**Australian Healthcare & Hospitals Association and Climate and Health Alliance**

# Greening the Health Sector
# Policy Think Tank
# 22 August 2012

# Report

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## Introduction

The AHHA, in conjunction with the Climate and Health Alliance (CAHA), convened the first Greening the Health Sector Policy Think Tank (PTT) in Sydney on 22 August 2012.  The Think Tank asked: *How can the health care sector in Australia play a leadership role in the transition to a "clean energy future" by reducing the sector's environmental footprint?*

The PTT was attended by 52 enthusiastic participants from a range of health facilities, state departments and universities.  We certainly achieved our aim of starting an important conversation about how hospitals and healthcare providers can reduce their own carbon footprints (mitigation), and in doing so how the Australian health system can be strengthened through the promotion of greater sustainability and environmental health.  While hospitals have a big "environmental footprint", many are finding that sustainability measures benefit patients and the environment and offer financial savings.  We also discussed the role of the health sector in building capacity to deal with the impact of climate change on health services (adaptation).

A Policy Issues Brief on this topic was drafted for the AHHA's Institute, and circulated to registrants ahead of the PTT.

The keynote speaker was Professor Peter Orris from the USA, Senior Advisor to the international organisation Health Care Without Harm.

Professor Orris is the Director of the Occupational Health Service Institute and Global Chemicals Policy Program at the University of Illinois School of Public Health, a component of a WHO Collaborating Center.  Dr Orris has served as advisor to WHO, PAHO, Federal, State and Local Governments, environmental organizations, labor unions and corporations.

A series of Canberra-based meetings were organized with Peter in the two-days ahead of the PTT including with the Minister for Health and Ageing (Tanya Plibersek), the Minister for Climate Change's Chief of Staff (Allan Behm), Senators Richard Di Natale and Nick Xenophon and officers from the Departments of Health and Ageing and Climate Change and Energy Efficiency.  Professor Orris also presented a seminar for the staff at the Department of Climate Change with about 50 attendees.

Other speakers at the PTT were:

- Dr Kate Charlesworth - Public Health Registrar, NSW Ministry of Health
- Mr Glen Hadfield - Manager, Asset Systems & Sustainability, Western Sydney Local Health District
- Dr Forbes McGain - Anaesthetist and Intensive Care Physician, Western Health Footscray, Vic
- Professor Tony Capon - Head of Public Health, Faculty of Health, University of Canberra
- Daniel Hilson - Dalkia Energy Solutions

The Think Tank was facilitated by Dr Paul Dugdale and all presentations are available on the AHHA website. Sponsorship was provided by Dalkia Energy Solutions and University of Canberra.

The Climate and Health Alliance is an Australian partner of Health Care Without Harm and the AHHA has joined the Global Green and Healthy Hospitals Network (GGHHN).  Professor Orris presented the Association with a membership certificate.  This Network represents the interests of health systems and health organizations and more than 3,500 hospitals from six continents (and growing), which have come together to form a global network dedicated to reducing their ecological footprint and promoting public environmental health.  The Network is based on members' commitment to implement the Global Green and Healthy Hospitals Agenda -a comprehensive environmental health framework for hospitals and health systems, launched in October 2011.  Joshua Karliner of the GGHHN is looking forward to working with AHHA as members of the Global Network.

A joint Climate and Health Alliance and The Climate Institute Report titled *Our Uncashed Dividend: the health benefits of climate action* was launched at The Canberra Hospital on 14 August and was highlighted at the PTT.  The report was publicly supported by the AHHA and the AMA.

# Outcomes

## Summary

As a result of the PTT, AHHA, in conjunction with CAHA, will:

- establish a Greening Health Network to link interested health services and academic organisations from all jurisdictions in:
  - developing a policy agenda
  - assisting in preparing a bid for funding to include in the AHHA's Commonwealth budget submission
  - raising awareness about the opportunities provided by building sustainability in healthcare initiatives among Australian hospitals and healthcare organisations.
- seek funding for a health service demonstration project, including selection of mentor services, and incorporate an health services awards system which would be presented at an annual sustainability event.
- coordinate, through the AHHA Policy Research Institute, a research project with Founding Partner, University of Canberra as the applicant. UC is well-placed to take a lead on an NHMRC Partnerships project grant application for such a proposal. The Institute and UC will convene a meeting of a group of academics and health services to explore options for an evaluative research project that would review international best practice in sustainable healthcare, evaluate several Australian case studies, and recommend options for a national approach.

## Ten–point plan

Participants at the PTT recommended a range of strategies to inform the AHHA and CAHA policy development, advocacy campaign and research. These strategies have been aligned with the GGHHN agenda (italicised in the box under each heading below).

## *1. Leadership*

> *Prioritize environmental health as a strategic imperative*
>
> *Demonstrate leadership support for green and healthy hospitals in order to: create long-term organizational culture change; realize widespread hospital worker and community engagement; and foster public policy that promotes environmental health.*

### *1.1     National coordination*

National coordination: Establish a national organisation based on the [NHS Sustainable Development Unit](#) the aim of which is to help the Australian healthcare sector fulfil its potential as a leading sustainable and low carbon healthcare industry, by developing organisations, people, tools, policy and research which will enable the health sector to promote environmentally aware development and mitigate the impact of climate change.

Engagement: Encourage priority setting to involve senior-level support and achievements to be promoted.

Knowledge sharing: Establish mechanisms to utilise web-based communication and other low-carbon methods to support knowledge sharing and networking. Establish a national clearing house to maximise opportunities to share and link data and research analysis with the aim of sharing knowledge, reducing silos and combatting misinformation including a road map of:

- organisations involved in adaptation and mitigation (eg Australian Health Infrastructure Association and Centre for Health Asset Association)
- existing activities.

Financial support: Encourage governments to offer grants and interest free loans to healthcare organisations for investment in environmental sustainability.

Business case development: Establish a national approach to developing the business case for sustainability programs and projects in the healthcare sector including:

- development and adoption of a national measurement tool for calculating cost savings
- establishment of pilot sites
- initiation of evaluation projects.

The business case should make reference to the opportunities for improving public health outcomes, realising financial savings and reducing environmental harm.

## 1.2 Resourcing the workforce

Sustainability committees: Foster healthcare professional associations and agencies to actively work with management to establish local committees to oversee the management of environmentally sustainable healthcare facilities.

> For example, Austin Health has a hospital-wide environment committee which is involved in the organisation's environmental strategy - energy, waste, water and greening.

Health sector roles: Establish designated positions with standardised roles for officers involved in sustainability and mitigation activities.

Nurses as key: Nurses are a key provider group as they make up a high proportion of healthcare staff and are represented at all levels.

> For example, the UK Royal College of Nursing is a signatory of the Climate and Health Council's declaration to take action on climate change and global health and recognises the critical impact of climate change on global health and the environment. The College is actively working to measure and minimise its own carbon footprint and similarly, through RCN safety representatives and other activists, is encouraging health care provider organisations across the UK to do the same by, for example, reducing health care waste. RCN members are being encouraged to sign up to the Climate and Health Council declaration to take action on climate change and global health. It was suggested that the ANF membership could be surveyed and state-based awareness-raising activities convened. The US Nurses Association and the International Council of Nurses are also active.

Primary Health Care: Attention is given to hospital practices because of their greater capacity to make system changes, but moving to sustainable PHC is also critical. This can be achieved by:

- advocating for board level champions within Medicare Locals and Community Health Services
- evaluating sustainability implications of care pathways in primary healthcare.

> For example, in the US Healthcare Without Harm is now focusing on sustainability in physician's rooms. Positive co-benefits are particularly relevant because of the greater community engagement when encouraging healthier lifestyles. Local actions that can be implemented include:
> - Champions on Medicare Local Boards
> - Efficient and effective care pathways for maximum sustainability
> - Effective use of chronic disease management practices; for example, care closer to home etc.

## 1.3 Introducing performance measurement, accreditation and benchmarking

National standards: Develop coherent and consistent national standards for sustainable healthcare including adoption of sustainability indicators by the National Health Performance Authority as well as the inclusion of risk factors around sustainability in the work of the Australian Commission on Quality and Safety in Health Care.

Accreditation: Establish mandatory accreditation standards for sustainability in healthcare.

> At present, only one of the 47 criteria across 13 ACHS EQuIP5 standards refers to sustainability, and this is limited to monitoring and continuous improvement rather than a particular goal or target. There is no reference to sustainability in the National Safety and Quality Health Service Standards apart from management of infectious waste.

Performance measures: Share ideas, policies, actions and data to facilitate learning and national consistency at governmental and health service level.

> For example, Victoria is linking carbon emissions, energy and water use to cost per bed-day.

<u>Practical management tools</u>: Provide criteria to assist hospitals to measure outcomes of sustainability actions.

> For example, energy use from hospital lighting/heating reports; transport data from national travel surveys; procurement based on money spent.

<u>Benchmarking</u>: Include sustainability criteria in benchmarking projects.

## 1.4    *Training, education and engagement of health sector workers*

<u>Health Professional Education</u>: Include subjects on climate change, sustainability and health in University undergraduate and postgraduate health professional curricula and integrate sustainability issues across the curricula in all disciplines.  Develop a ranking system of effectiveness in implementing these programs.

> For example, universities in the UK and USA (Oxford, Cambridge, and Harvard) are including healthcare sustainability subjects in medical education.

<u>Health sector staff engagement</u>: Implement strategies at provider level to engage healthcare professionals, staff, patients and the wider community in understanding the connections between health and environment and the importance of adopting sustainable practices at work and at home.

Include sustainable healthcare topics in the orientation and training programs of healthcare agencies and the Continuing Professional Development curricula of associations and professional colleges.

> For example, The Centre for Sustainable Healthcare (UK) programs concentrate on three areas: engagement; knowledge sharing; and transformation.

> The CHS NHS Forest project aims to:
> - Improve health of staff, patients and communities through increasing access to green space on or near to NHS land.
> - Green the NHS Estates with a target of 1 tree per employee amounting to 1.3 million trees.
> - Encourage greater social cohesion between NHS sites and the local community.
> - Bring together a range of professionals and volunteers to produce woodland that includes the use of art, food crops, wood fuel and biodiversity.

## 1.5    *Rural and remote*

<u>Rural and remote health</u>: The additional challenge of achieving sustainability in rural and remote areas is recognised and requires further analysis and action (eg waste management opportunities, supply chain costs, client and staff travel).

## 1.6    *Research*

<u>Research Agenda</u>: It is estimated that 95% of the global scientific research effort is related to human health but the challenge is - how to bring this together?  There is a need for national approaches and methods in order to understand the system better including its interactions and points of resistance, interventions and unintended consequences.

> For example, in the US, it was realised that research was being undertaken at the intersection of patient safety (clinicians), worker safety (OHS / HR officer or external to institutions) and sector/community sustainability (governments / NGOs).  As a result, three silos of information were formed and the need to create a setting in which all groups talked together became apparent.

<u>Research Proposal</u>: There is an immediate need for an evaluative research project to review international best practice in sustainable healthcare, evaluate several Australian case studies, and recommend options for a national approach.  Specific and varying aspects related to sustainability across the healthcare sector including patient outcomes, organisational impacts, economic modelling and community level impacts will be analysed and integrated.  This will be pursued through the AHHA Policy Research Institute in collaboration with the University of Canberra.

<u>Scholarships</u>: Approach health care professional organisations, accredited agencies and health care equipment suppliers/industry to offer scholarships in collaboration with universities for research into the environmental sustainability of health care.

## 2. Chemicals

*Substitute harmful chemicals with safer alternatives.*

*Improve the health and safety of patients, staff, communities and the environment by using safer chemicals, materials, products and processes, going beyond the requirements of environmental compliance.*

### 2.1 Chemical exposure

Indoor Environment Quality: Encourage reduced exposure to hazardous materials and irritants through the better selection of low-emitting materials for construction and fit-out of buildings.

## 3. Waste

*Reduce, Treat and Safely Dispose of Healthcare Waste*

*Protect public health by reducing the volume and toxicity of waste produced by the health sector, while implementing the most environmentally sound waste management and disposal options.*

### 3.1 Waste Management

Life cycle analysis: Undertake life cycle analysis of medical consumables and processes.
> For example, compare disposal options for unused pharmaceuticals such as (i) incineration after take-back to a pharmacy, (ii) wastewater treatment after toilet disposal, and (iii) landfilling or incineration after rubbish disposal.

## 4. Energy

*Implement energy efficiency and clean, renewable energy generation.*

*Reduce fossil fuel energy use as a means to improve and protect public health; foster energy efficiency as well as alternative, renewable energy use with the long-term goal of 100% of energy needs to be supplied by on-site or community renewable energy sources.*

### 4.1 Energy management and production

Energy management: Establish a nationally consistent approach to the development and management of cogeneration and trigeneration programs including costing mechanisms, business case development and evaluation.

Energy production: Review existing restrictions on healthcare organisations accessing national and state-based green energy subsidy and support programs. Advocate for schemes to promote uptake of renewable energy generation in healthcare particularly the use of solar photovoltaic production.

## 5. Water

*Reduce hospital water consumption and supply potable water.*

*Implement a series of conservation, recycling and treatment measures to reduce hospital water consumption and wastewater pollution. Establish the relationship between potable water availability and healthcare resilience to withstand physical, natural, economic and social disruption. Promote public environmental health by providing potable water for the community.*

### 5.1 Conservation and recycling

Water conservation: Implement water conservation strategies including water efficient devices and enhanced preventive maintenance programs

Water recycling: Encourage implementation of water recycling strategies including grey-water programs and cogeneration processes.

## 6. Transportation

*Improve transportation strategies for patients and staff.*

*Develop transportation and service delivery strategies that reduce hospitals' climate footprint and their contribution to local pollution.*

### 6.1    Transport

Transport: Require the development of transport plans by health services and improved collaboration with public transport providers to establish an appropriate balance between sustainability and client and staff access.  Consider the full cost and impact of car parking facilities to address the perverse incentives associated with hospital car-park generated revenue.

### 6.2    e-health

e-health: Where possible and appropriate, e-health initiatives should be encouraged to reduce carbon and environmental footprint.  For instance, the e-health agenda provides a range of opportunities to improve sustainability including reduced travel, paper use and disposal. Additionally the environmental impact of electronic equipment and server room energy requirements should be considered.

## 7. Food

*Purchase and serve sustainably grown, healthy food.*

*Reduce hospitals' environmental footprint while fostering healthy eating habits in patients and staff. Support access to locally and sustainably sourced food in the community.*

### 7.2    Food provision

Food provision: Analyse the carbon footprint of food and take into account when purchasing. Develop a business case / pilot.  Take patient satisfaction and nutrition into account.
> For example, disposable crockery/cutlery, packaging, transport etc.  Cornwall in the UK is a possible case study where local businesses and produce are used.

## 8. Pharmaceuticals

*Prescribe appropriately, safely manage and properly dispose of pharmaceuticals.*

*Reduce pharmaceuticals pollution by reducing over-prescription practices, minimizing inappropriate pharmaceutical waste disposal, promoting manufacturer take-back, and ending the dumping of pharmaceuticals as part of disaster relief.*

### 8.1    Pharmaceuticals

Pharmacists: Undertake focused education of pharmacists about 'sustainable prescribing and dispensing' (waste management) including the quality, financial and environmental co-benefits.

Community engagement: Undertake a public education program about the opportunities for reducing the environmental footprint of pharmaceuticals (including reissuing pharmaceuticals) and risks associated with pharmaceutical waste.

Legislation/regulations: Review legislation/regulations to ascertain necessary amendments to encourage emissions and waste reductions.

## 9. Buildings

*Support green and healthy hospital design and construction.*

*Reduce health care's environmental footprint, and make hospitals healthier places to work and visit, by incorporating green building principles and practices into design and construction of health facilities.*

### *9.1 Infrastructure*

<u>Built environment</u>: Require compliance with sustainability standards for new developments and encourage retrofitting of existing facilities.  Increase the attention to sustainability factors, including Indoor Environment Quality and energy efficiency in design, development and tender assessments.

<u>ICT</u>: Ensure appropriate investment in ICT equipment to support telemedicine and other e-health strategies.

## *10. Purchasing*

*Buy safer and more sustainable products and materials*

*Source sustainably produced supply chain materials from socially and environmentally responsible vendors.*

### *10.1 Procurement*

<u>Sustainable procurement</u>: Ensure government tendering, procurement and contract criteria encourage environmental sustainability by influencing health consumables manufacturers, who also have a role in reducing the sector's carbon footprint, and changing behaviours of clinical and other staff.  Sustainable procurement would take into account the longer-term life cycle management of the product - packaging, logistics, shelf life, waste management etc.

AHHA and CAHA

30 August 2012