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During the Holiday Season**

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Managing Time-Sensitive Inventory During the Holiday Season

Nancy Berkowitz

Industry VP

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The holiday season is always a crucial time for wine and spirits sales, with a significant share of revenue coming in the last couple months of the year. This season is shaping up to be especially important for beverage wholesalers and suppliers, because the pandemic has changed the profit equation.

The cost of keeping inventory is high, making it risky to take on too much product at once. However, retailers also don't want to risk running out of stock during the holidays. With consumers' buying habits changed as the result of the pandemic, it can be difficult to assess how much inventory to carry and which products to focus on. Luckily, by paying attention to the data, we can make informed decisions about how best to manage stock.

Where products are being sold is important

It's no surprise that on-premise alcohol sales are down this year. While bars and restaurants are opening back up, the expected bump from this returning base of customers has not been as significant as previously expected. While plenty of patrons have been coming back to their favorite establishments and ordering drinks, a lot of people are still understandably cautious about going out.

However, it seems that those customers are still drinking at home, since sales at liquor stores have remained strong all year. While the profit margins are thinner for these off-premise sales than on-premise, the higher quantity products consumers are purchasing can make up for some of it. Wholesalers and suppliers should analyze the products that are doing well in off-premise accounts, as these make up the bulk of their sales.

Online orders and delivery have been the fastest-growing sector of the wine and spirits market this year, and will likely play an important part in the upcoming holiday season. Off-premise stores should make sure they have an accessible avenue for online purchasing that their customers are aware of. Otherwise, they could be giving a lot of their potential sales to competitors. While less money is made from each transaction that goes through a third-party delivery service, it can be a great way to reach new customers and keep inventory moving.



Which products are being sold is important

The pandemic has changed more than just where customers are going to get their alcohol; it has also had a major effect on what they are purchasing. There is a noticeable trend of customers this year gravitating towards well-known brands and products that they are familiar with, especially when they are shopping in-store or online. People tend to splurge and order more adventurously when dining out, so the lull in bar and restaurant patronage is likely causing fewer people to order things they haven't tried before. It could also be that with times being so uncertain, customers feel safer going with a brand they already know they'll enjoy.

Seasonal products should already be in stock and presold or selling now, so wholesalers carrying these items should consider featuring them prominently in store displays early (and on online ordering pages) to ensure that most of them get sold before the year ends.



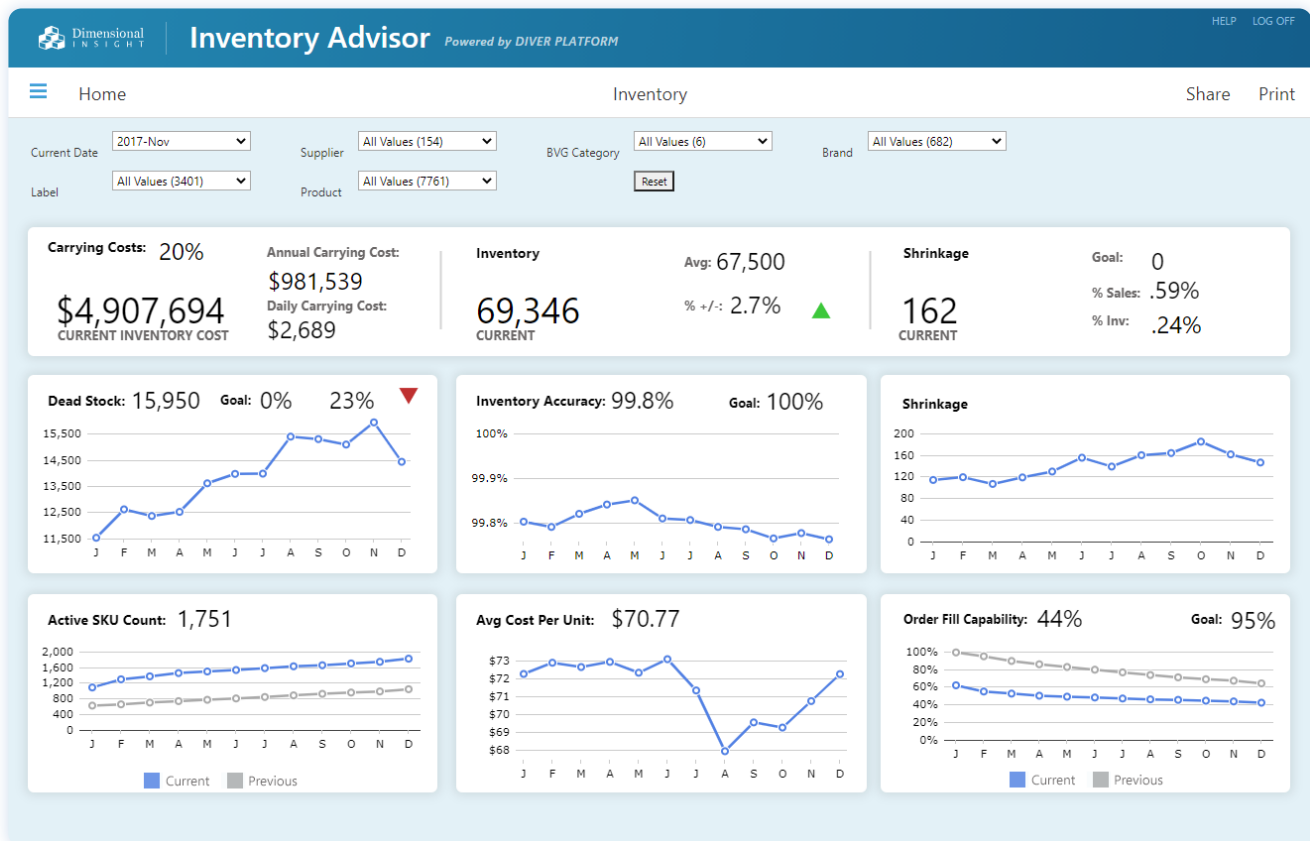
But COVID-19 isn't the only thing that is affecting wine and spirits sales patterns in 2020. The ongoing wildfires on the west coast of the U.S. are set to have a profound effect on the wine industry. Portions of these fires reached the Napa and Sonoma valleys, both known for being some of the biggest producers of wine in America. Even for vineyards that were not directly in the path of the flames, it is still unclear what long-term impact this will have on the wine business, but for now it seems to actually be boosting sales of California wines. Whether it is to show support or to speculate on the future availability of wine from the region, some wines made on the west coast are currently experiencing a sales bump.

How data can help

Trends in the beverage alcohol industry fluctuate rapidly, and are heavily dependent on seasons, and location. The only way to keep your bearings in the constantly changing landscape is with reliable data analytics to help with your decision making.

One tool that can make wholesalers' and suppliers' lives easier is Inventory Advisor™ from Dimensional Insight. Inventory Advisor offers an easy way to monitor inventory and compare it to sales goals, providing insights about which products to focus on. Inventory Advisor is able to track

inventory key metrics looking at actual quantities versus goals for things like order fill rates, "dead" inventory, and other important measurements. This vastly simplifies the inventory management process so that beverage alcohol distributors and suppliers can ensure they have the inventories needed to keep up with changes in consumer preferences to maximize profits. This screenshot shows an example of Inventory Advisor in action, with several key performance indicators combined into one easy-to-read dashboard.



How You Can Incorporate Real-Time Data into Your Dashboards

George Dealy

VP, Healthcare Solutions
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In order to make more informed decisions, you need data that is refreshed on a timely enough basis to support those decisions. In many use cases, such as those in the supply chain and healthcare industries, this data must be real-time—or very close to it.

So why might you need real-time data? And how you can integrate it into your Diver dashboards? We will examine those topics in this article.

Real-time data: On demand to support important decisions

There are several instances in which you will want data refreshed on an “on demand” basis. For example, in the supply chain industry, you might need a very up-to-date view of inventory in order to make important decisions such as ‘can I make a commitment to deliver an order in a particular time period?’ This requires real-time data since the state of inventory is constantly changing with new replenishments, depletions, and new orders.

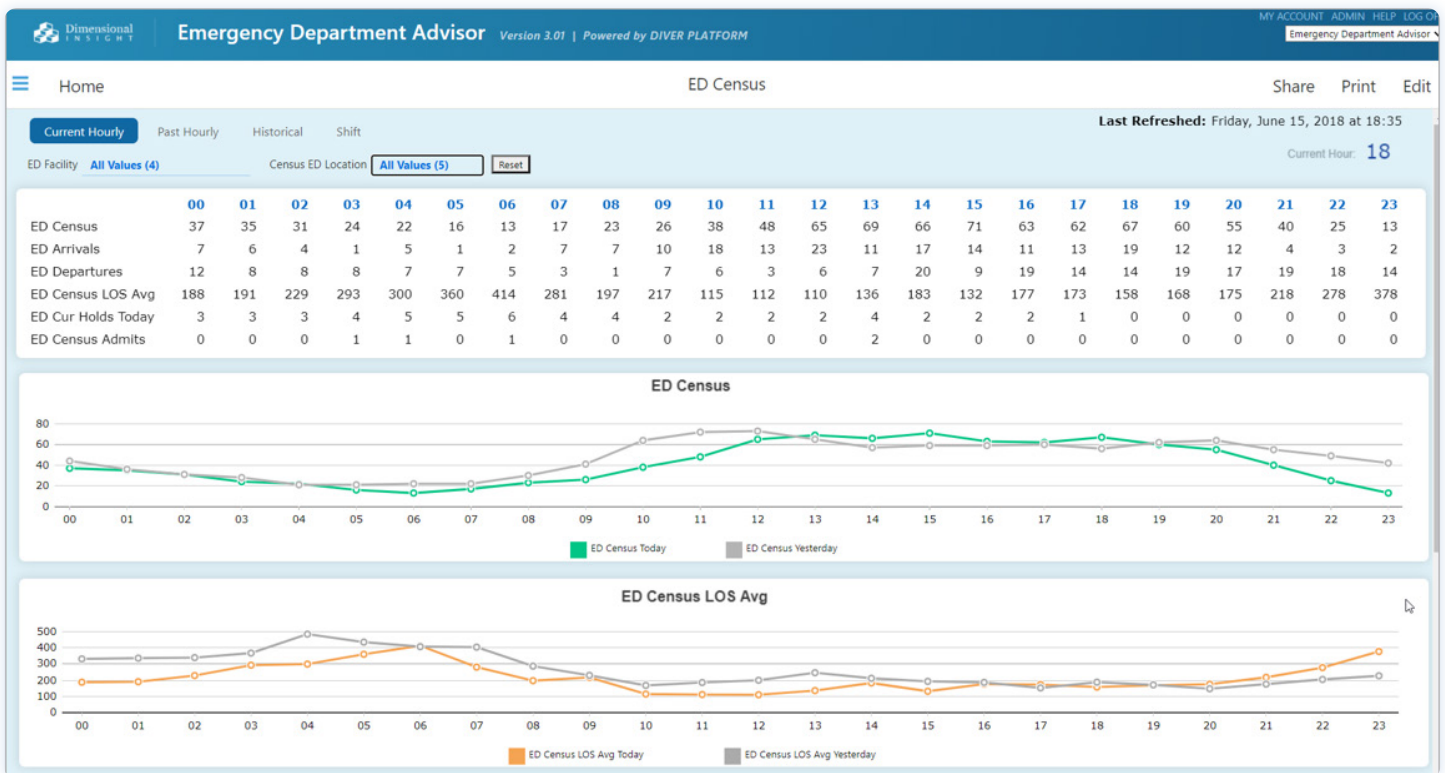
In the healthcare industry, patients are constantly arriving to and departing from the hospital. Then there are all kinds of activities within the hospital that are important to understand and stay on top of, or instance, when patients are admitted from the emergency department and when they arrive on inpatient units. To support this, we want to constantly refresh the state of that information so we can make the most informed decisions around how to care for patients from an operational perspective.



Representing real-time data on your dashboard

We will use a healthcare example to show how you can incorporate real-time data into your dashboards. In our example on the next page, we have a dashboard that shows information about a hospital's census: the number of patients who are currently in the emergency department, and various other numbers that reflect the state of operations, including how long patients have been in the hospital, on average, and how long it takes for a patient to depart once they've arrived. There's also data such as how long a patient has been boarded, which means they are waiting for a hospital bed.





This is an ideal use case for real-time data for a couple of reasons. First, there are patient implications to having a patient wait for a bed, so we want to understand the “current state” of the hospital to minimize that number. Second, we

might also want to understand other information about our patients, such as who has been in the emergency department the longest. Because this data gets stale very quickly, we will want to make sure it is updated on a frequent basis.

Refreshing information in Diver Platform

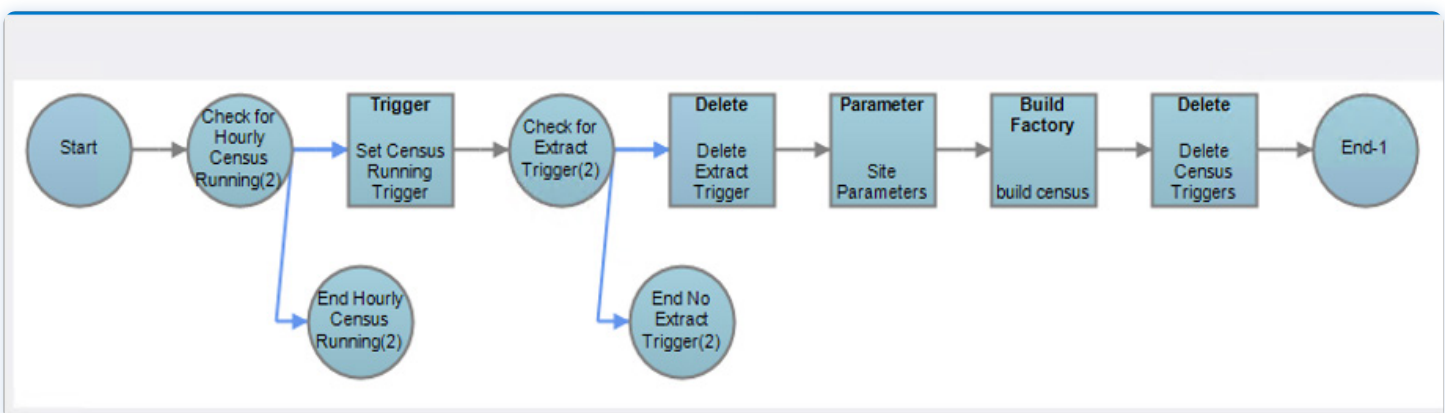
If you’d like to use real-time data in Diver Platform, there are a few different use cases to consider:

1. You might want to refresh a small amount of information that you need right away. To do this, you could make a SQL call or some other type of API call to a remote system or data source to refresh the information.
2. Other times, you might want to refresh the state of an entire data set, because of the specific business logic and the interdependence of the data across multiple data sets.

3. You might also want to update the information based on an event or the arrival of new information.

Let’s examine how this would be implemented in Diver Platform. Below is a DI-Production script that implements a refresh process for census information within our Emergency Department Advisor application.

We have condensed some of the operations that take place across multiple processes into fewer processes to make this a little easier to explain.



Here's the process step-by-step:

The process is scheduled, so it's most often just waiting on a timer or "sleeping". Here's what happens when it "wakes up" on some defined frequency:

Step 1: Check to make sure the previous process isn't still running. If it is, go back into a sleep state and wait for the next opportunity to run.

Step 2: Set a trigger to indicate that the current instance of the process is running. This will prevent it from overlapping with a subsequent instance of the process.

Step 3: Check for the availability of a new update or extract. If none is available, stop. Even though this is scheduled, it is similar to an event-driven model where

if we don't know when new information is coming in, we keep checking (or "polling"). If something is available, we process it. If not, we go back to sleep.

Step 4: Once the new data has been successfully ingested, we delete the trigger set in Step 2. Then we can initiate any additional processing, such as refreshing the measures factory. When these operations are complete, the process ends and we go back into our sleep state.

Now you have newly updated data and the opportunity to look at the most current information on your dashboard. You can interrogate the numbers, see the underlying detail, and most importantly use your insights to make the most informed decision based on current data.



This topic was recently examined in one of our Knowledge Forum episodes. Please visit the [Knowledge Forum page](#) on our website to access all past episodes to enrich your understanding of Diver Platform.



How to Reach New Customers in 2021



by **Parker Jones,**
Public Relations Specialist

As we all know, the year 2020 brought large-scale and completely unpredictable changes to nearly every business sector. COVID-19 transformed the way that nearly everything is done, and its effects are certain to have ripples that affect things in the year 2021 and beyond.

But even with the disease still at large, the economy is showing signs of recovery. With any luck, the landscape of industry will look very different next year. Still, it doesn't hurt to look at some of the changes that happened this year when planning for the next. Here are some suggestions, supported by data, on how to reach new customers in 2021 and beyond.



So does that mean the sun is setting on advertisements as a whole? Fortunately (or unfortunately) not. As usual, advertisers have found new ways to get their message across. Targeted ads, once thought to be creepy or invasive, are becoming more commonplace and expected. This is a good way to stretch out a limited advertising budget, by narrowing your outreach to consumers who are likely to be interested in your product. Indirect advertising through sponsorships and product placement are also a good way to go, since they bypass people's accumulated resistance to advertisements and lead them to associate your product with a show or person that they already like.



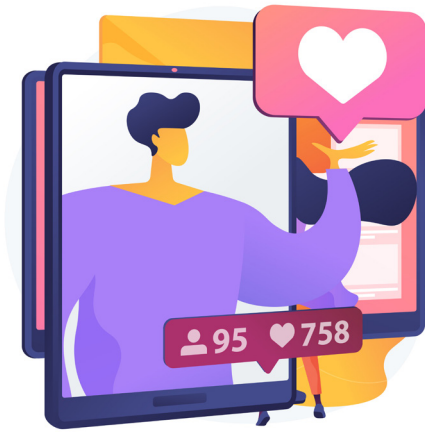
Get creative with your methods of advertising

Of course, the first thing that should come to mind when thinking about expanding your customer base should be advertising. It is how businesses accomplish that important first step of letting customers know that their product exists. While advertising has been fairly straightforward in the past, the new year demands new methods of spreading the word about products.

Now more than ever before, people are becoming resistant to traditional ads. Streaming services such as Netflix and Hulu prove that people are willing to pay significant amounts of money to avoid ads altogether. Online, ad-blocking browser extensions are practically a 'must', which means that banner ads are going mostly unseen (and let's be honest, no one was paying much attention to them in the first place).



Maintain a strong social media presence



People are using social media not only to keep in touch with the friends and family they care about, but the brands they care about as well. More and more people are following companies on Twitter, Facebook, and Instagram as a way to get news about their products as soon as it occurs. This is an excellent way to get customers excited about whatever new releases or events your company is working on. Even if there isn't any pressing news related to your brand, the occasional social media post is a great way to keep your customers engaged and interested.

While at first social media might only seem like a tool for communicating with your existing customer base, it is actually a very effective form of indirect marketing. People will see when their friends and followers interact with your brand's page, which will pique their curiosity. Seeing that others who they personally know and trust are using your product acts as the best kind of endorsement. And best of all, this kind of 'advertising' through social media is completely free.

E-commerce is more important than ever

The pandemic took a heavy toll on most brick-and-mortar stores. For both safety and convenience, more and more shoppers have been turning to the internet to purchase whatever they need. Even things like groceries are now being bought online. Although most physical stores have been allowed to re-open and customers are starting to return, it seems they may never be as essential as they were before.

No matter what your business is, having a route for customers to buy your product online will be vital for

the year 2021 and beyond. If your products are only sold in-store, then the number of customers that your business will be able to reach is heavily limited by geography. Moving at least some of your business to the internet makes your potential customer base nearly unlimited. Competing with giant online retailers like Amazon is a challenge, but by using data-driven strategies, you can determine exactly who your target customers are and how to get their attention.



Focus on short-term goals

The start of 2020 was full of optimism and best-laid plans for the new year, most of which had fallen apart by mid-April.

This is true for both individuals and businesses who expected it to be another year like any other. Soon the pandemic was accepted as a new part of life and more plans were made, only to be dashed once again by the ever-changing reopening schedules and general uncertainty of life in quarantine.



In short: this was not a good year for planning things far in advance. There is, of course, nothing wrong with looking toward the future, but when times are unpredictable it can be better to focus on what lies immediately ahead. Setting short-term goals is a good way to keep your business moving forward, while keeping your focus grounded in the present, and giving you the flexibility to adjust your course when needed. By incorporating the latest sales and consumer data into your dashboard, you can see current trends and flexibly adapt your plans as needed.



Analytics Provides the Road Map to the Supply Chain's Uncertain Future



by **John Sucich**,
Contributing Writer

For some companies, 2020 exposed gaps in their supply chain that proved devastating. For others, the events of this year provided them with a chance to take a step back and figure out what worked and what needed to be changed moving forward.

The supply chain has perhaps never been more transparent than it is right now. Customers who saw shortages of certain items in the spring have a better awareness of where products come from and how they reach their destinations. Here are some ways that companies are working to make sure their supply chain is scrutinized in a positive rather than a negative light.

Changes ahead

The only certainty to come out of the uncertainty surrounding the supply chain in the first half of 2020 is that there are changes coming. Some organizations already learned hard lessons about weak links in their supply chains from natural disasters such as hurricanes or tsunamis, and they were in a better position to adjust quickly when the pandemic hit. For others, the pandemic forced them to react, in some cases too late to make a difference.

Organizations learned that the most efficient way to do business might not be the way that's best suited to handle a disruption. Industry experts predict a move

away from "just-in-time" supply chains in favor of storing surplus product. This also might mean less reliance on manufacturing far from home as businesses opt to keep all



aspects of their operations closer to home. These could be more expensive options, though, between manufacturing expenses and the cost of using warehouses. In order to figure out where they can save money and work more efficiently, organizations are turning to solutions using technology.





Digital twins

Supply chain mapping is essential to companies that have many moving parts and locations that are spread out. Without a reliable idea of what is happening every step along the line, it can be difficult to figure out where a problem is when something goes wrong.

Mapping is also an important part of being able to create a 'digital twin,' which can help a company figure out where its opportunities for improvement lie. Digital twin technology allows for companies to not only to look at historical information to conduct predictive analytics and identify potential problems, but it can also use that information to perform prescriptive analytics, where they can come up with solutions to those potential issues...or avoid the issues in the first place.

Organizations can use the information they gather to figure out where they are flexible and able to diversify either their resources or their distribution. The more agile a company can be, the better its chances of being able to capitalize on opportunities, as well as survive possible disruptions.

Real time visibility

Knowing the process is one thing, seeing it carried out is another. Many companies are investing in technology that gives them updates in real time of the progress of a product as it moves through the supply chain. If a company is spread out across the globe, real time alerts from an unmanned facility can let a company know of a problem when it happens rather than waiting until a shipment fails to arrive.

Transportation companies are using technology that offers updates in real time as well. In addition to offering the company information about the status of a shipment as it happens, it can help the organization keep track of other potential expenses such as the maintenance schedule for its vehicles, or scheduling for its employees.

While the pandemic has wreaked havoc on many aspects of industries reliant on the supply chain, many organizations have tried to take advantage of the opportunities presented by the disruption. In re-thinking their approach to the supply chain, organizations have used the analytics they have gathered to look at where they can be more environmentally friendly, for example. Other technology solutions could help companies that aren't able to fully shift from the just-in-time model. In some cases, the World Economic Forum has encouraged the use of 3D technology to quickly create products that might have fallen into a crack in the supply chain.

Investing in supply chain analytics is an investment many organizations put off because of its potentially high cost. What those organizations have found, though, is that being unable to appropriately prepare for all scenarios is even more costly. Finding the right analytics solution for your supply chain needs is a critical part of preparing for the supply chain of the future.



St. Jude Walk/Run Boston a Success in “Virtual” Fundraising



ST. JUDE WALK/RUN

BOSTON



TODAY | September

Contributions are still being accepted
last minute
Support Dimensional Insight's team



When Dimensional Insight signed up as registration sponsor for this year's St. Jude Walk/Run Boston, it was pre-pandemic and we were expecting all systems go as usual with a celebration of thousands of walkers and runners on Boston Common on September 26th.

Now, as we all know, that was not meant to be. This was an especially difficult blow to [St. Jude Children's Research Hospital](#), which relies on donor contributions to fund 100% of the cost of treatment, travel, and housing for its thousands of patients each year. The St. Jude Walk/Run Boston is one of more than 60 walk/runs the organization hosts in September each year and provides millions of dollars to the hospital.

St. Jude didn't let the pandemic deter it from its mission, though. With the help of its volunteers, the St. Jude Walk/Run Boston team reimagined this year's event to go fully virtual. Participants were able to fundraise from a St. Jude app, and they could log miles walked around their neighborhood on Strava, so other walkers and runners could cheer them on. Most importantly, the Boston event was able to raise more than \$500,000 for St. Jude, which was far more money than organizers initially thought they could raise in a challenging fundraising year.

Dimensional Insight is proud to be the registration sponsor of St. Jude's Boston event and to continue to support this organization whose values so closely align with ours.



Customer News

KONZA Receives ONC Grant

Dimensional Insight would like to congratulate our customer KONZA on its two-year federal grant from the Office of the National Coordinator for Health Information Technology (ONC). KONZA will use funding from the ONC grant to accelerate innovative uses of Health Information Exchange (HIE) data to support healthcare

providers and public health agencies in the prevention of, response to, and recovery from pandemics that include COVID-19. Dimensional Insight plays an important role in this project.

This award is part of ONC's Strengthening the Technical Advance & Readiness of Public Health via Health Information Exchange Program



(STAR HIE Program), which is funded under the Coronavirus Aid, Relief, and Economic Security Act (CARES Act). It is designed to support public health agencies in their efforts to respond to emergencies including disasters and pandemics such as COVID-19.

New customers

We would like to welcome the following new customers to the Dimensional Insight family.



Avita Health Systems will leverage Diver Platform for richer insight and transparency into its acute patient data.



Children's National has selected Dimensional Insight's Diver Platform to provide advanced analytics and reporting within the Division of Pharmacy Services.



Wilson Daniels is using Dimensional Insight's Diver Platform to report and analyze their national business across multiple data sources to take action based on key performance indicators.



Thank you to Diagnostic Med for the strong partnership and shared commitment to meeting the needs of Children's National Hospital.

Population Health and Data Reporting Strategies in the Era of Covid-19



MASSACHUSETTS
Health & Hospital
ASSOCIATION

Population Health and Data Reporting Strategies in the Era of COVID-19:

Roundtable Discussion Panel

Moderated by Jeff Becker, Senior Healthcare Analyst, Forrester

In the wake of Covid-19, Massachusetts hospital reporting tactics underwent a massive transformation as health systems raced to move from retrospective to real time reporting of key metrics like bed availability, PPE burn rate, and inventory of nasal swabs, reagents, ventilators, and medications. These insights

were critical to public health administrators working to coordinate a statewide response to the pandemic. As case counts surge—it is critical that hospital and public health leaders consider additional reporting strategies that will better prepare the healthcare system.

This 1-hour panel discussion convened by the Massachusetts Health & Hospital Association and Dimensional Insight featured local healthcare leaders to discuss:

- Steps taken to identify and close health data reporting gaps during the first phase of the pandemic.
- Remaining data deficits faced by MHA and hospital executives
- Strategies for creating more granular visibility into end-to-end patient flow, including identification of new key metrics from ambulatory, acute, and post-acute care settings.
- Opportunities for, and sources of, predictive analytics available to support more efficient inventory management and care coordination.

Panelists:

- **Elizabeth H. Johnson**, MD, MS, FACP, Chief Medical Officer, Beth Israel Lahey Health Primary Care
- **Peter F Dunn**, MD, Vice President, Procedural Services, Healthcare System Engineering, Capacity Management, Massachusetts General Hospital
- **Kyan Safavi**, MD, MBA, instructor, Harvard Medical School; David F. Torchiana Fellow in Healthcare Policy and Management; faculty member of the Department of Anesthesia, Critical Care and Pain Medicine at Massachusetts General Hospital.
- **Anu Puri**, Executive Director, Chief Data Officer, Massachusetts Health & Hospital Association
- **Thomas Scornavacca**, DO, Chief Medical Officer, Population Health, Medical Director, Employee Health Plan, UMass Memorial Health Care—Office of Clinical Integration

Moderated by Jeff Becker, Senior Healthcare Analyst, Forrester

Watch Webinar

Using Data to Inform the First-in-the-Nation Response to COVID-19



by **Kathy Sucich**,
Vice President of Marketing

EvergreenHealth is based in Kirkland, Wash., 15 miles northeast of Seattle. The health system has two hospitals—one in Kirkland and one in Monroe—as well as several primary care clinics, specialty care clinics, urgent care centers, and a freestanding emergency department.

EvergreenHealth has been a Dimensional Insight customer since 2011 and the organization uses Diver Platform to deliver analytics to users across the health system in order to make better decisions and improve outcomes.

Key takeaways

- EvergreenHealth was the first hospital in the U.S. to be severely impacted by the COVID-19 pandemic, and had to navigate the crisis with no precedent.
- The organization knew at the outset that data would be critical to its response to the pandemic.
- Because of the flexibility and ease of use of Diver Platform, EvergreenHealth was able to get a dashboard with key metrics available to executives in just one day.

The challenge

It's never easy to be the first to deal with a crisis when you are not only in the public eye, but there is also no precedent for how to manage such a situation. But that is exactly the situation EvergreenHealth found itself in when COVID-19 threw the hospital into the spotlight in February 2020. The suburban Seattle hospital was the first in the nation to be severely impacted by the pandemic, with several sick patients coming in from the nearby Life Care Center nursing home, and a number succumbing to the disease.

While there was no playbook available on how to manage the COVID-19 pandemic, Jessica Foy, RN, BSN, director of clinical informatics and analytics at EvergreenHealth, knew right away that data would be critical to the hospital's response to COVID-19 and her team went into action.

Organization: EvergreenHealth

Industry: Healthcare

Location: Kirkland, Wash.

Revenue: \$1.98 billion

Beds: 318

EHR: Cerner

Employees: 3,000

Customer since: 2011

Website: www.evergreenhealth.com

Solution: Diver Platform®

The results

Once COVID-19 impacted EvergreenHealth, Foy's team quickly got to work on the dashboards and working with different teams within the hospital to understand their requirements. The ease of use and flexibility afforded by Diver Platform made Foy's job much easier.

The first group that the data team helped out was the lab. It had been using a manual process to view and report on test results, but switched to visualizing them via Diver Platform dashboards. In addition, EvergreenHealth had an Incident Command Center that wanted to view summary-level data critical to understanding the impact of the virus on the hospital.



"Within a day we were able to get the basics up to help them run Incident Command," says Foy. "From there, we have been fine-tuning the dashboard to make sure it is displaying the right information. There are always new situations coming up and new requests to add additional information. We have been able to easily specialize different views depending on what's needed."

With the new dashboards, EvergreenHealth's leadership was able to understand the situation in the hospital in real-time and make better decisions as a result. In addition, the hospital's communications team had access to the numbers and could much more quickly and accurately convey that information publicly, which was critical since the hospital was in the national spotlight.

EvergreenHealth is also able to easily modify the dashboards and provide more information as it is needed. Foy says the team is adding more clinical and social determinants data to the dashboards, including ventilator settings, co-morbidities, lab results, medications, age groups, and race/ethnicity. This will help clinicians better understand the data surrounding the patient and how that can better contribute to care.

The goal

EvergreenHealth's data team needed to anticipate what executives needed and deliver a dashboard that would be used by them and clinical leaders to make critical decisions. The dashboard had to provide up-to-date data on key metrics including:

- Number of COVID-19 tests completed
- Number of positive test results
- Location in hospital of COVID-19 inpatients
- Location of COVID-19 positive tests in the community

Lessons learned

While EvergreenHealth didn't have other hospitals it could model its response after, Foy hopes that her institution's experience can help others. She says it's important for a hospital's data experts to work with the people who are going to be utilizing the dashboard on a daily basis to understand what numbers they need on the dashboard and how they want those numbers displayed.

She also says a really strong partnership with the hospital's lab team is important, because they are the people who really understand what orders are present, how the results work, and what the right way is to count that data.

In summary, analytics success for EvergreenHealth is built on the partnerships between data experts, clinical experts, and the executive team. When everyone understands the ultimate end goal, they can work together to put together the right pieces to get there.

