

Digital Workflows: Enabling Choice-Based Esthetic Treatment



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Amy received her BA from the University of Denver and MBA from Hamline University. She joined 3M in 2015 as a Sr. Technical Business Analyst in R&D. In 2016 she became the Global Digital Marketing Manager, responsible for the 3M™ Oral Care portal, 3M™ CAD software supporting custom orthodontics and 3M's patient-facing Treatment Tracking app.

Digital technology is enriching the field of orthodontics by providing advanced analytics and software tools to assist with treatment planning. Digital workflows are also advancing to support combination treatment with a range of esthetic appliances, providing orthodontists the control necessary to customize treatment for each patient.

3M Oral Care is committed to delivering leading-edge technology in this field. The Oral Care portal is the software platform used to plan treatment with 3M™ Clarity™ Aligners. The web-based software allows clinicians to plan patient treatment at anytime from anywhere. Some of the most robust and widely used features of the portal are a direct result of 3M's collaboration with orthodontists. These features include advanced software tools to aid with esthetic treatment planning, as well as features to assist doctors with patient consultations.

Pivot Points: This feature (Figure 1A-B) allows clinicians to control the point from which the selected movements originate. Custom pivot points are available for rotation, mesio-distal angulations and bucco-lingual inclination.

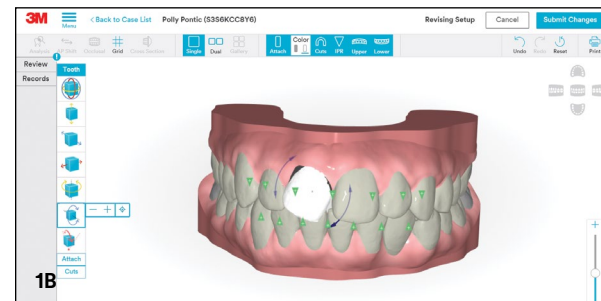
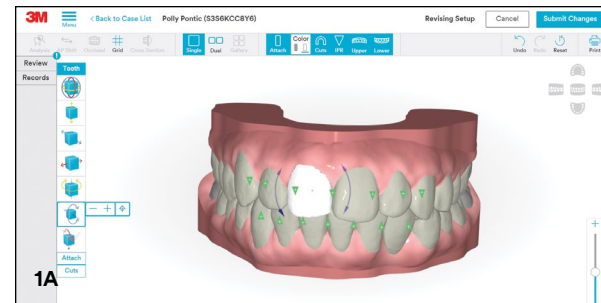


Figure 1A-B:
By selecting the Rotating Tool from the Tooth Movement Bar, you can change the origin of movement in any tooth. In this example, the tooth is being rotated through its center pivot point.



Progress Scans: Clinicians have the ability to scan a patient periodically throughout treatment. The Oral Care portal can generate an overlay from this raw digital scan (Figure 2), allowing you to compare the planned treatment visually and via measured movement analysis. This is an excellent tool for engaging patients throughout treatment and planning for refinement and/or finishing stages.

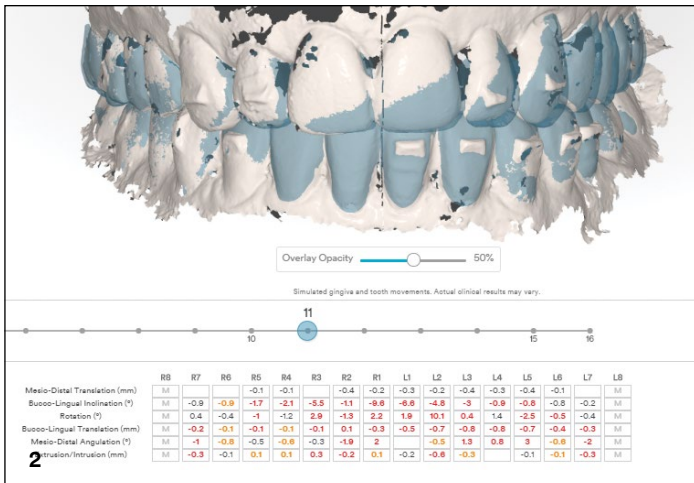


Figure 2: Progress scans can be uploaded into the portal to monitor a patient's treatment progress and to review overall patient compliance.

Attachment Coloration: Gaining patient acceptance for treatment can be challenging. Many patients lack an understanding of attachments. Attachments are presented in the portal as white by default to demonstrate their esthetic quality. With a single click, attachments can be presented in a high-contrast gray to assist with detailed setup reviews (Figure 3A-B).

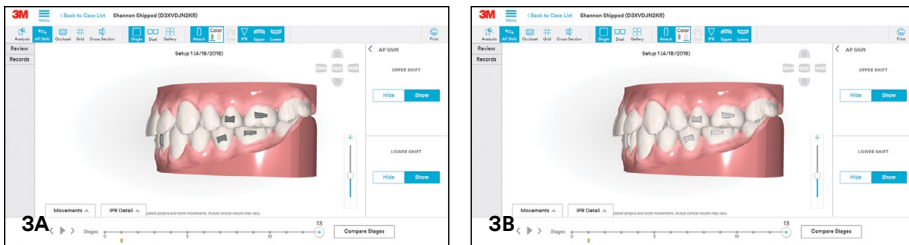


Figure 3A-B: Attachments can be changed from gray to white by clicking on the Color Tool on the top bar on the setup page.

Patient Record Visibility: Many clinicians rely on dual monitors to reference patient photos when reviewing treatment setups. The Oral Care portal displays patient photos within the 3D Viewer. The setup model will also rotate to match the position of the selected photo (Figure 4).

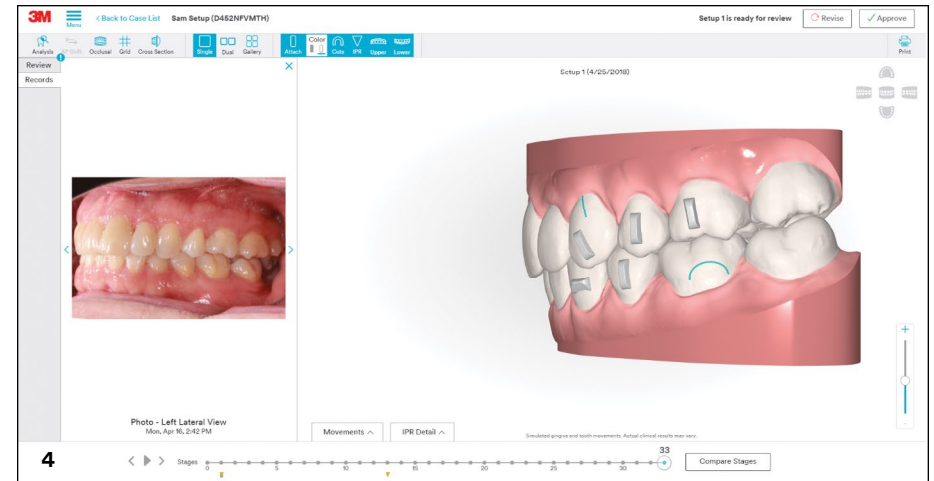


Figure 4: The 3D dimensional image (right) on the main setup page correlates to the exact viewpoint of the images found under the Records tab.

3M is continually investing in the Oral Care portal platform to deliver innovative solutions that allow orthodontic practitioners to confidently treat a variety of cases. Our collaboration with market leading companies like 3Shape and uLab Systems provide important integrations and streamlined capabilities. We are proud to partner with orthodontists to provide esthetic, digitally integrated, choice-based solutions that will help your practice grow.