

# How to transform your new patient consultation appointment with iTero Element™ 5D Plus imaging systems.



## Dr. Bart Iwasiuk (Toronto, ON, Canada)

Dr. Iwasiuk has been in private practice since 2002 and has treated patients with Invisalign® aligners since his orthodontic residency training. He achieved Elite Provider status in 2012 and continues to push the limits of what can be accomplished with clear aligners and iTero™ imaging systems. He received his DDS from the University of Toronto and his orthodontic certificate from the University of Rochester. His interest in multidisciplinary dentistry stems from spending two years at the University of Washington and being influenced by the Seattle Study Club. He is a keynote speaker, a research consultant, and a key opinion leader on Align Technology's Mandibular Advancement Clinical Expert Panel. He is an Invisalign Diamond Provider practicing in the Greater Toronto area.

## Summary:

Our use of the iTero Element 5D Plus imaging system goes far beyond substituting physical impressions with digital scanning. With the Invisalign Outcome Simulator Pro software, we have transformed our front-end patient workflow into an engaging visual experience that is customized to the patient's own smile. Patients who see our proposed plan within the context of their own face have a better understanding of their treatment plan, which helps them accept our treatment recommendations. The software also automates the time-consuming steps associated with creating a digital treatment plan, which makes better use of the doctor's time with the patient. With the iTero Element 5D plus imaging system, we have also been able to eliminate the time-consuming and technique-sensitive process of taking intraoral photos, which expedites the submission process for ordering Invisalign aligners. Our imaging results are very consistent regardless of the user, which has made our staff training easier, especially for new hires. The net result is shorter but more engaging initial consultation appointments, more efficient use of doctor and staff time, and the creation of additional capacity to see more patients and potentially generate more revenue.

## Introduction

In the past, integrating new technology into our orthodontic practice usually involved swapping out something old with something new and improved. The benefit of constantly evolving with incremental improvements over time was the ability to optimize our processes and procedures for greater efficiency. Our iTero imaging system, however, is so much more than a digital substitute for physical impressions. With the iTero Element 5D Plus imaging system, we have been able to completely overhaul our new patient experience and not just upgrade individual steps in the process. By using the technology to rethink the possibilities, we have removed constraints that no longer apply, and eliminated redundancies and outdated practices.

The iTero Element 5D Plus imaging system has transformed our new patient experience in three key ways:

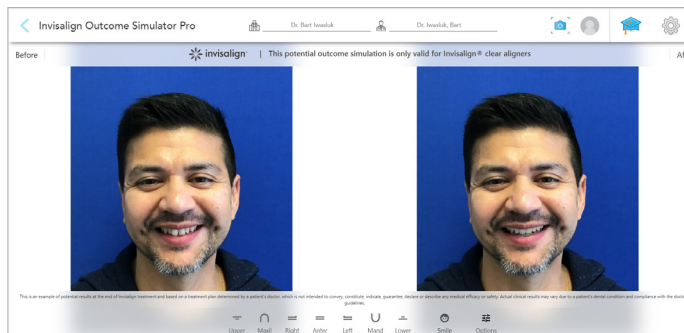
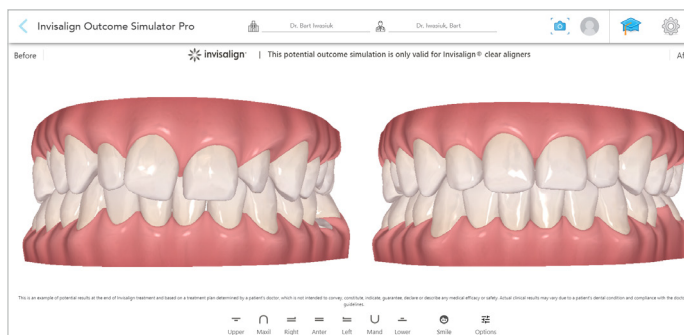
1. Our new patient experience has greater impact today because it relies primarily on visual instead of verbal communication. Advanced visualization tools in the iTero Element 5D Plus imaging system (such as Invisalign Outcome Simulator Pro) let us show prospective patients realistic simulations of how Invisalign treatment could improve their smile, occlusion, and overall oral health.
2. Higher quality information for our initial discussions with the patient is obtained with minimal wait time. With the iTero Element 5D Plus imaging system, the doctor immediately receives a high-resolution full-color digital 3D model of the patient's teeth and surrounding soft tissue for diagnosis and treatment planning purposes. Unlike 2D photos, the 3D model can be viewed at any angle, and customizable treatment plans can be created in real time during the consultation appointment. The doctor spends less time waiting for the staff to prepare the patient's records and can spend more time discussing treatment solutions with the patient.
3. The elimination of time-consuming and technique-sensitive steps such as taking and formatting 2D intraoral photos helps keep our team members focused on creating an amazing new patient experience. This benefit extends not only to existing team members, but also to new hires, because of simpler training and easy-to-reproduce protocols. Today, we can provide with four people, an amazing patient experience that used to require a team of seven to manage.

## I. We use the iTero Element™ 5D Plus imaging system for visual communications to build trust, enhance the new patient experience, and increase treatment acceptance.

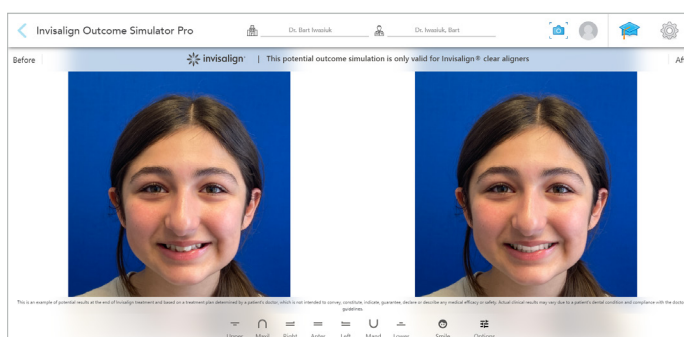
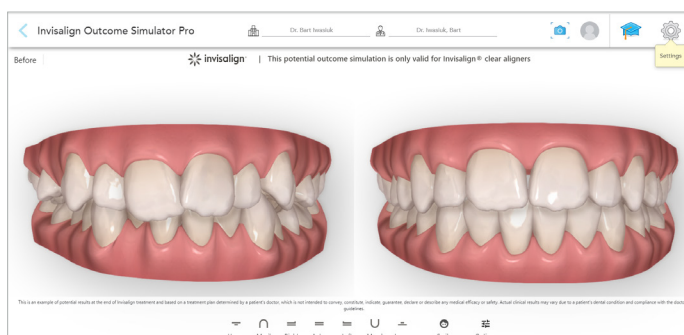
Switching from silicone impression material to intraoral scanning has obviously been a significant evolution in dentistry, because the mess, discomfort, and imperfections associated with physical impressions can be minimized. However, the bigger opportunity for us with intraoral scanning has been the ability to transform our new patient appointment from one dominated by verbal communication to one centered on visual communication. Most of our patients are more engaged when we add 3D scan images to communicate our findings. The Invisalign® Outcome Simulator Pro software especially grabs the patient's attention because they can see the potential impact of orthodontic treatment customized to their own smile. Before Invisalign Outcome Simulator Pro was available, we had to wait for a ClinCheck® set up with In-Face Visualization before we could provide the experience of seeing one's own smile transformed. This delayed the excitement, potentially involved another office visit, and required extra work for the doctor and team for follow-up. With the Invisalign Outcome Simulator Pro feature, the in-face smile simulation feature is applied in real time. Patients can see their potential new smile during the consultation visit and leave with a clear idea of what to look forward to at the end of Invisalign treatment.

Prior to using Invisalign Outcome Simulator Pro, our initial consultation appointment was mainly focused on data collection. Most of the appointment time was spent on gathering information, because our initial records process had many steps. As a result, most of our patients received substantial orthodontic information from their consultation, but not necessarily the confidence and clarity that we wanted them to have in order to move forward with treatment. Without a clear understanding of the potential outcome, patients delayed starting treatment, or they would seek a second or third opinion. What we needed was a more elegant and patient-friendly way to collect initial records, showcase the reasons why treatment was being recommended, and communicate our orthodontic treatment plans in a very personal and unique fashion.

Today, a quick intraoral scan of the patient's teeth and occlusion is taken with the iTero Element 5D Plus imaging system (in usually three minutes or less from start to finish) along with extraoral digital photographs (including a wide smile photo) using the photo capturing feature in the Invisalign Practice App (IPA). A simulated treatment outcome is then immediately created using the Invisalign Outcome Simulator Pro software. The program displays a simulated 3D treatment outcome of the patient's smile within the context of their own face without needing a bulky DSLR camera, special room lighting, cheek retractors, or intraoral photography mirrors to collect the patient records. We do not need to use typodonts or case reports of previously-treated patients to show our patients what we are trying to accomplish. By using the patient's own teeth and the patient's own face to show how their orthodontic treatment results might appear, the patient connects with what they see right away, so we can spend more time reviewing and discussing the proposed plan. Visual communication helps build trust, and as a result, our patients feel more engaged and excited to get started with treatment, which leads to more Invisalign case starts after the initial visit.<sup>1</sup>



Invisalign® treatment simulation using the Invisalign Outcome Simulator Pro software during the initial consultation of a patient with dental spacing concerns. A 3D simulated treatment outcome of the scanned dentition (above) is integrated into the patient's face (below) to create a real-time in-face orthodontic treatment visualization experience.



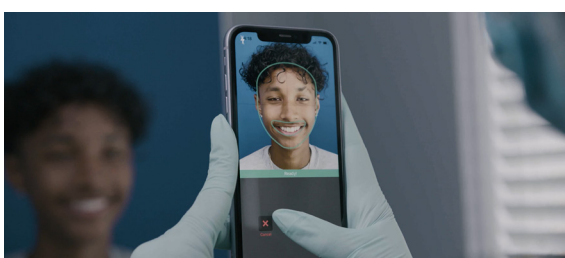
Invisalign® treatment simulation using the Invisalign Outcome Simulator Pro software during the initial consultation of a patient with dental crowding concerns. A 3D simulated treatment outcome of the scanned dentition (above) is integrated into the patient's face (below) to create a real-time in-face orthodontic treatment visualization experience.

<sup>1</sup> A survey conducted by Align Technology found that doctors who agreed that Invisalign Outcome Simulator Pro improved their Invisalign case starts estimated a 50% increase in case starts. Based on a survey in September 2022 of n = 32 doctor respondents who answered, "Strongly agree" or "Agree" to the following statement: "My practice experienced an increase in Invisalign case starts with usage of Invisalign Outcome Simulator Pro (vs previous workflow & tools)." Those doctors were then asked to estimate the % increase in Invisalign case starts. 50% was the median of all responses. Respondents represent both GPs (n=16) and Orthodontists (n=16) in NA, EU, and APAC who had utilized Invisalign Outcome Simulator Pro in their workflows ten times or more with their iTero Element Plus Series for an average period of 4 months. Data on File at Align technology, as of October 11, 2022.

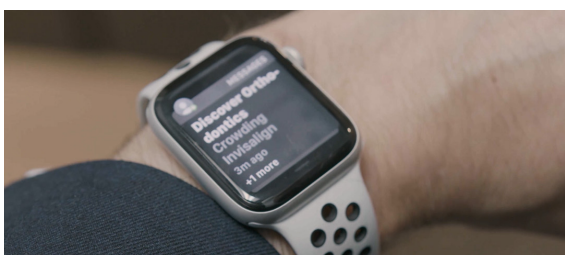
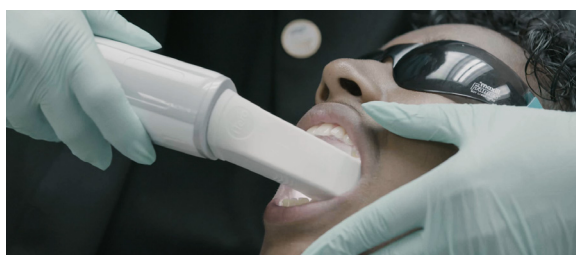
## II. The iTero Element™ 5D Plus imaging system significantly improves our quality and efficiency with managing new patient data.

With our previous workflow (with digital intraoral photos as part of the initial records process), the doctor had to wait for the photos to be formatted by the staff first, and sometimes the images did not contain all the diagnostic details required, which meant an additional delay until the proper views were captured. Scanning the patient's teeth and surrounding soft tissue in color and high definition with the iTero Element 5D Plus imaging system means that we can skip the intraoral photos step of the records process because these are automatically created from the scan images, so the doctor can begin diagnosing and treatment planning the patient with hardly any delay. The iTero™ scans are supported by a cloud-based storage solution, so the doctor can access the scan images from anywhere in the clinic (via another scanner or the MyiTero portal) almost immediately after they have been captured.

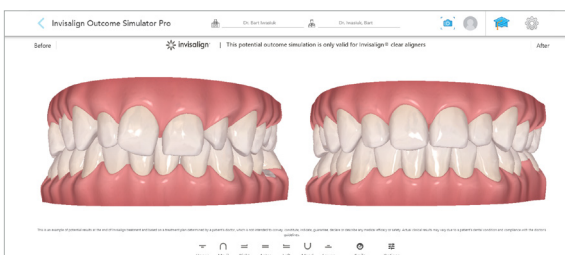
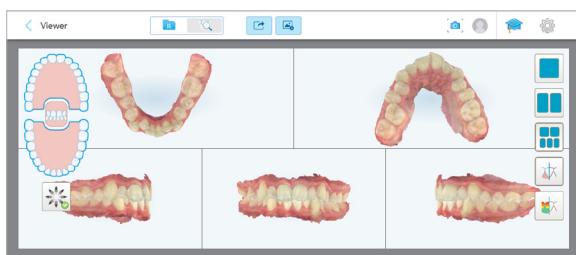
Currently, whenever a consultation scan is completed in our office, the staff member taking the scan communicates the patient's chief concern to the doctor via text message, which also alerts the doctor that a completed scan is ready to be reviewed. The patient will then have their radiographic images taken before they are moved to the consultation room. The digital study models are then immediately reviewed by the doctor and potential treatment options recorded into our practice management software. This workflow gives the doctor a head start with the patient's diagnosis process so that more of the consultation time can be spent discussing treatment solutions and answering questions. Our patients appreciate that the doctor is familiar with their situation before they meet face-to-face.



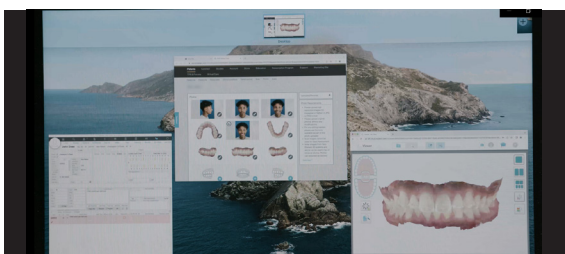
1. Our treatment coordinator Debbie Khedoo capturing smile images of a prospective patient using the photo capture feature in the Invisalign Practice App (IPA).



2. After the staff scans a prospective patient, the doctor is alerted about the patient's chief concern via secure text message.



3. The doctor reviews the patient's records from his office using the MyiTero™ portal and starts to create a treatment plan.



4. By the time the doctor and patient meet face-to-face, a treatment plan has already been created and recorded by the doctor. The visual in-face treatment plan is reviewed with the patient, and once the patient agrees to begin treatment, intraoral 2D images created from the 3D scans are automatically uploaded as part of the Invisalign case submission process (via the auto-upload feature of the Invisalign prescription).

### III. The iTero Element™ 5D Plus imaging system creates efficiencies by eliminating redundant tasks and producing more consistent results.



Before automated intraoral image acquisition with the iTero® intraoral scanner was implemented in our office, this was the patient's initial consultation experience with cheek retractors, intraoral mirrors and a DSLR camera.

With traditional intraoral orthodontic photos, the views were limited to whatever was captured at the time that the pictures were taken. Even with the best-trained staff, the views captured varied from patient to patient depending on the person operating the camera. The iTero Element 5D Plus imaging system uses a high-definition camera to create a full-color 3D model of the patient's teeth, so any view can be reproduced later. Everyone on the team loves how the intraoral scans provide a clear and unobstructed view of every area of the patient's dentition. More importantly, our image quality is consistent regardless of the user.

The iTero™ technology also automatically captures 2D intraoral images from the scans and arranges them in a standard composite format, so our staff no longer needs to spend time arranging and formatting individual pictures for routine applications like sending printouts to patients and referring dentists. The 2D photos generated from our scans are also automatically uploaded to the Invisalign Doctor Site for our Invisalign cases, which saves us even more time during the order submission process.

By eliminating intraoral photography, we are also eliminating the resources needed to support, maintain, and store our photography equipment. We can redirect those resources towards engaging and enlightening our patients on the benefits of orthodontic care instead.

Eliminating repetitive and time-consuming steps from our workflow lets our staff focus on fewer tasks, and this makes our new hire training much easier as our practice grows. With fewer repetitive tasks to perform, we can accomplish with four team members what used to take a staff of seven to accomplish. We have also gained efficiency through virtual care technology, which lets us schedule our in-office visits farther apart. Since most of our patients prefer Invisalign aligners instead of regular braces, we have very few in-office emergencies in our schedule.

Today, our new patient exam is 20 minutes shorter than when we used a DSLR camera to capture intraoral and extraoral photographs (**Figure 1 on next page**), and this is accomplished without the patient feeling like we are rushing through their appointment. We have created the capacity to see more patients without adding additional days (about two hours of time gained in our daily schedule whenever we provide consultations in any given day), and the doctor is able to work more efficiently by beginning to craft the patient's Invisalign treatment plan during the consultation appointment instead of as a separate step after the patient has left the office. By getting more prospective patients to start treatment during their initial visit, not only do we avoid the risk of them receiving treatment elsewhere, but we also reduce the administrative workload needed for follow-up emails, text messages, and telephone calls.



Orthodontic composite photos generated by the auto-upload feature of the Invisalign® prescription, using iTero Element 5D Plus scans and photos captured through the Invisalign Practice App.

## Efficiencies gained with iTero™ imaging systems features: auto-upload & Invisalign® Outcome Simulator Pro.

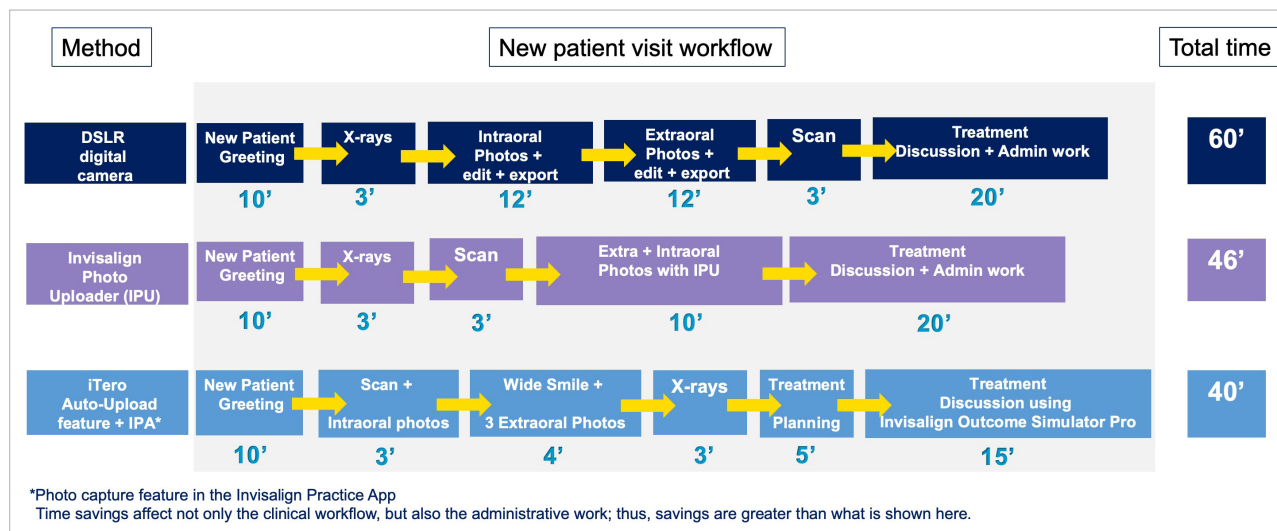


Figure 1. Evolution of our workflows and the efficiencies gained with the introduction of the auto-upload feature and the photo capture feature from the Invisalign Practice App.

### Conclusion.

With the iTero Element™ 5D Plus imaging system, we have transformed our new patient consultation into a visual communications experience that avoids many of the pain points that our patients and staff have struggled with in the past. We have overcome the challenges associated with intraoral photography and physical impressions, the inability for patients to connect with the tools we historically used to communicate their orthodontic problems during the consultation appointment, and the effort required to follow up with patients because of ineffective communications.

The iTero™ Element 5D Plus imaging technology helps prospective patients visualize in real-time how Invisalign® orthodontic treatment could affect their own smile, and this greatly motivates them to accept treatment while they are in the office. By eliminating redundant tasks for our staff and reducing administrative costs associated with follow-up activities for undecided patients, operational efficiencies are created. This produces more consistent results and enhances overall practice productivity.