

# The hospital organisation of the future

#### Andreas Otte<sup>1</sup>, Rudi A. Dierckx<sup>1</sup>, Karina Otte<sup>2</sup>

<sup>1</sup>Division of Nuclear Medicine, Ghent University Hospital, Gent, Belgium, <sup>2</sup>Legal Department, University Hospital, Freiburg, Germany

[Received 8 IV 2004; Accepted 9 IV 2004]

#### **Abstract**

The future of hospital Nuclear Medicine is triggered by the hospital organisation itself. In general, the hospital organisation of the present requires substantial changes in order to be competitive, economical, and abreast of the rapid progresses in medical developments and patient management. It also must be flexible to changes in health politics. In this special report an organisational hospital structure is outlined which may help encounter the challenging hospital future. Some hospitals have already implemented convincing changes, whereas others are far behind.

Key words: hospital organisation, hospital of the future, patient management, patient focus, controller unit

#### Introduction

Whether there can be an "ideal" organisational hospital structure in view of the increasing legal and economical pressure on the hospitals remains open. The fact is, however, that the strained financial situation of the hospitals makes innovations of their organisation essential. Physicians, including Nuclear Medicine physicians, working in hospitals must be aware of the changes the hospital organisation may face to remain competitive. In the following, therefore, we would briefly like to outline our opinion of an "ideal" organisational hospital structure, which is in line with current opinions in health economics [1–23], but certainly will be subject to the legal, political and financial framework and may need adaptation from country to country. Also, some countries may be more progressive in the installation of such or similar structures than others. Furthermore, within a country implementation may vary from hospital to hospital depending on the chosen legal form of the hospital.

Correspondence to: Andreas Otte Division of Nuclear Medicine, Ghent University Hospital, De Pintelaan 185, B-9000 Gent, Belgium e-mail: Andreas.Otte@Ugent.be

### "Ideal" hospital organisation

At present in most hospitals the existing rigid hierarchical structures should be overcome by flatter hierarchies considering increasing delegation of decisions, increasing responsibilities for the delegates, and implementing task forces and project team structures. The old rigid hierarchical organisation with its trial separation into medical director and staff, administrative director and staff and hospital service director and staff mainly reduces flexibility in decision making and, albeit created to best possible ensure the interests of the patients, frequently ends up in competition between the three lines on existing resources, which are unstoppably becoming rare. Where possible, matrix management should replace line management structures. One approach to leverage the hospital organisation could be to integrate the heads of the various medical departments and the hospital services unit in the financial processes and financial management. This, however, would probably not have the expected success, given the different business languages of the involved parties and the heterogeneous attitudes of the medical group compared to the nonmedical group. Another approach may be to appoint a full-time and fully dedicated Senior Medical Director, who on the one hand is board-certified in a medical discipline, ideally, but not essentially, with leadership experience in a clinical staff position, and on the other hand has an additional qualification in Business Administration. Without doubt, finding such candidate may be challenging, but as we think worthwhile, as the Senior Medical Director could help coordinate the balance between best practices in medicine (being an expert in the medical field) and economical considerations (being an expert in Business Administration). A further approach could be decentralisation in decision-making from the aforementioned top management to the strategic business unit or even departmental level, allowing for autonomous definitions of the strategic business unit or departmental clinical and research outputs and directions, their quality and funding. This does not necessarily mean that the top management is to be abandoned; it only focuses on the more integrative concept of management in general. Decentralization in decision-making would, as we think, indeed be a motivating factor for the employees. This could be enhanced by provision of supporting structures such as controller units and a well organised and networked Information Technology division. Former "pure" personnel departments should be replaced by "true" human resources departments including training, motivation and incentive programme units. Only well-motivated and trained employees will contribute to the successful economy and quality of their hospital. Employees in the medical field, apart from similarities to industry employees, also have special

needs characteristic for the medical field, which must be addressed appropriately. Besides, the choice of the legal form of the hospital plays a key role in the opportunities the employees actively have. In Germany, for example, more and more public or state hospitals are being transformed into limited companies, which have already been proven successful in private hospitals, in terms of quality in decision-making, medical output, short response times and flat hierarchical structures. In addition, as in industry, mergers and take-overs between hospitals are playing an increasingly important role in order to address competitiveness.

The general processes and sequences in the special organisation "hospital" should also be revisited, as medical progress in diagnostics as well as therapeutics is rapidly developing, new indications are evolving, patient structure and frequency is dynamic and the health-political framework is continuously changing. Patient services should primarily be patient-focused offering different levels of care such as emergency rooms, intensive care units, intermediate care units, normal wards, and low-care units, allowing for adequate stratification of the patients, which results in an optimisation of the time patients are staying in hospitals and at the end helps saving funds. A short-term therapy unit would add up here, allowing for optimisation in planning, staffing, motivation of the employees, patient contentedness, and last but not least marketing of the hospital. Also, an interdisciplinary admission unit could optimise the sequences in the hospital, as by this the patient is first screened for the following transfer to the correct unit. This would help reduce ineffective admissions and potential diagnostic duplications; it would also shorten patients' stays in hospital and, therefore, be more economical. It could furthermore be motivating for the employees to work in interdisciplinary teams. Commencing with the interdisciplinary admission units, the modern hospital organisation may reconsider changing the classical separation of medical departments in general. For this, a dedicated allocation (patient) management tool would be essential, enabling the timely planning and accurate organisation of all necessary and avoidable steps during the stay of a patient according to his/her individual needs.

The introduction of diagnosis related groups (DRGs) as a basis for hospital funding is another topic, which — as we think — should be treated separately. In our opinion, at least speaking for Germany, the introduction of DRGs into the existing hospital environment is still challenging.

The aforementioned suggestions are, of course, a personal view of the authors and may be subject to limitations due to political, financial, capacity or other reasons. However, we want to draw a picture which may help the reader to become aware of the complexity of this certainly intriguing field.

# The "hospital of the future"

Of course, the "hospital of the future" already in part exists. As one example the new clinical centre Barmbek in Hamburg/Germany may be mentioned [24]. This hospital, which is entitled by its flyer "hospital of the future", developed a model with a new management and organisational structure, with modern patient-focused sequences and a future-oriented service offer. This hospital has been consulted by the internationally experienced management consultant Andersen Consulting/Accenture and, as we

think, presents an excellent example of a new hospital era. It comprises the formation of new leadership and organisational structures with modern patient-focused processes and a future-oriented offer of medical services. It includes interdisciplinary medical centres, the focus on key medical tasks, new reporting structures in medicine, care and management, new functions such as multiprofessional treatment teams, centre managers, team partners etc, individual admission and dismissal planning, or an allocation management.

Andersen Consulting/Accenture has also consulted other hospitals, e.g., in the USA. In fact, many ideas which are about to be implemented in European hospitals, as for example the aforementioned Barmbek clinical centre in Germany, result from the American experience of organizing and managing hospitals. Of course, there are differences in the hospital organization and Nuclear Medicine between the United States and most European centres (e.g., the integration of Nuclear Medicine into Radiological departments, different board certification procedures, state versus private University organization, radioprotection requirements with influence on patient care times). Nevertheless, implementation of key items from the American organization and management of hospitals in general and Nuclear Medicine in special and learning from its (much longer) experience could help make the European centres more effective.

#### Conclusion

The changes of the mostly decrepit hospital organisation are first of all provocative for all involved parties. The changes are affecting all professional groups in the hospital, medical and non-medical. Changes often provoke emotions. Changes are, however, necessary. Team work and team playing are essential in the implementation of changes. The challenges to the hospital of the future are coming, and we can only address them if we face them unemotionally and constructively, seeing also the opportunities. We think that this general health economics topic is of increasing interest also to the Nuclear Medicine physician readership.

## References

- Dick B, Zielke A. An integrated concept of management for serviceoriented hospitals — the "Balanced Scorecard". Dtsch Med Wochenschr 2002; 127: 1656–1659.
- El-Din I, Kempf T, Winkler M, Seelbach H. Einführung der DRGs in Deutschland — Vorbereitungserfahrungen aus der Praxis. Gesundh Ökon Qual Manag 2002; 7: 106–113.
- Göldner F, Hehner S, König M, Salfeld R, Wenzel G. Der Markt für Medizinprodukte: Im Spannungsfeld zwischen Innovation und Regulierung. In: Salfeld R, Wettke J (eds.). Die Zukunft des deutschen Gesundheitswesens. Perspektiven und Konzepte. Springer, Berlin, Heidelberg, New York 2001.
- Götzner T. Entscheidungsorientiertes Kostenmanagement im Krankenhaus. Krankenhaus 1995; 3: 205–212.
- Hennevogel W, Seifert S. Krankenhaus-Controlling mit Standardsoftware SAP R/3. In: Hentze, Huch, Kehrer (eds.). Krankenhaus-Controlling. 2. Aufl., Stuttgart 2002.
- Hensen P, Schwarz, T, Luger TA, Roeder N. Krankenhäuser: DRG--Kompetenz als Schlüsselqualifikation. Dtsch Arztebl 2004; 101: A 557– -558 [Heft 9].

104 www.nmr.viamedica.pl

- Kastenholz H, Both B. Qualitätssicherung der medizinischen Versorgung aus Sicht des Bundesministeriums für Gesundheit. Bundesgesundheitsbl Gesundheitsforsch Gesundheitsschutz 2002; 45: 215–222.
- Kongstvedt PR. Essentials of Managed Care 2<sup>nd</sup> Edition (ed.). Aspen Publication, Gaihersburg, Maryland 1997.
- 9. MacAdam M. Home care: it's time for a Canadian model. Healthc Pap 2000; 1: 9–36.
- McKee M, Healy J. Hospitals in a changing Europe. European Observatory on Health Care Systems Series. Open University Press, Buckincham, Philadelphia 2002.
- Mölller J. Methoden zur Bewertung der Qualität im Gesundheitswesen.
  Ein Überblick. Gesundh Ökono Qual Manag 2001; 6: 26–33.
- Mörsch M. Die ökonomischen Funktionen des Wettbewerbs im Gesundheitswesen: Anspruch, Realität und wirtschaftspolitischer Handlungsbedarf. Gesundh Ökon Qual Manag 2002; 7: 155–160.
- Perleth M, Schwartz FW. Qualitätssicherung von Krankenhausleistungen. In: Hentze, Huch, Kehrer (eds). Krankenhaus-Controlling 2 Aufl, Stuttgart 2002.
- Richter-Kuhlmann EA. Gesundheitsreform: Die ersten 40 Tage. Dtsch Arztebl 2004; 101: C 383–384 [Heft 8].
- Rocke B. Zur Thorie und Praxis der Kooperationen und Fusionen im Krankenhausbereich. Krankenhaus 2002; 7: 531–535.

- Rychlik R. Gesundheitsökonomie und Krankenhausmanagement.
  Grundlagen und Praxis. Kohlhammer, Stuttgart, Berlin, Köln 1999: 22–23
- Schmidt C, Gabbert T, Engeler F, Möller J. Krankenhausmarkt im Umbruch Welche Kliniken profitieren von der aktuellen Situation? Gesundh Ökon Qual Manag 2003; 8: 294–299.
- Schmidt C, Möller J, Gabbert T, Engeler F. Investoren im Krankenhausmarkt. Dtsch Med Wochenschr 2003; 128: 1551–1556.
- Schmidt C, Möller J, Gabbert T, Mohr A, Engeler F. The German Healthcare sector — a market in transition. Dtsch Med Wochenschr 2004; 129: 1209–1214.
- Schmidt C, Möller J, Reibe F, Güntert B, Kremer B. Patientenzufriedenheit in der stationären Versorgung. Stellenwert, Methoden und Besonderheiten. Dtsch Med Wochenschr 2003; 128: 619–624.
- Schrappe M. The hospital perspective: disease management and integrated health care. Z Arztl Fortbild Qualitatssich 2003; 97: 195–200.
- 22. Scriba PC. Future development of hospital structure. Dtsch Med Wochenschr 2003; 128: 1181–1182.
- Silvers JB. The role of the capital markets in restructuring health care.
  J Health Polit Policy Law 2001; 26: 1019–1030.
- 24. See pdf article on internet under http://www.ak-barmbek.lbk-hh.de//data/akb\_gsl.pdf.