

# Align Technology & SmileDirectClub Face Limited Demand Post COVID-19 Shutdown

Companies: ALGN, HSIC, PDCO, PWG, SDC, STMN.SW, XRAY

April 23, 2020

Report Type:  Initial Coverage  Previously Covered  Full Report  Update

Ratings: ALGN 3/5, SDC 3/5

## Research Question:

### How will COVID-19 affect demand for clear aligners?

## Summary of Findings

- Demand for clear aligners is nonexistent, with no new patients at either [Align Technology Inc.](#)'s (ALGN) credentialed dental and orthodontic practices or [SmileDirectClub Inc.](#)'s (SDC) SmileShops, all of which have been shut down to comply with the American Dental Association (ADA) March 16 [recommendation](#).
- When dental practices reopen, demand for clear aligners will be slow to return to previous levels and the longer the closure, the longer the recovery. Sources said teeth straightening will be a low priority for most consumers.
- SmileDirectClub is offering new patient starts via its telehealth platform and DIY in-home impression kits. However, sources did not consider that a competitive advantage because its target market is a more vulnerable population that will be among the first to stop spending on non-essentials and the last to resume it.
- None of the dentists interviewed for this report or their colleagues have signed on to SmileDirectClub's new [Doctors In-Office Partnership](#). SmileDirectClub has a poor reputation in the dental community, yet one source said he would consider offering its products, provided he supervises the treatment process. Another source said some dentists will sign up because of its low cost, improving technology, and limited loyalty to other clear aligner suppliers. A third said a SmileDirectClub partnership with a corporate dentistry concern is a possibility.
- Align Technology, the clear aligner industry leader, markets exclusively through dentists and orthodontists. The shutdown of these practices has not only eliminated new patient starts but also disrupted monitoring and treatment of existing patients. Dentists are employing telehealth practices to try to supervise patients already being treated with Invisalign. However, one dentist said many patients will have to restart their treatment and he will be unable to charge for the additional service or straightening trays. Another source said that he has recently started to favor [Straumann Holding AG](#)'s (STMN.SW) [ClearCorrect](#) over Invisalign, because he had to alter many of Invisalign's treatment plans.
- One dentist is using this shutdown time to update his practice to [Dentsply Sirona Inc.](#)'s (XRAY) digital dentistry products, including 3D intraoral scanning and 3D printers. He said he is interested in printing his own clear aligners after additional training.

## Silo Summaries

### 1) Dentists Offering Clear Aligners

With dental practices closed except for emergencies, these four dentists using Align's Invisalign and one also using Straumann's ClearCorrect said there is virtually zero demand from new patients for clear aligners. Dentists with patients in mid-treatment are monitoring their progress remotely via phone, pictures, and telehealth platforms. One dentist said he expects several of his patients will have to start treatment over from scratch and he will be unable to charge for the restart. **Sentiment was mixed regarding clear aligner demand following the reopening of dental practices. One source said he expects a full and robust return of demand, while another source expects a slow return of demand, as clear aligners will initially be a low priority for consumers.** SmileDirectClub has a poor reputation with these sources; however, one said he would consider using their product as long as he monitors the patient throughout the treatment process. Another said some dentists will sign on with SmileDirectClub because of its low cost, improving technology, and the limited loyalty toward other suppliers. A third source said corporate dentistry may adopt SmileDirectClub. **All four dentists acknowledge that teledentistry has a role to play during the COVID-19 pandemic and three think it will expand in the future. One source thinks its use is temporary and sees a limited future.**

### 2) Dental Supply Sales/Telehealth/Trade Pub

Demand for clear aligners will be muted when dental practices reopen. The longer the shutdown continues the more severe the drop-off in demand will be. One source predicts that SmileDirectClub will experience significant decline in demand because its target market has limited discretionary income, is more vulnerable to an economic downturn, and typically does not consider dental care a high priority. While practices are closed one supplier sales rep said dentists are revising their examination safety procedures and protocols. He said the major dental suppliers—[Henry Schein Inc.](#) (HSIC), [Patterson Companies Inc.](#) (PDCO), and [Benco Dental Supply Co.](#)—are backordered on personal protective equipment (PPE). One source said Invisalign is the best fit for the clear aligner industry moving forward. SmileDirectClub faces a significant challenge in altering its business plan to include dentists. One source said the negative die is cast, another said the company is blackballed, and a third said no dentists are signing up for the company's Doctors In-Office Partnership. **Two sources said teledentistry is becoming a part of the evolving dental care delivery model.**

# Clear Aligner Market

	Post-shutdown Clear Aligner Demand	Demand for Invisalign	Demand for SmileDirectClub
Dentists Offering Clear Aligners	➔	➔	➔
Dental Supply Sales/Telehealth Provider/Trade Pub Ad Sales	➔	➔	➔

## Background

Blueshift Research’s initial research found dentists and orthodontists seeing their industry slow to a crawl as it adjusts to the coronavirus pandemic. Two-thirds of all dental practices in the United States are temporarily closed and patient volume has declined significantly. New patient starts for SmileDirectClub and Align Technology are likely to decline dramatically, as elective medical procedures have been discouraged during the pandemic. Still, teledentistry, which had been growing pre-coronavirus, has the potential to build momentum and provide a lifeline for SmileDirectClub and Align through the end of the pandemic—and possibly beyond.

Survey [results](#) from 137 dentists conducted the first week in April revealed that 67% have now closed their dental offices and expect them to be closed for another four to five weeks. There were some geographic differences: West Coast closures—84%, New England closures—78%, South Atlantic and Mountain region closures—40%. This has led to patient volume declines and less spending. Patient visits dropped 63.6% and several offices reported an 80% to 100% decline, according to the survey.

Teledentistry has not been strongly supported by dental associations in the past, but the increasing number of consumers using DIY clear aligner platforms and the recent coronavirus pandemic are expected to bring about significant change. The American Association of Dental Boards (AADB) and General Dental Council in the UK are now looking to provide [regulatory guidance](#) for teledentistry. As healthcare workers and patients become more comfortable with telehealth, it is possible this will apply to dentistry and the clear aligner space as well, and [may last far beyond](#) the end of the COVID-19 pandemic.

SmileDirectClub was founded as a direct-to-consumer clear aligner provider using teledentistry to communicate with patients and dental professionals. Most of its sales are online, though it started wholesaling to dental and orthodontic practices this year. This DIY business model could help generate new patient starts during the coronavirus pandemic and keep current customers engaged during stay-at-home orders. It has also [offered](#) its HIPAA-compliant teledentistry platform to any practice free of charge to maintain contact with its patients. SmileDirectClub is referring its online patients to local dentists who agree to use its teledentistry program. But the company has had to [furlough](#) many employees as it has extended its store closures.

Align [said](#) some of its doctors are using video and patient-submitted photos to monitor patients’ Invisalign treatment progress. Align’s model does not include an online DIY option. All new patients must be seen by one of its participating dentists, hampering new patient starts for the foreseeable future. In an interview with Blueshift, one dental practice using Align said they are trying to copy SmileDirectClub right now by making customers’ Invisalign trays available without contact, while some of his colleagues are using video tools like Zoom to interact with patients.

Blueshift’s [Feb. 12 report](#) on SmileDirectClub was positive, indicating that its decision to sell clear aligners directly to dentists and orthodontists would drive growth and improve its poor reputation. Our [Oct. 3, 2019, report](#) on Align cautioned that sales of its Invisalign aligners were at risk in the mild and moderate teeth straightening market segment because of intense competition for low-cost DIY competitors—including SmileDirectClub.

### Current Research

Blueshift Research assessed how COVID-19 is impacting the clear aligner industry and what post-shutdown demand will look like. We employed our pattern mining approach to establish two independent silos, comprising eight primary sources (including three repeat sources) and four secondary sources focused on the clear aligner industry. Interviews were conducted April 6–17.

- 1) Dentists offering clear aligners (4)
- 2) Dental supply sales/Telehealth provider/Trade pub ad sales (4)
- 3) Secondary sources (4)

# Clear Aligner Market

## Next Steps

Blueshift Research will continue to monitor the clear aligner industry to gauge demand following the COVID-19 shutdown. We will also research the new competitors, including new manufacturers and in-practice 3D printer platforms. We will research SmileDirectClub's Doctors In-Office Partnership program to see if it is gaining traction. Finally, we will research Align Technology's newer lower-cost products being introduced to compete against DIY clear aligners.

## Silos

### 1) Dentists Offering Clear Aligners

With dental practices closed except for emergencies, these four dentists using Align's Invisalign and one also using Straumann's ClearCorrect said there is virtually zero demand from new patients for clear aligners. Dentists with patients in mid-treatment are monitoring their progress remotely via phone, pictures, and telehealth platforms. One dentist said he expects several of his patients will have to start treatment over from scratch and he will be unable to charge for the restart. Sentiment was mixed regarding clear aligner demand following the reopening of dental practices. One source said he expects a full and robust return of demand, while another source expects a slow return of demand, as clear aligners will initially be a low priority for consumers. SmileDirectClub has a poor reputation with these sources; however, one said he would consider using their product as long as he monitors the patient throughout the treatment process. Another said some dentists will sign on with SmileDirectClub because of its low cost, improving technology, and the limited loyalty toward other suppliers. A third source said corporate dentistry may adopt SmileDirectClub. One source is using the practice shutdown to upgrade his practice with Dentsply Sirona's digital dentistry 3D interocular scanner system and 3D printer. He added that he would be open to making his own clear aligners—with the appropriate training. All four dentists acknowledge that teledentistry has a role to play during the COVID-19 pandemic and three think it will expand in the future. One source thinks its use is temporary and sees a limited future.

### Key Silo Findings

#### Clear Aligner Market Conditions

- 4 said their practices closed to all but emergency appointments on March 16, in accordance with ADA guidelines.
  - o 1 is using the time to develop new patient-handling procedures.
  - o 1 is upgrading to Dentsply Sirona's digital dentistry platform. He added he would be interested in making his own clear aligners with additional training.

#### Clear Aligner Sales

- 3 expect demand for clear aligners to be limited upon reopening their practices.
- 1 said demand will return fully.

#### Invisalign

- 1 said Invisalign remains the best clear aligner company. He added that he expects Align to help patients whose treatment was interrupted by COVID-19 with restarting material costs.
- 1 said he has shifted his preference of clear aligners from Invisalign to ClearCorrect. He said Invisalign treatment plans needed to be corrected too often.

#### SmileDirectClub

- SmileDirectClub has a poor reputation with these sources.
  - o 1 said some dentists will sign up to use SmileDirectClub's aligners because they are less money, have improving technology, and there is little loyalty to any supplier.
  - o 1 said he has not been approached to take on SmileDirectClub aligners but he would consider it, provided he supervises the treatment.
  - o 1 said corporate dentistry may consider joining SmileDirectClub.

#### Teledentistry

- 4 said teledentistry has a role during the pandemic.
  - o 3 think the use of teledentistry will expand in the future.
  - o 1 thinks its use will be temporary.

# Clear Aligner Market

## 1) East coast family and cosmetic dental practice using Invisalign for 15 years; repeat source

This two-dentist practice has been closed and all of its employees furloughed for 21 days as a result of COVID-19. Since the practice is not seeing patients there is zero demand for new Invisalign starts. He has 25 to 30 active Invisalign cases he is trying monitor, but several will likely have to start the treatment process over. He has used the time to complete neglected office and reorganization projects. He is also developing new patient-handling and treatment protocols that will be required when he is able to reopen his practice. He is not using any teledentistry, but is aware of some colleagues using Zoom and other platforms to maintain some contact with patients. He does not think teledentistry is very effective and will only be relied on temporarily during the shutdown.

### Clear Aligner Market Conditions

- “My practice has been closed for 21 days and I have furloughed all of my employees, so demand for Invisalign is zero.”
- “I have 25 or 30 active cases that I am trying to monitor and keep going, but many of them will have to start the treatment all over again.”
- “My new patient starts have been declining for several years now, as I have completely worked through my patients. I would say my new Invisalign starts are down 50% from Q1 of last year.”
- “I am not optimistic about Invisalign sales when we open back up. Typically, it has been my patients with discretionary income that have opted for teeth straightening procedures. With the hit the economy is taking it will be quite a while for elective procedures to pick up.”
- “Let me give you an example. From 2004 to 2008 my veneer procedures were going crazy, but then in 2008 they crashed along with the economy. It took three years for demand to pick back up in that category.”
- “I have spent the last 21 days working on neglected practice- and office-related projects. I have also been monitoring the dental association’s new guidelines for treatment following the coronavirus. When we do open back up it will be a whole new ball game, with many more safety procedures to protect the patient and practitioner. Before we open I have at least a week of retraining of my team on all the new protocols.”

I am not optimistic about Invisalign sales when we open back up. Typically, it has been my patients with discretionary income that have opted for teeth straightening procedures. With the hit the economy is taking it will be quite a while for elective procedures to pick up.

*East coast family and cosmetic dental practice using Invisalign for 15 years*

### Clear Aligner Sales

- “Since I have been prescribing Invisalign for so long (15 years) I have worked completely through my patient group. My sales have been steadily declining for about four years now”.
- “COVID-19 will have a significant impact on my Invisalign business because I will have to restart or significantly adjust a lot of the 25 patients I am treating, and I can’t charge them any more for the procedures.”

### Invisalign

- “Align is the best technology of all the clear aligners available.”
- “I expect they will help with the cost of the new trays for the patients whose treatment was interrupted by the virus, but my practice cost will be a loss.”
- “Align is still shipping trays and, in a way, we are behaving like SmileDirectClub, where we make sure they are delivered to the patient without contact and we inquire about their progress. But I anticipate I will need to make quite a few adjustments when we are able to resume patient visits and face-to-face monitoring of the treatment.”

### SmileDirectClub

- “I’m not aware of any dentists signing on to the SmileDirectClub program yet but, as I said when we talked in February, I do think some will sign on for several reasons: cost, improving technology, and the lack of loyalty. Keep in mind, out of 100 patients that need teeth realignment maybe only 15 or 20 would be appropriate for what SmileDirect offers.”

### Teledentistry

- “A lot of my colleagues are using online platforms and Zoom to keep in touch with their patients through the closure; I have not used it.”
- “I think teledentistry use will largely be a temporary thing. It’s too cumbersome and you really can’t treat anyone with it. It not my thing.”

# Clear Aligner Market

Feb. 12 SmileDirectClub report summary: According to this Platinum Invisalign provider, despite poor performance by SmileDirectClub, it will likely experience growth. The decision to sell SmileDirectClub clear aligners to dentists and orthodontists will add needed patient plans and progress reviews to the process and should improve performance. SmileDirectClub will still be limited to simple teeth straightening procedures, but as Invisalign patents expire this dentist expects all the competitors to improve their offering. Invisalign is the best clear aligner system, but the company is difficult to work with and frequently raises its prices. Little loyalty is developed, and dental professionals will switch if a competitor can match Invisalign's performance.

## 2) General dentist practitioner for 40 years and associate professor at a university school of dentistry

The COVID-19 pandemic has completely shut down this Invisalign-certified practice that has 10 employees. There is no demand for clear aligners as patients are not working and will delay starting treatment until they are back to work and have the funds. SmileDirectClub targets a segment of the population that does not go to dentists and has limited money to spend. This source considers SmileDirectClub a disservice that is practicing dentistry without a license. Invisalign requires dentists to sign off on the treatment and monitor the patient throughout the process. Most of this practice's Invisalign patients are adults. Teledentistry is considered a valuable tool that this practitioner regularly uses for treatment planning and design. He is also using it to monitor patients by viewing pictures provided by patients with their cellphones.

### Clear Aligner Market Conditions

- "We are in a recession. I have no income coming in, but there are still expenses. Everyone is in the same boat. Everyone in the office, all 10 employees, have applied for unemployment."
- "During the Great Recession, at least people could work. In this recession, if things keep going on as they are, shops can't open up. In 2008, we weren't quite as busy, but we had a productive practice. In this recession, nobody can predict what will be. Here, people feel helpless. Before, you were still earning a salary; now everything is shut down. Assistants and hygienists live paycheck to check."

### Clear Aligner Sales

- "The pandemic has severely impacted the demand for clear aligners. People aren't working—there is no money. They won't start with this. Everybody is holding off."

### SmileDirectClub

- "SmileDirectClub [SDC] is designed for a certain market, for people who can only spend so much or want to spend so much."
- "SDC is popular because it's less money."
- "People who want SDC don't go to the dentist regularly. They have active decay, periodontal disease, bone disease. They are getting inadequate treatment and diagnosis."
- "SDC is practicing dentistry without a real license."
- "No dentist recommends SmileDirect. It is not as easy as they say it is."
- "SDC, in the long run, is doing a disservice."
- "There is a problem with patient compliance."

### Invisalign

- "You get three trays, you monitor progress on the computer, and maybe combine the Invisalign with orthodontics."
- "That orthodontist sends me a letter that I have to sign off on that the patient is disease-free, that there is no active decay, and so on"
- "90% of these procedures are done on adults."

### Teledentistry

- "When I work on an implant reconstruction, crowns, veneers, and so on, I take photos, do computer scans, and I send to my computer tech. He designs the smile, then we fabricate what is necessary. There is a lot of design and manufacturing work done by the computer. Dentistry is a surgical profession. We use tech as a tool to better design things."
- "I am using teledentistry with patients now, because everyone has a camera on their phone."
- "I say, 'Take a photo of the problem'—and then they text me an image."

The pandemic has severely impacted the demand for clear aligners. People aren't working—there is no money. They won't start with this. Everybody is holding off.

*General dentist practitioner for 40 years and associate professor at a university school of dentistry*

# Clear Aligner Market

- “Last week a woman had ulcers in her mouth; I saw them in the texted image. I prescribed something and she is feeling better.”
- “I can look at the problem, decide if it is more involved or an easy fix. And it gives patients peace of mind.”

## 3) Dentist with a two-provider practice in the Southeast; repeat source

This dental practice is closed, with the exception of emergencies, which has dropped its volume by 90%. ClearCorrect and Invisalign cases that were started prior to the COVID-19 shutdown continue to be monitored, but no new cases are being started. This source expects a full and robust return of appointment volume and demand for clear aligners when allowed to reopen. He has not been approached by SmileDirectClub to use its aligners, but he will consider it, provided he is able to monitor patients’ progress throughout the treatment process. Teledentistry is being considered as a tool to follow and triage patients—he expects it will improve dental care delivery in the future. While his practice is closed he is upgrading his technology to digital dentistry with Dentsply Sirona equipment, including 3D interocular imaging and 3D printing capabilities.

### Clear Aligner Market Conditions

- “[We are] closed, except for emergencies. Current visit volume is 10% of what it was prior to the pandemic.”
- “I’m using this down time to upgrade our technology in the office. For example, we’re fully transitioning away from using impressions to doing all of our own lab work with the Sirona Dental Systems equipment, which includes 3D printing for crowns, bite guards, splints, restorations, etc. They also have a 3D x-ray system which scans the mouth and produces results that are even more accurate than impressions.”
- “I am open to making my own aligners with the 3D printer but would need more training to do that.”

### Clear Aligner Sales

- “Our practice uses ClearCorrect and Invisalign. We have continued to follow these patients because you just can’t drop them in the middle of their treatment regimen. In fact, one of my patients was right at a critical point in his process, so I went to his home to visually check his teeth from a safe distance and to give him his next tray.”
- “I am comfortable that we will be coming back fully...but differently. We’ll be practicing smarter.”
- “We are a very ‘preventive’ practice and rely heavily on establishing close working relationships with our patients. We continue to communicate regularly with them and already have a good feel about their intentions to resume with our historic patterns of cleaning, emergency work, preventive services, aligners, etc. So we will fully resume what we have been doing, but we will be changing how we do it, being more reliant on technologies of various kinds.”

**I am open to making my own aligners with the 3D printer but would need more training to do that.**

*Dentist with a two-provider practice in the Southeast*

### Invisalign

- “There has been virtually no communication of any kind from Invisalign during the pandemic.”
- “In our previous conversation I indicated that I preferred Invisalign. I am changing that now, as I had to change their treatment plans too frequently. I am now using ClearCorrect more often.”

### SmileDirectClub

- “I have not been contacted by SmileDirectClub to become involved with them and their technology. I would consider it, but only if I can have very active and regular interaction with my patients to check on how they are progressing. Teledentistry could, actually, be very useful here.”
- “Marketing directly to providers instead of the public is the only way to go.”

### Teledentistry

- “I am starting to get a lot more serious about using teledentistry as an approach to follow and triage my patients. This is going to be a huge improvement in the way we deliver dental care in the future.”
- “Right now, the guidelines from the ADA are not clear about how and when to use teledentistry.”
- “In fact, the pandemic may be the perfect launching pad for teledentistry.”

### Miscellaneous

- “In the ‘80s, when AIDS emerged, that changed the infection control practices of dentistry forever. I am sure that COVID-19 will also impact the practice as well, but more in the types of technology that we will all be using in the future.”

# Clear Aligner Market

**Feb. 12 SmileDirectClub report summary:** SmileDirectClub's recent legal wins are not particularly relevant in his view. The patients and providers will ultimately decide how successful any of these firms are going to be. His practice uses Invisalign and ClearCorrect when clear aligners are the appropriate treatment. He considers Invisalign the best-in-class clear aligner, followed very closely by ClearCorrect. He considers the DIY teeth straightening process and SmileDirectClub as a novel approach that might be useful in limited situations, but that is fundamentally flawed due to the lack of professional involvement. The adoption of SmileDirectClub clear aligners by the dental community is unlikely to occur rapidly as they have so much well-known "baggage."

## 4) Owner and lead dentist of a five-office practice

This source anticipates a low demand for cosmetic dentistry when offices reopen later this year. The public will focus on purchasing basic needs, vs. the 'luxury' of dentistry. SmileDirectClub has no competitive advantage with their remote model and their new offerings, as they have left a 'bad taste' in the mouths of most dentists. There is one exception—the corporate model of dentistry may see this as an opportunity.

### Clear Aligner Market Conditions

- "In 2008-2009, folks were concerned about their basic needs. Dentistry is viewed as a 'luxury', not a necessity—the opinion of most people."

### Clear Aligner Sales

- "When the COVID-19 pandemic is resolved and our practices reopen, there will not be a pent-up demand. I believe demand will be much less. For braces, a much lower priority."

### Invisalign

- Did not discuss.

### SmileDirectClub

- "I don't think SmileDirectClub has a competitive advantage with their new model and offering to dentists, like the teledentistry platform and the rest. SDC leaves a bad taste in the mouth of most dentists; however, the corporate model of dentistry may see this as an opportunity."

### Teledentistry

- "Teledentistry does have a role and a place in dentistry. I fully believe this and have for three years."

When the COVID-19 pandemic is resolved and our practices reopen, there will not be a pent-up demand. I believe demand will be much less. For braces, a much lower priority.

*Owner and lead dentist of a five-office practice*

## 2) Dental Supply Sales/Telehealth Provider/Trade Pub Ad Sales

Demand for clear aligners will be muted when dental practices reopen. The longer the shutdown continues the more severe the drop-off in demand will be. One source predicts that SmileDirectClub will experience significant decline in demand because its target market has limited discretionary income, is more vulnerable to an economic downturn, and typically does not consider dental care a high priority. While practices are closed one supplier sales rep said dentists are revising their examination safety procedures and protocols. He said the major dental suppliers—[Henry Schein Inc.](#) (HSIC), [Patterson Companies Inc.](#) (PCO), and [Benco Dental Supply Co.](#)—are backordered on personal protective equipment (PPE). One source said Invisalign is the best fit for the clear aligner industry moving forward. SmileDirectClub faces a significant challenge in altering its business plan to include dentists. One source said the negative die is cast, another said the company is blackballed, and a third said no dentists are signing up for the company's Doctors In-Office Partnership. Two sources said teledentistry is becoming a part of the evolving dental care delivery model.

### Key Silo Findings

#### Clear Aligner Market Conditions

- 4 said demand for clear aligners will be negatively impacted the longer the closure of dental practices persists.

#### Clear Aligner Sales

- 2 said sales of clear aligners had been up before the shutdown.

#### Invisalign

- 1 said Invisalign is the best fit for the clear aligner industry moving forward.

# Clear Aligner Market

## SmileDirectClub

- 2 said SmileDirectClub is negatively perceived by the dental community.
- 1 said no dentists are signing up to use SmileDirectClub products.

## Teledentistry

- 2 said the use of teledentistry will grow and become a bigger part of dental care delivery.

## 1) CEO of major dental group purchasing organization

The ADA announcement of March 16 shut down the dental industry for elective procedures, including clear aligner starts, and orders for this dental distributor completely dropped off. The clear aligner market is drying up, with SmileDirectClub's 'do-it-yourself at home' model most vulnerable to the economic turndown. This market segment is the first to stop spending and the last to resume it. This source recalls 2008 to 2011 as similar, with consumer confidence depressed, resulting in a steep decline in elective procedures.

### Clear Aligner Market Conditions

- "Since the American Dental Association issued the recommendation to postpone all elective procedures and office visits except for emergencies on March 16, communications and orders have gone radio silent. With the ADA order, I don't know of any new starts on any elective procedures. I can't imagine anyone doing anything non-emergency."
- "In 2008 to 2011, elective procedures took a major hit. Consumer confidence was down and, consequently, discretionary, elective procedures were down greatly."
- "I think the office will open back up in June or July."

### Clear Aligner Sales

- "Sales were steady and growing prior to the March 16 ADA announcement."
- "If this economic turndown is a short recession, then things will come back to where they were. If it is more of prolonged depression, the clear aligner market will probably dry up."

### Invisalign

- Did not discuss.

### SmileDirectClub

- "I have not heard of a single dental practice signing on to SmileDirectClub's Doctors In-Office Partnership program."
- "SmileDirectClub will be hurt disproportionately compared to the doctor-interfaced clear aligner companies. SmileDirectClub's market segment is very vulnerable to an economic downturn. This market segment—discount and low discretionary spending—will be the first to stop spending and last to resume. Forty percent of the people in the U.S. visit the dentist—60% don't, because they don't make it a priority. [They] don't care or can't afford [to go]. This is the segment SmileDirectClub has targeted."

### Teledentistry

- "None of my accounts have discussed teledentistry or applications of it. With my accounts, it's non-existent. It is very hard to do a consult using a cellphone picture. Remote intraoral cameras change this aspect—you get a good picture—but they are not readily available. If a patient has to buy a camera, it will cost between \$500 and \$2,500, depending on the quality. This is a major obstacle for effective teledentistry."

**If this economic turndown is a short recession, then things will come back to where they were. If it is more of prolonged depression, the clear aligner market will probably dry up.**

*CEO of major dental group purchasing organization*

## 2) Sales rep in the Southeast for a major dental supply company with competitive and allied products; repeat source

A slow rebound for clear aligner sales is expected, depending on how long it takes the economy, stock market, and patient fears to recover. Sales in aligners were growing in 2020, but not as strong as 2019 sales. SmileDirectClub is blackballed in most practices. Offices are in the process of remodeling their sanitary practices: how, when, and where to use PPE; how to screen patients prior to an exam or procedure to keep safe from COVID-19. PPE is in high demand and short supply, with the major distributors like Henry Schein, Benco, and Patterson. There are backorders and lean inventories and offices want a surplus that currently does not exist.



# Clear Aligner Market

## Clear Aligner Market Conditions

- “Dentistry is remodeling how they will use PPE in the future—what the staff will wear, for how long prior to sanitizing or discarding, what the patient will wear, etc. ...”
- “The PPE will be modified in ways that are not currently in practice. It will be a slow process.”
- “Patients will need to be monitored prior to coming into the office—temperature checks, questionnaire about where they’ve been and with whom they’ve been in contact. It will be safety first. We will need time to heal.”

## Clear Aligner Sales

- “When practices reopen patients will be nervous to sit in the dental chair, afraid that they will contract COVID-19.”
- “People who have lost their jobs have also lost their insurance and can’t afford braces and similar procedures.”
- “Doctors are very concerned about the PPE they will need and how they will acquire them for their staff. Dental companies like Schein, Benco, Patterson are backordered or have very little PPE in their inventories. Nobody has a surplus that offices will want when practices reopen.”
- “I’m not sure how resilient spending will be in clear aligners. Sales were moving up prior to the COVID-19 outbreak, not as strongly as they did in 2019 but still in a positive direction. Sales will probably be down for a while, dependent on how long it takes for the economy, the stock market, and confidence to rebound.”

I’m not sure how resilient spending will be in clear aligners. Sales were moving up prior to the COVID-19 outbreak, not as strongly as they did in 2019 but still in a positive direction. Sales will probably be down for a while, dependent on how long it takes for the economy, the stock market, and confidence to rebound.

*Sales rep in the Southeast for a major dental supply company with competitive and allied products*

## Invisalign

- “I am not aware of anything Align is doing regarding COVID-19.”

## SmileDirectClub

- “SmileDirectClub is openly competitive with dental and orthodontist practices. This results in their being blackballed by most practices.”
- “SmileDirectClub needs to go to the leaders of the orthodontic community and make peace. They need to align themselves with the doctors they have, to date, competed against. They need the doctors much more than the doctors need them.”
- “None of my accounts have signed up with SmileDirectClub, that I know of.”

## Teledentistry

- “Teledentistry is growing and more doctors are asking me about it. According to my customers, if a patient calls them and they talk through the same content they would discuss during a face-to-face consult, the dentist can use the same billing codes and get reimbursed as a consult. The remote consult can be billed and reimbursed, with or without a teledentistry software platform.”

Feb. 12 SmileDirectClub report summary: SmileDirectClub’s selling directly to dental/orthodontic practices is a great move. Dental providers view SmileDirectClub as a very successful commercial company circumventing their practices and threatening their revenues, but know little else about them. By SmileDirectClub coming out from “behind the curtain” and partnering with practices, the providers will have a potential alternative to Invisalign and get the piece of the pie that has been eluding them. This will curtail the lawsuits and support continued growth for SmileDirectClub this coming year.

## 3) CEO of an established teledentistry platform company

Cosmetic procedures will take a backseat to other dental work as the industry reopens after the COVID-19 interruption. SmileDirectClub’s change in policy to now sell direct, offer a teledentistry platform, open their referral base, and other offerings is like an act of reparation to the provider industry—but the die is cast. They are not in favor. Invisalign will fare better. Teledentistry facilitates virtual consultations and should be a part of the evolving dental model. It provides a revenue stream for the practitioner. Intraoral cameras are tools to greatly improve the virtual consultation.

## Clear Aligner Market Conditions

- “I couldn’t speak to how COVID-19 has impacted the clear aligner market. [I] just don’t know.”

## Clear Aligner Sales

- “Regarding the resiliency of the market, cosmetic procedures will take a backseat to most other dental procedures.”

# Clear Aligner Market

- “As the industry reopens, there will be new approaches. They are working on them now. Teledentistry should be a part of the evolving dentistry model.”

## Invisalign

- “Align, with its Invisalign product, is a much better fit for the industry moving forward.”

## SmileDirectClub

- “SmileDirectClub initiating direct to dental and orthodontist office [sales], with a teledentistry platform, PPE, and access to their membership is a reparations approach. Like giving the enemy a drink of water during a war. ... [It’s] a smart move by them but ‘the die has been cast’. Too much has happened. For state ADAs, they are not a priority.”
- “I have not heard of any dental practices signing up with SmileDirectClub’s Doctors In-Office Partnership program.”

## Teledentistry

- “Teledentistry is evolving. We used to talk more about improving collaboration and referral, but [now it’s more about] triaging, managing, or preventing an emergency. Through the virtual consultation, dentists can decide on a prescription, an appropriate treatment, or a plan for a treatment.”
- “Teledentistry can provide another stream of revenue—either additional or one that might have been cut off.”
- “Reimbursement is dynamic and steadily improving as coverage improves as a fee for service.”
- “Use of cellphones during a remote evaluation gives the practitioner enough to indicate what most problems are and what needs to be done. It is certainly better than the alternative—doing nothing. It’s an interactive discussion between healthcare provider and patient. The patient will use fingers, a spoon, or other at home ‘tools’ to help the provider diagnose the problem and a course of treatment.”
- “Cellphones are good to help with the diagnosis, but not as good as intraoral cameras. There are misconceptions about the cost of intraoral cameras. We sell them to patients for \$299 or less. If a patient has periodontal disease, if there are multiple patients in the same household, if you’ve had thousands of dollars of dental work or some ongoing dental issue, it can really make financial sense.”

Regarding the resiliency of the market, cosmetic procedures will take a backseat to most other dental procedures.

*CEO of an established teledentistry platform company*

## 4) Advertising sales rep for leading dental trade journal for more than seven years

Clear aligner treatment is considered an elective procedure; therefore, companies serving this market are losing new business due to the shutdown. Depending on the length of practice closures, this source expects demand for clear aligners to return to normal. Unlike the 2008 economic downturn, this recession offers a stimulus package to consumers which will shorten the recovery period. As a direct response to the COVID-19 pandemic this trade publication has consolidated its May and June issues to a single publication and is considering also combining the July and August issues. This journal continues its advertising sales efforts to major dental industry advertisers; however, extended payment terms are being offered. This source is a current SmileDirectClub patient. He has developed a problem with his treatment which is being addressed remotely via an at-home impression kit which will be used to alter his treatment plan.

### Clear Aligner Market Conditions

- “Dentists are losing business. If they are not in the office, they must be losing money.”
- “I am still calling on companies for ads. I was calling this morning. We combined the May/June issue. We might combine July/August. We are giving advertisers extended payment days.”
- “Right now, the recession regarding the dental business is not as bad as in 2008 to 2009. The economy hasn’t shut down—[the] reason now is a virus. The market then had gone to crap. The housing market was crashing. At least with this recession there is a stimulus package and there are emergency procedures. This recovery won’t last as long as 2008 to 2009. Then, we lost half of our advertising business, about \$10 million total for trade journals.”

I am still calling on companies for ads. I was calling this morning. We combined the May/June issue. We might combine July/August. We are giving advertisers extended payment days.

*Advertising sales rep for leading dental trade journal for more than seven years*

# Clear Aligner Market

## Clear Aligner Sales

- “Once we go back to work, we will get back to where it was. It depends on when people go back to work.”

## Invisalign

- Did not discuss.

## SmileDirectClub

- “I have SDC. I had always wanted to do something with my smile but it wasn’t until I saw what SDC did for my girlfriend’s daughter’s smile that I looked into it. She never smiled before; now she is a completely different person. It costs \$1,800, a lot cheaper than Invisalign.”
- “I was developing a gap between two teeth. But I can’t go into the dentist now, because it’s elective. I had to bite down into the Play-Doh and send back.”
- “They are printing ventilator valves, printing anything they can to help infection control.”

## Teledentistry

- Did not discuss.

## Secondary Sources

These four secondary sources focused on the financial impact of the COVID-19 pandemic on dental practices, Align Technology’s recent acquisition, the entrance of a new clear aligner manufacturer, and the increasing demand for in-practice printing of clear aligners.

### April 15 Dental Tribune [article](#)

A second round of ADA poll results shows the serious financial impact of COVID-19 on most dental practices.

- “The COVID-19 crisis has caused a significant financial impact on dental practices, with collections for the vast majority of dentists less than 5 percent of what is typical. This is according to a second round of results from an ADA Health Policy Institute poll.”
- “The poll, from responses gathered during the week of April 6, was taken by 6,441 dentists in private practice, a response rate of over 50 percent.”
- ““This invaluable data gives an accurate picture of what dentists are facing and will help shape the ADA’s response,” said Marko Vujicic, PhD, chief economist and HPI vice president.”
- “In the second round of polling, 79 percent of dentists reported that their practices were closed except for emergency patients, and 18 percent are closed completely, indicating that the vast majority of dentists are complying with Centers for Disease Control and ADA guidelines. Outlier states were Vermont and Arkansas, with 38 percent and 31 percent of practices fully closed, respectively.”
- “This week’s poll introduced a question about what actions dentists would consider to ensure the sustainability of their practices if the current practice restrictions continue. Through the end of April and June, the majority of dentists reported that they would focus on cost cutting, including adjusting staffing and borrowing money to address shortfalls. But if the situation were to continue through the end of August, 46 percent said they would consider closing, selling or filing for bankruptcy.”
- ““The data tell a clear story. The early, proactive response by the dental profession to safeguard the safety of patients and help flatten the curve and preserve PPE has, as expected, impacted dental practices in a major way,” Vujicic said. ‘Short-term financial relief from the Coronavirus Aid, Relief and Economic Security Act, dental insurers and other groups as well as the enhanced use of teledentistry could help ease financial shortfalls in the short term. What is clear at this stage, however, is that the coming two to three months represent a critical juncture for the economic sustainability of many dental practices.’”

# Clear Aligner Market

## March 18 3D Printing Industry [article](#)

Align continues to expand with the purchase of Exocad a German based CAD/CAM software company they have been collaborating with since 2017.

- “[Align Technology Inc](#), a Californian 3D scanner and dental clear aligner manufacturer, has announced it will acquire [Exocad GmbH](#), a German CAD/CAM software company. With Exocad’s expertise, Align Technology aims to strengthen its digital dentistry platform and make the digital workflow easier for doctors.”
- “The two companies have been collaborating since 2017, integrating Align’s iTero intraoral scanners and Exocad’s Chairsides CAD software. Align Technology described the acquisition as a “natural next step.”
- “Joe Hogan, explained, ‘Dentistry today is evolving digitally, with technology advances and consumer awareness driving new opportunities in ortho-restorative and comprehensive treatment. Align is in a unique position to lead the digital transformation of dentistry by reimagining comprehensive treatment planning and by reinventing the way orthodontists and GPs practice with our digital platform for transforming smiles.’”
- “Last year, Align Technology produced over half a million unique 3D printed parts per day, according to Joseph Hogan, CEO of Align Technology. Hogan explained, ‘We have a team of 3000 dental cad technicians who aid in the creation of our aligners. As a result, we can tackle 90% of the 12 million orthodontic cases that arise every year.’”
- “This year, SmileDirectClub, a Nashville-based dental equipment manufacturer, has become a direct competitor to Align Technologies, ending its 3-year-long partnership with the firm. After the company’s supply agreement with Align expired in 2019, SmileDirectClub partnered with Walmart.”
- “Alex Fenkell, Co-founder of SmileDirectClub, commented on this decision, ‘We have seen increasing demand from the dentists and orthodontists in our network who wish to provide SmileDirectClub clear aligners to their in-office patients, and with our agreement with Align Technology now expired, we are no longer obligated to stay in the direct-to-consumer channel.’”

## Feb. 20 3D Print.com [article](#)

Prodways Technologies, a subsidiary of Prodways Group SA (PWG), is offering a clear aligner manufacturing ecosystem in partnership with several digital dentistry companies.

- “At Lab Day 2020 in Chicago, Prodways has announced the development of its [Clear Aligners Manufacturing Ecosystem](#), meant to cover all aspects of the design and production of clear aligners. Developed in partnership with prevalent companies in the digital dentistry space—3Shape, Full Contour, Imes-Icore and Dreve—the product ecosystem can deliver up to 1200 aligners daily, according to Prodways.”
- “As SmarTech Analysis has reported, the market for additive manufacturing in dentistry was on track to surpass \$2.7 billion in 2019, with an anticipated 500 million dental devices and restorations projected to be produced annually by 2022. If you’ve seen an TV ads lately, you’ve likely caught one 3D-printed dental item that is already in high demand.”
- “Clear dental aligners were among the first consumer products to be mass manufactured with the use of 3D printing. These devices are typically made by the following workflow: an intraoral scan of a patient’s mouth captures the 3D data used to design a model of their teeth; this model is 3D printed before the aligner thermoformed on top of the mold.”
- “Given the success of clear aligners, not only are there now numerous competing aligner brands, but also [3D printing companies](#) vying for their business. Prodways aims to stake out its own territory in the segment with what it considers the first end-to-end digital manufacturing solution. This includes 3D scanning, data preparation, treatment design, 3D printing, thermoforming, laser marking and trimming, with hardware and software integration and automation along each step. Part of this automation comes in the form of the automatic platform loader and unloader (seen in the video below), a semi-automatic thermoforming module and an automatic laser marking and trimming module.”
- “As Prodways works to fully automate the process of making clear dental aligners, they may have some stiff competition, particularly from the likes of HP, which is already claiming to make 50,000 molds for aligners per day via its customer, the Smile Direct Club.”

# Clear Aligner Market

## Feb. 19 Dental Tribune [article](#)

Demand for in-practice clear aligner branding and manufacturing is growing.

- “The clear aligner market leader Invisalign is facing increased competition from smaller, localized manufacturers. Dentists wishing to offer clear aligner treatment have a number of options. Manufacturing and selling an in-house brand directly to patients is one option that a growing number of practices are choosing.”
- ““3D printing has allowed us to be in control of our own workflow, and with that, the possibilities are endless. We are able to provide esthetic treatment options for our patients and keep the cost down by not accruing large laboratory fees from third-party companies. This includes in-house clear aligners, lingual braces and hybrid treatment using a combination of both. 3D printing has truly changed the way we practice,” Kaltschmidt said.”
- ““The investment for orthodontists and dental professionals to get started [with a 3D printer] can be anywhere from \$500 to \$20,000 or more,” Kaltschmidt said. “Technology is advancing so quickly, and the cost of 3D printers will continue to come down. Our advice for those interested in getting started with 3D printing is to spend less on the printer and invest more time into refining your digital workflow. You will begin to notice the differences when you go from analog to digital.”
- ““Orthodontists can definitely brand their own aligners and they absolutely should,” Kaltschmidt continued. “The product you design and manufacture in your office as an orthodontist is a superior product in the end, and you should package and brand your aligners to reflect that. In-house aligners give the practitioner full control over workflow, time to delivery, trim line and choice of aligner materials.”
- “Growing demand for this technology from dentists is being met by companies manufacturing solutions that are tailored to a number of dental applications, including making clear aligners. Manufacturers predict that sales will climb this year and that integrated digital workflows will make the technology even more accessible.”
- “Lee Kwang Min, vice president of the Korean 3D-printer manufacturer Carima, told the online trade journal *3D Printing Industry* last year that “[2020] will be a full-scale digital dentistry year. The emergence of a variety of 3D scanning solutions with an affordable price range, which has been an obstacle to the spread of digital dentistry, will replace the milling machines in the market and, furthermore, [will accelerate] the rapid adoption of 3D printers.” Min said that he expects that a collaborative approach between individual manufacturers of 3D printers, software and scanners will act to increase the accessibility and adoption of the technology by dentists.”

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Additional research by James Boland, Bruce Wicks, and Christine Bahls.

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