
medid t
oins
DASSAULT SYSTEMES

Globally, from a TA perspective the recovery has been varied. As we pointed out in our last report, oncology has made a recovery in June to its pre-COVID baseline and in July improved 20% over 2019 baseline levels. CNS has also made a marked improvement in July, at -7% of its pre-COVID baseline compared to -44% in June. Overall, non-oncology TAs are at -21% of their pre-COVID 2019 baseline.

The differing impact on TAs and geographic regions, as well as the continued fluctuations, underscore the need to continue to track impact realt-time at a granular level, so that we can enable companies to make the best decisions on when and where to focus efforts, help them continue to run their trials and get treatments to patients.

Figure 1: Case [illegible] [illegible] [illegible]

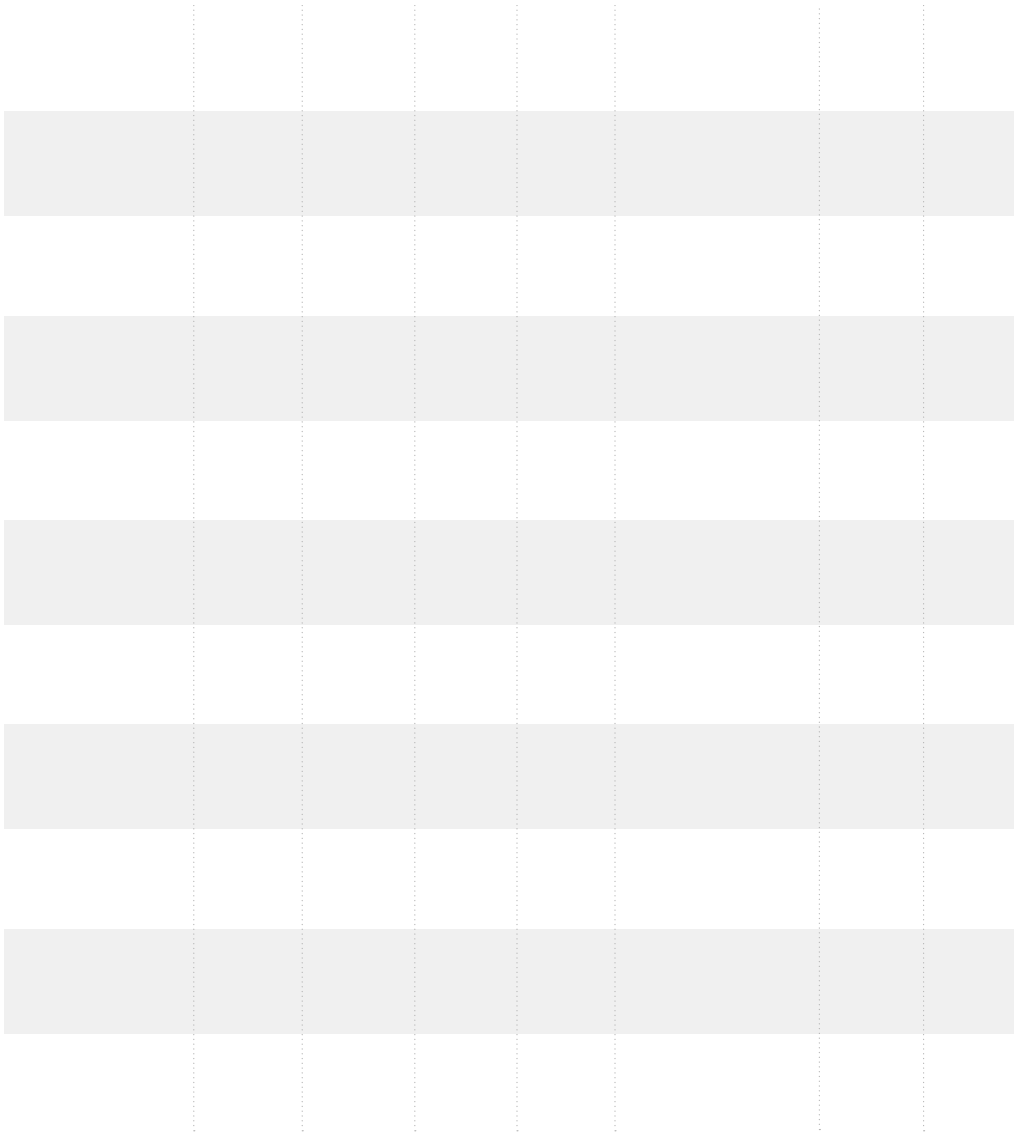
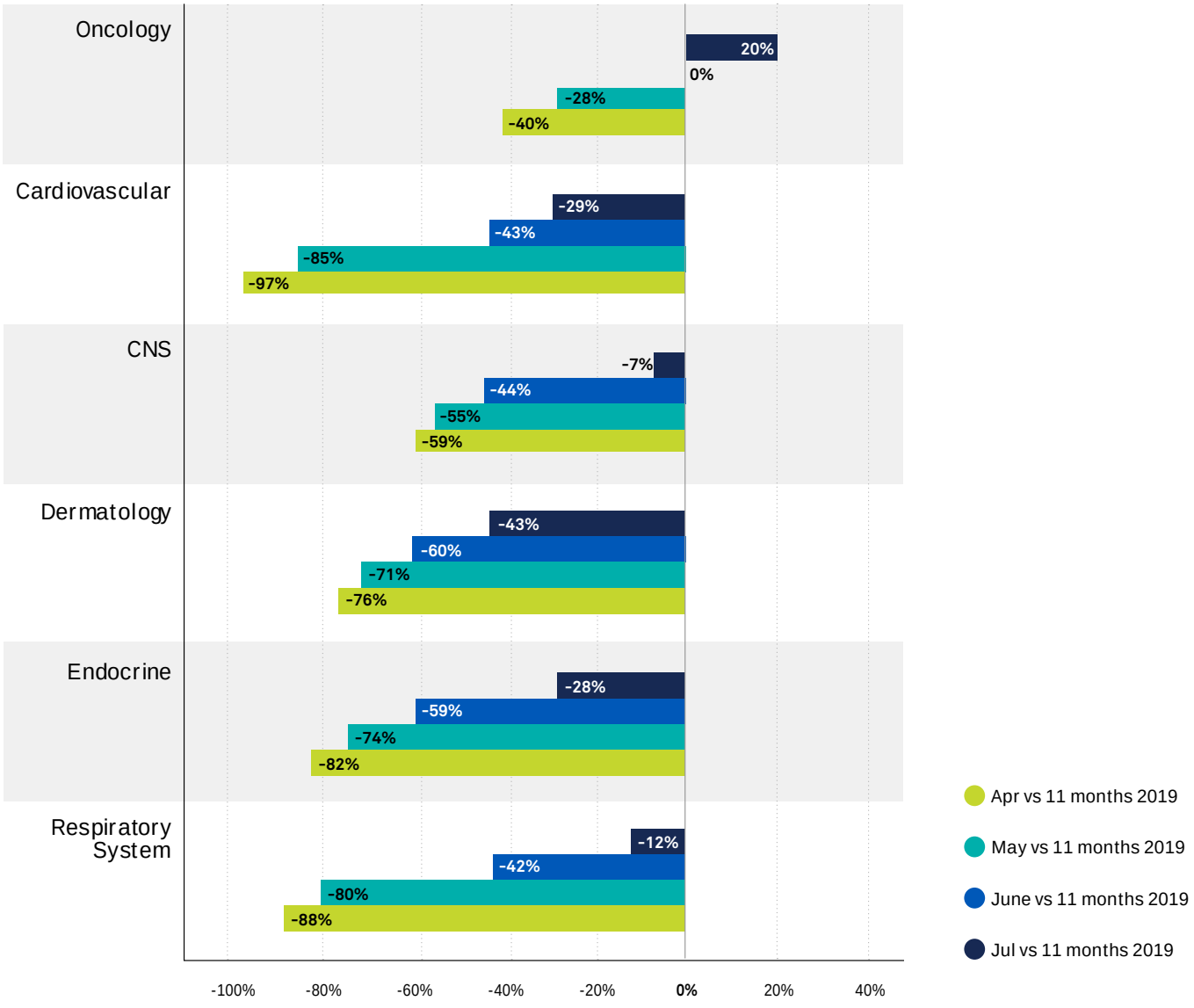


Fig e 2: C a e e a e e e d - e b TA



Regulatory Response

Over the past months multiple authorities, including those below, have issued emergency guidance on trial conduct amidst COVID-19. Technology enablement topics including those in Figure 3 and many other topics including protocol deviation management, investigational product handling, protocol amendments, ethics committee review, etc. are common areas of discussion by the authorities. As these are updated frequently and are not uniform in scope, duration, and approach, see the applicable guidance for speci□c expectations.

F e 3: Ke ec c add e ed b e a a e

A / L	M	eC e	Te e ed e / dece a a	D ec IP S e Pa e
E e EMA (v3 28Apr)	✓	✓	✓	✓
Denmark Jul 02: Sundhedsstyrelsen v 6.0)	✓		✓	✓
France ansm (08Aug)	✓		✓	✓
Germany _____				

Frequently discussed topics include telemedicine/decentralization (see FDA Question 20), consent and eConsent (See FDA FAQ 10 and 11), expectations on electronic records/ signatures rules (See FDA FAQ 24), and remote monitoring including remote source data veri□cation (rSDV) (See Question 14). Note that while the US FDA, UK MHRA, Australia DoH, Health Canada, and Singapore HSA suggest rSDV is possible, the EMA leaves it as an option in very limited circumstances (Section 11 and Annex) and some outright discourage it including Germany and France. Centralized monitoring activities are suggested by most regulators, however.

The regulatory appetite for making COVID □exibilities extend beyond the pandemic is uncertain but there is reason to believe change is possible. For instance, US FDA Commissioner Hahn's June 1 remarks "The COVID-19 Pandemic - Finding Solutions, Applying Lessons Learned" indicated a desire to make some of the changes, (i.e., accelerated receptiveness to trial decentralization, master protocols, real world evidence) endure beyond the pandemic. Additional information may be found in Medidata's regulatory blog.

Ongoing Impact to Medidata Customers, Patients and Trials

COVID-19 SITE SURVEY 1.0 - APRIL 2020

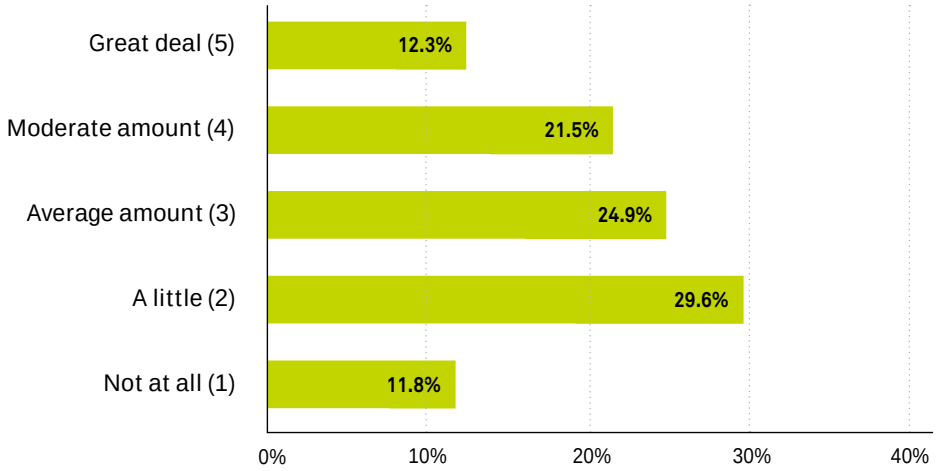
The impact of the pandemic on sites was well documented by a survey of over 1,000 clinical site personnel performed by Medidata in late April 2020. Not unexpectedly, the survey results clearly and dramatically show that most sites are feeling the negative impact of the pandemic on current and future trials, speci□cally around delays in patient enrollment and recruitment. They also are concerned about the impact of trial delays and cancellations on their □nancial well-being. Over two-thirds of respondents indicated that they have halted, or will soon halt, patient recruitment for ongoing trials, a third are halting randomization, and about half are now delaying or will be delaying their studies. Sites have shown □exibility and ingenuity in adopting new approaches. Over half of sites are switching site patient visits to virtual ones and/or are using telemedicine to interact with patients. The detailed results of the survey can be reviewed here.

COVID-19 SITE SURVEY 2.0 - AUGUST 2020

A follow up survey was sent to over 7,000 sites during the □rst week of August 2020. Preliminary results of the 734 respondents indicate that sites are coping better with the pandemic now than when we surveyed them in April. Slightly over half of the respondents were from the United States and the vast majority of respondents were study coordinators or investigators.

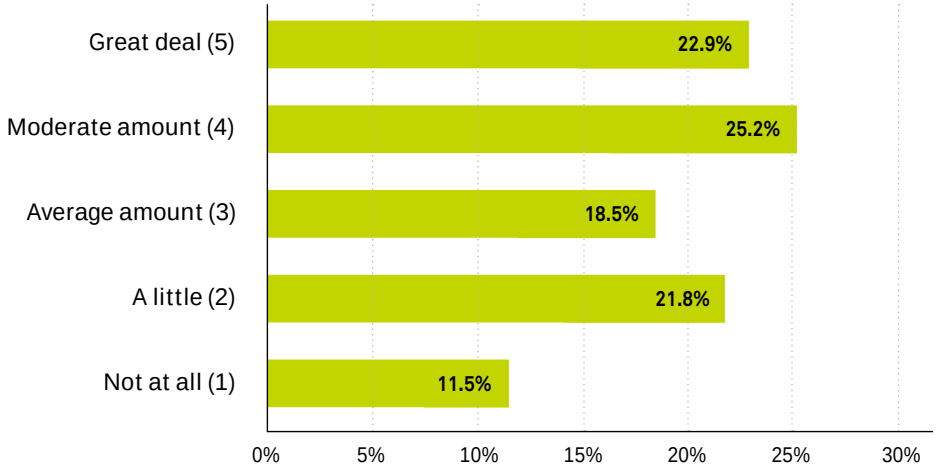
Medidata asked the sites again to weigh the impact of the COVID-19 pandemic on their ongoing trials with 5 being a great deal and1 being not at all. The weighted average of respondents was only 2.93 with 41.4% of respondents stating that COVID-19 now had little to no impact on their ongoing trials. See Figure 4.

F e 4: I ac f COVID-19



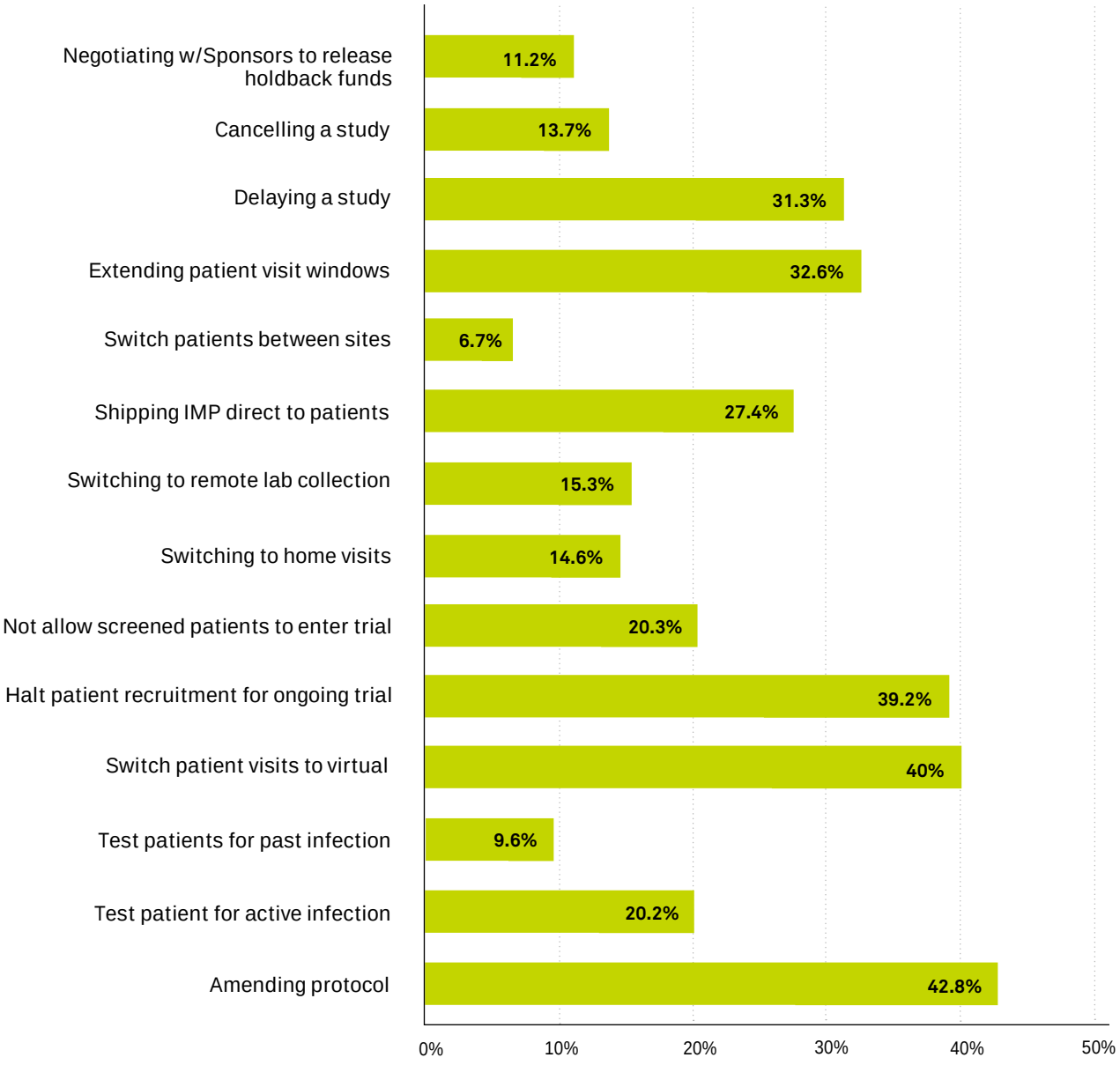
Again we asked sites to weigh the impact of COVID-19 on their ability to initiate new trials with 5 being a great deal and 1 being not at all. The weighted average of the responses was 3.26, higher than the impact for ongoing trials. Almost half of the respondents indicated that COVID-19 had signi□cantly impacted their ability to start new trials, while one-third of respondents indicated that the pandemic had little to no impact on their ability to initiate new clinical studies. See Figure 5.

F e 5: I ac f COVID-19 e



We also reasked the sites about how and when they would be responding to the impact of the pandemic on the trials. When looking at the results for activities that sites had already done, about 40% of respondents had implemented study protocol amendments, had halted recruitment for ongoing trials and 40% had switched patient visits to virtual. Of note, about one-third of respondents indicated that they had delayed a study and/or had extended patient visit windows. About one-fifth of sites test patients for active COVID infection but only about 10% test for past infection. See complete results in Figure 7.

Figure 7: Percentage of sites already responding to COVID-19



New and Adapted Medidata Solutions to Assist Sponsors/CROs and Patients in Mitigating the Impact of the COVID-19 Pandemic on their Clinical Trials

The following tables provide details about the Medidata's solutions available to assist with COVID-19-realted clinical trial challenges. Since some aspects of the four challenges are not mutually exclusive, some solutions may be applicable to more than one challenge.

CHALLENGE 1: UNDERSTANDING THE EVOLVING SITUATION

Ac Al l e e T a

CHALLENGE	SOLUTION
U de a d ec / e/ d ea e a ea ac ac e d ,a dde e a a ad ec e a .	**T a l ac A a c :** COVID-19 tracking and forecasting powered by 6,000 active and 20,000 overall industry trials **Rea -T e S a T ac :** inform critical decisions by monitoring the impact of COVID-19 on

CHALLENGE 2: RECONSIDERING TRIAL DESIGN TO ENABLE DATA CAPTURE

Ra e eCOA

CHALLENGE	SOLUTION
P de a f ed ed f be e e ed b a e e d e .	Medidata's eCOA solution can be used to convert site-based data forms to remote data forms. If study modi□cations are made to accommodate this approach, patients can download the patient cloud app from the app store and provide urgent data forms as needed for missed visits. Any Rave EDC study using eCOA can have additional data forms pulled into the eCOA app and made available to patients. Any Rave EDC studies not using eCOA can add eCOA to the project and immediately begin converting forms to remote-enabled forms. Learn more about Rave eCOA here.

Med da a/

CHALLENGE	SOLUTION
Q a f e ac f a a c a COVID-19 e ea c d e .	IIn late April, Medidata and 3DS launched the COVID-19 Symptom Tracker as part of myMedidata (the Medidata Patient Portal), which will be used as a remote patient symptom tracker. This Tracker will function as a registry (in an MVP version) and will allow sites to remotely monitor and report symptoms of patients in their trials. Learn more about myMedidata and the COVID-19 Symptom Tracker here.

Ac Al S e c C Da aba e / T a De

CHALLENGE	SOLUTION
I de a d f afe e e e a ea e (e. ., c e) a a e de e f c - d a e.	Support research by providing aggregated data, e.g., Synthetic Control Database (SCD) to support understanding of expected and unexpected AEs for products being studied for COVID-19. These drugs are already marketed with a mature safety pro□le, but an SCD might improve the analyses above what published literature can provide. In addition, historical trial data can be compared against real-world data from claims or EMRs to provide con□dence and validation in trial design, better understand inclusivity of patients populations to better re□ect real world clinical practice, and potentially decrease sample size requirements for event-driven trials.
C - d e e ba e c e .	Leveraging historical clinical trial data to augment or replace control arms of trials that are in danger of high dropout or unful□lled enrollment due to COVID-19; reduce scienti□c uncertainty to advance to the next phase, reduce patient enrollment burden or increase statistical power.

Ra e C de

CHALLENGE	SOLUTION
T e c a a de c a ed a e eed f a a ed, a da d ed a ac c d a d e e fec a a ba ea e.	MedDRA Maintenance and Support Services Organization (MSSO) has released an updated version of MedDRA 23.0 with new COVID-19 terms and revisions. The updated MedDRA dictionary will allow organizations to capture, share and analyze scienti□c and medical information for pre-marketing and post-marketing data. Approximately 70 new COVID-19 related terms and revisions were implemented to group relevant COVID-19 infection terms in System Organ Class Infections (SOC). The updated MedDRA 23.0 dictionary is now available to clients using Rave Coder. More information about Rave Coder is here.

Ra e EDC a d Ra e RTSM

CHALLENGE	SOLUTION
Pa e ca ' e e e f d e a - e a e e b d a e f d e a .	D ec Pa e S Ma a e e Rave RTSM can now be con gured to send investigative product directly from the Depot to the patient's home. Upon registering a dispensing visit, Rave RTSM sends a shipment request noti cation to the depot including the SubjectID, and the depot can send the dispensed items straight to the subject's home or of ce. Learn more about Direct to Patient Supply Management here.
Pa e ca ' e e ef d e a b e e e .	Sites can process dispensation through Rave EDC as a visit and send the drug to the subject via a courier. Rave EDC could be updated to store the courier tracking number (collected as text data). Adding a new eld would require a migration in Rave EDC.
S e a e c ed a d a e eed ad e a .	Subjects may be transferred to sites that are open, or if site users are able to work remotely they can register a visit in Rave EDC that is con gured in RTSM to be Direct to Patient and have the dispensed items shipped from the Depot to the patient's home.
S b ec a e ab e a e a e e b f e a e e ab e.	Multiple dispensing visits can be made in Rave EDC at the same time, providing additional IMP for the subject. If this will become standard, DND dates should be updated so that the drug does not expire over the longer time period between dispensations. Our Services team can provide speci c steps that can be utilized to ensure off-cycle/unscheduled visits can be conducted without issue.
S c a c ce a e e a a e eb ffe c a d e (de e d f e c ce a a ab fd a a ab f e).	Supply plans can be instant 360.373SS U00 8 54.2543 /Lan7by can rg o /Ls (o ha)7 mee the same heduls(f shipr

CHALLENGE 4: ACCELERATING STUDY START-UP

Ra e G a Ma a e COVID IIS

CHALLENGE	SOLUTION
B d e f e e a - a ed d e (IIS) d fe e f a a a . W b d e d e b e e (a d e) e e a e f e de a e a a f e a b d e de a a e eeded.	Medidata has developed a COVID-19 vaccination study budgeting solution, Rave Grants Manager COVID IIS, to help investigator- initiated studies develop detailed trial budgets for patient, procedure and site costs. Leveraging Medidata's deep fair market value data and our clinical trial budgeting expertise, Sponsors can streamline the budget build process for their sites. Learn more about Rave Grants Manager COVID IIS here.
W COVID-19 e a - a ed d e , e e a e b d e e a de a d e e a be ee e e' a d ' d d a c be c a . T e e a eed f a de e de d be c a .	Ra e G a Ma a e COVID IIS enables Sponsors to negotiate investigator-initiated studies quickly using a single, reliable fair market value data source as well as a complexity analyzer. The complexity analyzer calculates benchmarks with industry averages, along with a site's work effort required by the procedures, visits and protocol. This helps sponsors determine fair site payments based on relative study complexity.
C a ce a d a d . Lac f e a COVID-19 e a ed da a e ab FMV e e S a e e a de a e .	Medidata's deep fair market value data provides auditable defensible rates. An audit trail of negotiation activity is retained for reference and compliance with fair market value regulations.

Ra e EDC a d Ra e RTSM

CHALLENGE	SOLUTION
COVID-19 d e eed be a d c .	Rave RTSM with basic EDC forms for COVID-19 studies can be up and running in two weeks for a randomization only study and three weeks for Randomization and basic trial supply management. Medidata's robust capabilities and interoperability with Rave EDC can support the demand to deliver faster start-up timelines between study kick-off to database go-live and has supported multiple go-lives recently within 3 weeks or less.

About Medidata

Medidata is leading the digital transformation of life sciences, creating hope for millions of patients. Medidata helps generate the evidence and insights to help pharmaceutical, biotech, medical device and diagnostics companies, and academic researchers accelerate value, minimize risk, and optimize outcomes. More than one million registered users across 1,700 customers and partners access the world's most-used platform for clinical development, commercial, and real-world data. Medidata, a Dassault Systèmes company (Euronext Paris: #13065, DSY.PA), is headquartered in New York City and has offices around the world to meet the needs of its customers. Discover more at . ed da a.c and follow us @ ed da a, The Operating System for Life Sciences™.