

# Greening

Massachusetts' Health Care Systems and Facilities

Proposal

from

Rocky Mountain Institute

and

Health Care Without Harm





## Project Summary

The purpose of this one-year project is to demonstrate how to make hospitals and health care facilities into ideal healing environments that are resource-efficient and do not pollute the environment. The end result will be hospitals and other health care facilities that are attractive and healthy places to heal, to work, and to visit; that use resources of energy, water and materials efficiently; and that use and produce nothing toxic to the environment. Even more, Rocky Mountain Institute will demonstrate how to achieve these positive ends at little or no additional capital cost above that typically required for more traditional facility construction.

The scope of this project covers the entire building life cycle, including design, technology, operations, and procurement practices. The project approach is designed to foster innovation by health care system leaders, developing practical recommendations and guidelines they can implement.

The project will be executed in three phases. The first phase will be conducted largely by Health Care Without Harm, and will engage health care system and facility leadership as project participants. These senior leaders will identify issues we need to address in order to make it feasible for them to implement new design and policy practices.

In the second phase of work, Rocky Mountain Institute will conduct an Innovation Summit in whole system design that will enable participants to create unique solutions that are cost-effective, result in building/performance improvements, and promote human and environmental health. Health Care Without Harm will lead much of the third phase, assuring that participants can implement change within their facilities and systems, and disseminating the recommendations of the group throughout the health sector.

Rocky Mountain Institute has received \$50,000 from the Merck Family Fund, \$20,000 from the Massachusetts Health and Educational Facilities Authority, and Health Care Without Harm has raised another \$50,000 from the Barr Foundation. We are seeking \$67,165 to complete this unique demonstration project with clear implications for health care facility design nationally.

*Building design  
that incorporates  
nature and natural systems  
correlates to  
the enhancement of  
human health,  
recovery from illness,  
and worker productivity.*







## Strategy and Action Plan

**RMI and Health Care Without Harm are seeking \$67,000 to complete this one-year joint project, begun in January 2004. Together, we will assist Massachusetts' hospital and health care facility executives, chief operating officers, purchasing managers, and facilities managers to implement guidelines that will dramatically enhance facility energy- and resource-efficiency, while greatly reducing waste and toxicity. The project will have three phases: strategic development, a two-day intensive Innovation Workshop, and dissemination and support for implementation of policy and guidelines within participating health care systems.**

**Phase 1: Strategic Relationship Development.** This phase of the project will ensure that the necessary actors are personally engaged in creating the solutions they will eventually be responsible for implementing. The Massachusetts Hospital Association and the Massachusetts Medical Society have recently signed on as partners in this project. Health Care Without Harm and Boston's Green Roundtable will engage up to 70 project participants from health care facilities in Massachusetts. These will include Harvard/Dana Farber Cancer Institute, Massachusetts General Hospital (including Partner Group member hospitals), and Boston's Beth Israel Deaconess Medical Center (including Care Group member hospitals). High-leverage participants include:

- Jim Conway, Chief Operating Officer, Dana Farber Cancer Institute
- Louise Forrest-Bowes, Purchasing Manager, Dana Farber Cancer Institute
- Michael McGowan, Facilities Manager, Dana Farber Cancer Institute
- Arthur Mombourquette, Vice President Support Services, Brigham & Women's Hospital
- Guillermo Banchiere, Director of Environmental Services, Massachusetts General Hospital

Participants will assist in outlining a work-book that will be used during the Innovation Workshop to tackle the difficult issues that hospitals face in promoting green building design and pollution prevention. Project participation from environmental health leaders at the National Institute of Health and the Institute of Medicine is also likely. We will explore how NIH and/or IOM might support dissemination of the consensus report to a national audience, and implement its recommendations.







## **Phase 2 Project Activities and Timeframes**

### **April - May '04**

#### **Innovation Summit Logistical Confirmation**

Tasks include:

- Logistics and confirmations related to venue (the Massachusetts Medical Society's conference center outside Boston) and staffing
- Communications with participants and facilitators

### **June '04**

#### **Hold 2-Day Innovation Summit**

Tasks include:

- Plenary presentations (including discussion) highlighting case studies of green initiatives at health care facilities, describing research on healthy hospital design, and identifying challenges to be addressed in the workshop
- Working groups craft solutions to critical challenges (eg: a more effective hospital mechanical system, effective policy for changing purchasing guidelines)
- Working group reports receive comment from plenary gathering
- Working groups refine recommendations and record in Workbooks that become the basis for the Report of Recommendations.

### **July – August '04**

#### **Produce Report of Recommendations**

The Report of Recommendations will offer hospital policy and guidelines promoting sustainability, including: energy efficiency and green building design; creating market demand for and procurement of non-toxic products and building materials; and reducing hospital waste and pollution.

Tasks include:

- Participants complete topic area recommendations from each working group.
- RMI develops business cases for each of the topic area recommendations. These business cases will define the cost effectiveness of the recommendations.
- RMI and HCWH assess likely barriers to implementation and determine how the recommendations can be practically implemented.
- RMI and HCWH fold the final recommendations, business cases, and implementation approaches into an integrated report (the Report of Recommendations), including an executive summary.



### **Phase 3 Activities and Timeframes**

#### **September '04 – November '04**

##### **Provide Support for Implementation**

Tasks include:

- Health Care Without Harm staff arrange meetings with key participants to present the case for change to stakeholders within health care facilities and systems, maintain contact as leaders move forward
- Green Roundtable members assist with implementation in selected facilities
- Communicate with COBRA for feedback on evolving implementation efforts

#### **September '04 – October '04**

##### **Influencing Participants to Take Action**

Tasks include:

Influencing Local Decision Makers:

- RMI and HCWH will meet with senior executives in the major health care systems in Massachusetts who participated in the workshop to brief them on the implications of the recommendations.
- To the extent that government policies need to be addressed in order to implement the recommendations, RMI and HCWH will also meet with government officials in the Boston area to articulate business case for these changes.
- HCWH has a partnership with the Sustainable Hospital Project at the University of Massachusetts at Lowell, which has technical staff and a website devoted to providing healthier alternative products and services to hospitals nationwide. HCWH will bring the Sustainable Hospitals Project in as a partner, since it can highlight healthier and greener building materials and available suppliers on its website ([www.sustainablehospitals.org](http://www.sustainablehospitals.org)).

Influencing National Decision-Makers:

- HCWH has partnered with the American Hospital Association, the American Nurses Association, and the U.S. Environmental Protection Agency on a project called "Hospitals for a Healthy Environment" (H2E). H2E operates a list serve for more than 1,000 hospitals nationwide, a website, and has developed an awards program to reward hospitals for their environmental initiatives ([www.h2e-online.org](http://www.h2e-online.org)). HCWH will utilize H2E to highlight the successes in Massachusetts building in the awards program, conference call learning sessions and on the website.
- HCWH hosts a national conference every eighteen months entitled CleanMed ([www.cleanmed.org](http://www.cleanmed.org)). HCWH will use CleanMed in 2004 in Philadelphia and subsequent conferences to showcase positive green building projects in Massachusetts and link hospital leaders in Massachusetts with their peers around the country.
- RMI and HCWH plans to disseminate the Report of Recommendations through NIH, CDC, EPA, the IOM or other government entities, exploring with them how federal policy might encourage or discourage improved health care facility design, environmental health, and operations
- RMI and HCWH post the Report on our respective websites.



## **Rocky Mountain Institute** ([www.rmi.org](http://www.rmi.org))

Mission and Goals: Rocky Mountain Institute (RMI) is a 21-year old entrepreneurial non-profit fostering the efficient and restorative use of resources to make the world secure, just, prosperous and life-sustaining. We do this by inspiring business, civil society, and government to design integrative solutions that create true wealth. We solve problems of resource depletion, global climate change, waste and toxicity.

Based in Colorado, it has a full-time staff of 45 and an annual budget of roughly \$6.2 million.



## **Health Care Without Harm** ([www.noharm.org](http://www.noharm.org))

Mission and Goals: Health Care Without Harm is an international coalition of hospitals and health care systems, medical professionals, community groups, health-affected constituencies, labor unions, environmental and environmental health organizations and religious groups. Its mission is to transform the health care industry worldwide, without compromising patient safety or care, so that it is ecologically sustainable and no longer a source of harm to public health and the environment.

It is headquartered in Washington, DC but maintains an office in Boston. Its annual budget of \$1.8 million supports a core staff of 5 and affiliated staff of approximately 15.