



GLOBAL
GREEN and
HEALTHY
HOSPITALS

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Ian Rudd
NHS Highland



Highlands and Islands Enterprise
Iomairt na Gàidhealtachd 's nan Eilean

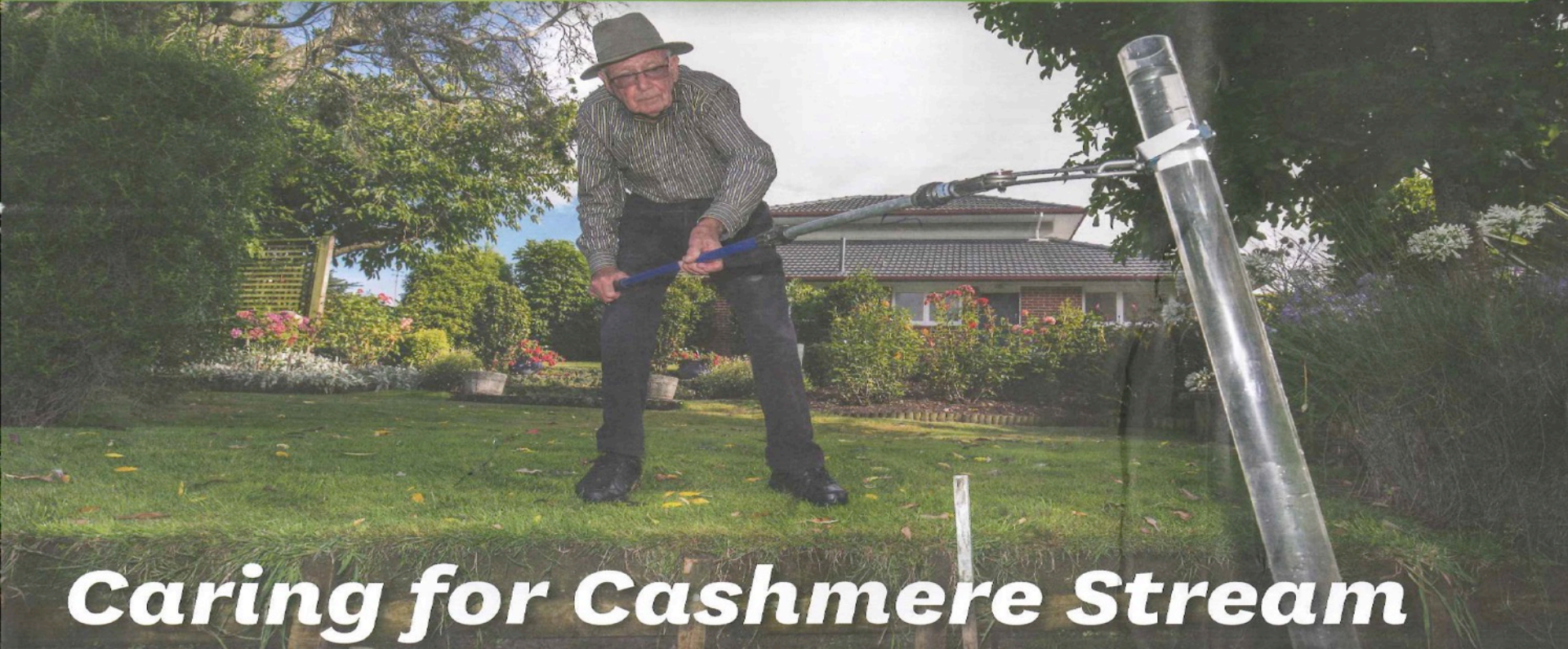
Pharma Waste – why are we interested?

Ian Rudd
Director of Pharmacy
NHS Highland
ian.rudd@nhs.net

The newsletter of Environment Canterbury

Living here

March 2016



Caring for Cashmere Stream



We don't have any of these in the Highlands



But we do have this

NHS Highland – 2016/17



Community Pharmacy

- 30L waste bins – 96 uplifted
- 60L waste bins – 918 uplifted

Dispensing GPs accept and dispose of pharmaceutical waste in the same way as community pharmacy.

Waste leaves Highland for incineration and landfill elsewhere in Scotland.

That leaves most of the remaining
pharmaceutical waste entering our
waterways

By providing more information to our patients and public on the impact of pharmaceuticals in the environment can we

Protect our environment and economy?

Protect our health?

Protect our health services?



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Sharon Pfleger
Consultant



Highlands and Islands Enterprise
Iomairt na Gàidhealtachd 's nan Eilean

Padding upstream to prevent pharma harm

Sharon Pflieger

Consultant in Pharmaceutical Public Health, NHS Highland

National Clinical Lead, Area Drug and Therapeutics
Committee (ADTC) Collaborative, Healthcare
Improvement Scotland

Pharmaceutical Public Health approach today

- Global perspective on circular economy
- Why do medicines matter?
- What can we do?
- What are we doing in Highland/ Scotland?
- What next?

GLOBAL USE OF NATURAL RESOURCES IN CRISIS OR NOT?

World Circular Economy Forum

Helsinki, June, 5th 2017

JANEZ POTOČNIK

Co-chair UNEP International Resource Panel (IRP)

Partner SYSTEMIQ



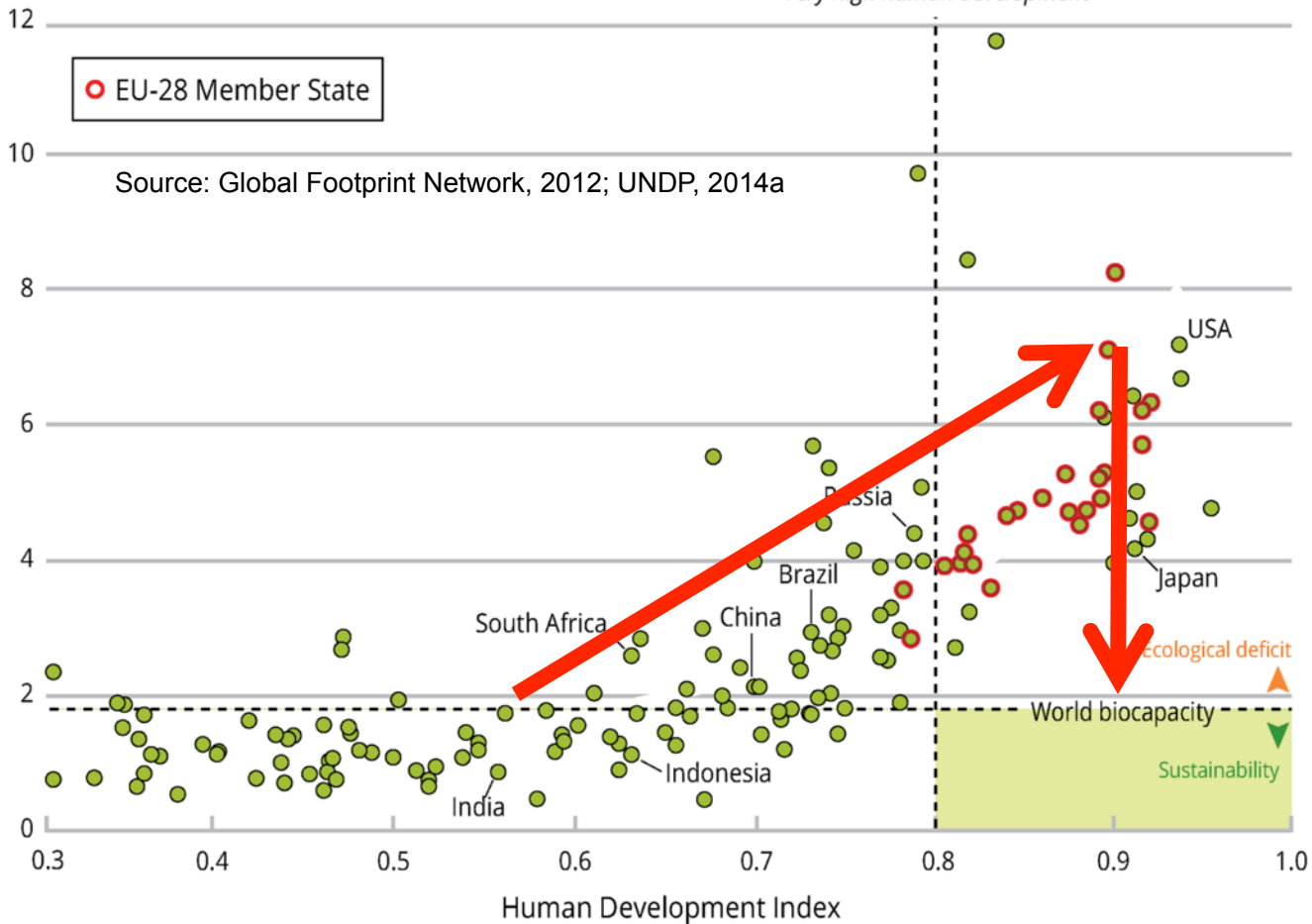
A taste of the 21st Century environment

- *Increasing evidence of the **climate change** threat*
- *60% of **ecosystems** already degraded or used unsustainably*
- *33% of **soil** is moderately to highly degraded due to erosion, nutrient depletion, acidification, salinization, compaction and chemical pollution*

DEVELOPMENT TRAJECTORY ...

Ecological footprint
(hectares per person per year)

'Very high human development'



GLOBAL USE OF NATURAL RESOURCES IN CRISIS OR NOT?

- *For the first time in a human history we face emergence of a **single, tightly coupled human social-ecological system of planetary scope**.*
- *Environmental consequences caused by **excessive and irresponsible use of resources** , in the future more responsible use of resources will be central*
- *It is about **system change** which needs leadership and improved global governance.*
- *Transition to a **new economic model integrating all pillars of sustainability** should be in the centre of our attention.*
- ***Circular Economy** is an excellent concept to operationalise it in practice.*
- *We should **refocus our efforts** from addressing the consequences (migration, security ...) to **the reasons** leading to them (economic, social, environmental ... imbalances).*

Why do medicines matter?

- More than **600** pharmaceuticals and their metabolites have been found in the environment worldwide.
- They enter the environment (through water, soil, sludge, and organisms) at all stages of their life cycle and can end up in drinking water, and accumulate in fish, vegetables, and livestock.

Use of medicines is increasing

- Growing population
- More older people
- Technological advances
- Pill for every ill culture
- Waste also increasing

How do medicines get into the environment?

- Production processes in pharmaceutical industry



- Consumption / use of medicines

- Between 30-90% of an oral dose can be excreted as an active substance in urine

- Improper disposal



- Each year in the UK alone, an estimated £300m worth of dispensed medicines go unused and are ultimately discarded- many flushed down toilets

Some medicines are worse than others because of their potential to affect people and wildlife



- Antibiotics
- Antidepressants
- Oral contraceptives
- Hormone replacement
- Painkillers
- Anti-inflammatories

Public health approach

Prevention is better than cure



What can we do?

- International agreement to minimise pharmaceutical pollution of our environment
- Cleaner production by **pharmaceutical industry**
- Raise awareness amongst **healthcare professionals** about the impact of pharmaceuticals in the environment and what they choose to prescribe
- Help **people** to understand the impact of pharmaceuticals in the environment and how to safely dispose of unused medicine

Source control

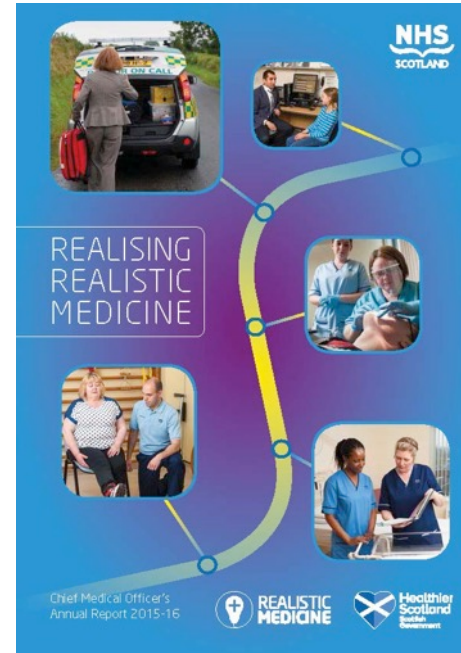
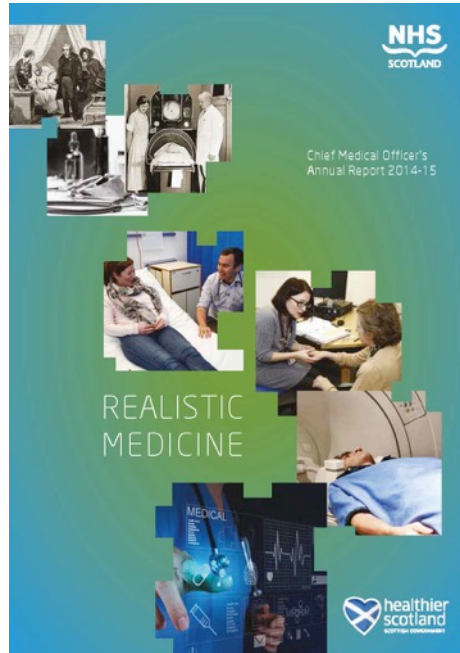
Reducing the quantity of pharmaceuticals that enter sewage systems by:

- ✓ Educating people about the possible environmental effects of what they stock in their medicine cabinet
- ✓ Encouraging people to return unused drugs to a pharmacy for proper disposal.
- ✓ Advise not to flush medicines down the toilet

What are we doing in NHS Highland?

- Area Drug and Therapeutics Committee (ADTC)
- Joint formulary for prescribing
- Guidelines linked to formulary
- Antimicrobial management team
- Disposal of unwanted medicines
- Public messages

Realistic medicines



REALISTIC MEDICINE

CAN WE:



CHANGE OUR STYLE TO
SHARED DECISION-MAKING?

BUILD A **PERSONALISED**
APPROACH TO CARE?



REDUCE HARM
AND WASTE?



REDUCE **UNNECESSARY**
VARIATION IN PRACTICE
AND OUTCOMES?

MANAGE RISK BETTER?



BECOME IMPROVERS
AND INNOVATORS?

**Patients' preferences matter.
The Kings Fund.**

**Doctors
generally chose
less treatment
for themselves
than they
suggest for
patients.**

Patients' preferences matter
The Kings Fund

**Patients who are fully
informed choose less
treatment and have
less regret**

Medicines Booklet

- ✓ Launched June 2016 and revised 2017
 - ✓ Available electronically and as a video
 - ✓ Patient journey starting at consultation
 - ✓ Explains how healthcare professionals decide whether to prescribe a medicine and which to prescribe
 - ✓ Potential to underpin conversations between patients and healthcare professionals
 - ✓ Educate the public on medicines risks and benefits
 - ✓ Fulfils NHSScotland quality ambitions
 - ✓ Engage patients in shared decision-making
- **Higher quality care and better outcomes**
- **Reduced waste and harm, improved safety**



http://www.healthcareimprovementscotland.org/our_work/technologies_and_medicines/adtc_resources/medicines_factsheet.aspx

Medicines booklet

Medicines in Scotland: What's the right treatment for me?

Related pages

- [Technologies and medicines](#)
- [Area Drug and Therapeutics Committee Collaborative \(ADTC Collaborative\)](#)



Video description

This video is an animated summary of our "Medicines in Scotland: What's the right treatment for me?" booklet.

This animation gives you an overview of the key points from our booklet and aims to help you understand more about your treatment options and how you can work with your doctor (or other healthcare professional) to ensure you gain the greatest benefit from your treatment.

Subtitled versions in English, Polish, Arabic, Urdu, Punjabi, Cantonese and Mandarin can be found by clicking on the playlist tab above.

Download the booklet

Downloads

- [Medicines in Scotland: What's the right treatment for me? - information for patients and the public - booklet March 2017 \(PDF, 918K\)](#)
- [Medicines in Scotland: What's the right treatment for me? - information for patients and the public - Summary document March 2017 \(PDF, 176K\)](#)

Our booklet is for **patients and the public** and explains how people can work with their doctor (or other healthcare professional) to decide whether a medicine is needed and if so, which to choose. It also explains about the likely benefits and possible risks of medicines.

Medicines are usually prescribed by a doctor. However, other healthcare professionals can also prescribe medicines (for example dentists and some nurses, pharmacists and physiotherapists). In this booklet, "healthcare professional" is used to describe the person prescribing the medicine.

Background

The Area Drug and Therapeutics Committee Collaborative, hosted by Healthcare Improvement Scotland, worked with healthcare professionals, public partners, public involvement groups, patient support groups across NHS Scotland and The Robert Gordon University to develop the medicines booklet. The booklet replaces the 2010 Health Tights Information Scotland (HITS) booklet, *How Medicines in Scotland - who decides what the NHS can provide?* and the medicines factsheet published in June 2016.

See also

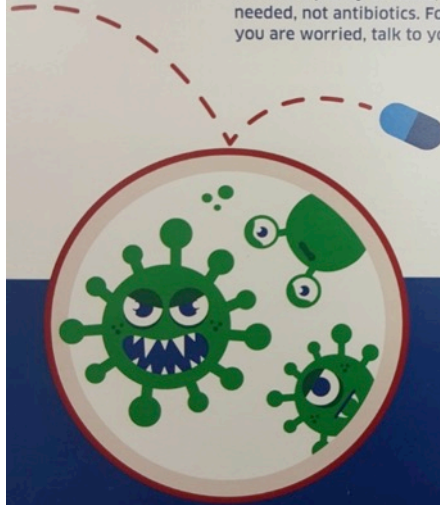
* Area Drug and Therapeutics Committee Collaborative (ADTC Collaborative)

Published date: 20 March 2017

Stop Antibiotic Resistance

Bacteria are becoming resistant to antibiotics. Keep antibiotics working for serious infections.

The best way to treat common colds, coughs or sore throats is plenty of fluids, rest and painkillers if needed, not antibiotics. For more information, or if you are worried, talk to your pharmacist or doctor.



Find out how you can help at Antibioticguardian.com



The commitment – Single National Formulary by 2019

- All medicines
- Tackle health inequalities, ('postcode prescribing')
- Increased safety through continuity of care for cross-board patients
- value-based care
- Streamlined process from SMC to formulary

'REALISTIC'

1. HAVING OR SHOWING A SENSIBLE AND PRACTICAL IDEA OF WHAT CAN BE ACHIEVED OR EXPECTED.
2. REPRESENTING THINGS IN A WAY THAT IS ACCURATE AND TRUE TO LIFE.

CREATING CONDITIONS

COMMUNICATE



CONNECT



COLLABORATE



CULTURE



THE VISION

BY 2025, EVERYONE WHO PROVIDES HEALTHCARE IN SCOTLAND WILL DEMONSTRATE THEIR PROFESSIONALISM THROUGH THE APPROACHES, BEHAVIOURS AND ATTITUDES OF REALISTIC MEDICINE

Will this be easy?

Albert Einstein when asked why it is that mankind has stretched so far as to discover the structure of the atom, but we have not been able to devise the political means to keep the atom from destroying us he replied:

“That is simple, my friend. It is because politics is more difficult than physics”