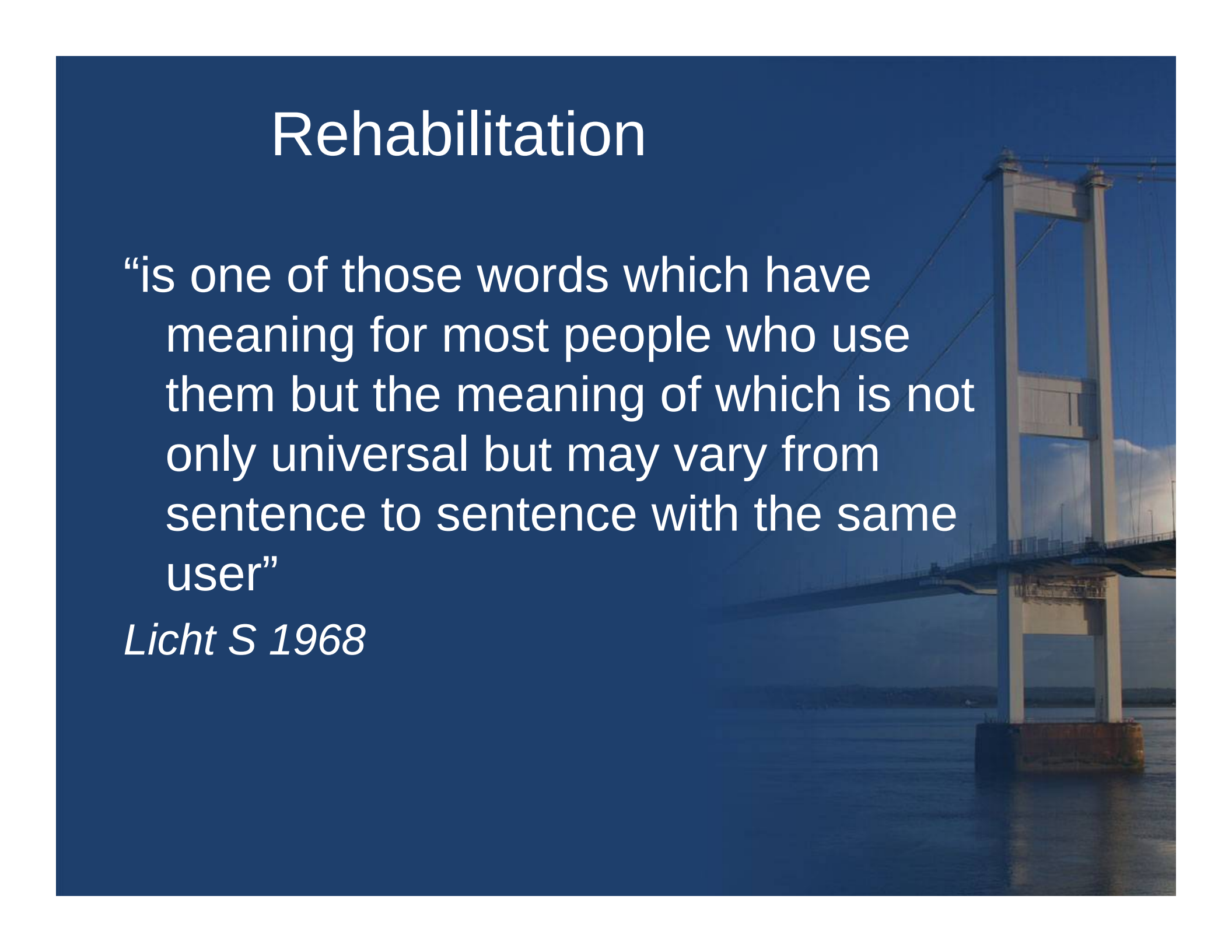




Rehabilitation

"is one of those words which have meaning for most people who use them but the meaning of which is not only universal but may vary from sentence to sentence with the same user"

Licht S 1968



Rehabilitation

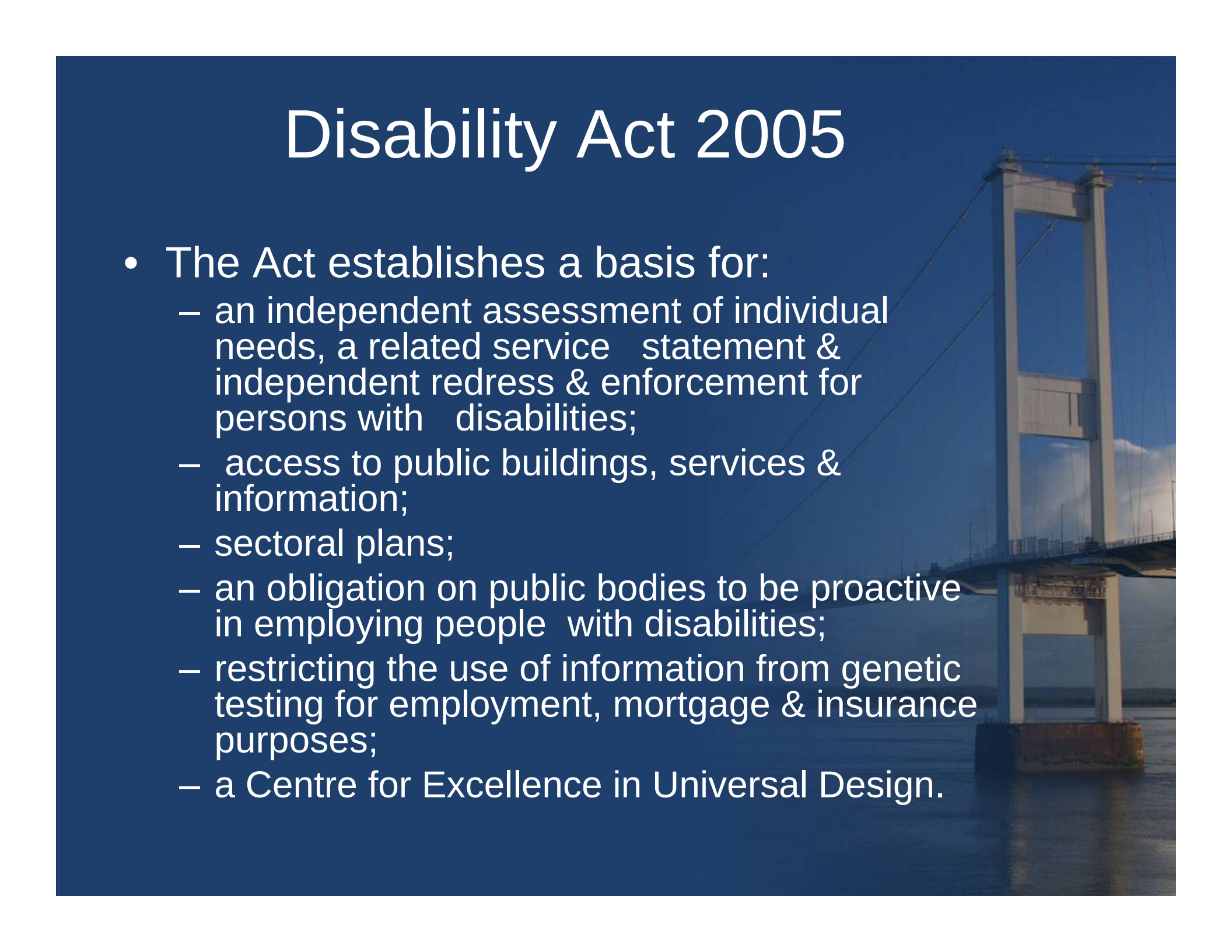
- Access to Rehabilitation is a basic human right, which is supported by the United Nations Charter through its standards (1993) by the European Year for People with Disabilities, 2003 and the 58th Resolution of the World Health Assembly (2005).
- In addition, many European states have anti-discrimination laws, which can be used to support people with disabilities and their families and assistants.

UN Convention on disability

- UN Convention adopted on 13 December, 2006 and opened for signature on 30 March 2007.
- 149 signatories (Ireland)
- 101 ratifications

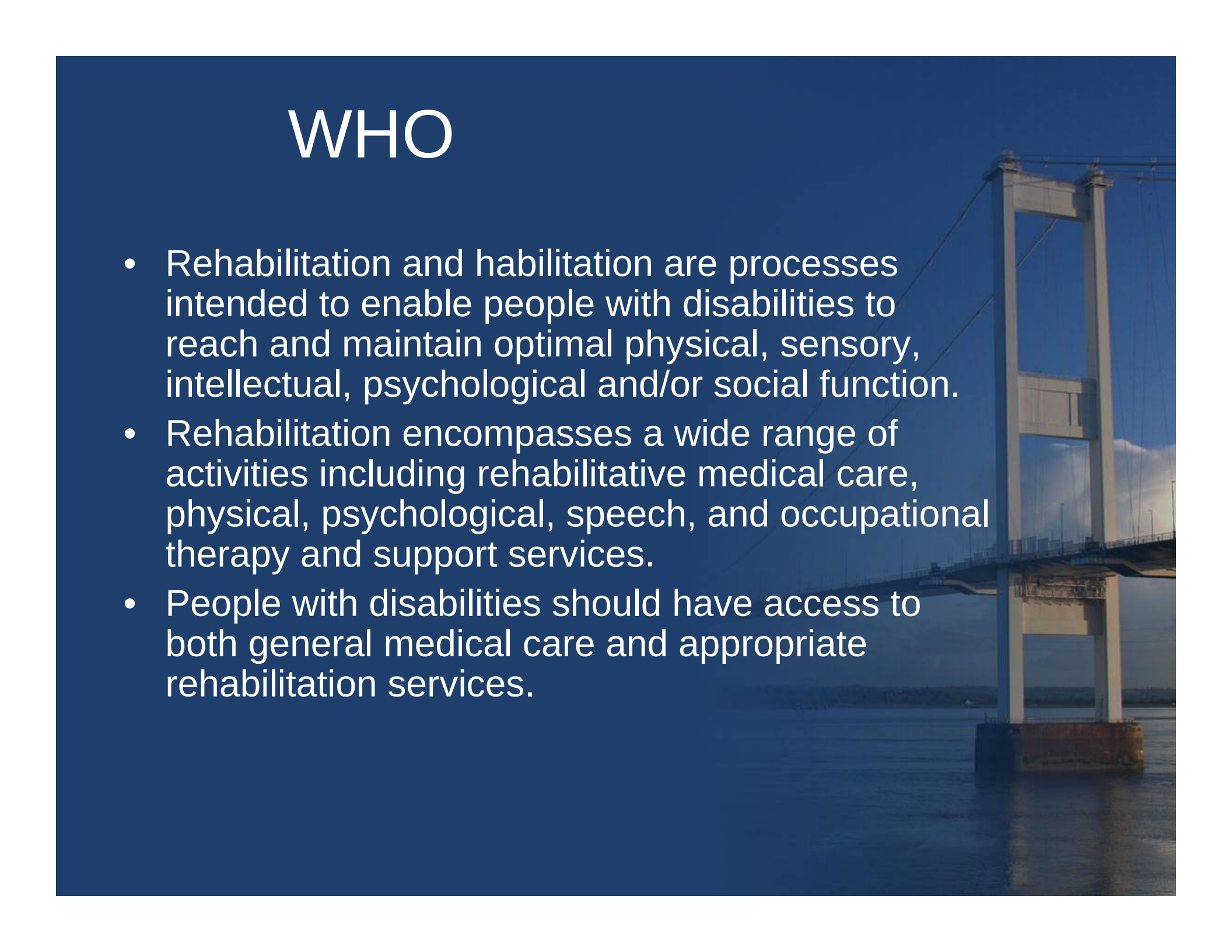
Disability Act 2005

- The Act establishes a basis for:
  - an independent assessment of individual needs, a related service statement & independent redress & enforcement for persons with disabilities;
  - access to public buildings, services & information;
  - sectoral plans;
  - an obligation on public bodies to be proactive in employing people with disabilities;
  - restricting the use of information from genetic testing for employment, mortgage & insurance purposes;
  - a Centre for Excellence in Universal Design.



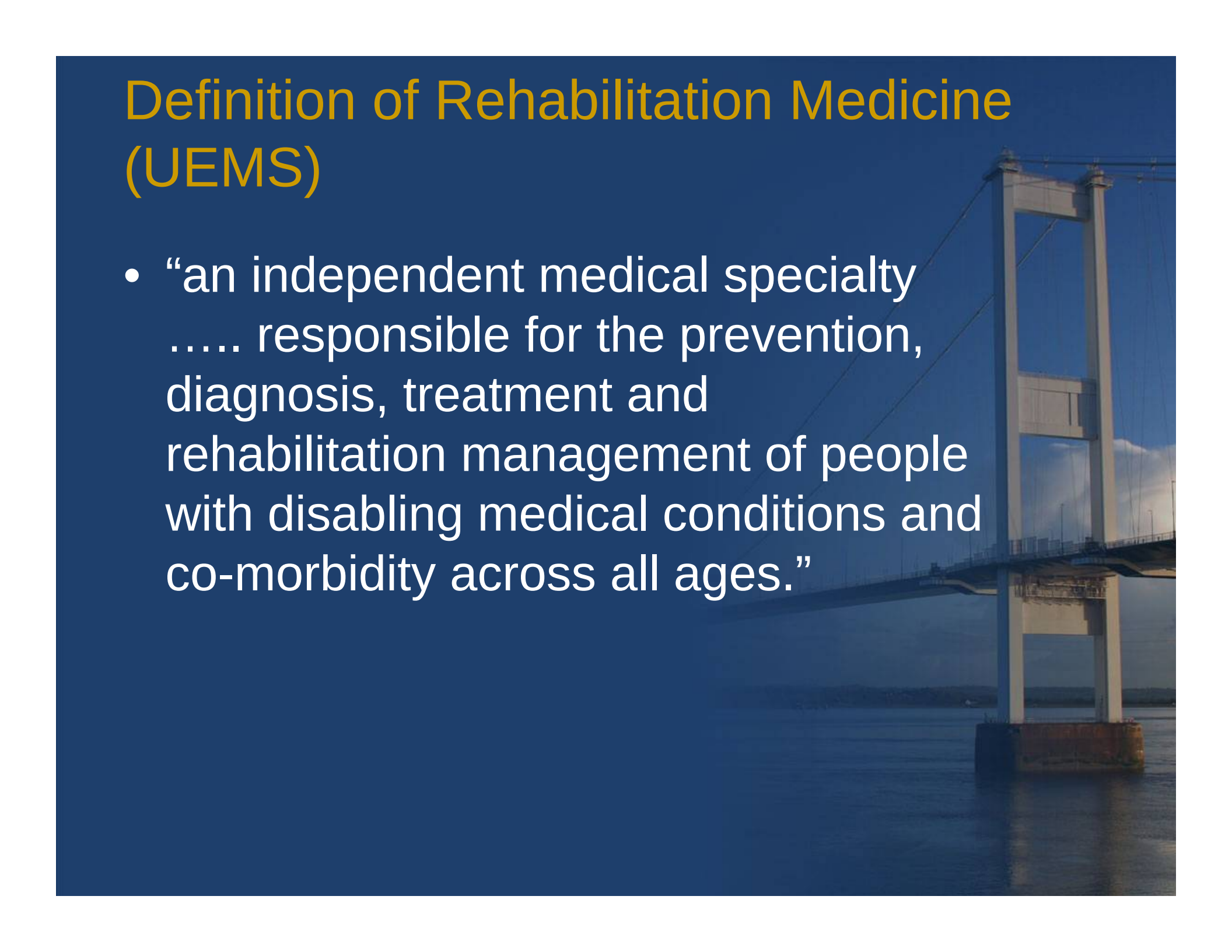
WHO

- Rehabilitation and habilitation are processes intended to enable people with disabilities to reach and maintain optimal physical, sensory, intellectual, psychological and/or social function.
- Rehabilitation encompasses a wide range of activities including rehabilitative medical care, physical, psychological, speech, and occupational therapy and support services.
- People with disabilities should have access to both general medical care and appropriate rehabilitation services.



Definition of Rehabilitation Medicine (UEMS)

- “an independent medical specialty ….. responsible for the prevention, diagnosis, treatment and rehabilitation management of people with disabling medical conditions and co-morbidity across all ages.”



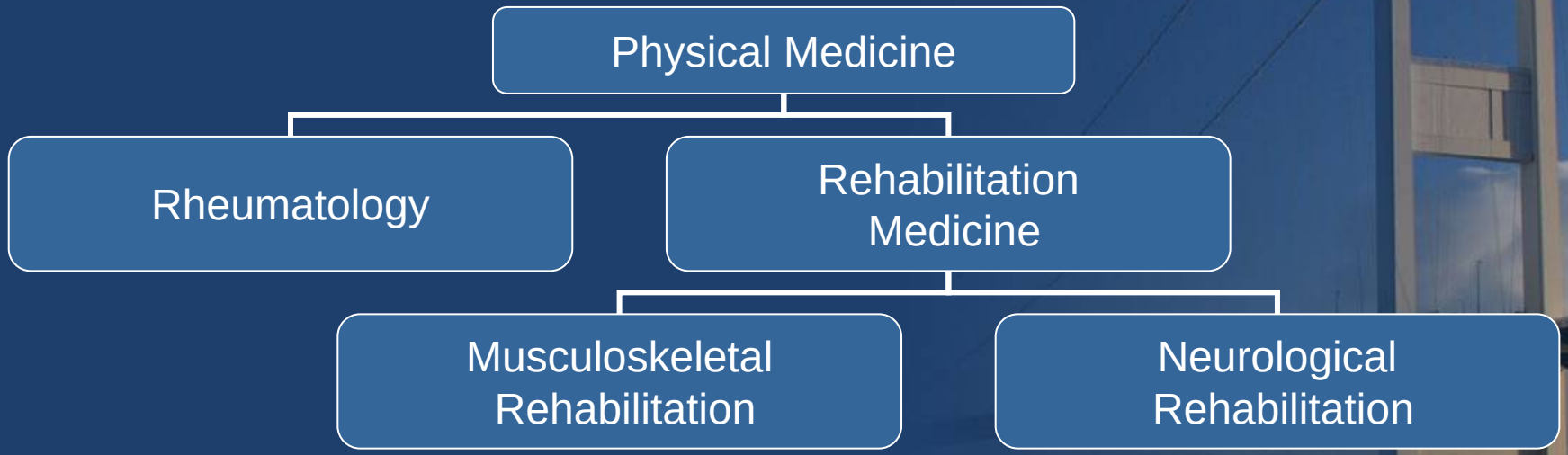
Definition BSRM

- defined in terms of concept and service:
  - *Conceptual definition:* A process of active change by which a person who has become disabled acquires the knowledge and skills needed for optimal physical, psychological and social function.
  - *Service definition:* The use of all means to minimise the impact of disabling conditions and to assist disabled people to achieve their desired level of autonomy and participation in society.

Rehabilitation Medicine

- Historically grew to fill the 16-65”gap” between paediatric and elderly services
- Good evidence to show that young adults require different programmes and environments for rehabilitation from those required for the elderly.

History


Physical Medicine
Rheumatology
Rehabilitation Medicine
Musculoskeletal Rehabilitation
Neurological Rehabilitation

History

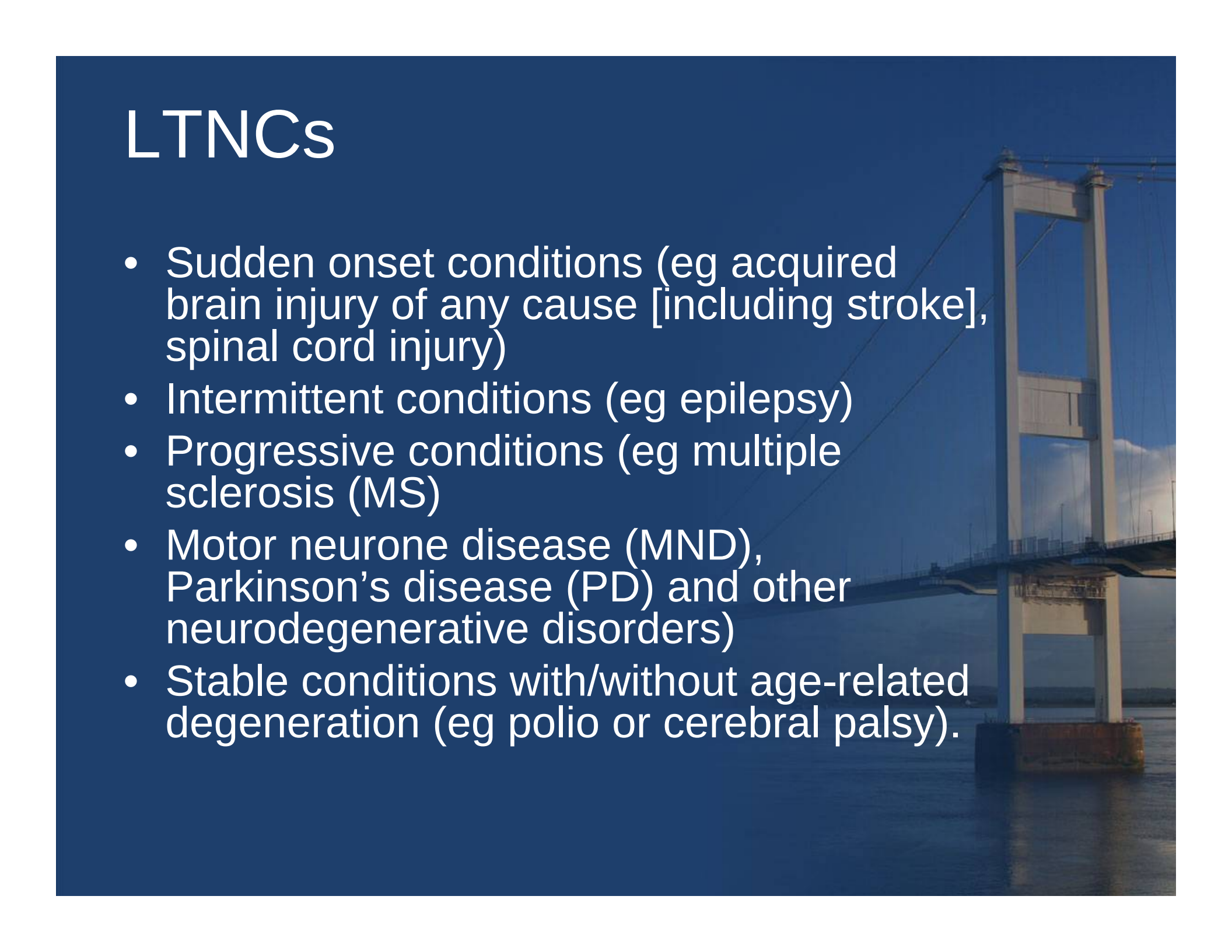
- First Generation
  - Polio and world war survivors
- Second generation
  - Evidence based practice
- Third generation
  - Neuromodulation, neuroprostheses

Neurological Rehabilitation

- 40% of significant disability due to chronic neurological disorders
- 20% of hospital admissions

LTNCs

- Sudden onset conditions (eg acquired brain injury of any cause [including stroke], spinal cord injury)
- Intermittent conditions (eg epilepsy)
- Progressive conditions (eg multiple sclerosis (MS)
- Motor neurone disease (MND), Parkinson’s disease (PD) and other neurodegenerative disorders)
- Stable conditions with/without age-related degeneration (eg polio or cerebral palsy).



Re-habilitation Options

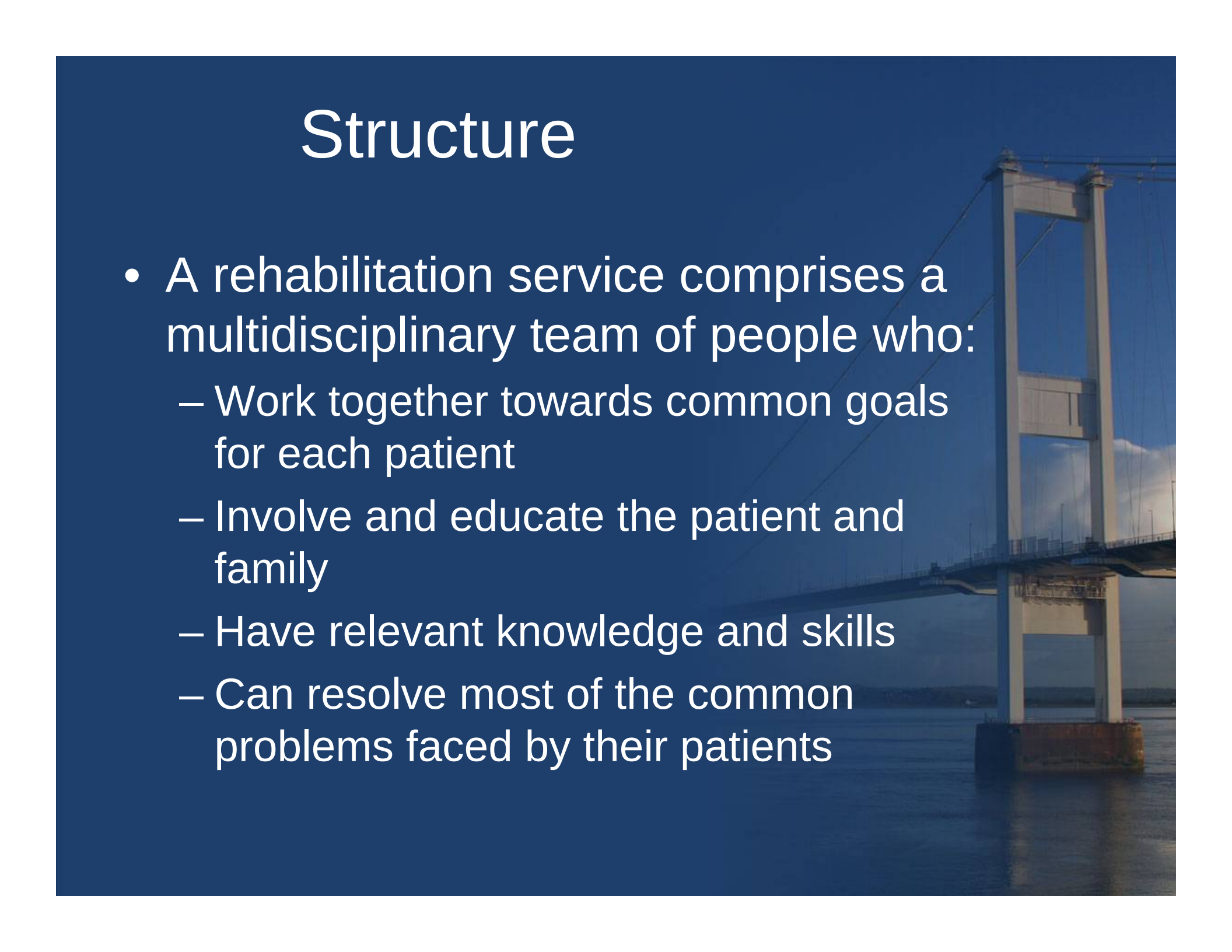
- Restorative - Restitution, Substitution
- Developmental - Compensation:
  - Remediation, Behavioural substitution,
  - Accommodation, Assimilation
- Enablement and ‘habilitation’

Rehabilitation

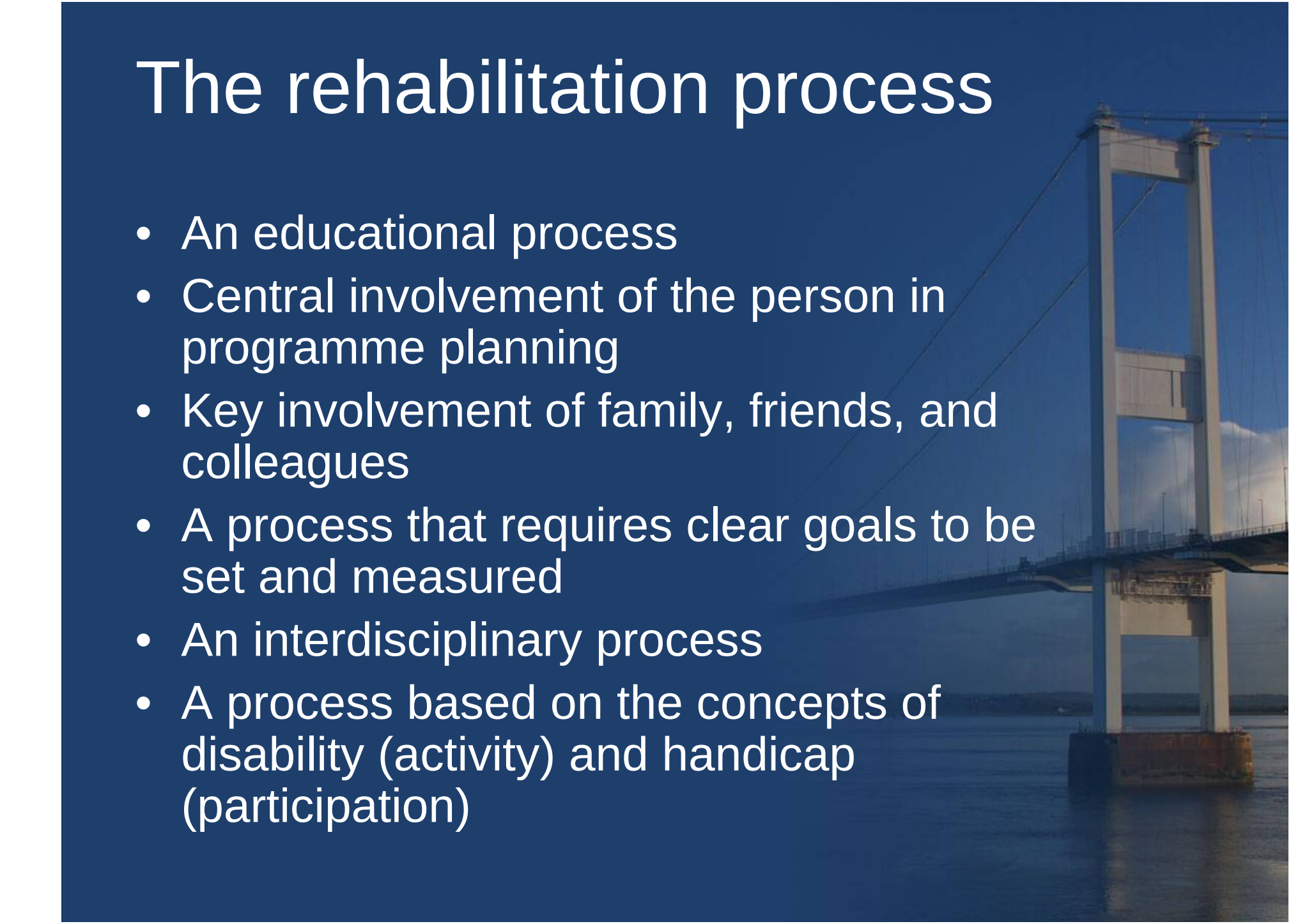
- Continuum from onset to community
  - Starts from first contact between patient & professionals
  - not a separate process from quality medical care
- Communication
  - Patient & Family
  - Interprofessional
    - In-patient Team
    - Primary & Secondary Care

Structure

- A rehabilitation service comprises a multidisciplinary team of people who:
  - Work together towards common goals for each patient
  - Involve and educate the patient and family
  - Have relevant knowledge and skills
  - Can resolve most of the common problems faced by their patients

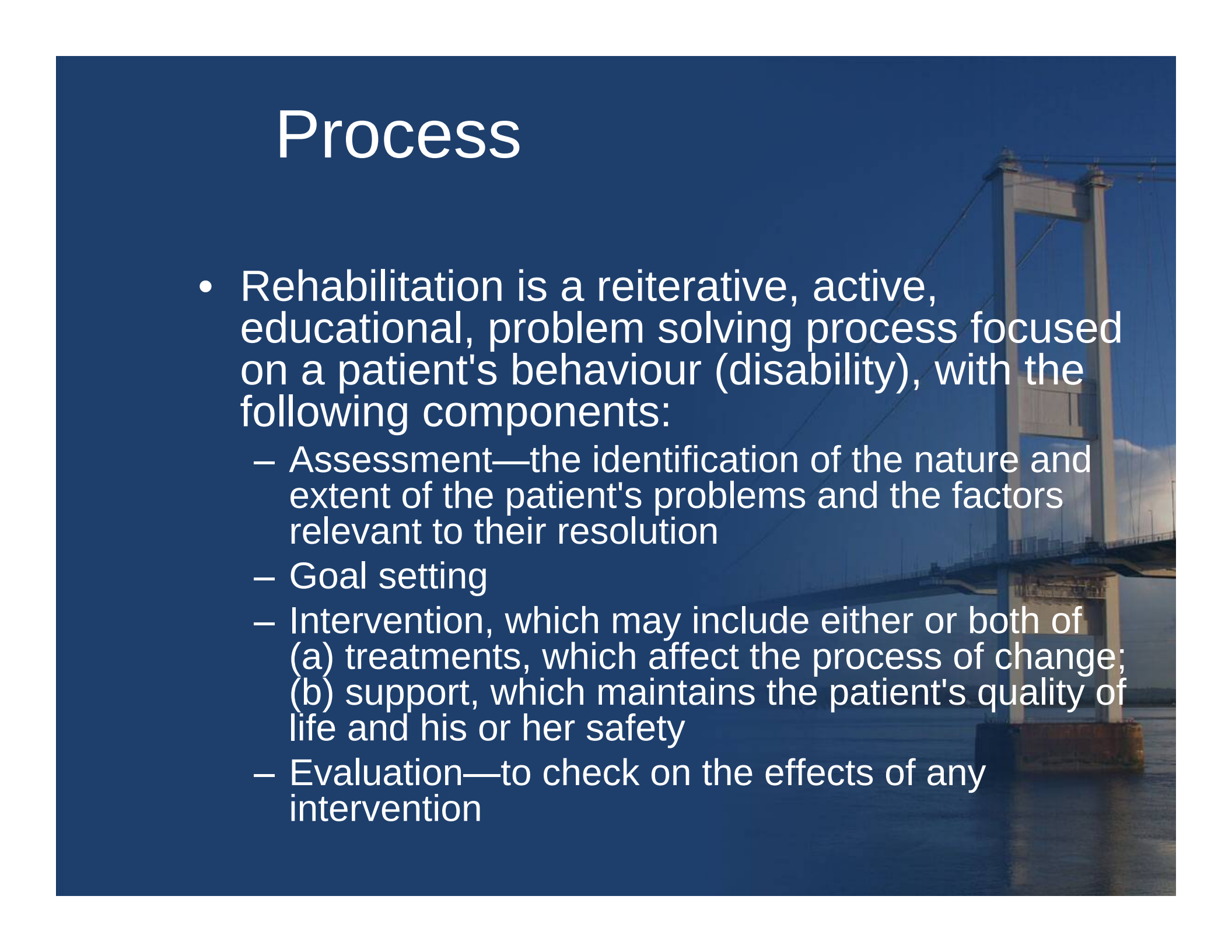


The rehabilitation process



- An educational process
- Central involvement of the person in programme planning
- Key involvement of family, friends, and colleagues
- A process that requires clear goals to be set and measured
- An interdisciplinary process
- A process based on the concepts of disability (activity) and handicap (participation)

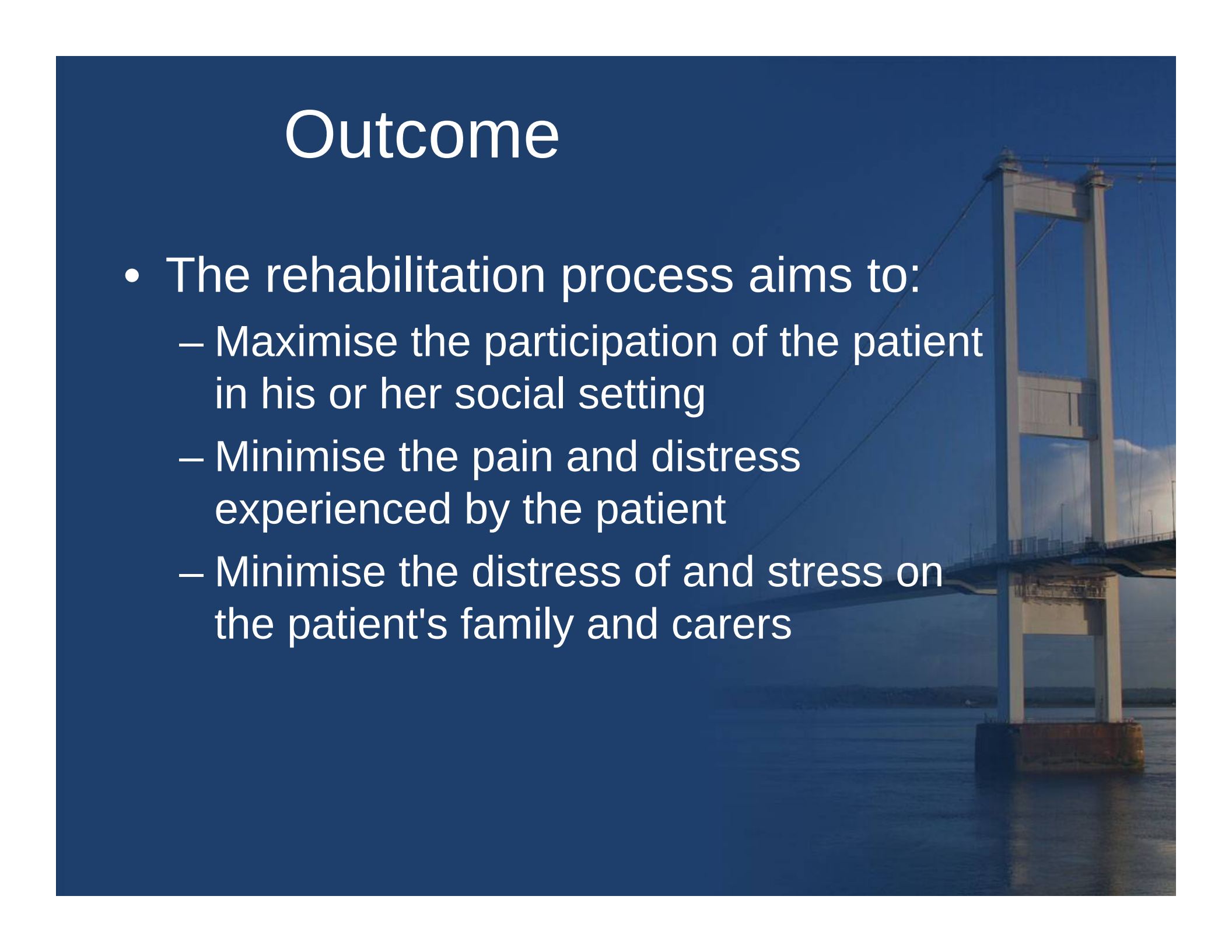
Process



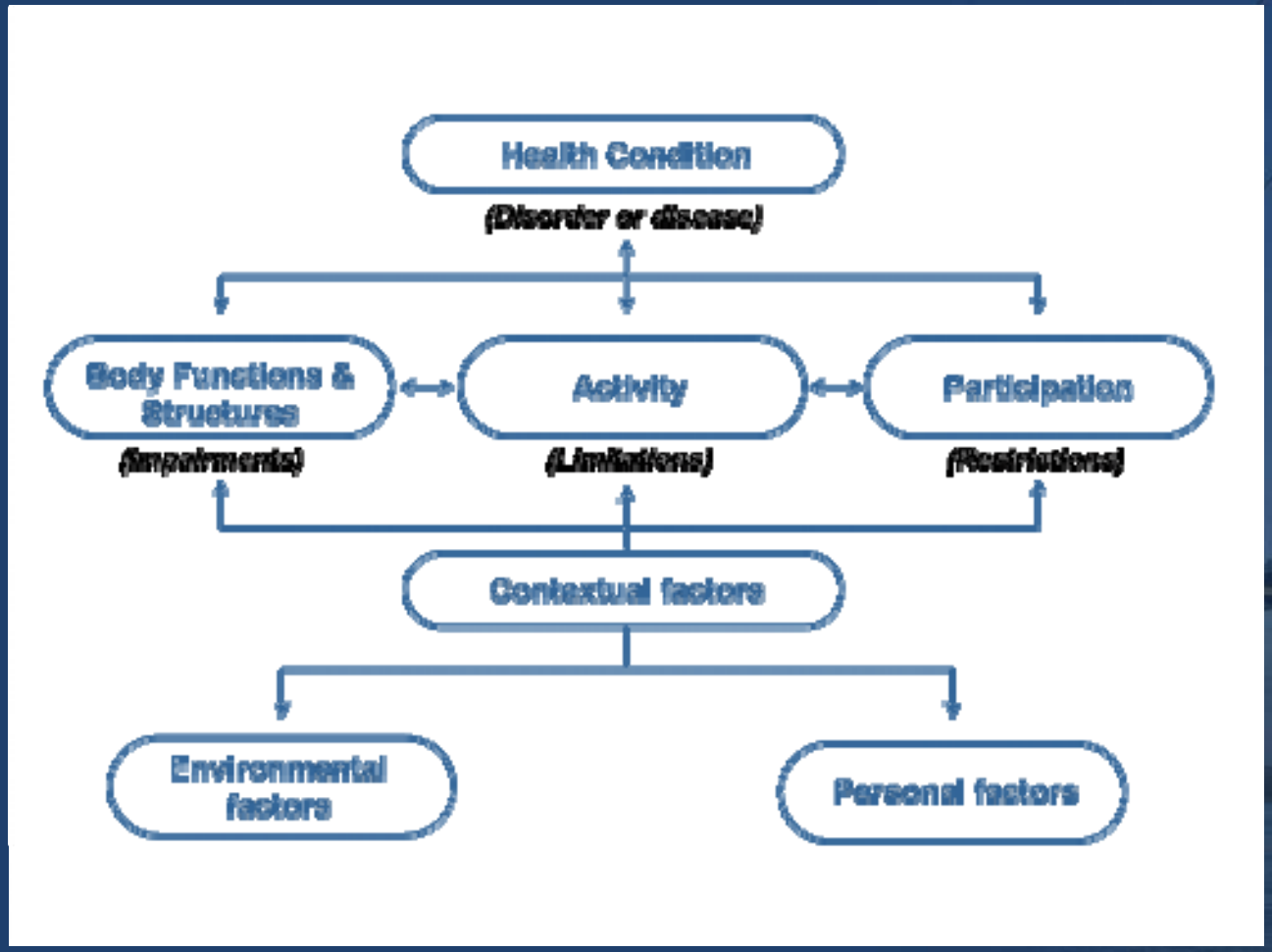
- Rehabilitation is a reiterative, active, educational, problem solving process focused on a patient's behaviour (disability), with the following components:
  - Assessment—the identification of the nature and extent of the patient's problems and the factors relevant to their resolution
  - Goal setting
  - Intervention, which may include either or both of (a) treatments, which affect the process of change; (b) support, which maintains the patient's quality of life and his or her safety
  - Evaluation—to check on the effects of any intervention

Outcome

- The rehabilitation process aims to:
  - Maximise the participation of the patient in his or her social setting
  - Minimise the pain and distress experienced by the patient
  - Minimise the distress of and stress on the patient's family and carers



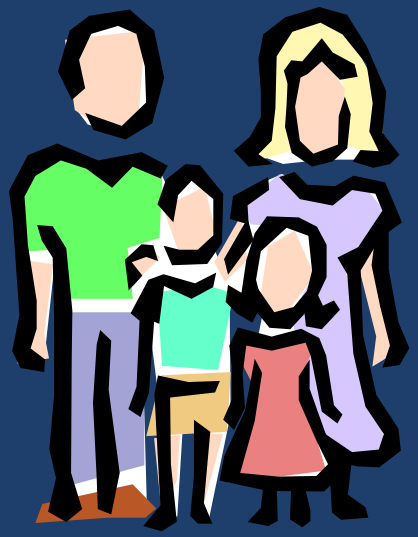
International Classification of Functioning, Disability and Health



Cultural Applicability

- Conceptual and functional equivalence of Classification
- Translatability
- Usability
- International Comparisons

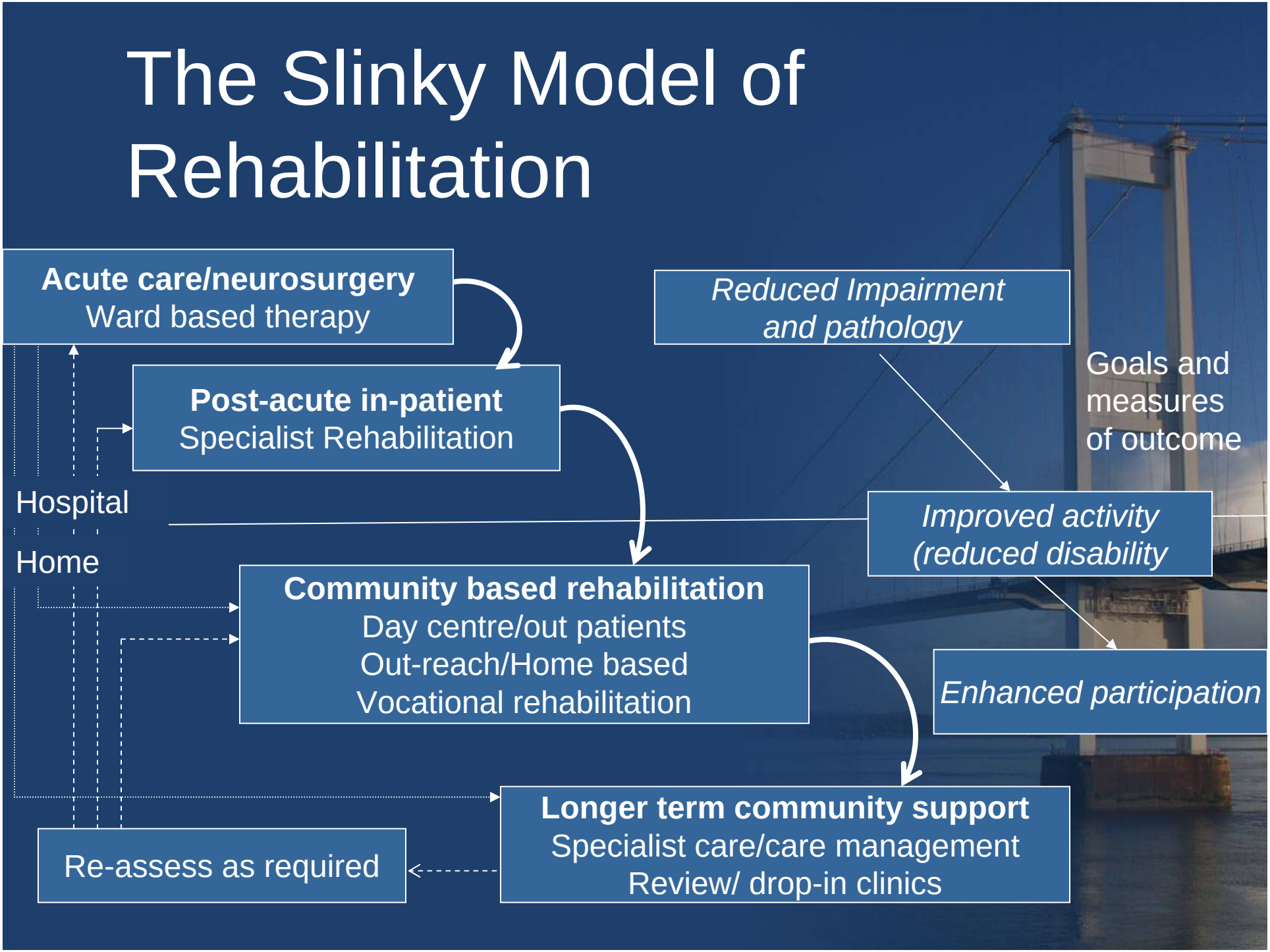
Universal Model vs. Minority Model



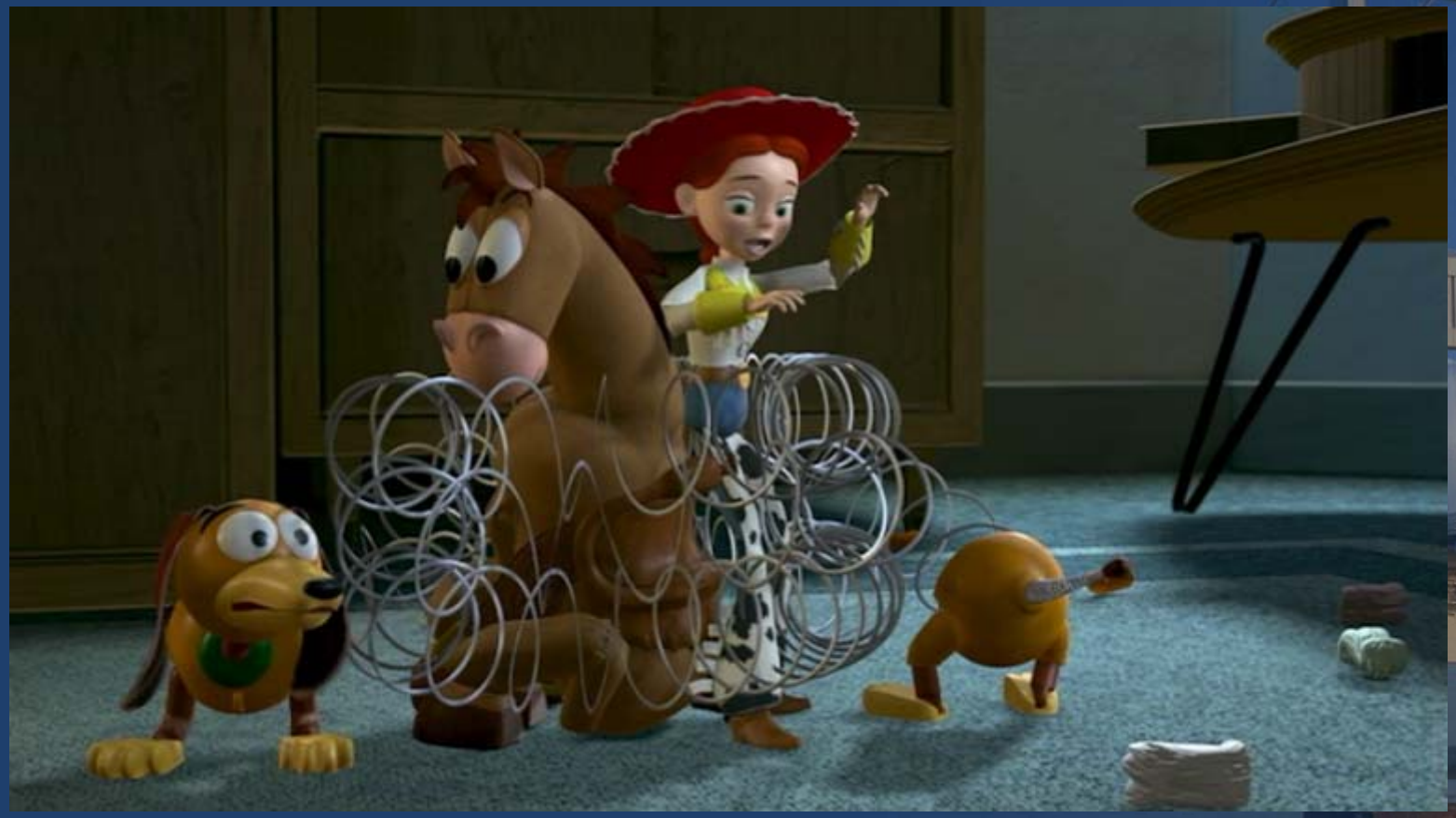
Everyone may have disability
Continuum
Multi-dimensional

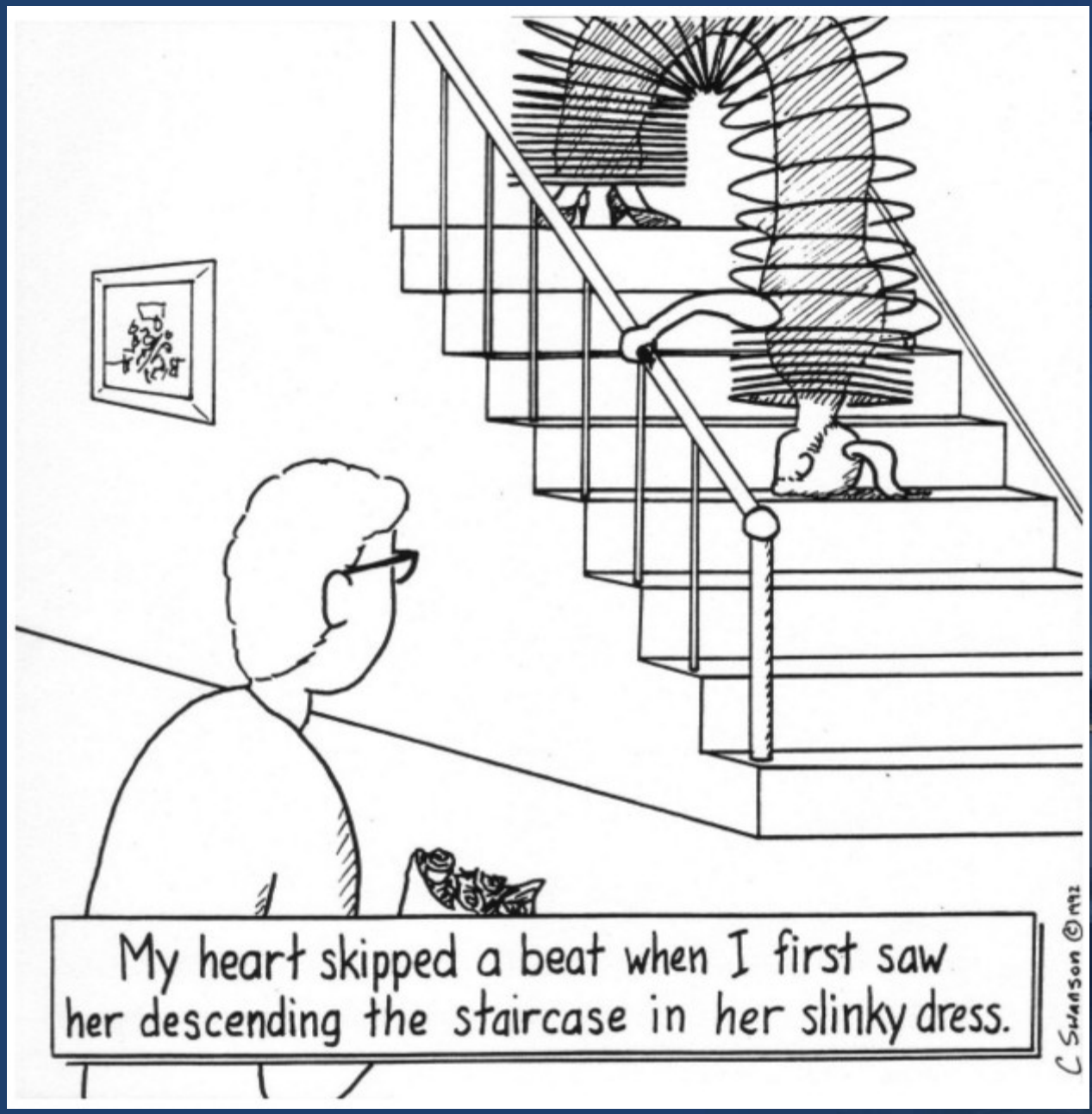
Certain impairment groups
Categorical
Uni-dimensional

The Slinky Model of Rehabilitation

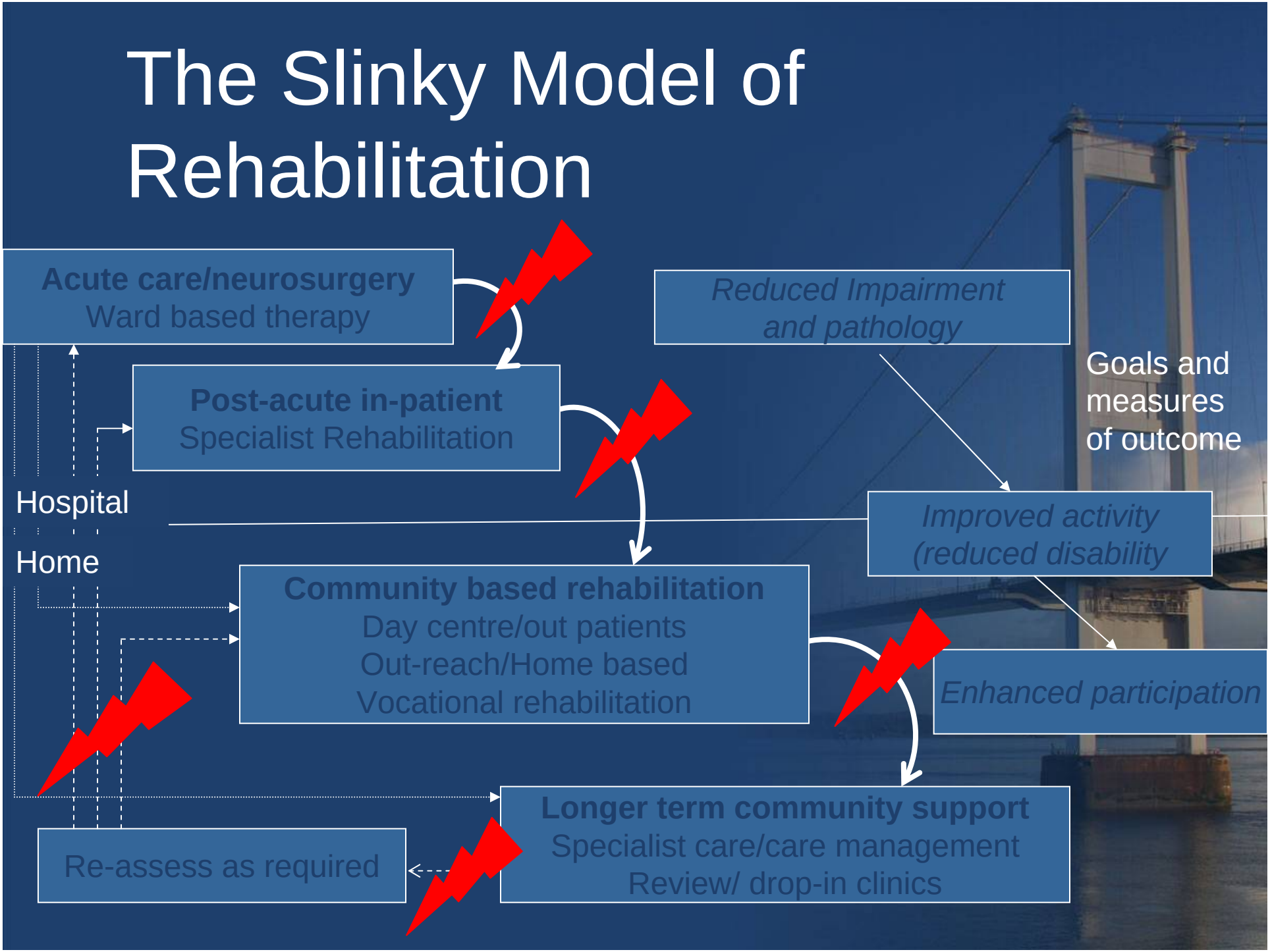



Disney's
TOY
STORY

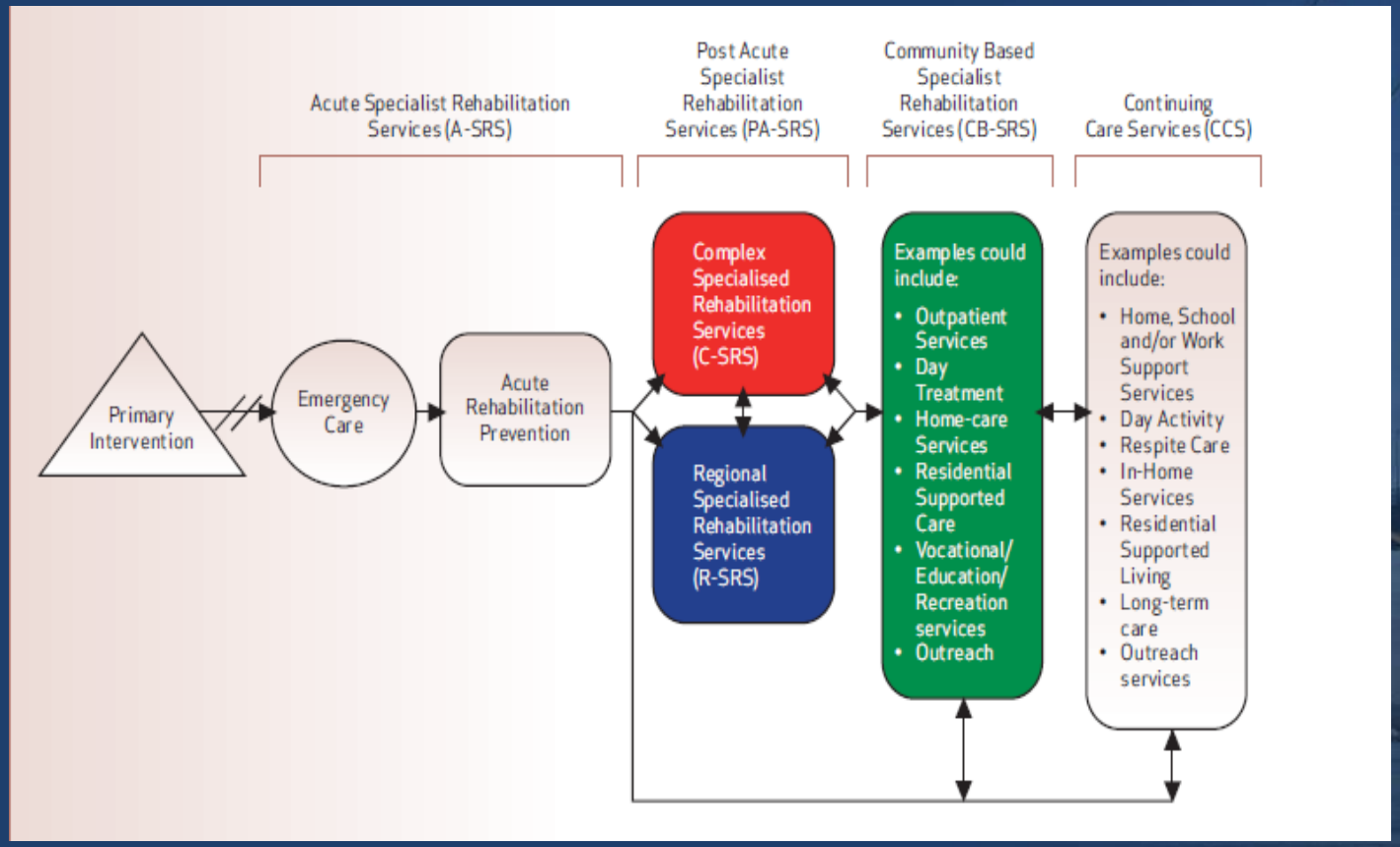



My heart skipped a beat when I first saw her descending the staircase in her slinky dress.
C Swanson ©1992

The Slinky Model of Rehabilitation



The Rehabilitation continuum



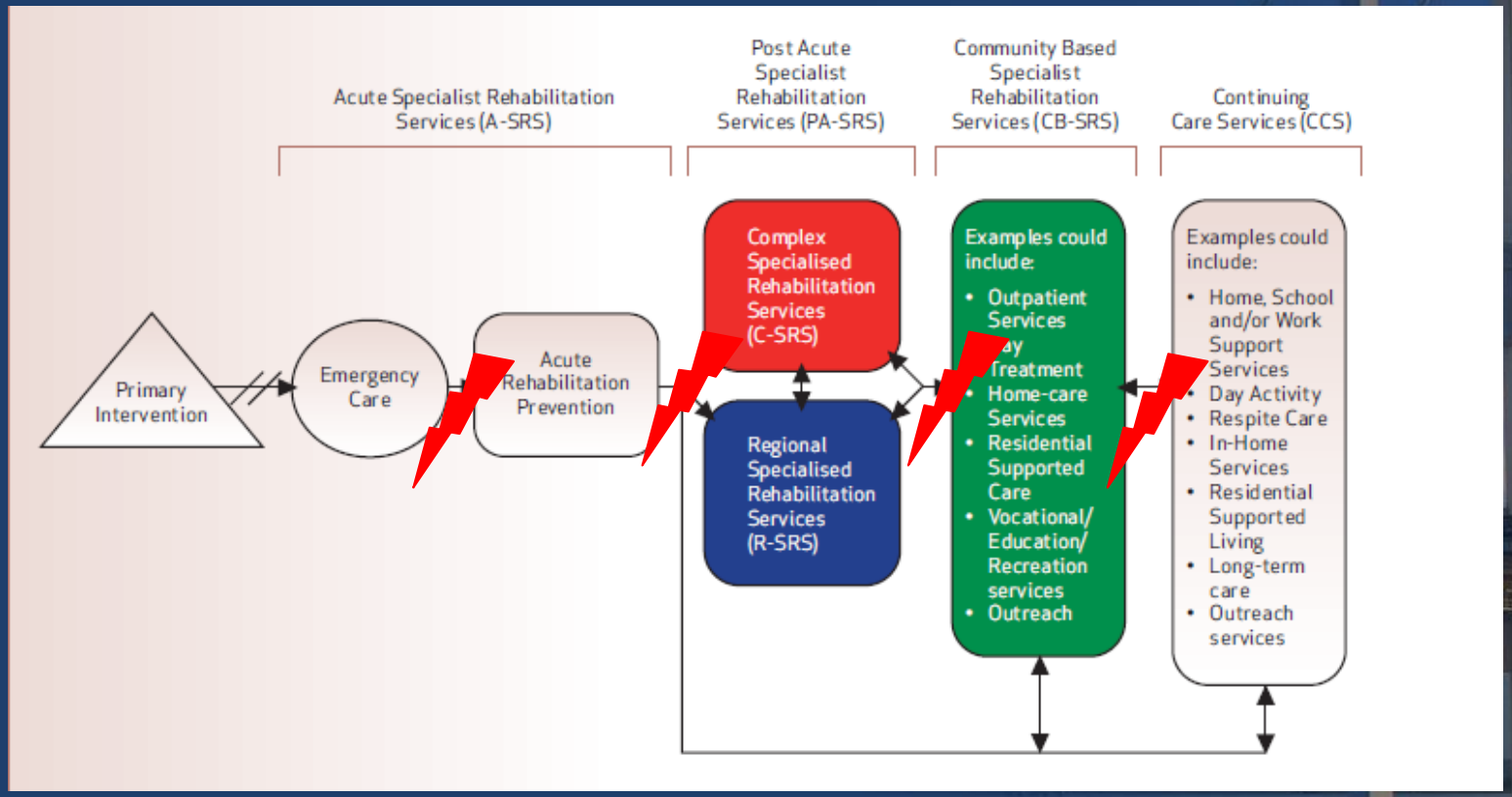
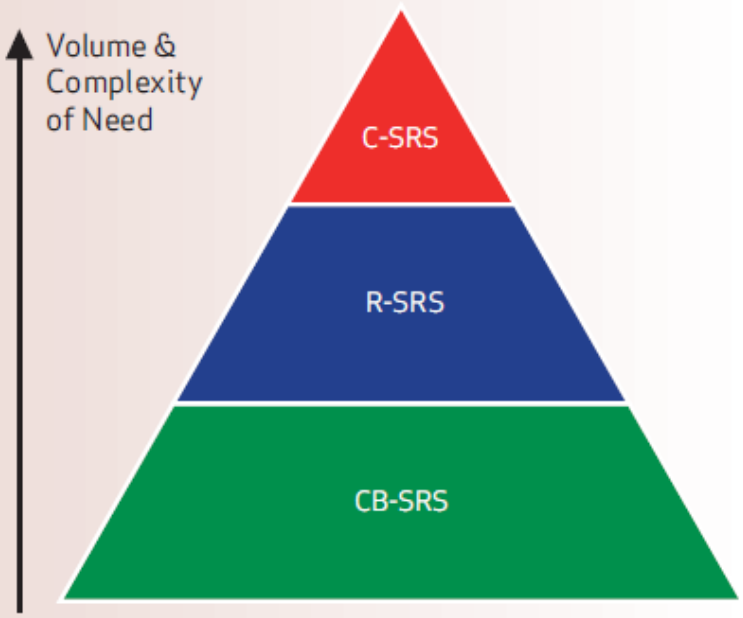

Acute Specialist Rehabilitation Services (A-SRS)
Post Acute Specialist Rehabilitation Services (PA-SRS)
Community Based Specialist Rehabilitation Services (CB-SRS)
Continuing Care Services (CCS)
Primary Intervention
Emergency Care
Acute Rehabilitation Prevention
Complex Specialised Rehabilitation Services (C-SRS)
Regional Specialised Rehabilitation Services (R-SRS)
Examples could include:
• Outpatient Services
• Day Treatment
• Home-care Services
• Residential Supported Care
• Vocational/ Education/ Recreation services
• Outreach
Examples could include:
• Home, School and/or Work Support Services
• Day Activity
• Respite Care
• In-Home Services
• Residential Supported Living
• Long-term care
• Outreach services

Figure 1: Levels of Specialised Rehabilitation Services

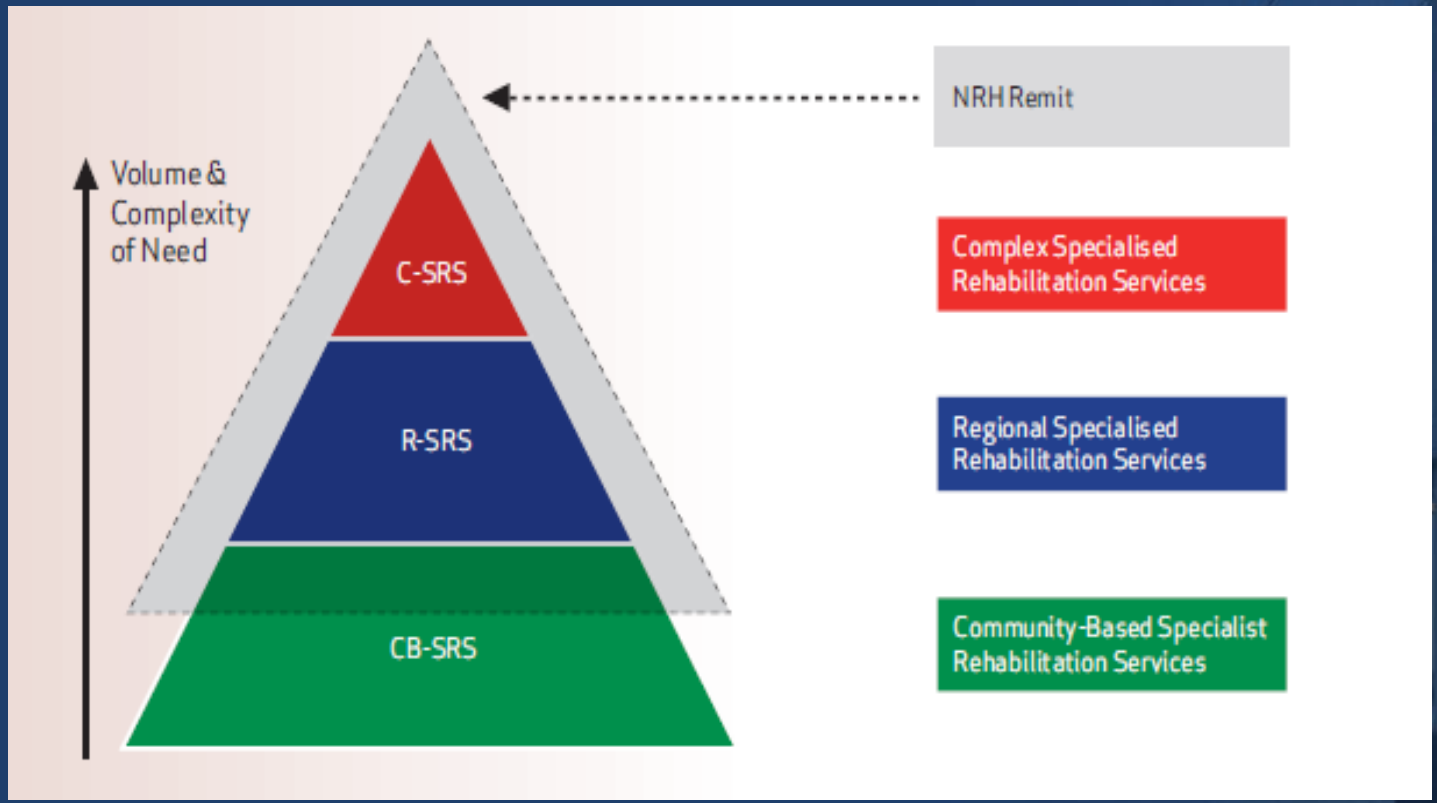


Complex Specialised Rehabilitation Services

Regional Specialised Rehabilitation Services

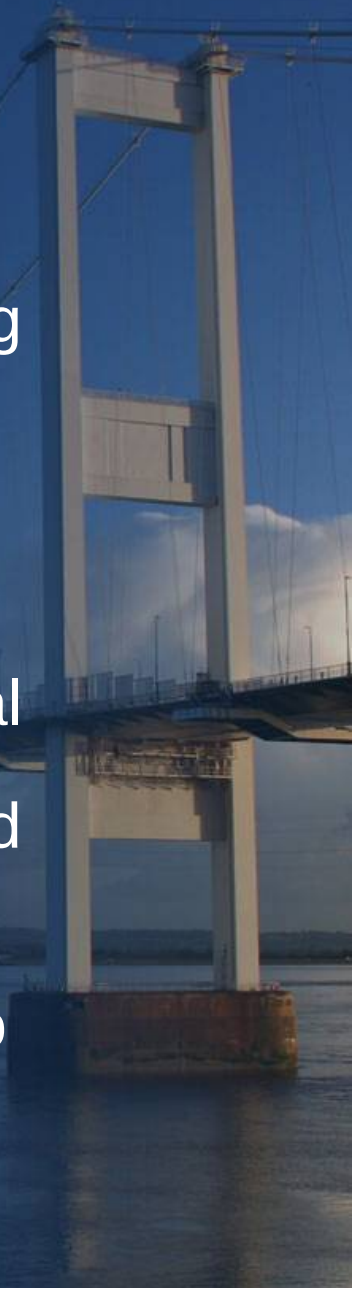
Community-Based Specialist Rehabilitation Services

Specialist Rehabilitation Services

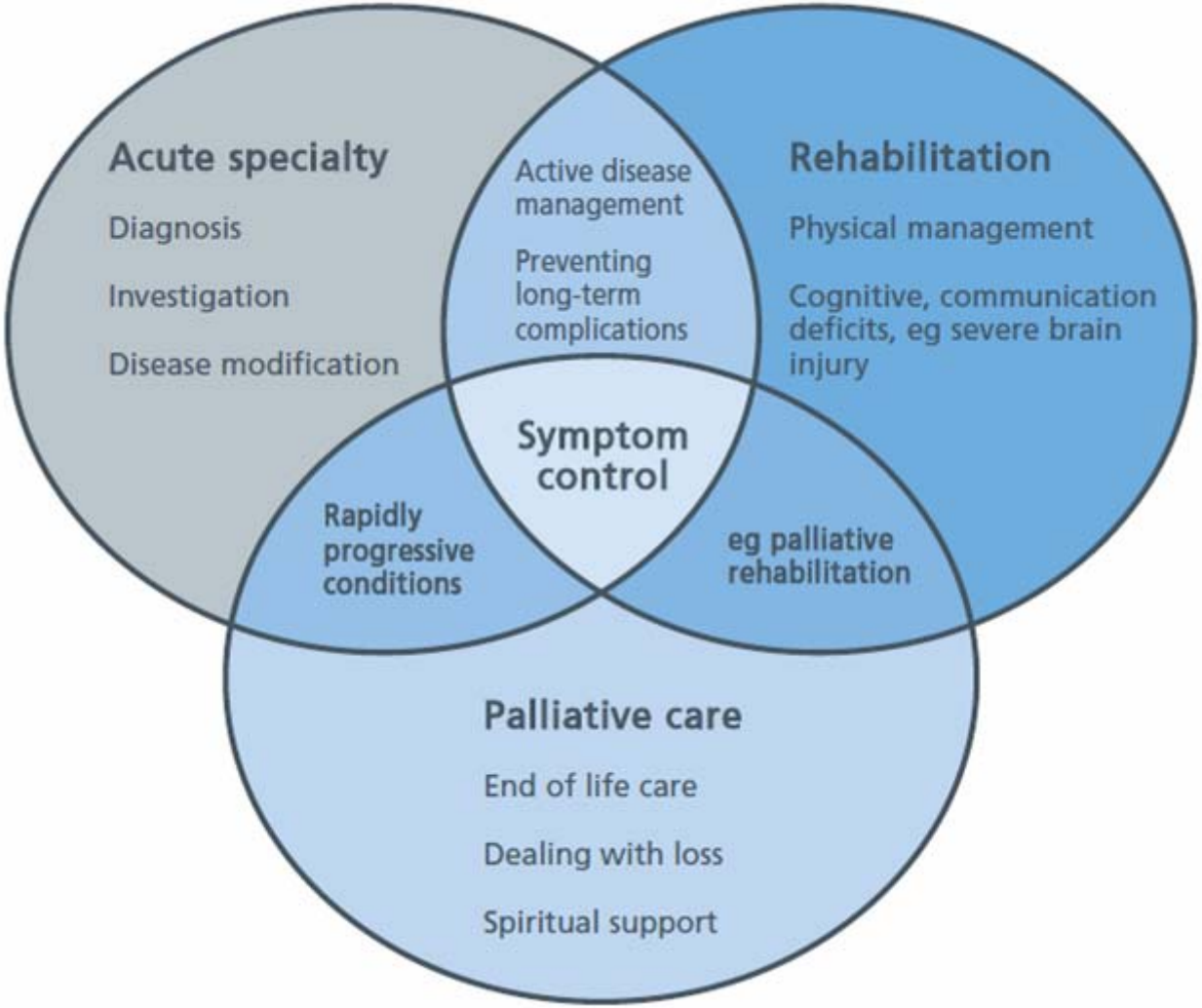


Generic services

- Developed for specific conditions such as stroke are excellent in their attention to rapid diagnosis and early treatment, and for the overall upgrading of community-based service provision after early discharge from hospital (where present).
- However, they fail to capture the need for many stroke survivors to have access to a specialist rehabilitation service, with high-intensity treatments and greater consideration of individual participation in life, addressing vocational needs, needs as a parent, cognitive needs, and the need to return to as normal a life as possible.
- They do not address the needs of those with highly complex disability after stroke – those who are going to take longer than six weeks in a hospital or other specialist setting.



What is specialist rehabilitation and which patients require it?



WHO is currently implementing its Plan of Action 2006–2011 on disability and rehabilitation

- community based rehabilitation
- wheelchair manufacture in low resource settings
- Medical rehabilitation guidelines

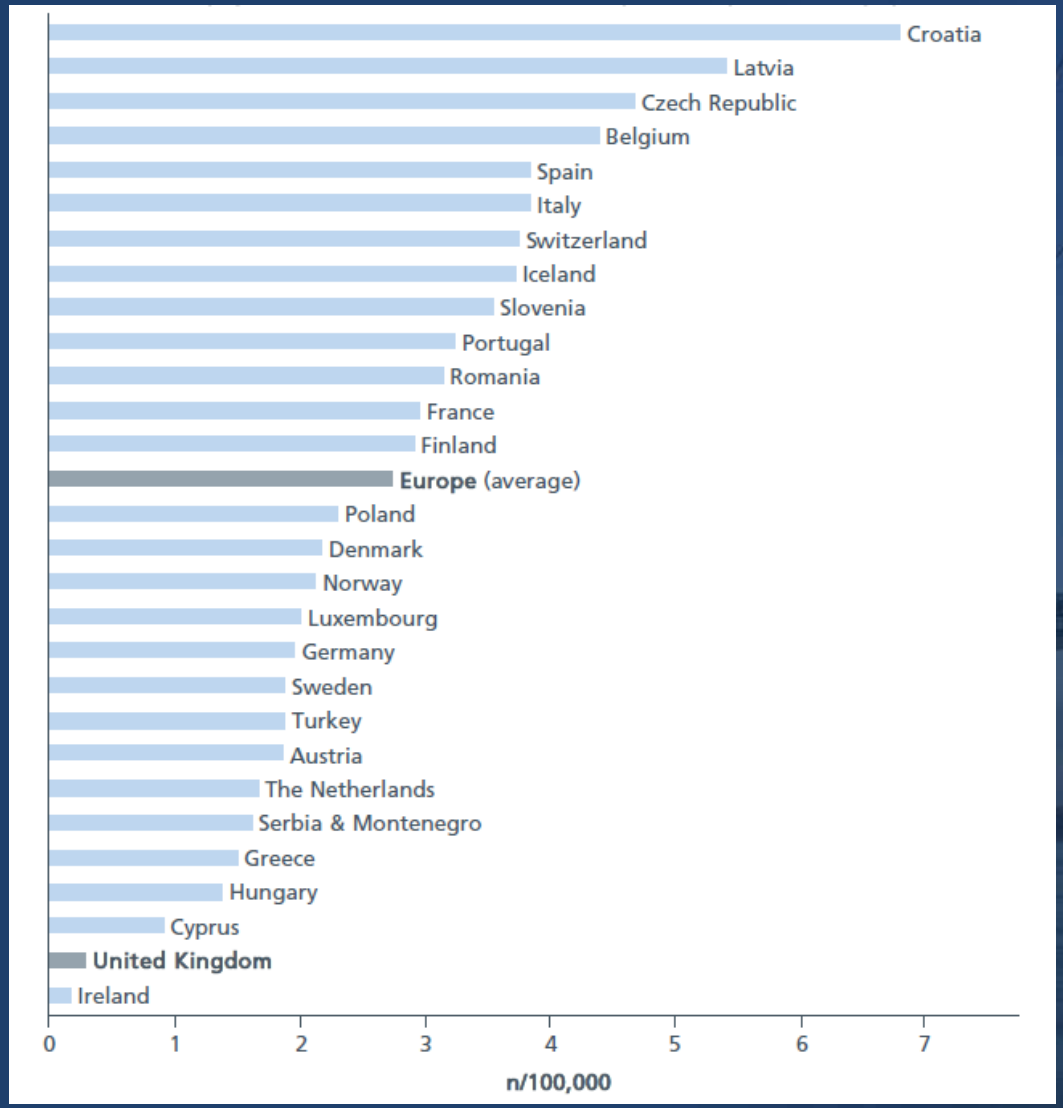
Triage of Rehabilitation

- Mild
  - rapid physical recovery . *No need of Rehabilitation.*
- Moderate (intermediate)
  - persisting disability but stable & recovery evident. *Likely to respond to / participate in Rehabilitation*
- Severe
  - immobile, medically unstable, nurse dependent.

  Unlikely to respond to / participate in Rehabilitation but may require advice on complication avoidance/DOC assessment/seating etc

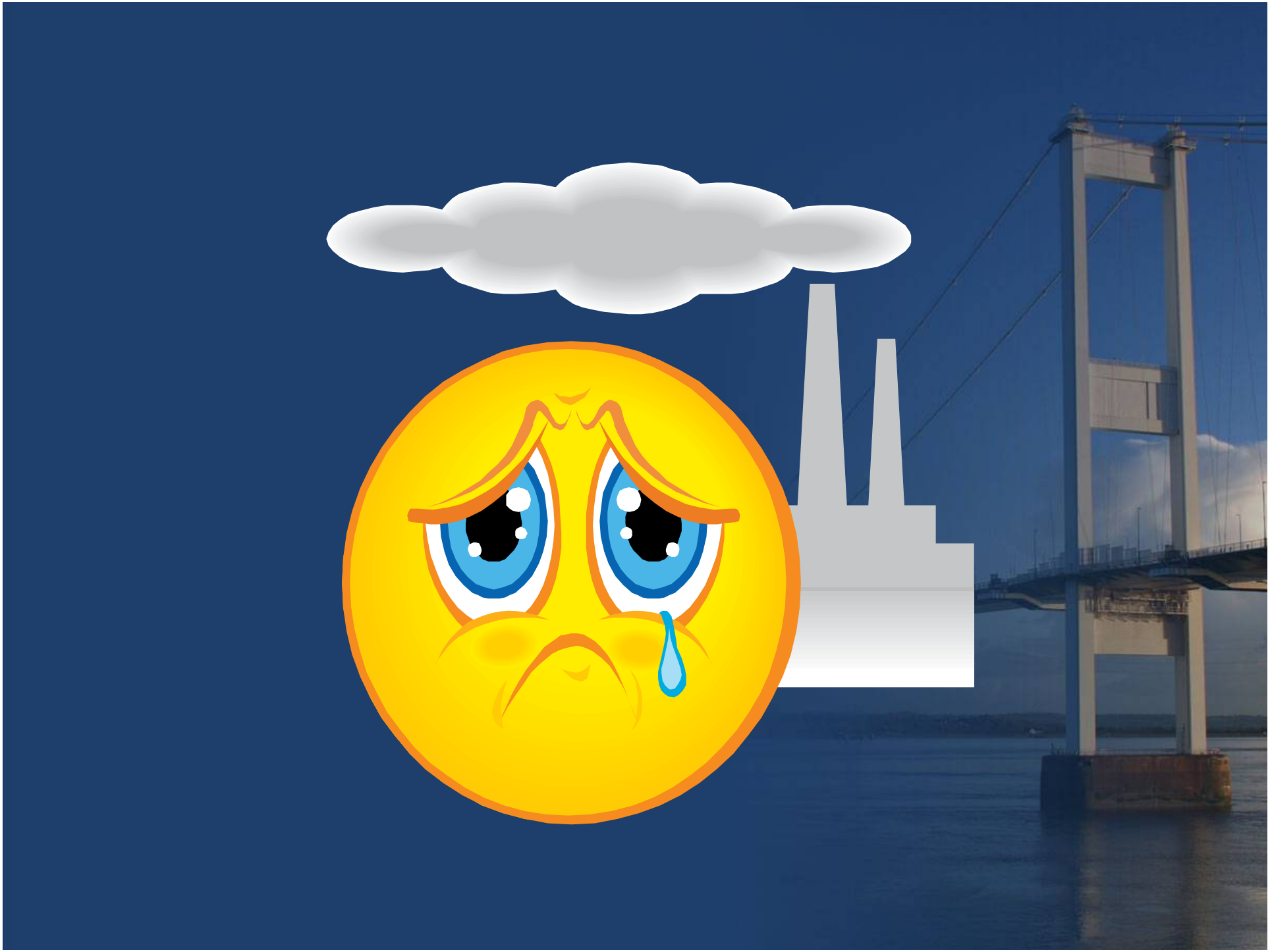

Where are we now?

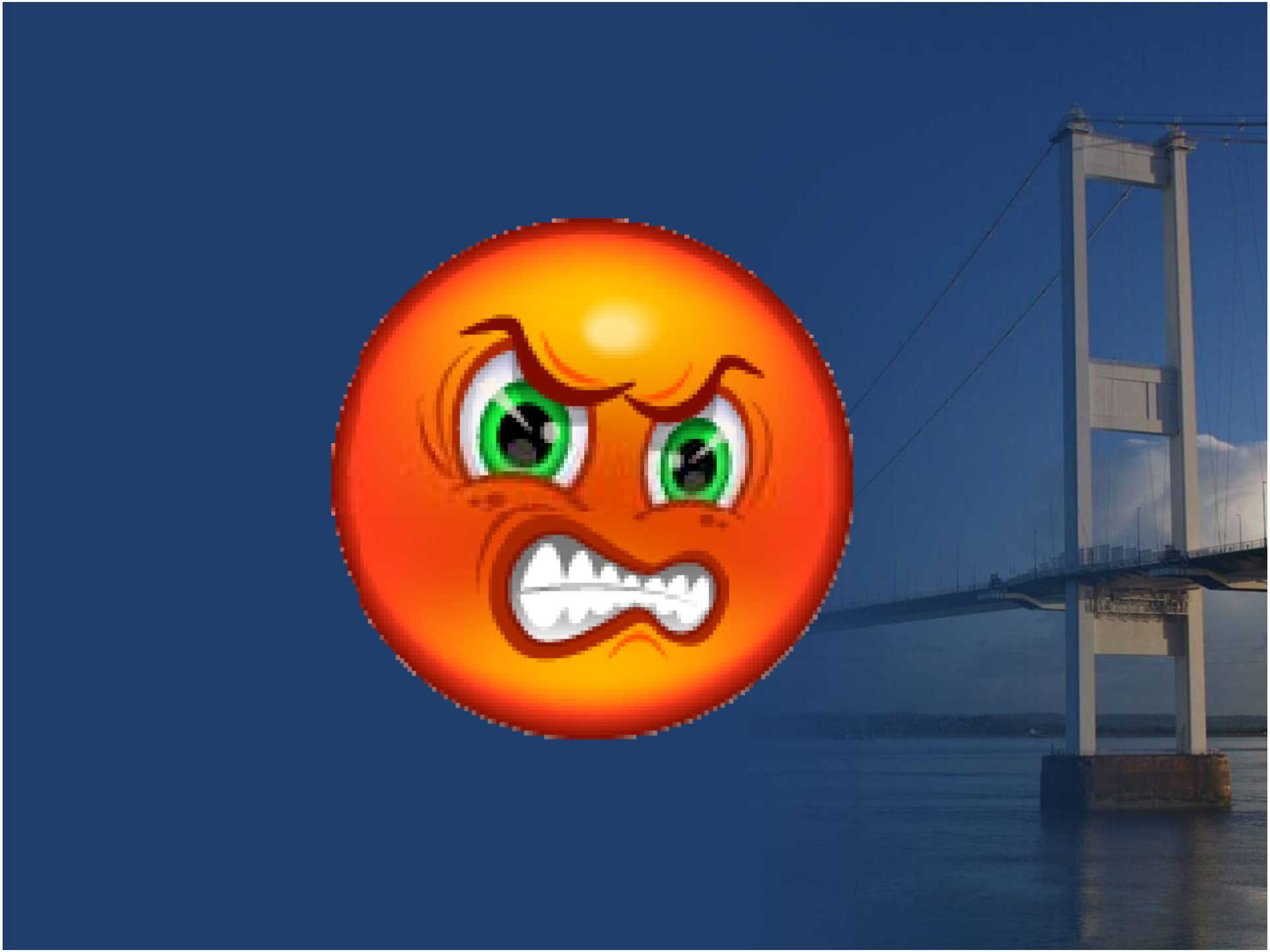
Number of physical and rehabilitation medicine specialists per 100,000 population 2010

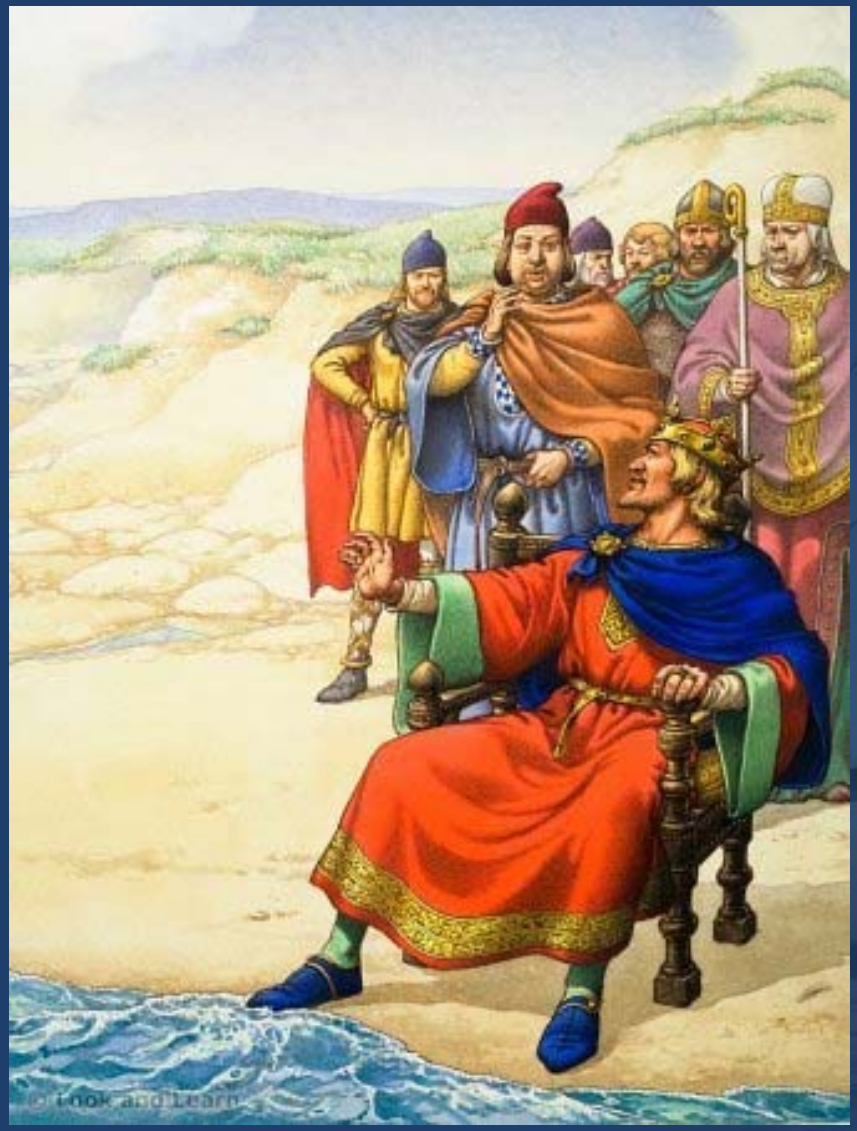


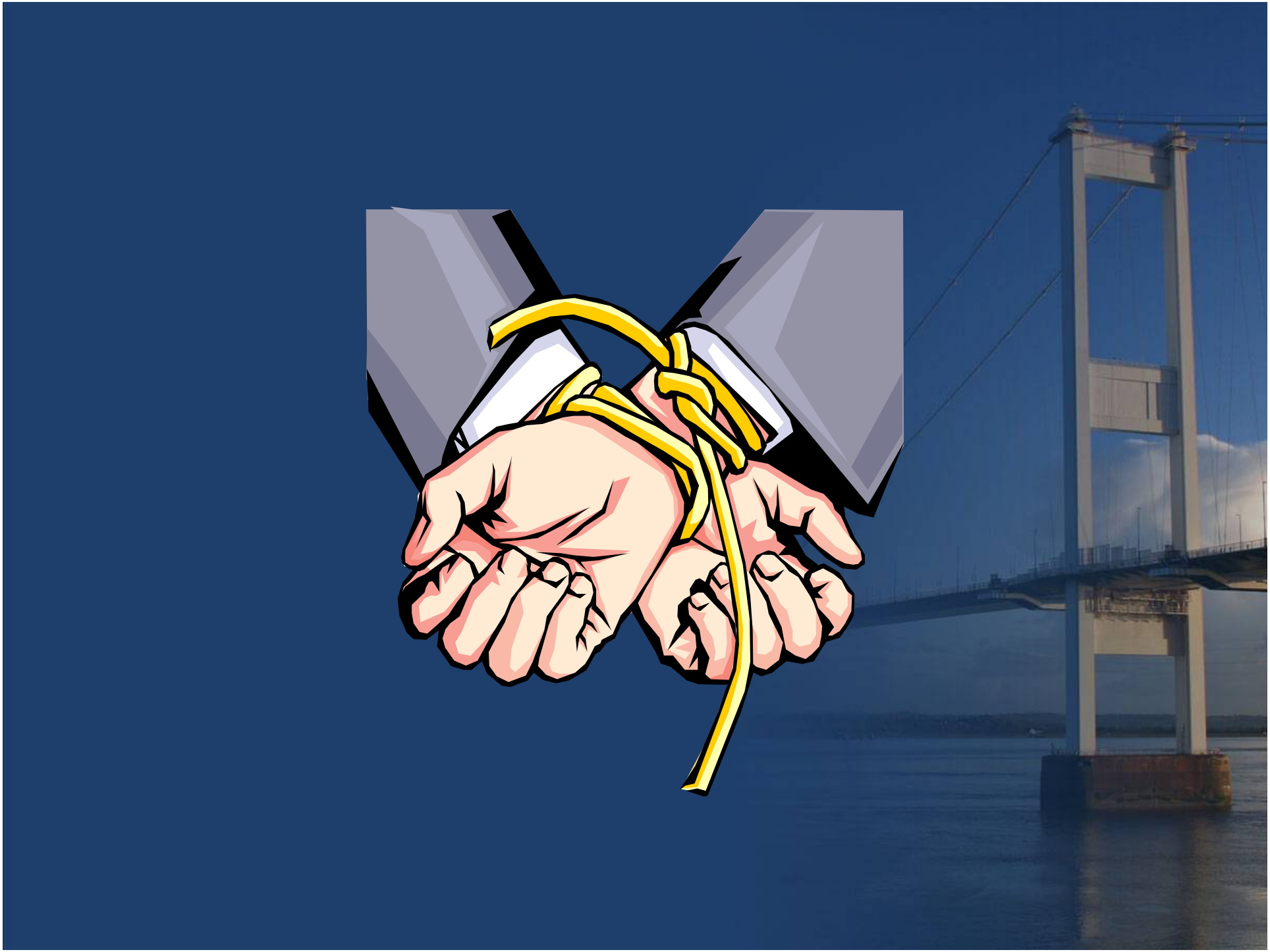
Specialist in-patient Rehabilitation in Ireland

- National Rehabilitation Hospital has 121 beds and 6 Consultant Specialists in Rehabilitation Medicine.
- Internationally, the minimum recommended number of beds is 6/ 100,000 population with 1.5 consultants/ 250,000.
- This equates to 254 Post acute Rehabilitation beds and 27 Rehabilitation Consultants.
- There is currently a major shortage of Rehabilitation beds and rehabilitation expertise.









Drivers for change

- Legislation
- Patient expectation
- The Clinical Care programmes!

Drivers for change

- Robust empirical data
- Clinical utility
- Reductionism
- One size fits no-one


The Future?
The RM Programme


Aim
Maximising ability, reducing disability

Working group and Clinical Consultant Advisory Group

Program Interdependencies

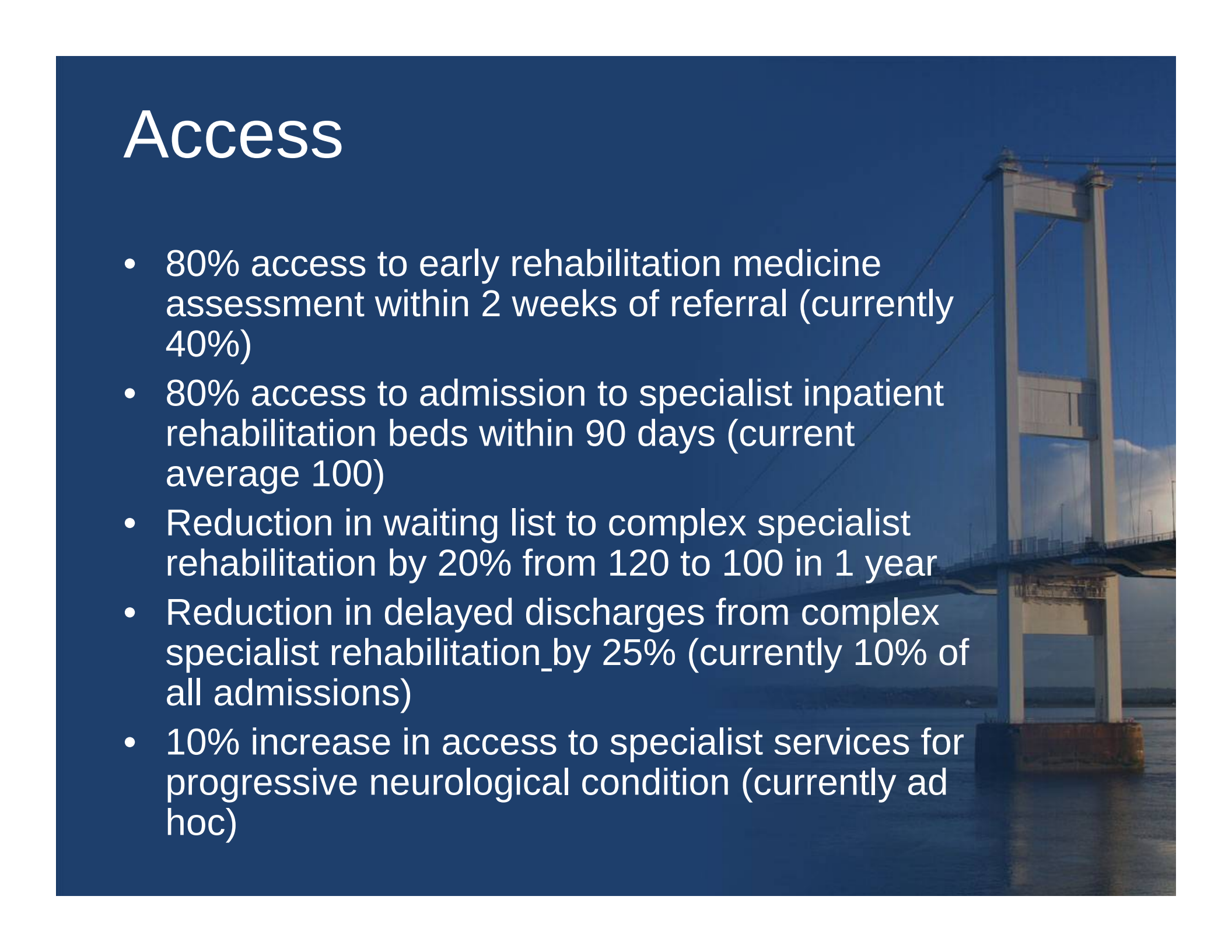
Other initiative/Program	Nature of interdependency	Contact point
Acute Medicine Program	Access and Pathways of Care for acute and chronic major disabling conditions such as ABI, SCI, Amputation Access to post acute rehabilitation Availability and access to specialist, community and disability support services	Leads or Rehab Med rep on this group
Chronic Illness Groups	Access and Pathways of Care for chronic neurological disease, including Stroke, amputees, and diabetics Access to rehabilitation Availability and access to specialist, community and disability support services Mental Health	Leads or Rehab Med rep on this group
Surgical Programs	Access and Pathways of Care for neurosurgical, trauma/orthopaedic, vascular, and oncology patients Availability and access to specialist, community and disability support services	Leads or Rehab Med rep on this group
Rheumatology Group	Access and Pathways of Care for chronic rheumatological disease including back pain Implementation of fracture and falls policies. Implementation of osteoporosis protocols	Leads or Rehab Med rep on this group
Elderly care Program	Access and Pathways of Care for acute and chronic major disabling conditions such as ABI, SCI, Amputation Access to post acute rehabilitation Availability and access to specialist, community and disability support services	Leads or Rehab Med rep on this group
Palliative Care	Neuropalliation	Leads or Rehab Med rep on this group

Quality

- Reduce morbidity:
  - » Reduced pressure sores
  - » Reduced contractures
  - » Reduced fractures
  - » Increased continence
- Increase home discharges to 80%
- Increase numbers returning to work to 20%
- Reduce carer distress by a 10 point reduction in carer burden scale

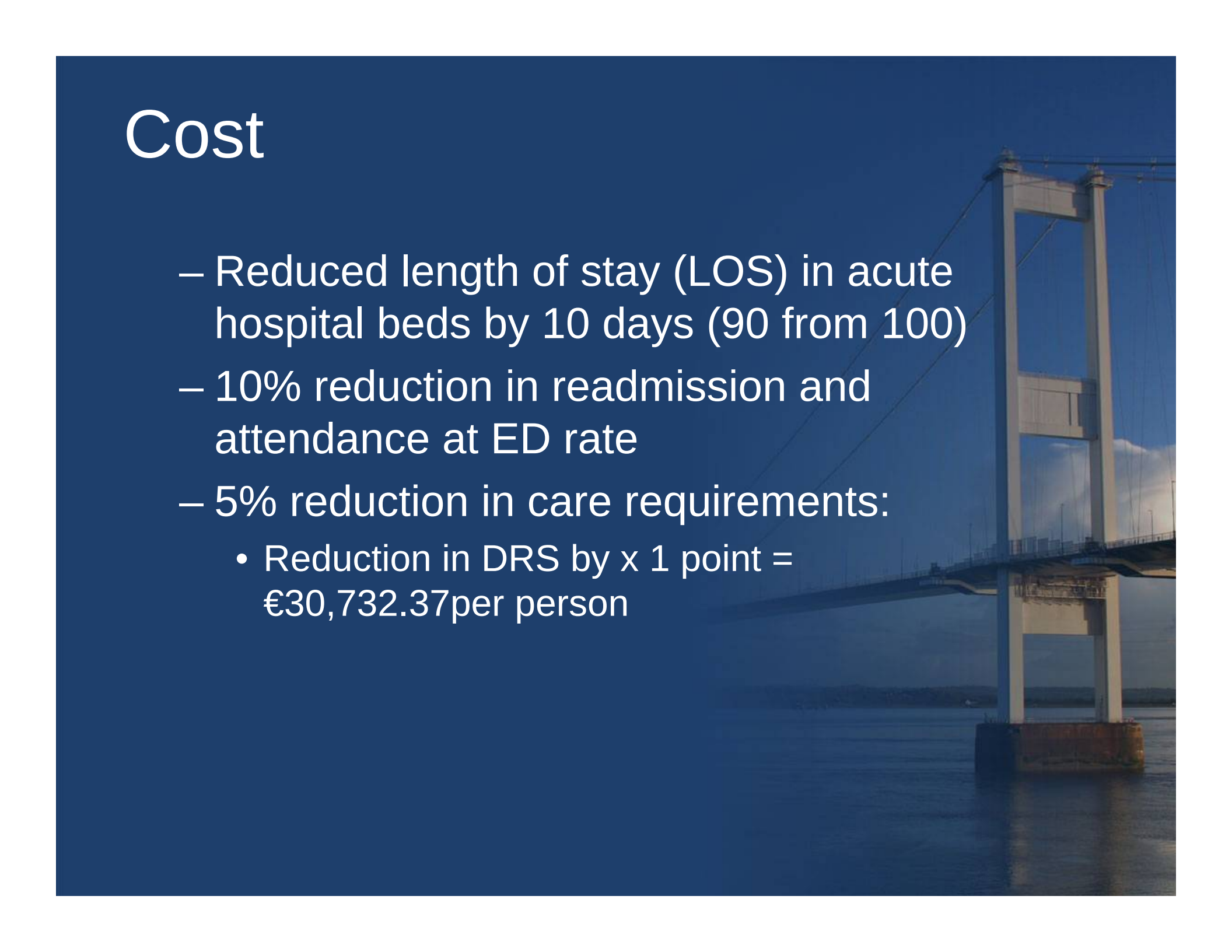
Access

- 80% access to early rehabilitation medicine assessment within 2 weeks of referral (currently 40%)
- 80% access to admission to specialist inpatient rehabilitation beds within 90 days (current average 100)
- Reduction in waiting list to complex specialist rehabilitation by 20% from 120 to 100 in 1 year
- Reduction in delayed discharges from complex specialist rehabilitation by 25% (currently 10% of all admissions)
- 10% increase in access to specialist services for progressive neurological condition (currently ad hoc)



Cost

- Reduced length of stay (LOS) in acute hospital beds by 10 days (90 from 100)
- 10% reduction in readmission and attendance at ED rate
- 5% reduction in care requirements:
  - Reduction in DRS by x 1 point = €30,732.37per person



2012

- Development of Regional Rehabilitation Networks (Hub and spoke)
- Development of Regional Specialist Rehabilitation Services
- Development of pathways of care for common conditions

The Future

- New technological solutions will include telemedicine, teletherapy, enabling technology, and smart homes.
- The development of disease-modifying drugs and neuroprotection will extend lives, may reduce or may attenuate and lengthen the experience of disability.
- Implanted prostheses will create new demands for limb loss RM specialists.
- Stem cell treatments and neural implants will require ‘training’ to gain individual functional benefit.
- There will be a continued and growing demand for medical expertise in RM.


Can we make a difference?

Yes we can!

Together!

WE NEED YOU!

I NEED YOU!

‘Would you tell me, please, which way I should go from here?’ Alice asked the Cheshire Cat.

‘That depends a good deal on where you want to get to,’ said the Cat.

Lewis Carroll, *Alice in Wonderland*

The Future's Bright

The Future's Rehab!