Subject: Report of the first meeting of Working Group I 'Education & Awareness'
Chair: Tom Clarijs
Date and hour: 2011-11-29 - 14h00 – 16h00
Present: Hans François, Hilde Engels, Koen Persyn, Véra Pirlet, Hugo Coen, Sébastien Lichtherte, Tom Clarijs, Patrick Van der Donckt, Lodewijk Van Bladel (partim)
Excused: Christine Niyonsavye, Jose Ribeiro Vas, Yann De Bast, Jean-Louis Greffe, Yo Baeten, Klaus Bacher, Françoise Malchair, Heidi Vanden Eeckhoute, Zohra Zella, Christian Vanhaudenarde
Absent:
Number of pages: 1: presentation Tom Clarijs

Summary: Report of the first meeting of the topical working group I focusing on the subject of Education & Awareness. This working group was founded at the round table conference around the use of X-rays outside the imaging department (1 October 2011).

<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Modification</th>
<th>Author</th>
<th>Revision</th>
<th>Validation</th>
</tr>
</thead>
</table>

Internal distribution: PV, AF, TC, LVB

Content
1. Meeting 29 November 2011 ................................................................. 2
2. Action points ..................................................................................... 4
3. Next meeting ..................................................................................... 4
1. Meeting 29 November 2011

Introduction

Tom Clarijs starts the meeting with short introduction on the goal of this meeting, stressing the importance in improving the education and awareness for all specialities using X ray. (see attachment)
From the round table conference of the 1st October 2011, it was concluded that:
- Awareness on some subjects need to be increased
- Guidelines on continual education are needed and have to be defined
- Lots of material already exist for providing training
- Legislation on education needs to be further elaborated and enforced

Discussion

Everybody agree on the fact that all health care professionals (HCP, including medical doctors, nurses and technologists) should participate in a continual education program on radiation protection, and ideally for Medical Doctors it should be linked to existing programs in accreditation. This implies an agreement and a close cooperation with INAMI-RIZIV (Some cooperation exists already between FANC and INAMI-RIZIV for Dentists).
Training guidelines should be established per category of HCP’s.

The problem we will have to face is to convince Medical Doctors (MD’s) regarding the needs to be trained. We should explain them why they have to be trained on radiation protection on top of all the other topics, they should realise that radiation protection is not limited to justification and optimisation.

When radiation protection training is organised in a hospital, auxiliaries attend the meeting but the MD have no time to participate or are not motivated to participate. Some specialists think that radiation protection is not applicable to their speciality or they don't feel to be concerned. More actions are needed to guarantee that the MD maintains his knowledge on radiation protection issues..

1/ Art 53.1 and Art 53.2 (focusing on radiation protection of the patient)

For MD’s the training on radiation protection should be foreseen at different levels:
- a basic training on radiation protection for all students in Medicine, indeed all General Practitioners (GP’s) are potential referent of X-ray exams and they should be sensitized at early stage about radiation protection and justification (thus radiation protection should be included in the basic training to become GP (check the existence). Some participants point out the time between the course and the moment to start in practice.
- A extended training on radiation protection should be foreseen for all MD using X-rays, thus not limited to Radiologist or interventional radiologists. (following art. 53)

FANC informs the participants to the meeting that radiation protection training for general practitioners will become mandatory on European level, imposed by the new EU Basic Safety Standard. A joint communication could be adressed to the (communal) Ministries of Education, from FANC, Federal Public Service of Health and RIZIV to demand a minimal radiation protection in the general curriculum of every MD (at the correct moment in their education) and nurses.

FANC informs the participants of the WG that this topic will also be discussed with DG2 Ministry of Health, in relation with the recognition requirements for MD. We would like to include in the recognition (agrément, erkenning) training requirements on radiation protection in order to suspend the “personal authorisation” (gebruikers vergunning , autorisation -utilisateur)

This could solve the problems regarding newcomers, but the problem will remain unchanged for already recognised Doctors (date of diploma could help us).

The inclusion of radiation protection training in accreditation could also help to simplify administration (if accreditation OK then ”user authorisation” will be ‘automatically’ prolonged). Here again a close cooperation with RIZIV-INAMI is mandatory.

RIZIV –INAMI point out the problem of incentive link to accreditation and the potential problem to get the approval of the accreditation commission. The system of accreditation is also voluntary, and therefore not followed by every MD.
Regarding the training of auxiliaries (nurses)

In Wallonia a basic training on radiation protection is already included in the teaching program to become a nurse which in not the case in Flanders

The basic training of the auxiliaries (art 53.2) has a good level, but we should more focus on practice instead of theory (example: when and how to protect gonads, blind positioning, etc.)

Considering the blind positioning, training is available on the Web but is not free of charge

2/ Art 25 (focusing on auto-protection/protection of the worker)
Following items are already clearly stated in article 25:

- Information before working
- (written) documented
- At least 1x year
- Adapted to working conditions (applications used)
- During the working hours
- At no charge to the employee

The participants explain the difficulties to comply with this article, in some institution it seems not feasible to train the newcomers before their clinical activity. The training on site on the medical device is very limited.

The rotation of workers is important and the prevention advisor has no time to train all the newcomers in advance before starting on the medical device. The modalities of the training (participants, subjects, hours, speaker) are not systematically documented. It is remarked that article 25 also mentions specific subjects, and that a draft interpretation guideline is in development for industrial X-ray applications.

When organised properly on a yearly basis, this could meet the requirements set in article 53 on continuous education. This yearly information session should not be limited to the repetition of the basics in radiation protection.

3/ Advised approach
On a general point of view it is advised to work step by step, target per target and to start with sensitive topic

For patient protection “the effect of radiation on babies and children should awake interest for every HCP”

For HCP’s protection we should start with the one who encounter the most important risk: HCP’s involved in fluoroscopically guided procedure and focus on a limited number of applications.

According to the participants, the training (referring to art. 25) should be developed and sent to the hospital. The training should be given within the institution to all concerned people (MD’s and auxiliaries).

To sensitize the HCP the training should contain epidemiological data (on radiation induced cancer, cataract .... Ect). The training should also include practical aspects (practice on site).

The production of folders, training coordinated by FANC linked with CME credit, E-learning with self-assessment are considered, the works of the Guy Marchal group is also discussed.

The monitoring of patient dosimetry and the use of the results is discussed to improve (sensitize workers to) the radiation protection and to reach excellence. Some participants challenge the concept of patient dosimetry considering that the determination of DRL’s and the lowering of those values could impair the quality of diagnosis. FANC explains that this approach has been proven scientifically succesful in many applications, and it is obliged by a European directive.

The patient dosimetry after fluoroscopy could also be used to assess the risk for the patient and the HCP’s (a list of procedures is to be defined)

The follow up of workers dosimetry is discussed to improve (sensitize workers to) radiation protection.

The individual dose and the collective dose reflect the quality of the radiation protection on site. To give feedback to the team, and challenge the team in their daily practice (for example: visualising the data with an excel sheet with dosimetry of the team)

Training offer and available material
Today, few training on radiation protection is organised in Belgium. The FANC tries to collect the information and when aware put it on the FANC website (www.fanc.be > education > continual education). Every organiser of continuing education in radiation protection is invited to forward all relevant information to the FANC. Ideally, the initiatives in continuing education in radiation protection for the different profiles should
be developed by the professional organisations, in collaboration with the different experts in radiation protection (health physics, medical physics, art. 75 MD, FANC,...).
The RPOP (IAEA) posters are presented and discussed. This could be used but the format is not good .... A campaign with one tip per week was suggested (posters kit with several tips) (KISS keep it simple and stupid) Ex : Do not image without collimation

Quality control should be improved. This has also to be discussed with the High Schools
GRF (Guide des Procédures Radiologique France) is a good quality system

The organisation of a radiation protection day discussed.

**A proposal was made by the participants for continual education on radiation protection (wich will be further discussed)**

Continual radiation protection training for doctors should linked with the implemented technology
- For conventional radiologist : 5 hours / 3 year
- For radiologists and CT : 20 hours / 3 years
- For fluoroscopy : hours link to the type of procedure

A system with 3 level attest could be considered:
- Attest A : X ray conventional only
- Attest B : X ray and fluoroscopy
- Attest C : X ray, CT and fluoroscopy
A similar system could be considered for auxiliaries: with a special focus on people involved in interventional and operating rooms

**Conclusion:**

In order to guarantee the success of training implementation, a close cooperation between
- Federal Public Service of Health
- INAMI-RIZIV
- AFCN FANC

Will be mandatory and a good balance between regulatory obligations and the offer of educations in radiation protection is necessary

2. **Action points**

<table>
<thead>
<tr>
<th>Reference</th>
<th>Action</th>
<th>Responsible</th>
<th>Delay</th>
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<tbody>
<tr>
<td>1</td>
<td>Check the current curriculum of Medicine for radiation protection for every General Practitioner</td>
<td>FANC</td>
<td>ASAP</td>
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<tr>
<td>2</td>
<td>Make a draft proposal for posters-per-subject inspired by the IAEA rPoP '10 pearls’ posters</td>
<td>FANC</td>
<td>Next meeting</td>
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<td>3</td>
<td>Adress a communication to the (communal) Ministries of Education, from FANC, Federal Public Service of Health and RIZIV to demand a minimal radiation protection in the general curriculum of every MD (at the correct moment in their education)</td>
<td>FANC-FPS Health-RIZIV</td>
<td>March 2012</td>
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3. **Next meeting**

<table>
<thead>
<tr>
<th>Date:</th>
<th>Proposed date: Wednesday 18th January 2012</th>
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</thead>
<tbody>
<tr>
<td>Hour:</td>
<td>14h00-16h00</td>
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<tr>
<td>Location:</td>
<td>FANC</td>
</tr>
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