

## ECR 2011: Impact of Radiology on Health Cost Containment



At the kick-off press conference for ECR 2011, ESR President Prof. Maximilian Reiser gave a strong address stating that "Radiology's role in medicine is increasing in significance as the new trend for personalised treatment becomes the norm and the incidence of long-term health conditions continues to increase." The tailoring of therapy to meet the needs of a particular patient represents a paradigm shift in medical treatment, where radiology can help make a huge difference. Personalised medicine relies on biomarkers, which allow for validated, quantitative and reproducible assessment of prediction, response to therapy and prognosis of a patient.

Apart from biomarkers that can be analysed in serum and tissue samples, powerful biomarkers can also be used in conjunction with imaging techniques. For instance, ADC values, which closely correlate to the aggressiveness of prostate cancers, can be determined by using biomarkers in combination with diffusion-weighted MRI, thus enabling doctors to tailor therapy for individual patients.

At the same time, multiple factors indicate that costs of healthcare are critical; a situation that is likely to worsen as the incidence of long-term conditions grows. First, the ageing global population will further stretch the budgets of healthcare systems. Moreover, the increase in obesity, diabetes mellitus, and infectious diseases, to name only a few examples, is already putting an enormous strain on healthcare provision, and will continue to do so.

Therefore, the efficiency of healthcare has to be enhanced, if quality is to be maintained. Radiology, through imaging diagnostics and image-guided minimally invasive interventions, is well placed to contribute to this endeavour, explained Prof. Reiser from Munich.

"Over recent years and decades we have witnessed the steady increase in the importance of radiology to the healthcare system. Thanks to crucial developments since 1975, imaging has become more indispensable than ever to accurate diagnosis, which is a prerequisite for appropriate treatment," he said. It is estimated that imaging now contributes to 70 to 80% of all diagnoses made in clinical medicine.

The more accurate the imaging modality, the earlier diseases can be detected, which in turn improves treatment outcome while reducing its costs. In breast cancer, detection of the tumour before metastatic spread means breast-conserving surgery may still be carried out, while no adjuvant chemotherapy is required. Identification of a poor response to a particular therapy means doctors can abandon a treatment option that may be costly and have associated side effects.

In order to fully exploit the potential of radiological imaging and intervention to contain healthcare costs, radiological practice has to be based on scientific evidence, explained Reiser.

"The appropriate method of imaging has to be applied and high standards of training have to be provided. Moreover, standardised reporting must guarantee that the referring physicians obtain the information required for the management of their patients," he said.

Excellent training and continuous improvement of radiological practice is key, and the ECR, with its outstanding educational and scientific programme, will definitely contribute to this, he promised.

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