

Position paper “Workflow in Dentistry” - ESDE Congress in Wroclaw 2016

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Introduction

During ESDE’s 2016 Congress the program was built around the theme ‘the concept of Workflow’. A group of international speakers being scientists, experts or people with specific expertise was invited to lecture about their position on this matter. In this document firstly, basic principles are presented. Secondly in the paragraph “Recommendations / Conditions” statements about workflow that were gathered during the ESDE 2016 Congress in Wroclaw are grouped.

Aim

The purpose of the meeting was to bring into ESDE’s focus what was the current status of the concept of Workflow in Dentistry at the time, and how this phenomenon is being ‘used’ or ‘executed’.

The aim of this document is to gather all current information about Workflow from documents and form statement gathered during ESDE’s Congress 2016 and to spread it within as well as outside ESDE.

Intended for

This document can be used by stakeholders as a starting point to get insight in the current situation in dentistry or adjacent fields regarding the use of the concept workflow or the use of the term. It is meant for dentists, dental nurses, managers, software developers, manufacturers etc.

State of the art

What we know now as a result of the ESDE 2016 meeting is that executing a sequence of procedures in dentistry is not new. Furthermore the ‘concept of workflow’ is known from other fields outside dentistry as well such as the industrial area or the world of computer use, but only recently introduced in dentistry particularly in relation with software development and the ‘digital’ revolution in e.g. making dental impressions.

In relation with the aiming for a more efficient and also agreeable course of working processes in Dentistry in the recent past, parties involved, analyzed different separate activities like agenda planning, preparation of a crown or diagnosis and treatment planning etc. This was done in order to organize these activities in a proper and efficient way and to train everybody involved in carrying out the intended workflow in a planned way. This all designed in such a way that needed skills and forthcoming challenges will be in good balance, whereby barriers will be lifted as much as possible. Resulting in awareness that the work process goes smoothly. Today, as well as in the near future, technological developments in the dental profession pick-up rapidly and extensively and so there is a call for even more structure.

For understanding the broad scope of issues involved in considering workflow, ESDE would like to underline the document: ‘The workflow concept in dental practice, in relation with the clinical work place/station’ⁱ. ESDE sees this as a source document with statements and explanations, which can be helpful to get basic understanding of the starting points regarding the concept of Workflow. In that document Workflow is defined as:

“An orchestrated and repeatable pattern of business activity enabled by the systematic organization of resources into processes that transform materials, provide services or process information. It can be depicted as a sequence of operations, declared as work of a person or group, an organization of staff, or one or more simple or complex mechanisms”

In addition to this ESDE would like to endorse the importance of the following:

Workflow should be predictable and thus lead to a in advance worked out goal. The processes to be carried out must therefore be controllable.

Recommendations / Conditions

From the speakers' contributions during the Congress the following recommendations/ conditions could be derived.

General

Workflow has to:

- be fool proof (**de Ruijter, Vollstedt**)
- be designed only after analyzing the involved tasks and understanding it's concealed steps (**Wujec**)
- have 6 distinguishable components: who does what, how, when, where, whereby (**Katzschner**)
- have well laid out protocols in order to flourish (**Getsman**)
- have clear, ergonomic interfaces complying with international standards for usability (**Heinecke**)
- be made simple by containing clear to see (image based) clearly formulated and well understandable tasks (**Vollstedt**)
- be designed so that exponential growth is possible (**de Ruijter**)
- be used with the help of internet whenever possible, to be interconnected to everyone around the world (**Nguyen**)
- be designed not only based on ISO-standards but also on EDSE's ergonomic requirements for dental equipment (**Soares Orenha**)
- be at least pan European, preferably globally equally for users including patients (**Czownicka**)

Team and Patient

Workflow has to:

- be team oriented and direct (not confusing to) the user / dental team (**Heinecke**)
- be designed in a way that people executing it feel themselves appreciated as participants of the team (**Maziarz-Lipka**)
- induce team spirit (**Vollstedt**)
- make use of proper (four handed dentistry) assistance whose attendance is paramount (**Getsman**)
- support interdisciplinary working so enable adequate cooperation (**Erbe**)
- have an interface for the patient' perspective (**Czownicka**)
- be designed to be attractive for the users including the patient, different parties have different interest in it and perceive it (**Nguyen**)
- include information to the patient in a three-step-way: conversation, visualization and written information (**Katzschner**)
- be best executed by motivated people (**Maziarz-Lipka**)
- clarify that the users' knowledge still is essential (**Maziarz-Lipka**)
- be executed by well-informed workers so they know what they are doing (**Rucker**)
- be stress reductive and should give you sense of control of everyday work (**Skrzyszewski**)
- be aimed at reducing vulnerability to disorders of the musculoskeletal system with increasing age of their users (**Ohlendorf**)

Guidance

Workflow has to:

- use appropriate tools as questionnaires, assessments, information from X-) at the right time on the right place in close interaction with agenda planning (**Erbe**)
- guide the patient's treatment path (**Czownicka**)
- be built on well-acknowledged assessment instruments such as PSI Periodontal Screenings Index (**Czownicka**)
- be designed to make use of backward planning (**Karaś**)
- make use of tailor made interfaces such as e.g. 2nd screen for dental nurse. (**Karaś**)
- use easy clearly recognizable software (bookshelf like) solutions (**Katzschner**)
- leave time to physically keep your body fit (**Berlin**)
- prescribe multiple breaks when physical labor / posture is involved (**Ohlendorf**)
- not become compromised by the smallest disruptions (**Rucker**)

Ambiance

Workflow has to:

- be mirrored in visual appearance hardware and practice design (**Skrzyszewski**)
- be a fundamental approach of drawer content (**Karaś**)
- make use of color coated trays tubs and instruments (**Getsman**)
- make use of and support use of proper special little tools and technical aids (**Karaś**)
- deal with analyzing needs and creating special cabinet solutions (**Skrzyszewski**)
- be stimulated by use / application of instruments such as microscope etc. (**Skrzyszewski**)
- make use of a microscope even in pediatric dentistry (**Getsman**)

Workflow management should:

- be introduced by managers who can play the role of an innovator, someone who inspires (**Świtalska**)
- be best advocated by an independent leader (**Świtalska**)
- be best executed by the type of manager that will always find time (**Świtalska**)
- benefit from a natural leader who is there for his team (**Świtalska**)

Status quo

The described documentⁱ as starting point together with the recommendation / conditions added after the Congress 2016 form a new stepping stone to discuss the status quo. Firstly, within the EC of ESDE directly followed by asking the former presenters from the 2016 Congress for checking and if possible provide us with new points of view.

This paper then represents at its best where the concept of Workflow stands in dentistry and the wide array of statements from the speakers underlines the broad scope of it.

Revision of this document

Every 2nd year regularly.

ⁱ De Ruijter R.A.G., The workflow concept in dental practice, in relation with the clinical work place/station, Knowledge Center Dental Ergonomics, University Medical Center Groningen, may 2016