

COVID-19 Briefing Series Forecasting Peer Connect

As the world grapples with untold implications from the COVID-19 pandemic, Trinity will be highlighting specific issues faced by our customers in the life sciences industry. In this briefing, we explore some of the immediate issues presented to forecasters and their teams and stakeholders.

Perspectives from 50+ Industry Forecasting Leaders
Highlights from Trinity's Recent Research Focused on BioPharma Forecasting

In a time of peak uncertainty, forecasters are being called on to answer some of the industry's toughest questions surrounding the impact of COVID-19. Trinity is bringing together the latest data on challenges forecasters have been experiencing over the past few weeks. This research activity is a joint project of Trinity's Forecasting Center of Excellence and its benchmarking division, TGaS Advisors.

Background: Forty six industry forecasting leaders connected in two 1-hour sessions over the course of two days to discuss key forecasting challenges in the context of COVID-19. The sessions aimed to review data points from research briefings and recent benchmarking surveys of forecasters and to discuss key forecasting challenges including stakeholder asks, assumption and scenario evolution considerations, and their team's general preparedness to respond to their organization's needs. In addition, nine other participants from the TGaS benchmarking network filled out detailed questions about current forecasting practice during COVID-19 outbreak as part of a TGaS Advisors survey.

The following pages highlight discussion related to each of these key themes:

The demand for efficient and quality communication with forecasting stakeholders is fast and furious

A significant amount of uncertainty exists surrounding the magnitude and duration of the COVID-19 impact; much work remains to build appropriate scenarios

Functional changes in forecasting are necessary to account for key unknowns

Some COVID-19 impacts are already becoming clear:

- Many drug development programs will experience delays, altering timing and competitive dynamics
- Healthcare system dynamics are being and will be significantly impacted by COVID-19
- HCP, payer and patient behavior are being and will be altered by COVID-19



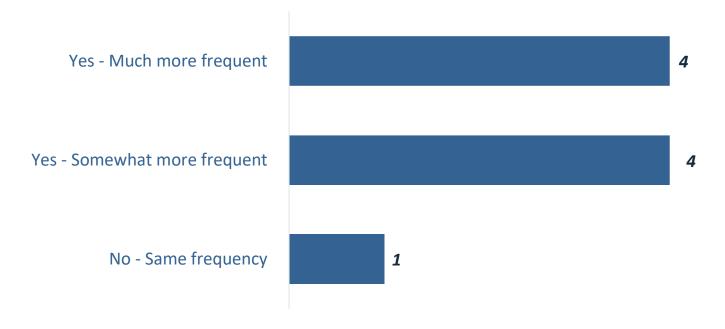
The demand for efficient and quality communication with forecasting stakeholders is fast and furious

Forecasters reported that they are now being asked to answer a wide variety of challenging questions from stakeholders. Thankfully, many of the forecasting leaders we spoke with have found that there is greater understanding of increased uncertainty in modeling. However, over time, the precision is expected to grow.

Stakeholders are more naturally able to accept that the purpose of good forecasting is to communicate risk and opportunities. Many of our participants noted the greater emphasis on communication of potential risks and sources of risk relating to forecasting.

Given the day-to-day changes all around, more frequent communication is expected from forecasters (see results from a brief survey below – 8 of 9 respondents have increased frequency of reporting or communication). Forecasters are now often being asked to report something each week. Forum participants also noted that more cross-functional stakeholders are engaging with the forecasts. In several cases, forecasters are part of a cross-functional task force to support leadership decision-making.

Do you expect a change in your U.S. forecasting communications frequency with your key stakeholders because of the COVID-19 outbreak? (n=9)





A significant amount of uncertainty exists surrounding the magnitude and duration of the COVID-19 impact

Many factors, including possible recurrence of COVID-19, will impact the magnitude and duration of impact. Forecasting leaders clearly reported difficulty identifying the ongoing impact and lingering effects of COVID-19 on their specific brands and healthcare systems as a whole.

Key "unknowns" mentioned include reduced access to HCPs, larger and longer time between refills, and the impact of telemedicine. Given the uncertainty, most forecasting leaders are focused on the short-term impacts of COVID-19. Many agreed that it was too early to be modeling long-term impacts with any granularity. However, modeling potential risks can be useful for executives, as long as very wide ranges are shown, to underscore the high level of uncertainty.

Functional changes in forecasting are necessary to account for key unknowns

Forecasters were almost unanimous, both in our brief survey (see below) and in the sessions, on expectations to track a greater number of scenarios with wider bounds in their models.



Do you expect to run more U.S. forecast scenarios because of the COVID-19 outbreak? (n=9)

Yes = 8

Have Not Determined = 1





Please describe the additional U.S. forecast scenarios (n=8)

Response

Ongoing changes to our variables will lead to multiple rounds of forecasting shifts

This is just the beginning of multiple iterations to come. We don't know when we will return to normal business activities, so we are looking at magnitude and length of COVID-19 impact as different scenarios

Will need to process best, worst and likely scenarios based on length of the pandemic and time to recovery

In discussion

Immediate Q2 impact, FY 2020 impact and potential long-term impact in our 5 Year Strategic Plan

Weekly updates

We will review weekly to see what other key factors have not been considered in the initial analysis and adjust the impact analysis as we learn more

We are running multiple projections based upon varying impact on new patient starts anticipated



Some Peer Connect participants are preparing to do market research. In the TGaS benchmarking survey, most participants were expecting to run new or additional market research in light of COVID-19.



Have you had internal conversation regarding how to proceed with primary market research engagements in the new COVID-19 environment? (n=10)



This market research and other methods will be focused on answering questions related to key forecasting assumptions, such as treatment rate, market share, gross to net, adherence, refill rates etc. Participants also mentioned the need to understand shifts in site of care.



Which of the following U.S. forecasting assumptions are being impacted by the COVID-19 outbreak? (Please select all that apply) (n=9)





Many forecasters are treating COVID-19 impacts as an "event" in their current modeling to help discuss the short-term impact of COVID-19. Some forecasters are building custom models to prepare for the availability of more inputs. Patient flow models were mentioned as a vital tool given the circumstances, as it will allow forecasters to model patients coming in and out of therapy (and back), which is likely to happen for more brands than usual over the coming year. In fact, Trinity has taken a unique approach of generating a patient flow model to answer questions on the impact of COVID-19. **See the case study below for a fuller description.**



Case Study: Converting Unit-Based Forecast to Patient-Flow Forecast to Model Impact of COVID-19



Client Situation

Large Pharmaceutical Company

- The client requested a unit based forecast model to assess the impact of COVID-19 on two of their antipsychotic products
- The client would like adjust various model assumptions to determine the overall effect COVID-19 has on their unit and net revenue forecasts



Trinity's Role

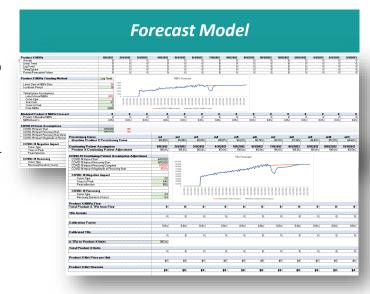
- Trinity generated a flexible and actualized Excelbased patient flow model which allows the user to forecast NBRxs, TRXs, units, and net revenue
- Trinity built model functionality which allows the client to depress NBRxs, TRxs, and patient persistency to assess how this affects net revenue during the COVID-19 impact period

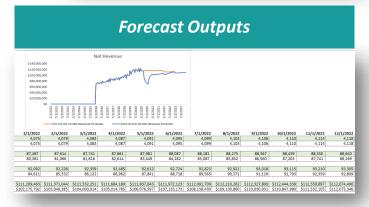


Project Outcomes

Unit and Net Revenue Forecast Outputs

 Trinity delivered a custom, user-friendly monthly model with the flexibility to run various COVID-19 forecast scenarios, allowing the client to compare the potential impacts against the baseline forecast







The Trinity Peer Connect webinar included productive discussions surrounding forecasting challenges, but key questions and considerations remain around the impact of COVID-19 on drug development, healthcare system dynamics and the behavior of healthcare providers, payers and patients. Continued discussion sessions and research will be critical to uncovering insights into the following considerations:

Drug development may experience delays due to COVID-19

- How will ongoing clinical trial activity be impacted?
- How will products with REMS programs that require routine lab work be affected?
 - Participants noted that some labs already have put restrictions in place

Healthcare system dynamics may be significantly impacted by COVID-19

- Will there be an uptake in telemedicine? What are the implications of a shift to telemedicine?
 - Participants noted anecdotal reports of HCPs signing up for telemedicine programs but have not yet seen any hard data on use of telemedicine
- How will **point of care** shift? How much of that shift will be permanent vs. temporary?
 - For example, special considerations are being taken for hospital injectables
- Forecasters are attempting to measure the impact of the delay or cancellation of elective treatments
- Scenarios are being developed to account for an overwhelmed hospital and healthcare system
- Supply chain stocking considerations are being taken at almost every step of the chain
- Forecasters are looking to other countries for analogs to COVID-19
 - However, participants agreed that few analogs are perfectly appropriate, particularly from past events

HCP, payer and patient behavior may be altered by COVID-19

- Tracking payer behavior will be critical to generate accurate forecasts (e.g. which payers will be waiving co-pays?)
- Many participants expect compliance and persistency shifts due to COVID-19
 - Survey results indicated that compliance may reduce as patients try to "stretch" prescriptions or avoid side effects that require healthcare utilization
 - However, some participants in the Peer Connect indicated that compliance may increase due to patients being at home and filling scripts for 9 days or more
 - Persistency could decline as a result of patients not willing or able to fill prescriptions
- Tracking HCP engagement with virtual communication tactics and office closures will allow insight into HCP and patient dynamics
- Changes to prescribing behavior must be taken into consideration in the future landscape

Conclusion and Summary:

With much uncertainty and many questions remaining on the impact of COVID-19, Trinity will continue to monitor developments as the situation is clearly changing quickly. For more information, please contact Trinity at info@trinitylifesciences.com.