Project description:

Background

In nearly all areas of a hospital it is possible to decrease environmental pressures by environmentally-sound measures, without neglecting medical standards. To assure a sustainable approach, ecological processes have to be included into the general management of the hospitals by means of integrated environmental management. A preliminary project launched in 1999, involving a partnership of hospitals in Germany, Italy, France and Austria had shown that environmental protection in hospitals was not generally something that could be solved solely by the use of ‘clean’ technology. From the start, it was clear that all staff members needed to be involved in the route towards an eco-friendly hospital, in order to reduce the consumption of energy, water and other materials and to reduce the amount of waste and wastewater. Even though Quality Management systems partially take into account environmentally relevant aspects they had not been combined with pure environmental management systems (UMS) according to the European EMAS standard (Environmental Management Auditing Scheme). Before the LIFE project, environmental management was only known in northern European countries, no southern European hospital had been audited and certified according to EMAS. The project IEM in Hospitals was developed by the partnership of four hospitals. On a European level this would result in the first comprehensive approach to participatory quality and environmental management, which would put the staff at the centre of activities by means of a comprehensive environmental education system.
Objectives

The main objective was to introduce, for the first time, EMAS-certified Environmental management systems in all four partner hospitals. This would involve the following: - Identification of improvement potential and taking preliminary measures to improve the environmental quality of the partner hospitals - Invention of new management systems and methodologies (web-based systems) for an improved integration of staff members in the environmental management processes (bottom up approach) - Education of large numbers of personnel - European comparison.

Results

The project was successful. 1. Environmental Management Systems and environmental improvements included: All partner organisations have introduced environmental management systems in one or more of their hospitals. This was confirmed by independent environmental experts and the hospitals were certified in accordance with the European EMAS convention. Linked to this are improvements regarding organisation and processes, whereby environmental targets and environmental programmes are now regularly elaborated, realised and checked. Environmentally-friendly processes were introduced such as waste-management and hazardous material management; some purchases were modified and some processes were changed entirely (e.g. cleaning and the making of beds and house cleaning in the Asklepios Harzkliniken in Goslar (Germany), house cleaning in the Sanatorium Hera (Austria), gas and water control in the hospitals of the Unità Sanitaria Lokale 7 (Italy) and the handling of hazardous material in the Institut Paoli Calmettes (France). 2. Integrated Environmental Management as innovative methodology: A new management approach was developed and could be successfully introduced in all four countries: The systematic involvement of the personnel by the means of a multiplier-system and the use of a ultra-modern, but reasonably easy-to-use e-learning solution. The software is an internal hospital documentation and learning system for operational environmental protection. This helps to ensure a higher professionalism in the field of the methodological competence of the staff members – an aspect which is of particular interest to other European hospitals. This multi-language learning platform, an ‘Open Source software’ is already available free-of-charge, for the quality management of a hospital group involving some 80 hospitals in Germany. 3. Trans-national Approach and environmental distance consulting: A lasting approach to the introduction of environmental management systems, that was EMAS and quality management-compliant, was developed for all partners, in order to facilitate a later evaluation and comparison of the hospitals (benchmarking) regarding their ecological success. Here the aim was to minimise the external consulting and to have the management system developed within the hospitals, by specially trained staff (so called ‘environmental multipliers’). A distance consulting system was developed for this, which is transferable to all European hospitals. The multipliers are instructed to be able to lead their hospitals to an environmental certification according to EMAS in 15 steps. 4. Training and qualification: The internet-based documentation and qualification system made time-consuming staff training in environmental management easier and better. Since the
beginning of the project, it was intended that the environmental multipliers would carry out the training themselves, so that the training of all organisations could be developed exactly according to their needs. Among the many different learning units, for example, the environmental multipliers from Vienna elaborated and tested ‘made-to-measure’ training units for the saving of energy, whereas the cancer institute of Paoli Calmettes developed individual units for improved safety with x-rays and irradiation and for the handling of hazardous material. Among others, a course for an ordering system for patients’ meals was developed according to ecological aspects in the ASKLEPIOS Harzliniken hospital and tested by hundreds of staff members. Discussion of results 1. It is important to underline that, regardless of size and individual activities, ecological measures are more easily introduced in hospitals if a positive cost effect can be demonstrated. Therefore, it is absolutely indispensable to identify possible cost savings in a management process from the start. For this reason, measuring stations that were introduced by the Italian partners for certain material flows, resulted in a significant innovation: On the basis of these values it is now possible for the first time to identify and introduce cost-saving measures. In this context the project partners stress the importance of the trans-nationally comparable data, which now allows benchmarking and therefore represent the basis for improvements in the field of material flows. The approach of an INTEGRATED Management has therefore been confirmed. 2. Sustainable consulting and training approach. The partners estimate that, roughly compared with ‘traditional’ consulting services, the efforts for consulting and coaching can be reduced by about one third. Here the reduced time for the release of staff members is of greater importance than the mere consulting costs. It would be desirable if these numbers could be verified on the basis of an extended IEM network. The organisational structure with environmental management representatives, teams of multipliers, blended learning offers for staff members and an easier filing of documents, was the reason for a deep penetration of environmental management in all organisations and, as a consequence, for a high acceptance. 3. Participatory approach: Integration of the staff The approach to integrate large numbers of hospital personnel also worked well. Because of the intensive methodological involvement of the staff different areas mutually take advantage (QM from EM, use of the intranet, internal training, suggestion system, communication etc.). This project has been selected as one of the 24 "Best" LIFE Environment projects in 2004-2005

Top

Environmental issues addressed:

Themes

Environmental management - Certification
Services & Commerce - Healthcare - Social work

Keywords
EC regulation on eco-management and audit, environmental training, hazardous waste, on-line service, hospital, waste management, decision making support, integrated management

Target EU Legislation

- Environmental management & assessment
- Regulation 761/2001 - Allowing voluntary participation by organisations in a Community eco-manage ...

Natura 2000 sites

Not applicable

Beneficiaries:

Coordinator: Harzkliniken
Type of organisation: SME Small and medium sized enterprise
Description: ASKLEPIOS Harzkliniken GmbH is an SME involving three hospitals employing between 200 to 1,100 staff.
Partners: Unità Sanitaria Locale 7, Siena (IT) Institut Paoli Calmettes, Marseille (France) Krankenanstalten Hera, Wien (Austria)

Administrative data:

Project reference: LIFE00 ENV/D/000317
Duration: 01-NOV-2001 to 30-APR -2004
Total budget: 1,804,673.29 €
EU contribution: 845,066.00 €
Project location: Wien(Österreich) Niedersachsen(Deutschland) Provence-Alpes-Côte d'Azur(France) Toscana(Italia)