Clinical pathways are an effective instrument to decrease undesired practice variability and improve clinician performance. IT-applications embedded into clinical routine work can help to increase pathway compliance. Successfully implementing such applications requires both a responsive IT infrastructure and a participatory and iterative design process aimed at achieving user acceptance and usability. Experiences from the implementation and iterative improvement of an online surgical pathway at Marburg University Medical Centre have shown that pathway conformance actually could be improved by the use of IT. An analysis of the iterative design process has shown that future pathway projects can benefit from the lessons learned during this project. Based on these lessons recommendations for developing well adapted interaction mechanisms are presented, aimed at improving process alignment. Our goal is to build up a library of tested reusable components to reduce the number of iterations for pathway implementation.