



Contribution ID: 15

Type: **Oral**

Monitoring of Medical Population Dose in Switzerland –How to move forward

Friday, 28 October 2022 13:35 (10 minutes)

Purpose

Imaging procedures are indispensable for diagnostics and patient treatment, but they also involve health risks due to the use of ionising radiation. Therefore, the FOPH monitors the radiation exposure of the Swiss population. The frequency of diagnostic examinations performed is recorded and the mean effective dose is estimated. This monitoring helps to recognize emerging changes and trends at an early stage. Due to the digitalisation in medicine, the data required for the monitoring is now partly available in electronic form. This work demonstrates the feasibility of future automation.

Methods

Possible data sources for the collection of the frequency of the different modalities are identified, their coverage is reported, automated access to the data is demonstrated and the connection to the previous surveys assured. The results are used to propose an update on the CT population dose for the period 2018-2020.

Results

Relevant data sources are available that allow to estimate the frequencies of the different examinations. Modalities used and anatomical regions examined can be derived from billing or classification codes: TARMED for outpatients, Swiss surgical classification (CHOP) for inpatients. Retrospective calculation of the frequencies up to and including 2013 allow the linkage to the previous monitoring. Initial estimations carried out for selected modalities show comparable trends.

Conclusions

The periodic survey of medical radiation frequencies in Switzerland is feasible for some modalities. A major advantage of this method is the use of existing data sources, which will enable publishing results at shorter intervals. The data sources allow for evaluations by canton or large region, age group and gender. Furthermore, analyses according to service provider characteristics, such as a breakdown by practices and hospitals, are possible.

Certain limitations result from the nature of the data used. Only billed activity examinations are recorded. They do not necessarily correspond to the examinations actually carried out.

Disclosures: BSS received funding from BAG for its work.

Primary authors: OTT, Barbara (Bundesamt für Gesundheit); Dr KAISER, Boris (BSS Volkswirtschaftliche Beratung); Dr KRÄMER, Florentin (BSS Volkswirtschaftliche Beratung); TRUEB, Philipp R. (Federal Office of Public Health)

Presenter: OTT, Barbara (Bundesamt für Gesundheit)

Session Classification: Session IV: Radioprotection, Treatment Techniques

Track Classification: Radioprotection