Published in proceedings of the *Tromsø Telemedicine Conference TTeC'2004*, June 2004
Tromsø, Norway

INDICATORS FOR BENEFIT ESTIMATION OF HOSPITAL REORGANIZATIONS

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Abstract

New healthcare policies imply increasing responsibilities for hospital administration and management. The highest possible quality of care must be ensured to citizens, together with an ongoing aim at minimizing financial costs and resources' usage. A new methodology, called BHP (Best Hospital Practice) [1], has been developed to help hospital managers in the reorganization of working models and the introduction of ICT support. BHP is targeted to specifying new, teamwork oriented organizational measures and implementing ICT (Information and Communication Technologies) to support the new working models, with the final goal of improving hospital efficiency. This methodology has already been successfully tested in seven hospitals from three different countries, operating in a wide range of medical fields.

An optimal strategy for hospital investments must ensure that improvement measures are identified with the aim of eliminating process bottlenecks at a minimal cost. BHP supports the hospitals with all necessary guidelines to implement such improvement measures efficiently and successfully. Process improvement in the hospital based on the introduction of ICT support, requires most of all a well-planned reorganization of tasks and responsibilities inside the institution.

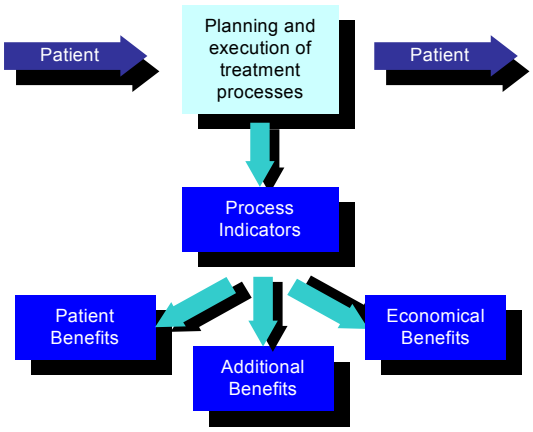

Figure 1. The BHP-Indicators Strategy

When a new project for Information Technology introduction is started in a hospital, the management must be confident that the benefits to achieve with the system to be developed will be worth the resources spent in the project. For this, a cost/benefit analysis must be done. Let us suppose that a new PDA based system will be developed to support nursing care. The expected benefits would be a more reliable nursing treatment and possibly a reduction of time spent in their activities. But how to measure, or estimate, these expected benefits, so that management may decide to move forward or stop the project? The BHP methodology offers a strategy based on process indicators to perform early estimation of ICT introduction benefits.

As shown in Figure 1, for the planning and execution of the patient treatment, a set of process indicators are defined, and from these, several benefits can be estimated for the following categories: Patient benefits – e.g. better treatment, less risks, less time in hospital, Economical benefits – e.g. optimization of resources, and Additional benefits – e.g. any other benefits related to treatment. For the example given above, these benefits could include, correspondingly: mistakes concerning the medicines assigned to each patient, time spent on the preparation and handling of *Unidose* (patient specific medication) requisitions, and better control of consumables supplies. The presentation of this paper will give a detailed description of the approach used to define and measure the process indicators and their related benefits. Additionally, the implications of these measurements and results in the reorganization of hospital activities will also be addressed, "if there is a time reduction in the nursing activities, what to do with their extra time?"

References

[1] *A Novel Methodology for World-best Teamwork in Hospitals*, J Artur Vale Serrano, Uwe Kirchhoff, in book *E-business, Key Issues, Applications and Technologies*, Brian Standford-Smith e Paul T. Kidd, IOS Press, ISBN 1 58603 089 2, 2000.