



Preface

The level of environmental friendliness of hospitals and health services worldwide has and will continue to have a significant and direct impact on human health. According to the WHO, the environment related mortality comes from a multitude of factors - including unsafe water, air pollution, waste disposal, toxic substances and so forth. Potentially, if environment is taken also to include man-made climate changes, the gravity of the health related issues is of course even more substantial.

The health care sector plays a major part in global environment, and thus we, as health professionals, can make a real change for the better. Hospitals are among the most intensive energy-consuming buildings and byproducts of health care industries include toxins, hazardous substances, polluted water, massive amounts of waste etc.

In this way, hospitals and health services can seriously undermine the health of the people they are meant to serve.

Rather than causing diseases, we should be preventing them, and thus hospitals and health services should take their place as front line promoters of a cleaner and greener world. Further, as health care professionals, we have a very credible platform for such advocacy, so our work in this area can make a positive difference.

The International Network of Health Promoting Hospitals and Health Services (HPH) focuses on actively promoting the health of patients, staff, communities and environment – wherever possible and however possible. Doing so naturally entails harnessing the tremendous positive potential inherent in furthering a more environmentally friendly health care sector globally. In light of the critical need for further development, documentation and dissemination of evidence-based environmental activities and initiatives in hospital and health service settings, the HPH Environment Task Force has developed this manual. The manual attempts to visualise environmental friendliness and related initiatives in core HPH documents, and by doing so it aims to support such initiatives at all hospital and health service levels and to be useful for all health professionals.

It is our hope that this manual will be of good use to you in your health promotion work.

On behalf of the International Network of Health Promoting Hospitals & Health Services,

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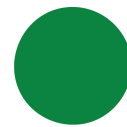
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1. Introduction

Background

The environment in which we live has a substantial impact on health. In fact, according to the WHO's Health and Environment Linkages Initiative (HELI), environmental factors account for no less than an estimated 25% of death and disease globally - and nearly 35% in particularly vulnerable regions (<http://www.who.int/heli/risks/en/>).

In this way, promoting the health of people is closely tied to promoting a healthy environment. This is also a fact which is clearly evident in the HPH Constitution, which states that the International Network of Health Promoting Hospitals & Health Services works towards the goal of better health gain by improving the quality of health care, the relationship between hospitals/health services, the community and the environment, and the conditions for and satisfaction of patients, relatives and staff (*HPH Constitution 2008*).

Promoting a healthy environment is something a hospital or a health service can do in many ways. For instance, one could deal with issues of waste, hazardous substances and energy/resources. The ways to take action can also be manifold, but one approach is to work towards replacement, reduction, reuse and recycling of that which can otherwise do harm to the environment. Another important issue is to think in terms of energy and resource production.

Naturally issues of workplace safety and patient safety are also tremendously important and can be seen as belonging within the term "environment". But as the HPH network already has Task Forces dealing with these issues (Please see the full list of HPH Task Forces at www.hphnet.org) they will not be included in this manual.

Environment friendliness for hospitals and health services

The terms "environment friendly", "eco-friendly", "nature friendly" or sometimes just "green" are often used interchangeably. For all intents and purposes relating to the HPH and Environment Task Force and to this manual, we will take them to refer to that which is considered to inflict minimal or no harm to the environment (definition from *Webster's New Millennium Dictionary of English, Lexico Publishing Group, LLC.*)

Thus, in our terminology, an environmentally friendly hospital / health service shall be one that actively works to inflict minimal or no harm to the environment.



2. The HPH & Environment Task Force

Task Force Focus – the five “R”s

The focus of the HPH & Environment Task Force is first and foremost to make hospitals and health services all over the world more environmentally friendly. The issue of how exactly to work with environment is however, something that naturally depends heavily on local context and conditions.

That being said, we have none the less identified five actions (five “R”s) that, we believe are crucial to becoming more environmentally friendly. These are:

Replace. To replace means to assume the former role, position, or function of something. It can also mean provide a substitute or equivalent. An example could be the replacement of one hazardous chemical with a more environmentally friendly substitute.

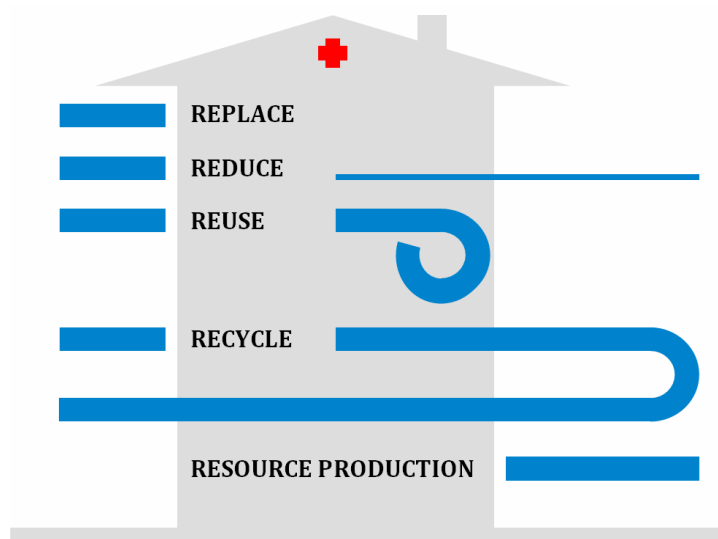
Reduce. To reduce means to bring something down to a smaller extent, size, amount, number, degree etc. An example could be to reduce the power consumption of a building by replacing all light bulbs with more environmentally friendly ones.

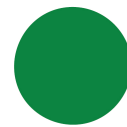
Reuse. To reuse means to re-employ for some purpose, put something into service again or make use of something again. It can thus also mean to re-consume. An example could be the reuse of so called “grey” water for, say, watering garden plants.

Recycle. To recycle means to treat or process (used or waste materials) so as to make them suitable for some form of reuse. An example could be the recycling of glass bottles into insulating building materials.

Resource production. Resource production means the act of producing, creating or manufacturing a source of supply of something. An example could be on gardening and vegetable production, the active production of power with solar panels or so forth. (All definitions adapted from *www.dictionary.com*).

For a graphical presentation of these five “R”s, please see illustration below.





Key issues

Aside from the five actions (“R”s) described above, it is necessary to identify the actual topic on which to apply them. The actual areas on which to implement the “replace, reduce, reuse, recycle and resource production” can be grouped and labelled in a multitude of ways. It is our belief, however, that most initiatives will be identifiable in one of the three areas: waste, hazardous substances and energy/resources.

Waste (as either gas, smoke, fluids, solids) generally refer to anything that is left over or superfluous, as excess material, remnants, garbage, refuse, excrements or by-products. This is taken to include liquid wastes such as polluted or otherwise unsafe water.

Hazardous substances generally includes toxins, poisonous substances, chemicals, nuclear material and other types of waste that has an especially hazardous nature.

Energy / resources. Energy can be taken to refer to any source of usable power, as fossil fuel, electricity, solar radiation or so forth. The main problems connected to energy are the resulting waste(s) and or pollution. Resources as such has to do with a supply of something and so the associated problems range from waste(s) to issues of optimal usage.

(All definitions from *www.dictionary.com*)

Although it seems that this list is, at least somewhat, adequate for practical purposes, it is clear that the key issues above could be grouped in many different (and possibly more optimal) ways. Our hope is thus not to present a finite and perfect list, but instead simply to present a workable one that can give inspiration as to how and where to practically apply the five “R”s discussed above.

Implementation of environment friendliness in hospitals and health services

Having looked at actions and key areas, the next step is to consider the specific context that a hospital or a health service constitutes.

In hospitals and health services, an important barrier to environment friendliness seems to originate from the need to consider what is often regarded as “more urgent” factors in the clinical work, the planning and the management.

Another important barrier is that one very often has an overwhelming feeling of not knowing where to start and what to change to actually make a difference on the environment.

With this manual and with the work of the Task Force as such, we hope to make these things better. We hope to facilitate changes and to minimize the obstacles mentioned - on both local, regional and national levels.

In this manual, we have tried to make it easier to get started with environmental friendliness for a health promoting hospital or health service. We have done this by visualising where and how environment related issues and initiatives can be completely natural (and necessary) parts of your clinical work, policies and strategies. By visualising environmental friendliness and by making the integration of it more accessible, it is our



hope that more HPH hospitals and health services will develop and improve in this field. By giving good examples on implementation and best practices of environment friendliness (as is the main focus of the Task Force) we hope that those of us who are just beginning to work actively in this field will be able to learn from the shining examples that already exist in the International HPH Network.

Task Force Structure

The HPH Environment Task Force was established by the International HPH Network in May 2010. The structure, terms of reference and organisation of the Task Force are described below, and the Task Force's main focus is on giving and disseminating best practice examples and on exchange of knowledge and experience.

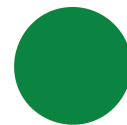
The Task Force relates directly to the overall mission of the International HPH Network, which is to secure a better health gain by improving the quality of health care and the relationship between hospitals/health services, the community and the environment (*HPH Constitution, 2008*). The Task Force further represents the decision of the HPH Network to begin intensive work on improving environment friendliness.





Task Force Terms of Reference & Deliverables

| Terms of References | Deliverables |
|--|--|
| 1. Visualising environment-related health promotion issues in existing HPH Models and Tools (e.g. WHO Standards) | In a manual visualise environment friendly issues relating to the WHO Standards, as well other key HPH documents |
| 2. Giving examples on best evidence practice related to HPH Models and Tools (evidence, staff competences and patient preferences) | In a catalogue give good examples on environment friendly initiatives relating to the five WHO Standards (management policy, patient assessment, patient information and intervention, a healthy workplace, continuity and cooperation) and to the five “R”s (Replace, Reduce, Reuse, Recycle, Resource production) |
| 3. Developing tools for monitoring the effect of environment friendly programs | In one or more tools describe how to monitor the implementation of environment friendly programs for Health Promoting Hospitals and Health Services |
| 4. Disseminating the best practice examples and HPH Models and Tools through the network and increasing the health professionals’ literacy about climate change and health impacts | In a scientific article disseminate the best practice examples through the network and other international and regional organizations |
| 5. Establishing a database for environment friendly hospitals and health services programs | In a database collect details of environment friendly hospitals and health services programs |



Visualising Environment Friendliness in HPH documents

For the first sub-group working on Term of Reference 1, the aim was to examine existing HPH documents for visibility of environment friendliness.

As the environment is not mentioned or referred to in other HPH models and tools, such as the HPH DATA Model or the HPH Documentation Model, the following visualisation will focus on the WHO Standards for HP in Hospitals from the publication entitled “Implementing health promotion in hospitals: Manual and self assessment forms” (*World Health Organization, 2006*).

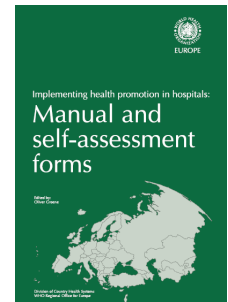
It should be mentioned also, however, that the environment is mentioned explicitly in the document entitled “The International Network of Health Promoting Hospitals and Health Services: Integrating health promotion into hospitals and health services - Concept, framework and organization.” (sometimes referred to as the HPH Brochure) on pages 6 and 10. Most notably, the brochure states that: “A Health Promoting Hospital and Health Service (HPH) is understood as an organisation that aims to improve health gain for its stakeholders by developing structures, cultures, decisions and processes. HPH is focused primarily on patients and their relatives, with a specific focus on the needs of vulnerable groups, hospital staff, the community population and – last but not least – the environment.” (*The International Network of Health Promoting Hospitals and Health Services: Integrating health promotion into hospitals and health services - Concept, framework and organization, 2007*)



3. WHO Standards for implementing health promotion in hospitals

The WHO Standards document provides a tool to assess, monitor and improve health promotion activities in hospitals. It is based on two complementary approaches to quality assessment:

- 1) evidence-based **standards**, expressing professionally consented statements on structures or processes that should be in place
- 2) and **indicators**, addressing health care processes and outcomes.



The document contains five standards relating to management policy, patient assessment, patient information and intervention, promoting a healthy workplace and continuity and cooperation.

The standards document mentions the environment explicitly in many places in the explanatory text (see p. 12, 13, 64, 75, 76, 81, 83, 89, 90 and 91) but not in the actual standards themselves.

That being said, the environment is, however, referred to implicitly in many instances within the actual standards.

Below, we have tried to visualise these instances in the 5 standards, and **bold blue** text indicates that environment friendliness or environment friendly initiatives are implicitly understood.

It is our hope that with the visualisation in the standards below, you will be able to see simplicity of procedure in terms of documenting your efforts and initiatives - and of course get further ideas to develop the environment friendly profile of your hospital or health service.



Standard 1: Management Policy

Objective: To describe the framework for the organization's activities concerning health promotion as an integral part of the organization's quality management system.

Substandards

1.1. The organization identifies responsibilities for health promotion.

1.1.1. The hospital's stated aims and mission include **health promotion (HP)**

1.1.2. Minutes of the governing body reaffirm agreement within the past year to participate in the WHO initiated HPH Network

1.1.3. The hospital's current quality and business plans include **HP for patients, staff and the community**

1.1.4. The hospital identifies personnel and functions for the coordination of **HP**

1.2. The organization allocates resources for the implementation of HP.

1.2.1. There is an identifiable budget for **HP services and materials**

1.2.2. Operational procedures such as clinical practice guidelines or pathways incorporating HP actions are available in clinical departments

1.2.3. Specific structures and facilities required for **HP** (including resources, space, equipment) can be identified

Does this include environment friendliness?

Yes

Partly

No

For example

☐
☐
☐

Time-table for action

☐
☐
☐

Date for the decision or for payment of the annual fee

☐
☐
☐

HP is explicit in the plan of action

☐
☐
☐

Staff member nominated for the coordination of HP

Yes

Partly

No

For example

☐
☐
☐

Budget or staff resources

☐
☐
☐

Check guidelines

☐
☐
☐

Facilities to lift patients available



1.3. The organization ensures the availability of procedures for collection and evaluation of data in order to monitor the quality of HP activities.

1.3.1. Data are routinely captured on HP interventions and available to staff for evaluation

1.3.2. A programme for quality assessment of the **HP activities** is established

| Yes | Partly | No | For example |
|--------------------------|--------------------------|--------------------------|---------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Availability assessed in staff survey |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Time schedule for surveys available |

Complimentary Indicators

_____ % of staff aware of **HP** policy

_____ % of patients (and relatives) aware of standards for **HP**

_____ % budget dedicated to staff **HP activities**



Standard 2: Patient Assessment

Objective: To support treatment, improve prognosis and to promote the health and well-being of patients.

Substandards

2.1. The organization ensures the availability of procedures for all patients to assess their need for HP.

2.1.1. Guidelines on how to identify smoking status, alcohol consumption, nutritional status, psycho-social-economic status are present

2.1.2. Guidelines / procedures have been revised within the last year

2.1.3. Guidelines are present on how to identify **needs** for HP for groups of patients (e.g. asthma patients, diabetes patients, chronic obstructive pulmonary disease, surgery, rehabilitation)

2.2. The assessment of a patient's need for HP is done at first contact with the hospital. This is kept under review and adjusted as necessary according to changes in the patient's clinical condition or on request.

2.2.1. The assessment is documented in the patient's record at admission

2.2.2. There are guidelines / procedures for reassessing needs at discharge or end of a given intervention

Does this include environment friendliness?

Yes

Partly

No

For example

☐
☐
☐

Check availability

☐
☐
☐

Check date, person responsible for revising guidelines

☐
☐
☐

For groups of patients specifically treated in the clinical dept.

Yes

Partly

No

For example

☐
☐
☐

Identified by patient records audit

☐
☐
☐

Guidelines present



2.3. The patient's needs-assessment reflects information provided by others and ensures sensitivity to social and cultural background.

2.3.1. Information from referring physician or other relevant sources is available in the patient's record

2.3.2. The patient's record documents social and cultural background as appropriate

| Yes | Partly | No | For example |
|--------------------------|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | For all patients referred from physician |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Religion that requires special diet or other specific attention. Social conditions indicating that the patient is at risk |

Complimentary Indicators

_____ % of patients assessed for generic risk factors

_____ % of patients assessed for disease specific risk factors according to guidelines.

_____ score on survey of patients' satisfaction with assessment procedure



Standard 3: Patient Information and Intervention

Objective: To ensure that the patient is informed about planned activities, to empower the patient in an active partnership in planned activities and to facilitate integration of health promotion activities in all patient pathways.

Substandards

3.1. Based on the HP needs assessment, the patient is informed of factors impacting on their health and, in partnership with the patient, a plan for relevant activities for health promotion is agreed.

3.1.1. Information given to the patient is recorded in the patient's record

3.1.2. HP activities and expected results are documented and evaluated in the records

3.1.3. Patient satisfaction assessment of the information given is performed and the results are integrated into the quality management system

3.2. The organization ensures that all patients, staff and visitors have access to general information on factors influencing health.

3.2.1. General health information is available

3.2.2. Detailed information about high/risk diseases is available

3.2.3. Information is available on patient organizations

Does this include environment friendliness?

Yes

Partly

No

For example

☐
☐
☐

Random review of patient records for all patients

☐
☐
☐

Patient record's audit

☐
☐
☐

Various assessment methods: survey, focused group interview, questionnaire. Time schedule

Yes

Partly

No

For example

☐
☐
☐

Availability of printed or online information, or special information desk

☐
☐
☐

Availability of printed or online information, or special information desk

☐
☐
☐

Contact-address is provided



Complimentary Indicators

- _____ % of patients educated about specific actions in self-management of their condition
- _____ % of patients educated about risk factor modification and disease treatment options in the management of their condition
- _____ Score on survey of patients' experience with information and intervention procedures



Standard 4: Promoting a healthy workplace

Objective: To support the development of a healthy and safe workplace, and to support health promotion activities of staff.

Substandards

4.1. The organization ensures the development and implementation of a healthy and safe workplace

4.1.1. **Working conditions** comply with national / regional directives and indicators

4.1.2. Staff comply with health and safety requirements, all **workplace risks** are identified

4.2. The organization ensures the development and implementation of a comprehensive HR Strategy that includes training and development of HP skills of staff.

4.2.1. New staff receive introduction training that addresses the hospital's **HP policy**

4.2.2. Staff in all departments are aware of the content of the organization's **HP policy**

4.2.3. A performance appraisal system and continuing professional development incl. HP exists

4.2.4. **Working practices** (procedures and guidelines) are developed by multidisciplinary teams

Does this include environment friendliness?

Yes

Partly

No

For example

☐
☐
☐

National and international regulations are recognized

☐
☐
☐

Check data on occupational injuries

Yes

Partly

No

For example

☐
☐
☐

Interviews with new staff

☐
☐
☐

Annual performance evaluation or staff participation in the HP programmes

☐
☐
☐

Documented by review of staff files or interview

☐
☐
☐

Check procedures, check with staff



4.2.5. Staff are involved in hospital **policy**-making, audit and review

| | | |
|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|

Check with staff; check minutes of working groups for participation of staff

4.3. The organization ensures availability of procedures to develop and maintain staff awareness on health issues.

4.3.1. **Policies for awareness** on health issues are available for staff

| | | |
|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|

Check for policies on smoking, alcohol, substance misuse and physical activity

4.3.2. Smoking cessation programmes are offered

| | | |
|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|

Available programmes

4.3.3. Annual staff surveys are carried out including an assessment of individual behaviour, knowledge on supportive services / policies, and use of supportive seminars

| | | |
|--------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|

Check questionnaires used for and results of staff survey

Complimentary Indicators

_____ % of staff smoking

_____ Smoking cessation programs for staff

_____ Score of survey of staff experience with **working conditions**

_____ % of short-term absence

_____ % of work-related injuries¹

_____ Score on burnout scale

¹ HPH Task Force on Staff and Promotion of a Healthy Workplace



Standard 5: Continuity and cooperation

Objective: To ensure collaboration with relevant providers and to initiate partnerships to optimise the integration of health promotion activities in patient pathways.

Substandards

5.1. The organization ensures that HP services are coherent with current provisions and regional health policy plans.

Does this include environment friendliness?

5.1.1. The management board is taking into account the regional **health policy** plan

Yes

Partly

No

For example

☐
☐
☐

Regulations and provisions identified and commented in minutes of the meeting of management board

5.1.2. The management board can provide a **list of health and social care providers** working in partnership with the hospital

☐
☐
☐

Check update of list

5.1.3. The intra- and intersectoral collaboration with others is based on execution of the regional **health policy** plan

☐
☐
☐

Check congruency

5.1.4. There is a written plan for collaboration with partners to improve the patients' continuity of care

☐
☐
☐

Criteria for admittance, plan for discharge



5.2. The organization ensures the availability and implementation of HP activities and procedures during out-patient visits and after patient discharge.

5.2.1. Patients (and their families as appropriate) are given understandable follow-up instructions at out-patient consultation, referral or discharge

5.2.2. There is an agreed upon procedure for information exchange practices between organizations for all relevant patient information

5.2.3. The receiving organization is given in timely manner a written summary of the patient's condition and health needs, and interventions provided by the referring organization

5.2.4. If appropriate, a plan for rehabilitation describing the role of the organization and the cooperating partners is documented in the patient's record

| Yes | Partly | No | For example |
|--------------------------|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Patients' evaluation assessed in patient surveys |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Check availability of procedure |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Availability of copy |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Review of records |

Complimentary Indicators

_____ % of discharge summaries sent to GP or referral clinic within two weeks or handed to patient on discharge

_____ Readmission rate for ambulatory care sensitive conditions within 5 days

_____ Score on patient discharge preparation survey

Visibility in WHO Standards for implementing health promotion in hospitals

Environment friendliness and environment friendly initiatives are not explicitly mentioned anywhere in the five standards. That being said, environment friendliness and environment friendly initiatives are implicitly referred to and can thus easily be included to a much greater extent in standards 1, 4 and 5 as indicated in **bold blue** text.



4. Conclusion

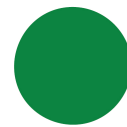
The visualisation of environment friendliness and environment friendly initiatives in the WHO Standards for Health Promotion in Hospitals has shown that the standards document is useful for supporting the work with this issue.

The environment is mentioned in the explanatory text of the standards document in many places (p. 12, 13, 64, 75, 76, 81, 83, 89, 90 and 91). Likewise, the environment is mentioned explicitly in the HPH Brochure on pages 6 and 10.

That being said, however, environment friendliness and environment friendly initiatives were in no instance in the actual standards referred to explicitly and could therefore (all too easily) be overlooked.

It is our hope that by using this HPH and Environment Manual, hospital staff and management will be able to adequately include environment friendliness and environment friendly initiatives where relevant in the WHO Standards for Health Promotion in Hospitals.

In this way, the HPH and Environment Manual can hopefully help you to document your hospital or health service's fulfillment of the WHO Standards for HP in relation to environment friendliness and environment friendly initiatives. Likewise, it could potentially help you to communicate across sectors in the health care system and ensure that environment friendliness and environment friendly initiatives in the hospital or health service are available for continuity and cooperation with other sectors.



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