

EXPERIENCE IN CLINICAL AUDIT IN THE CZECH REPUBLIC

J. Petera, H. Stankusova, P. Slampa, P. Zavoda

*on behalf of the Society of Radiation Oncology, Biology
and Physics, Czech Republic*

EXPERIENCE IN CLINICAL AUDIT IN THE CZECH REPUBLIC

- The basic requirement for clinical audits has been specified by Czech legislation in the Decree No 307/2002 Coll on Radiation Protection that is regulated by the State Office for Nuclear Safety (SONS)
- 2004 – 2006 „ Project of the Promotion of the Quality of Health Care“ supported by Ministry of Health of the Czech Republic

Objective of the project

To develop the methodology of clinical audit and to carry out clinical audits in selected radiology, radiotherapy and nuclear medicine departments in the hospitals managed by Ministry of Health

” Project of the Promotion of the Quality of Health Care“

Clinical audits in CR realized in the frame
of this project :

- 11 radiology departments
- 3 nuclear medicine departments
- 8 radiotherapy departments

***This presentation will focus only to clinical audits
in radiotherapy***

Preparatory stage

- **Establishment of working group for development of clinical audit methodology and criteria**
(coordinator from the Ministry of Health, members of professional societies: radiology, radiotherapy, nuclear medicine, medical physicists, representatives from regulatory body SONS)
- **Elaboration of the national standards**
- **Survey of the status of the Czech radiotherapy**
- **Elaboration of the checklist**
- **Workshop on quality assurance and clinical audit** *(organized by SROBF + SONS)*
- **Auditors training**

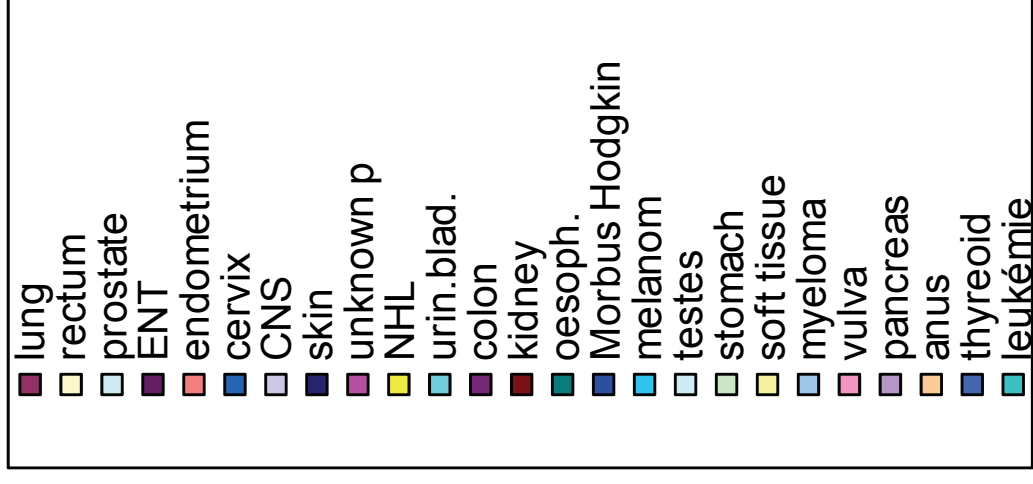
National radiological standards

- Indispensable role of professional societies
- Working groups of radiation oncologists and medical physicists have elaborated **standards for curative RT, palliative RT, brachytherapy, IMRT, stereotactic radiotherapy and radiotherapy for non-malignant diseases**
- Written standards were presented during professional meetings and were published for discussion on websites of professional societies and later also on website of the **Ministry of Health**

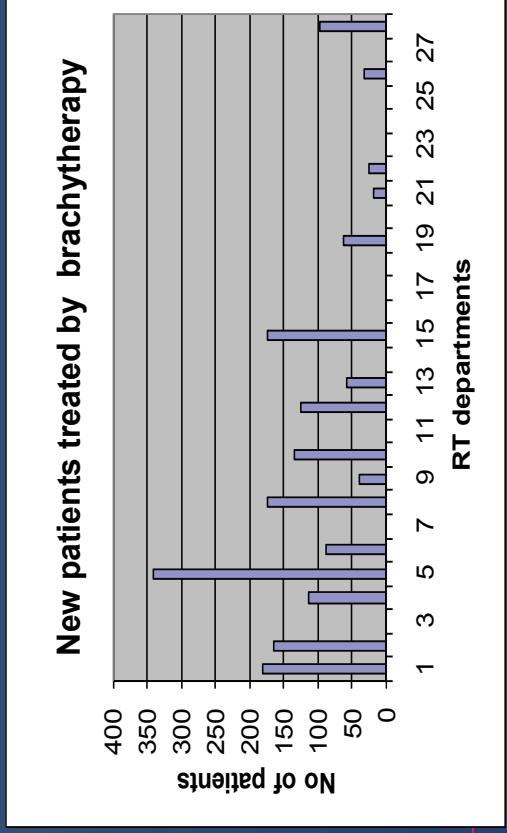
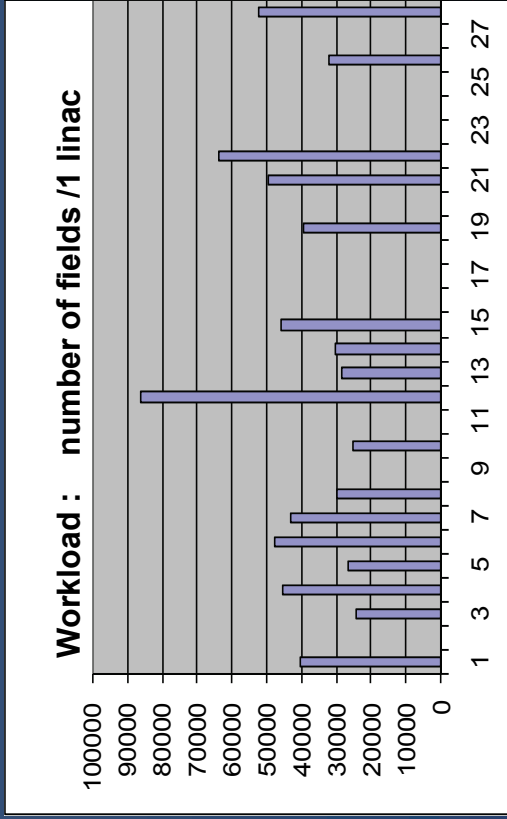
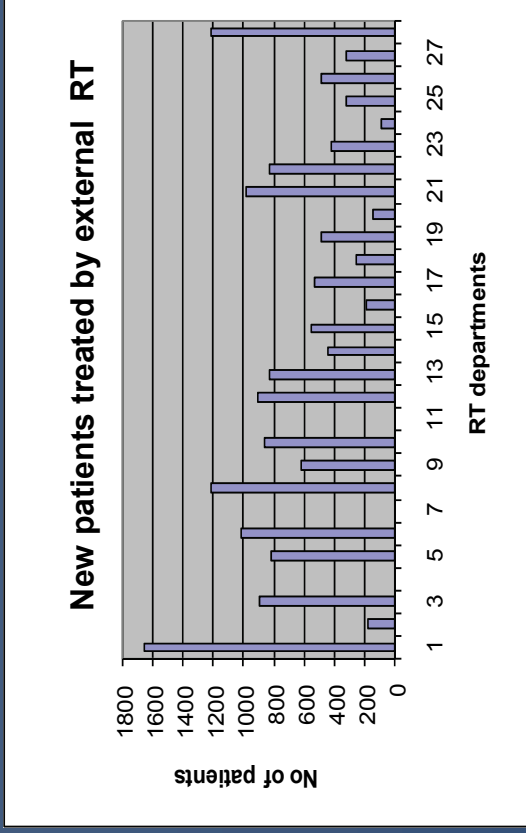
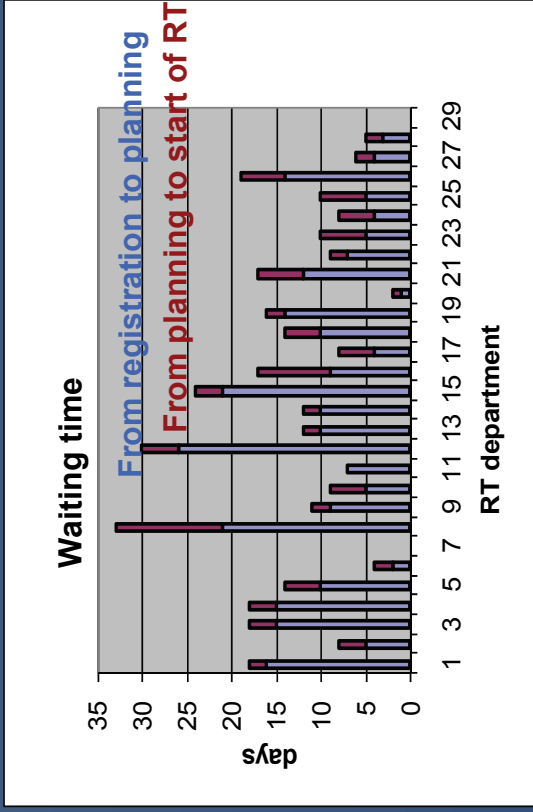
Survey of the status of the Czech radiotherapy

- **AIM: overview of infrastructure** (equipment, staff), efficiency and effectiveness of each department, structure of irradiated cancers, quality of the treatment planning process, rules for follow up, research activity....
- **Detailed questionnaire** (117 questions) has been distributed to all 28 radiotherapy departments
- **100% response**
- **Very important data were obtained for preparation of checklist for audit**

Proportion of cancer irradiated- new patients in CR-2004



Efficiency of RT departments



Preparation of methodology of comprehensive external clinical audit

- Valuable informations from attendance at International Symposium on Practical Implementation of Clinical Audit...in Tampere in May 2003
- Execution of comprehensive clinical audit (QUATRO) by IAEA team (12-16 September 2005) in one Czech RT department was also an inspirational and very helpfull event
- The methodology of the IAEA audit and its procedures have become a model for clinical audits in other radiotherapy departments in the Czech Republic

QUATRO audit has been carried out at MMCI that is a comprehensive cancer center, governed by the Ministry of Health, accredited (JAC), 1800 new patients for radiotherapy/year



QUATRO audit experience from the point of audited department (1)

The independence of foreign auditors and their high professionalism has been highly appreciated by all staff of the Institute and their criticism and advices were taken very seriously by the employees and by the management of the Institute as well.

QUATRO audit experience from the point of audited department (2)

- **The auditors discovered some imperfections and shortcomings in treatment protocols, evidence of differing radiotherapy technique for breast cancer and there were some other findings for improvement in planning and execution of therapy.**
- **The auditors recommended an innovation of some auxiliary equipment, more of training of some personell and further development of evidence-based radiotherapy practice consistent with international standards.**
- **As the Institute has real potentiality to be centre of competence after corrective procedures, follow-up visit has been recommended within about 12 month.**

QUATRO audit experience from the point of audited department (3)

- **The period of 2006-2007 was very productive in the MMCI in sense of: training** (9 participants in ESTRO courses and 4 other fellowships), **purchase of new equipment** (new Clinac 2100C/D, portal imaging in two linacs, IMRT in two linacs, in vivo dosimetry in all 3 linacs, new system for patient immobilisation) **and everyday work for innovation of local treatment standards in accordance with audit conclusion**
- **Follow up audit was carried out in March 2008**
- **Auditors stated tremendous improvement in radiotherapy practice and the RT department of MMCI now complies with the status of the CENTRE OF COMPETENCE**

QUATRO audit experience from the point of audited department (4)

QUATRO audit has entailed pronounced improvement in the quality of work at the radiotherapy department due to very active interest of the majority of employees. They have perceived the meaning of audit for the improvement of quality and now they are actively approaching „ quality committee“ with new proposals for improvement

The course of clinical audits in the Czech RT departments (1)

- Entrance briefing
- Complete tour of the facility
- Review of all relevant documentation and procedures
- Observation of patient examination and of practical work in the whole process of radiotherapy

The course of clinical audits in the Czech RT departments (2)

- Evaluation if the performance of the procedures is corresponding to the written one and if local standards correspond to the recommended national standards
- Identification of the problems
- Exit briefing

Clinical audit in Czech RT departments (3)

Report from audit (1)

- 2005 – descriptive reports
- From 2006 structural reports in which 35 main items were classified in 5 level scale (A,B,C,D,E)
 - **A very good status**
 - **B recommendation for improvement**
 - **C shortcoming**
 - **D serious deviation**
 - **E systematic deviation**

Report from audit (2)

Final conclusion from audit (4 level scale 1- 4):

- 1. No systematic or serious deviation, only limited number of shortcomings
- 2. No systematic deviation, only exceptionally some serious deviation or several shortcomings
- 3. Some systematic deviations or several serious deviations
- 4. Systematic and serious deviations are of such nature, that the harmony with legislation and/or national radiological standards could be threatened

Report from audit (3)

Conclusions with recommendations for improvement event. advice of follow-up clinical audit if serious deviations were discovered were distributed to:

Recipients of the report:

- Head of the department (radiation oncologist + medical physicist)
- Director of the hospital
- Ministry of Health – (the coordinator of the project)
- The leader of the task „ clinical audit in radiotherapy“

Conclusions (1)

After initial hesitation and apprehension from the side of audited departments **final acceptance of clinical audit was very positive.**

Benefits for audited departments:

- Acceleration of the development of local standards
- Increased attention to the control of quality - by all staff
- Improvement in communication across the centre during preparation and development of documents for local standards
- Independent confirmation of the lack or defects of some equipment has helped in dealing for the purchase of new one
- Quality of radiation therapy has increased in the audited departments

Conclusions(2)

Problems:

- Time consuming (for organization, preparation, execution and final report)
- Selection of „good“ auditors (independent, experienced professionals, still active, devoted to the problem, confidential behaviour)
- **The project of Ministry of Health was excellent act for developing methodology of clinical audit and to gain some experience from auditing but it is not sustainable approach for on-going external clinical audit**

Conclusions(3)

- For future in CR:** A new law about specific health services will be implemented from 1.1. 2009 that will specify more precisely the requirements for external and internal clinical audit for all RADIOLOGICAL services
- Establishment of an organisation for clinical audit is necessary if the activity should continue
 - Establishment of national coordination body is highly recommended with important role of professional societies in it
 - Financing of clinical audit should be taken into consideration in the budget of the centres