

Imaging asymptomatic people: are we doing more good than harm?

J. Brodersen¹, S. Ebdon-Jackson², J. Griebel³, E.G. Friberg⁴ and M. Perez⁵

¹ University of Copenhagen, Denmark

² Public Health England (PHE), UK

³ Federal Office of Radiation Protection (BfS), Germany

⁴ Norwegian Radiation Protection Authority (NRPA), Norway

⁵ World Health Organization (WHO), Switzerland

The sustainability, fairness, and equity of health systems are key factors to achieve universal health coverage. Both underuse and overuse of medical interventions represent barriers for strengthening health systems and ensuring the quality of health care. Advanced imaging technology has opened new horizons to medical diagnostics and improved patient care. However, a substantial fraction of procedures are unjustified and do not provide an evidence-based net benefit. An area of special concern is the unnecessary use of computed tomography (CT) when clinical evaluation or other imaging modalities could provide an accurate diagnosis. While evidence-based imaging referral guidelines can assist decision-making process when choosing the best imaging procedure for patients with clinical signs and/or symptoms, there is mostly lack of evidence regarding the use of CT in asymptomatic individuals. When the latter is not part of a population-screening program, it is often referred to as *individual health assessment (IHA)*. IHA using CT is currently applied in many areas such as coronary artery calcium scoring, investigation of coronary artery plaques, detection of cancers of the lung or colon, and whole-body CT surveys. The justification of these *IHA* practices performed outside approved screening programs requires particular considerations, some of which go beyond the assessment of the risks associated to the exposure to ionizing radiation. Examples of such considerations are direct and indirect costs, ethical dilemmas, overdiagnosis / overtreatment, false positives, false negatives, indeterminate and incidental findings. Such matters are important and can divert funding from symptomatic individuals, thus challenging the key principle of fair and equitable healthcare services for those in needs. These and other considerations indicate that, in order to view some IHA as part of good medical practice, it would be necessary to establish a robust clinical governance framework, which includes regulatory dimensions. This seminar aims to discuss elements/requirements to be included in such a framework of good governance of IHA practices.