

# Nursing collaboration through eHealth – an international view

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# Outline

- Global issues, local concerns
- eHealth as a saviour
- Nurses at the forefront of innovation
- Collaboration through eHealth



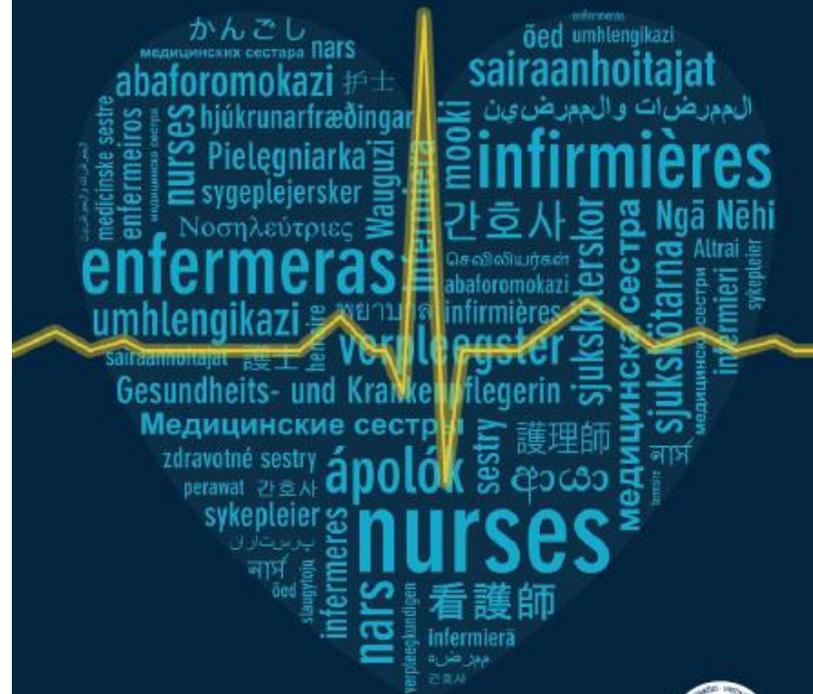
# The International Council of Nurses

- A federation of more than 130 national nurses associations representing more than 16 million nurses worldwide
- Operated by nurses and leading nursing internationally since 1899
- Its purpose is to represent nursing worldwide, advancing the profession and influencing health policy

International Council of Nurses

# NURSES: A FORCE FOR CHANGE

A vital resource for health

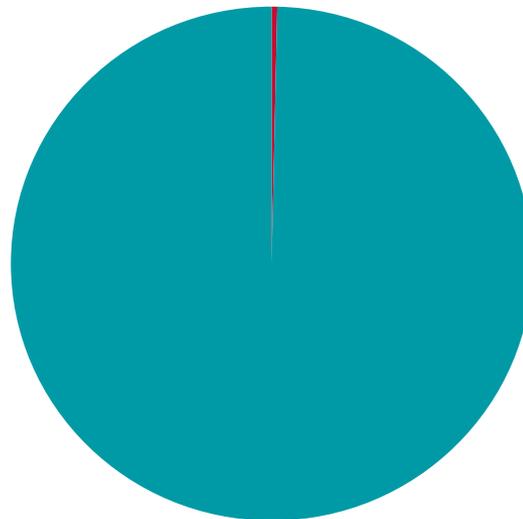


12 May 2014  
International Nurses Day



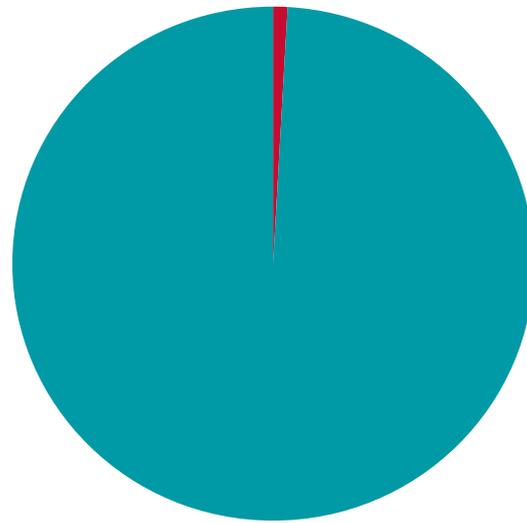


# Salford



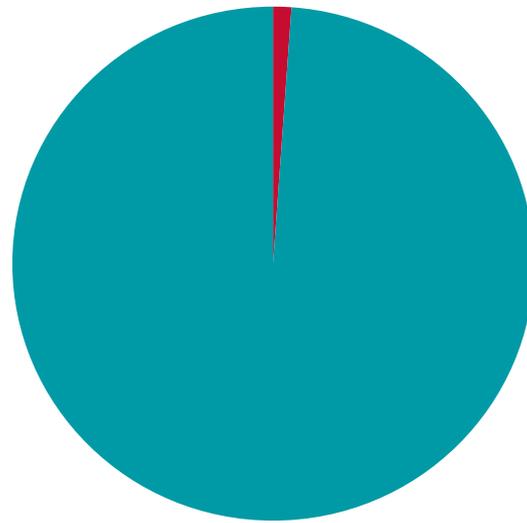
- Salford
- Rest of UK

**UK**



- UK
- Rest of World

# Germany

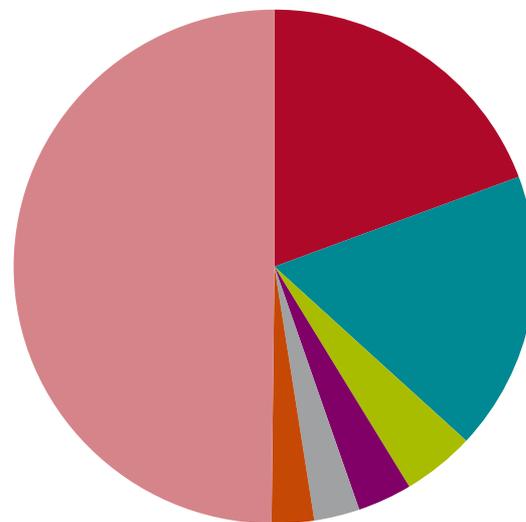


- Germany
- Rest of World

# Top ten populations?

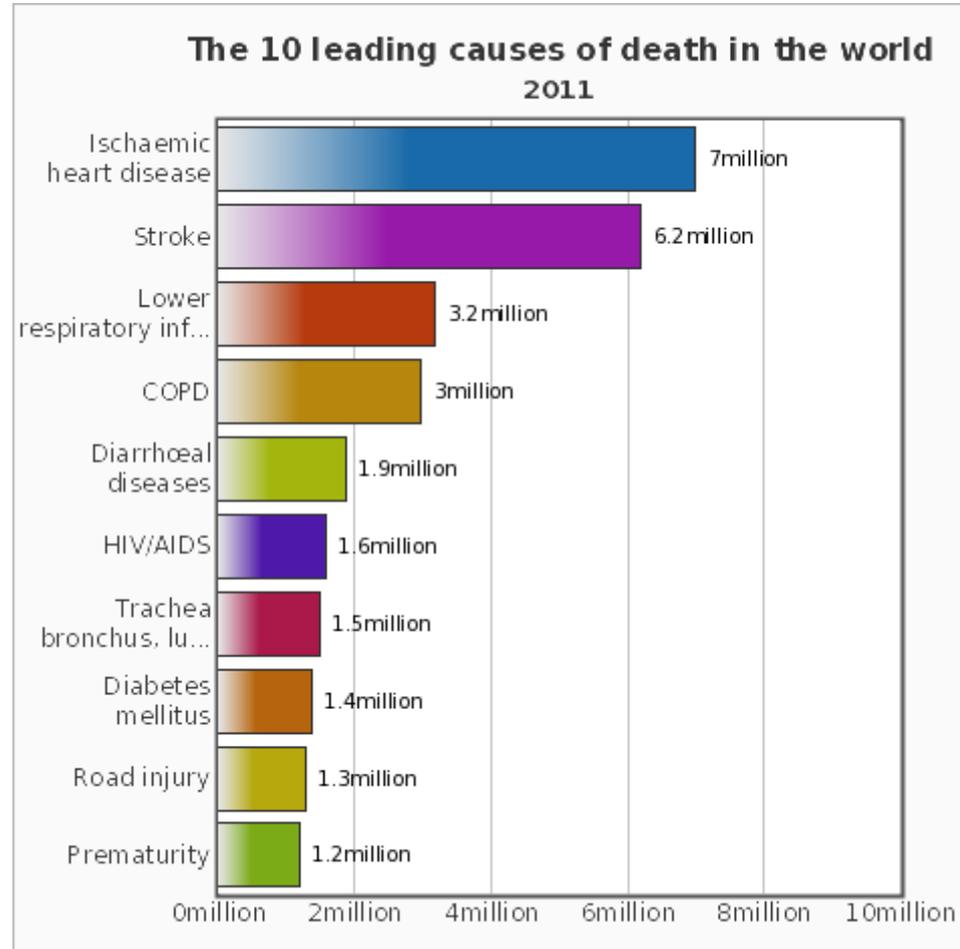
1.	China	1,360,610,000
2.	India	1,210,193,422
3.	United States	316,902,000
4.	Indonesia	237,641,000
5.	Brazil	198,907,000
6.	Pakistan	184,571,000
7.	Nigeria	174,507,539
8.	Bangladesh	163,654,860
9.	Russia	143,347,100
10.	Japan	127,547,000

# Populations in perspective



- China
- India
- USA
- Indonesia
- Brazil
- Pakistan
- Rest of world (183 countries)

# What do people die from?



**Is there a difference between high-income and low-income countries?**

# Germany

1.	<b>Coronary Heart Disease</b>	<b>24.49</b>
2.	<b>Stroke</b>	<b>10.65</b>
3.	Lung Cancers	6.62
4.	Colon-Rectum Cancers	4.87
5.	Hypertension	4.68
6.	Lung Disease	3.79
7.	Diabetes Mellitus	3.64
8.	<b>Influenza &amp; Pneumonia</b>	<b>3.46</b>
9.	Breast Cancer	3.10
10.	Liver Disease	2.47

# DR Congo

1.	HIV/AIDS	12.41
2.	Malaria	11.12
3.	<b>Influenza &amp; Pneumonia</b>	<b>10.39</b>
4.	Diarrhoeal diseases	7.19
5.	<b>Stroke</b>	<b>6.40</b>
6.	<b>Coronary Heart Disease</b>	<b>5.47</b>
7.	Low Birth Weight	4.54
8.	Tuberculosis	4.53
9.	Road Traffic Accidents	3.17
10.	Violence	3.00

# Diseases of the rich?

- Noncommunicable diseases are responsible for two-thirds of all deaths globally
  - Cardiovascular diseases, cancers, diabetes and chronic lung diseases
- Over  $\frac{3}{4}$  of NCD deaths occur in low- and middle-income countries

## High-income

- 7 in every 10 deaths are among people aged 70 years and older
- 1 in every 100 deaths are among children under 15 years

## Low-income

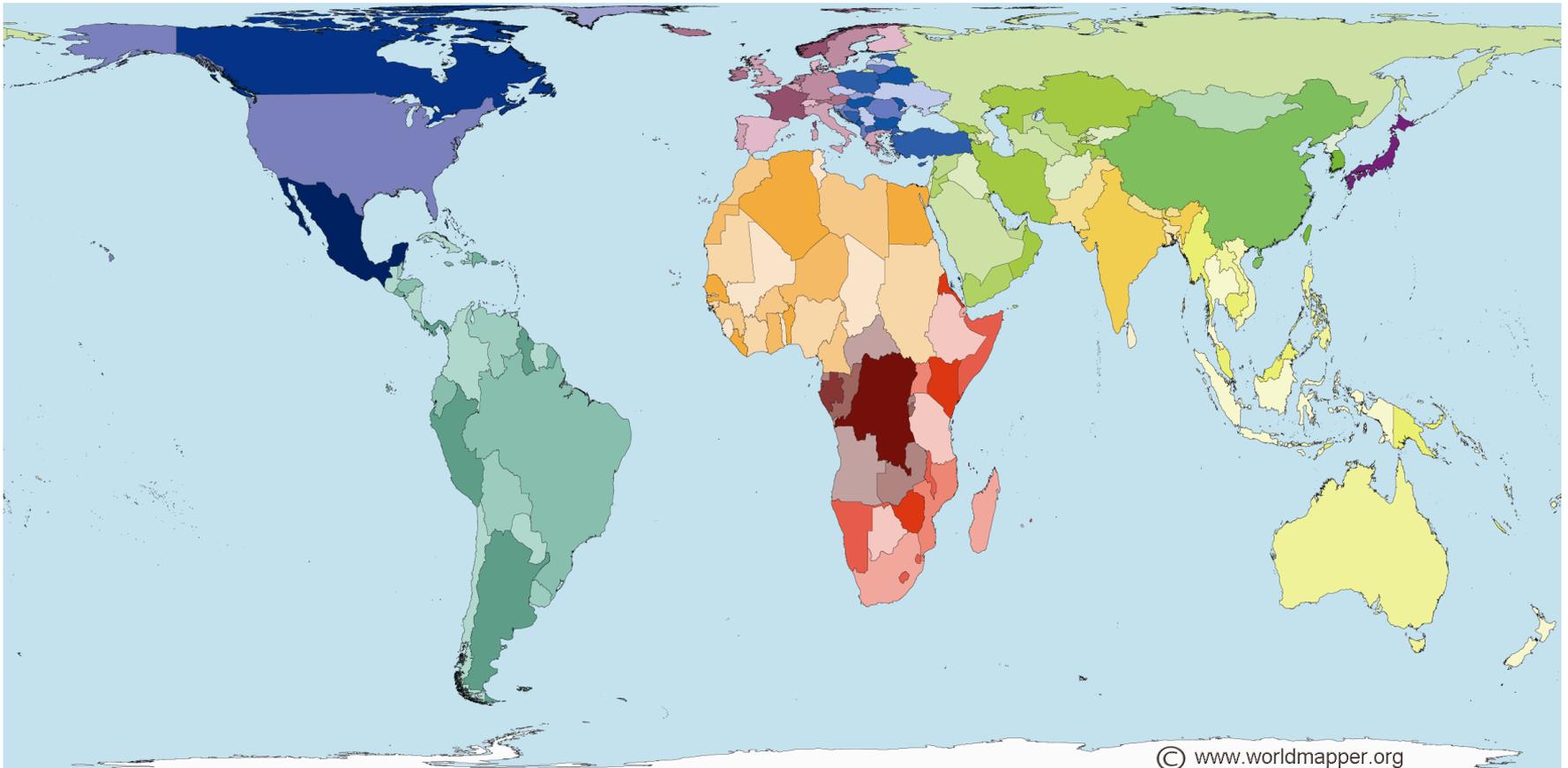
- 2 in every 10 deaths are among people aged 70 years and older
- Nearly 40 in every 100 deaths are among children under 15 years

## Relative wealth (GDP per capita)

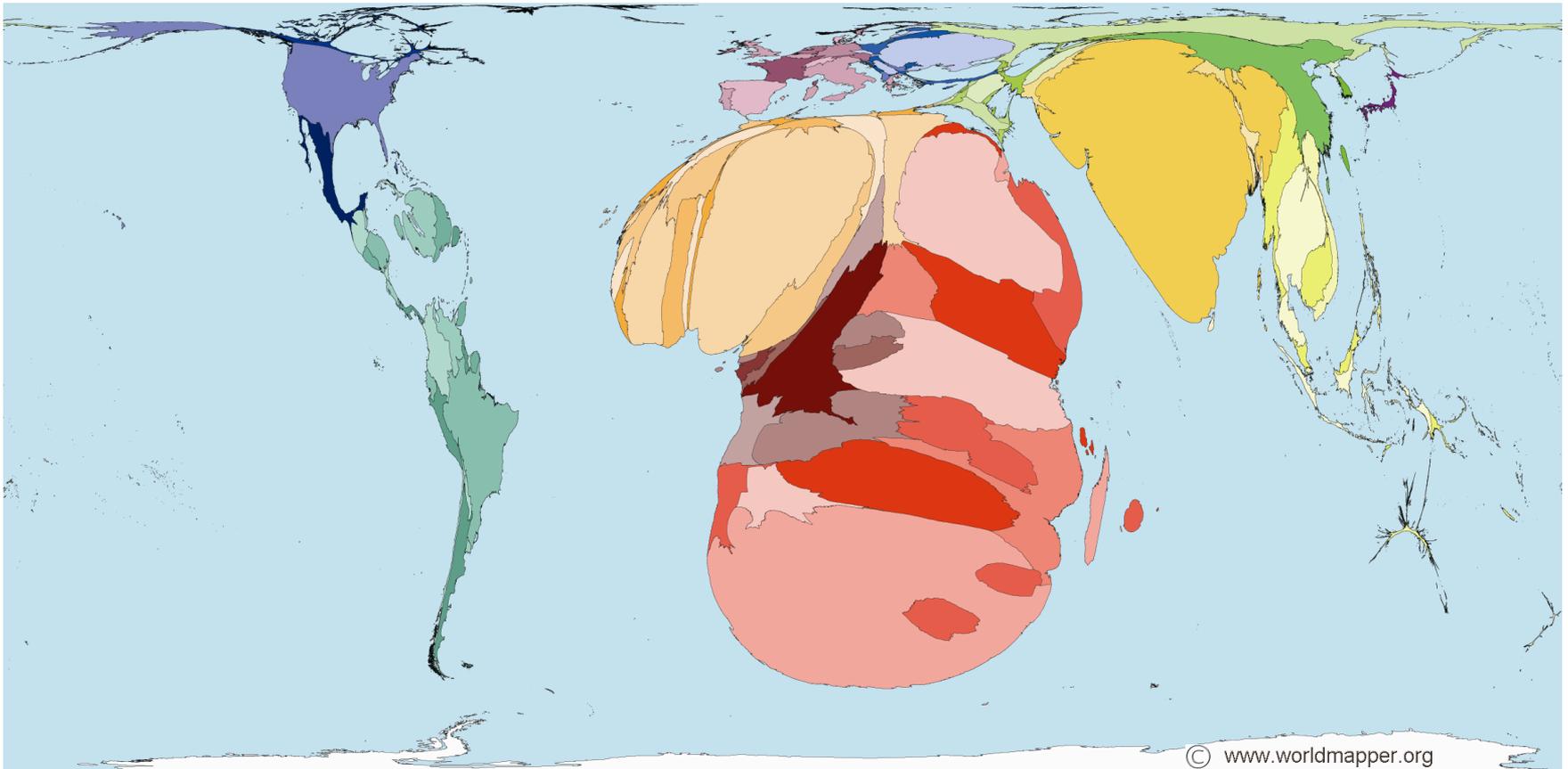
- Qatar
  - \$102,100 (1<sup>st</sup> of 195)
- Germany
  - \$39,500 (21<sup>st</sup>)
- UK
  - \$37,300 (24<sup>th</sup>)
- DR Congo
  - \$400 (195<sup>th</sup>)

# Average life expectancy at birth

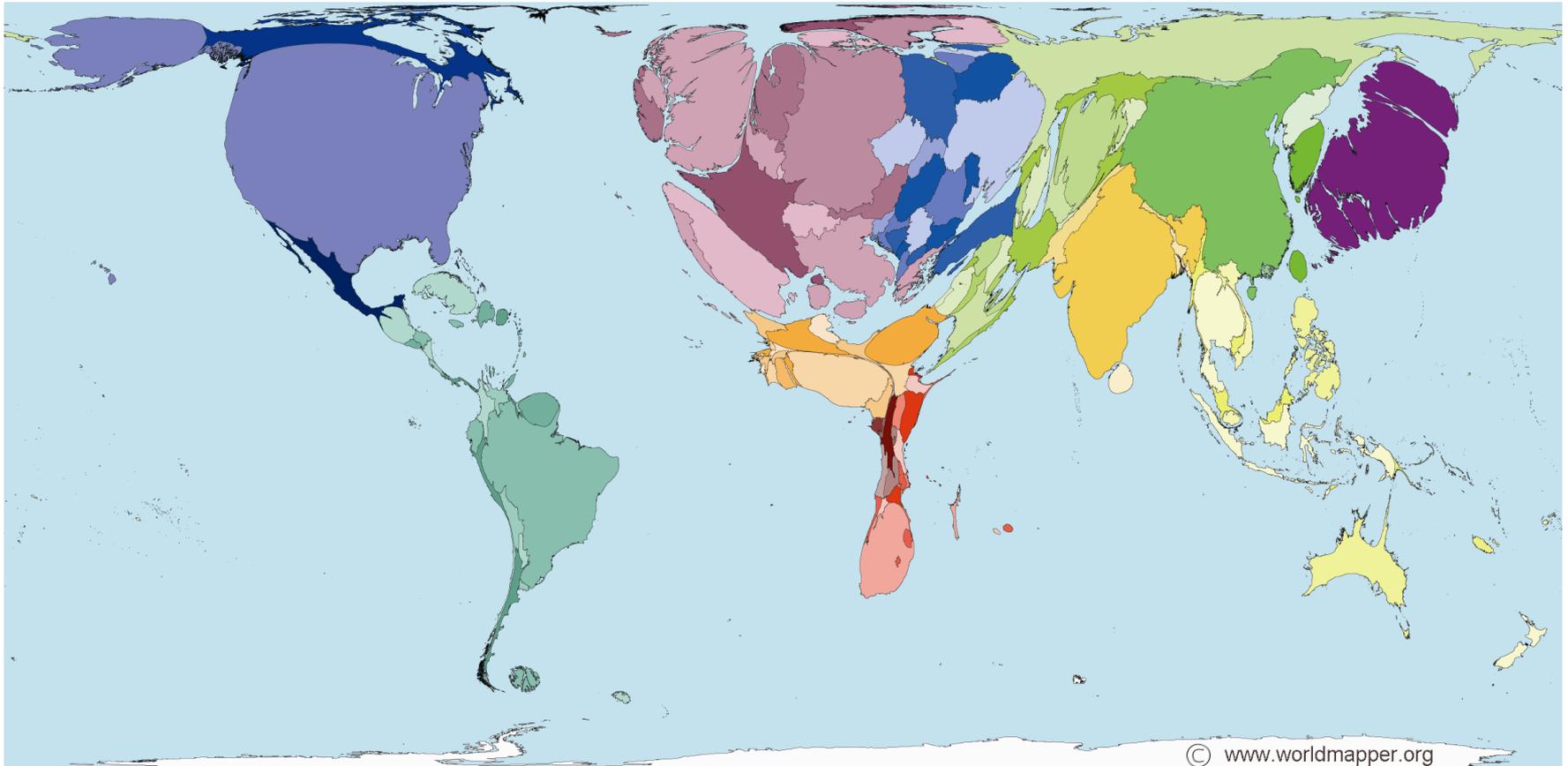
- Germany
  - 81 years (22<sup>nd</sup> of 193)
- UK
  - 81 years (27<sup>th</sup>)
- Qatar
  - 75.5 (70<sup>th</sup>)
- DR Congo
  - 49.5 years (191<sup>st</sup>)

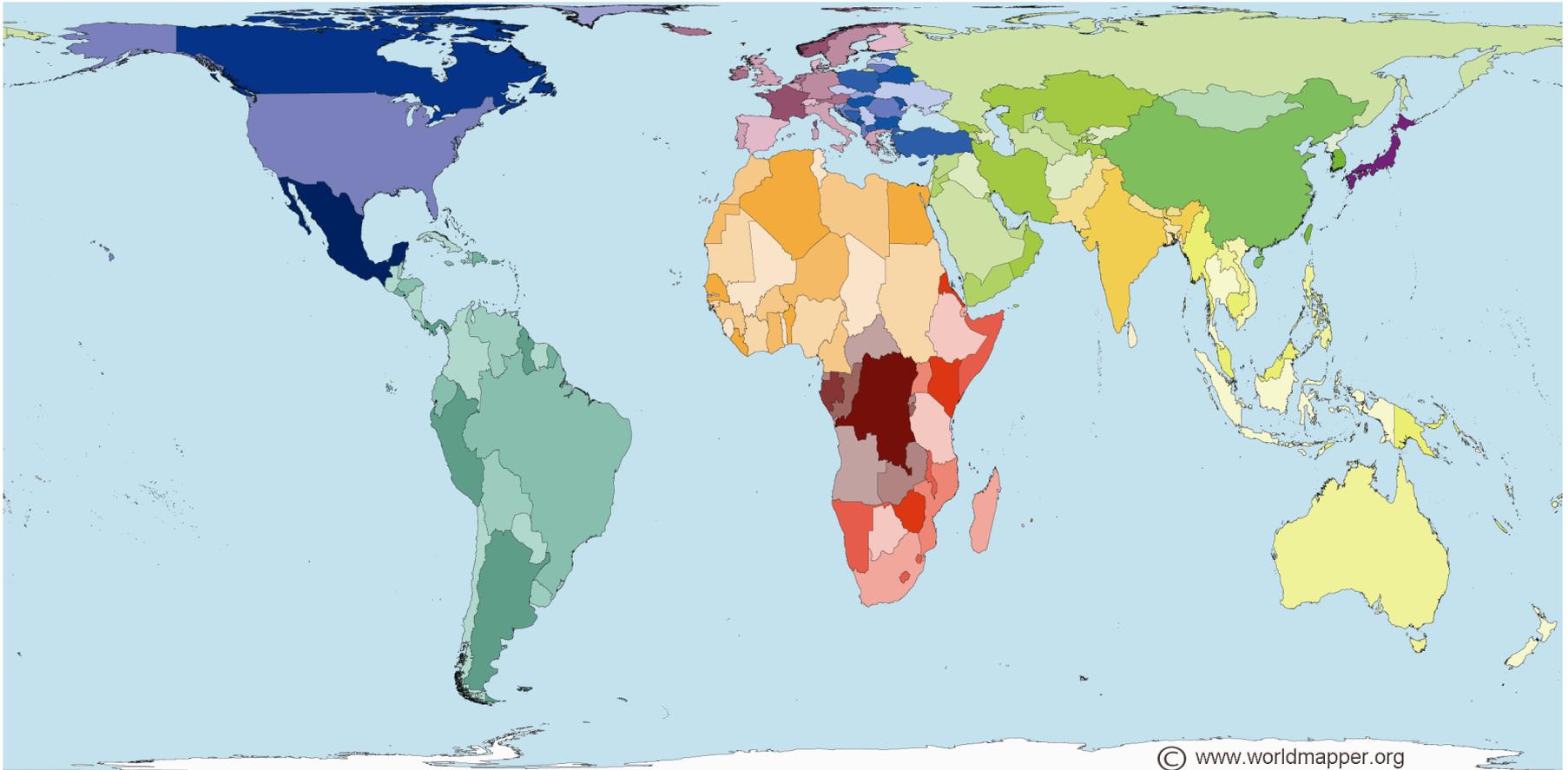


# HIV/AIDS

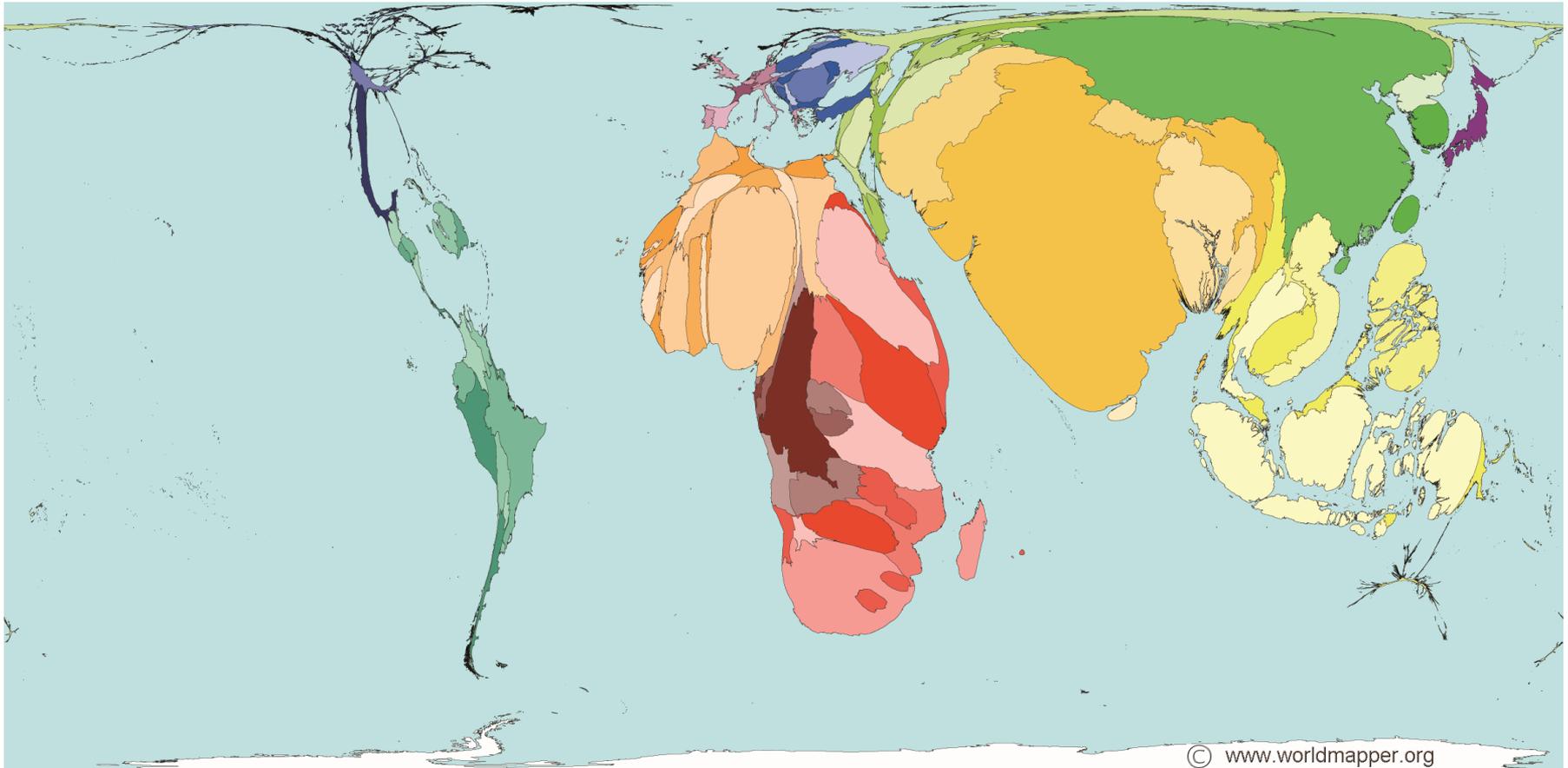


# Nurses

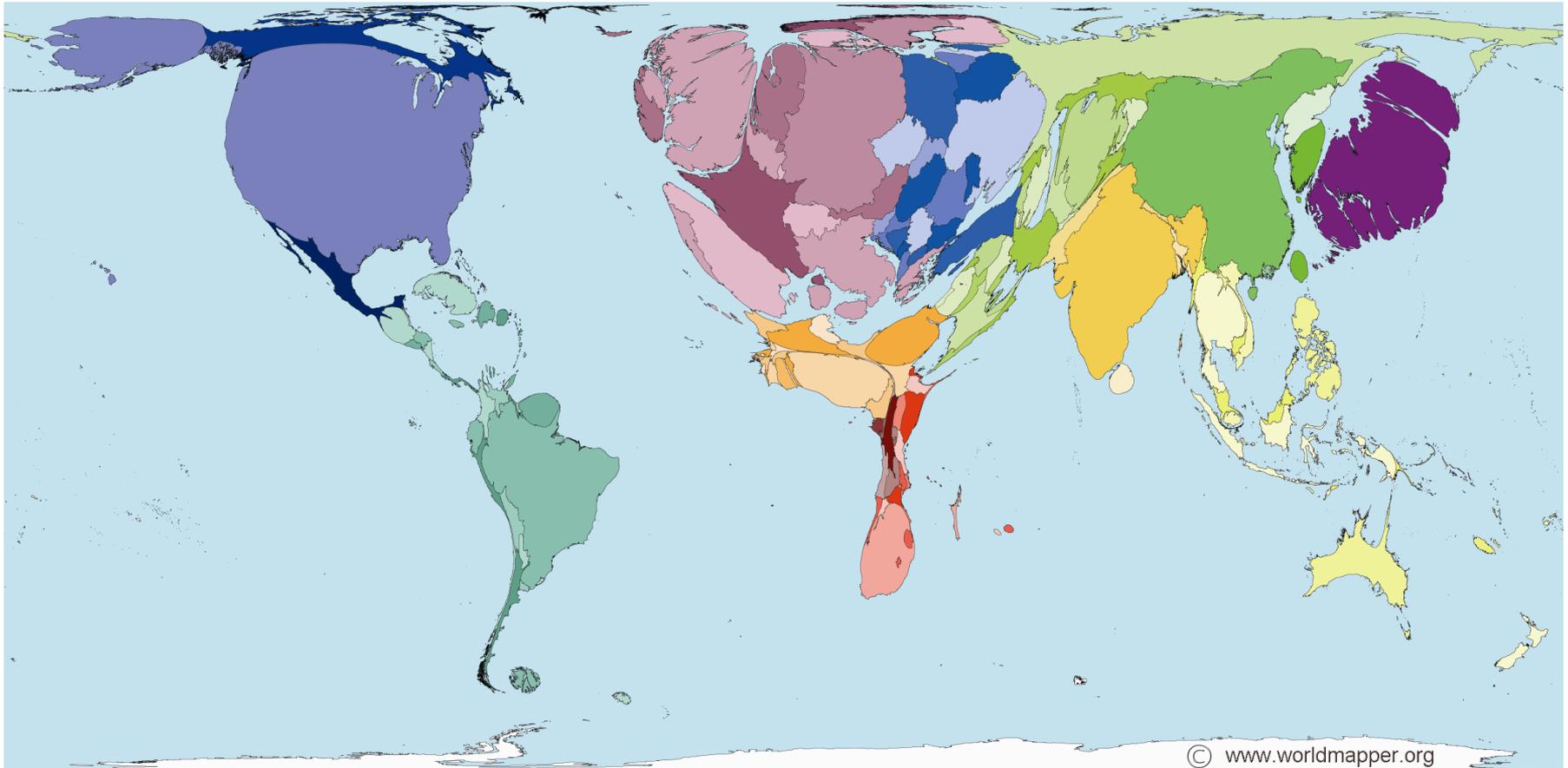




# TB



# Nurses



# “Weekend effect”

- Do differences in nurse:bed ratios affect mortality in stroke units?

*Bray BD et al (2014). Associations between Stroke Mortality and Weekend Working by Stroke Specialist Physicians and Registered Nurses: Prospective Multicentre Cohort Study. PLOS Medicine 11(8): e1001705*

*56 666 patients*



- 3 nurses per 10 beds
- 11.2% mortality risk



- 1.5 nurses per 10 beds
- 15.2% mortality risk

**1 excess death per 25 admissions**

# RN4CAST

- Do differences in nurse:patient ratios and nurses' educational qualifications affect mortality after common surgical procedures?

*Aiken LH et al (2014). Nurse staffing and education and hospital mortality in nine European countries: a retrospective observational study. The Lancet 383;9931: 1824-1830*

*422 730 patients*

- An increase in a nurse's workload by one patient increases the likelihood of an inpatient dying within 30 days of admission by 7%
- Every 10% increase in bachelor's degree nurses is associated with a decrease in this same likelihood by 7%



- 60% of nurses hold bachelor's degrees
- Care for an average of six patients



- 30% of nurses hold bachelor's degrees
- Care for an average of eight patients

**30% higher mortality**

# There are not enough qualified nurses

- There is a link between adequate staffing levels and nurse education and positive care outcomes
- The supply of nurses in both low-income and high-income countries is not keeping pace with demand
- Sub-Saharan African countries have a shortfall of more than 600,000 nurses - out-migration exacerbates the problem
- Ratios worldwide vary from less than 10 nurses per 100,000 population to more than 1,000 nurses per 100,000

# What would you do?

- Workforce policy interventions
- Money
- Medicines
- Technical assistance
- Food and water
- Housing
- Research
- Education
- Lobbying

# What ICN is doing

- Mobile libraries
- Tackling TB
- Girl child education fund
- Wellness centres for health care workers
- eHealth



# Hospital statistics

- ‘In attempting to arrive at the truth, I have applied everywhere for information, but in scarcely an instance have I been able to obtain hospital records fit for any purposes of comparison’ (p 176)

*Nightingale F. Notes on Hospitals. 3rd Edition. London: Longman, Green, Longman, Roberts, and Green, 1863*

Better information  
=  
Better health care

# Hospital statistics

- Tables to provide ‘an uniform record of facts’
  - Total sick population
  - Number of cases
  - Average duration
  - Mortality
  - Annual proportion of recoveries

*Nightingale F. Notes on Hospitals. 3rd Edition. London: Longman, Green, Longman, Roberts, and Green, 1863*

# eHealth (WHO 2011)

- eHealth is the use of information and communication technologies (ICT) for health
  - treating patients
  - pursuing research
  - educating students
  - tracking diseases
  - monitoring public health

*<http://www.who.int/topics/ehealth/en/>*

# Education

- WHO
  - Twitter during influenza A (H1N1) pandemic

# Disease and emergency tracking

- Cambodia
  - SMS to report malaria cases in real time

# Ensuring adherence

- Wisepill
  - Sends SMS when opened

# Entry of and access to patient data

- Mozambique Health Information Network
  - Wireless data transfer to servers via PDAs

# Assessment and diagnosis

- Apps (currently over 97,000 for health and fitness)
  - Respiratory rate, pulse rate, calculators (gestational age, drug dose, drip rate), drug reminder alarm, etc.

- Find a solution to the problem, not a problem for the solution

# ICN eHealth Programme

- Transforming nursing through the visionary application of information and communication technology
- 25 years in the making
- Announced at the ICN Conference 2011 in Malta

*<http://www.icn.ch/pillarsprograms/ehealth/>*

# Why ICN eHealth?

- Worldwide proliferation of ICT
- ICN informs, supports and advocates for nursing and its members
- eHealth threads through ICN processes and products
- ICT in health care provides new opportunities, not least equity and improved access

# A personal vision

- eHealth systems are in routine use to parallel other aspects of contemporary life
- Data is available and routinely used/exploited for the benefit of patients and those caring for them
- People are actively working on continually improving how things are i.e. advancing together the art/science of nursing informatics

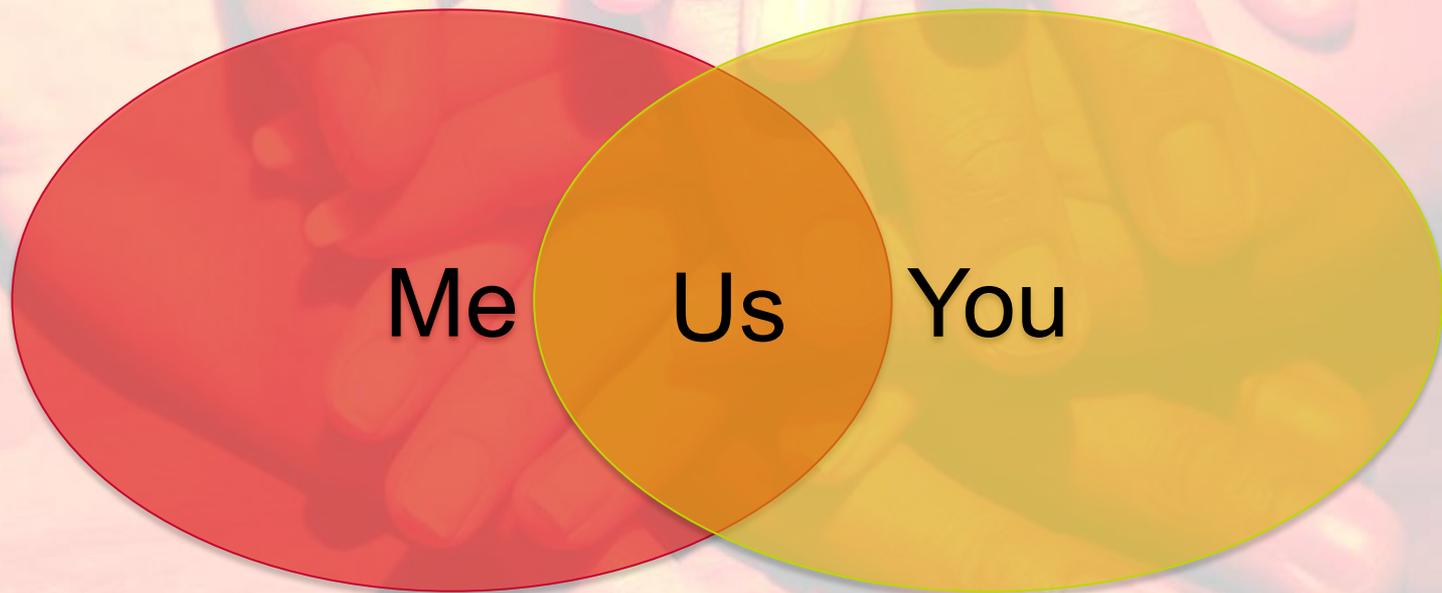
# ICN position statement

- The right to connect via information and communications technology
  - ICT can improve access to good healthcare, address inequalities in its provision and help citizens take a more active role

# ICN eHealth workstreams

- Connecting Nurses
- ICN Telenursing Network
- International Classification for Nursing Practice (ICNP®)

# International collaboration

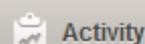


# Connecting nurses

- A forum for expert healthcare professionals from around the world to share their ideas, advice and innovations

# Information Shareapy

- A patient education service for nurses and midwives to share, via a dedicated and moderated social network, links to high quality, reputable health resources with their patients, families, friends or colleagues



Activity



Topics



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## Pain Management

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Posted 17 days ago by Robert Fraser :

### Opioid Overdose Toolkit

Facts for community members, first responders, prescribers, patient and family members.

Flag as inappropriate



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Like (2)



Share



Posted 6 months ago by Adrienne Huston :

### The British Pain Society - Pain scales in multiple languages

Flag as inappropriate



Comment (0)



Repost (0)



Like (0)



Share



Posted 6 months ago by Robert Fraser :

### Opioid Pain Medicines

Great information on pain medications for patients 1 From the Institute for Safe Medication Practices

Flag as inappropriate



Comment (0)



Repost (1)



Like (3)



Share



Hello, Nicholas

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SIDIIEF - Secrétariat  
International Des Infirmières  
Et Infirmiers De L'espace

#### Francophone

4 Resources



Robert Fraser

2 Resources



Scott Emory Moore

2 Resources

# Care Challenge

- A contest that highlights nursing innovations and helps to put them into practice
- There have been two winning entries this year. The authors have chosen a professionally produced video displaying their project as means of support from Connecting Nurses



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# Reducing Social Isolation for Our Residents in Long Term Care via Skype, a Best Practice

by Lorraine B. - La France | Ste. Anne de Bellevue, Canada

Goal: Reduce social isolation and promote intergenerational communication through the use of technology.

1 Comments

12 Like

Share Innovation:



# ICN Telenursing Network

- Global resource for sharing knowledge and expertise around telehealth and telecare
- Launched in 2009
- 296 members in 65 countries
- Membership open to all

# International Classification for Nursing Practice (ICNP®)

- ICN has supported ICNP® since 1989
- A standardised terminology used to represent nursing diagnoses, interventions and outcomes
- Available in 14 languages
- A formal infrastructure that facilitates cross-mapping and allows output in multiple formats
- A Related Classification in the WHO Family of International Classifications
- Harmonisation agreement in place with IHTSDO (SNOMED-CT)
- Collaborative agreements with other nursing terminologies

# Evidence-based practice

- Guidelines
- Standardised care plans

# Practice-based evidence?

- EHR
- Standardised languages
- Linkages

# Collaborations

IMIA-NI      ICN Telenursing Network  
Sabacare      ICNP R&D Centres  
WHO-FIC      ACENDIO      IHTSDO  
CEN      National Nurses Associations  
Informal networks  
ISO

- Working together to give nurses the tools that they need to do their job

- ‘Imagination is more important than knowledge’

*Albert Einstein*



# Thankyou

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