Workflow and experiences in Norwegian clinics using dental CBCT units: A questionnaire study

1 Competence centre of the Dental health service Region south, Norway, 2 University of Oslo, Norway, 3 Malmö University, Sweden

Objectives
CBCT was introduced to Norwegian dental clinics in 2007 (Table 1). It is important to understand and evaluate how this modality is used in order to create guidelines to ensure high quality. The aim of this study was to evaluate the experiences in Norwegian CBCT clinics, particularly regarding workflow and quality issues.

Material and methods
A web and paper based, 59 questions questionnaire was sent to all 39 CBCT clinics in Norway during 2012/2013. Questions regarding experience of and opinions on issues regarding clinical use and image quality were included.

Results
The response rate was 74 % (29/39 clinics). 97 % of the clinics were multiple dentist clinics; 86 % had at least one dental specialist. In addition to CBCT, all clinics had digital intraoral x-ray receptors and all except one reported having panoramic x-ray units, all digitized.

57 % of the clinics made an average of less than three CBCT examinations each week (Table 2). The most common indications (Table 3) were implant treatment planning (Figure 1) and localization of impacted teeth (Figure 2).

34 % of the respondents believed the patients received a dose equivalent to 10-20 periapical x-rays when using their standard CBCT protocol and the smallest field of view (FOV) (Table 4).

Subjectively, most respondents were satisfied (66 %) or very satisfied (17 %) with their image quality (Table 5). Multiple image enhancement functions were routinely used, especially contrast (97 %), brightness (90 %) and zoom (86 %).

Most clinics (86 %) had daily back-up routines for safety copies of their CBCT examinations.

Conclusion
Norwegian CBCT clinics are fully digitized, mainly multiple dentist clinics. Treatment planning was the most common indication for making a CBCT examination. The respondents were generally satisfied with their image quality.