Webinar summary:
IV Automation in the time of COVID-19: a
European pharmacy perspective



BD Cato™: a key resource during COVID-19.

During the first webinar in our Oncology Live series, three leading experts from the field of hospital pharmacies highlighted the vital role that BD $Cato^{TM}$ played in extending services that pharmacies could deliver during the pandemic. With the help of BD $Cato^{TM}$ these pharmacies really made a difference.



Each day the pharmacy produced

400 x 50ml vials

for syringe drivers for 50 ICU patients

Anna de Goede, The Radboud University Medical Center, The Netherlands



During COVID-19, and with vital support from the BD CatoTM team, we established a

CIVAS

(Centralised Intravenous Additive Service) for the ICU

Professor Inderjit Singh, The University Hospital Birmingham NHS Foundation Trust, UK



Pre-COVID-19, BD Cato™ helps the team generate

60 preparations

per day, in just 5 hours of operation. Up to 23 different products are prepared in house, including 30% of the cytotoxic medications.



During COVID-19, the pharmacy department produced

10,000 x 50ml vials

of midazolam 2mg/ml in a single week.

Professor Irene Kräemer, The University Medical Center Johannes Gutenberg, Germany



BD CatoTM is a medication management system that offers E-prescribing, aseptic compounding*, and barcoded medication administration. It interconnects various departments throughout a healthcare facility, creating well integrated, workflow management. In addition, the BD CatoTM team provides on-site support for workflow assessments, project management and personnel training.

Our recent systematic literature review on automated technology in chemotherapy compounding found that:

 Automated chemotherapy compounding improves accuracy and reduces dose errors when compared to manual compounding

- BD CatoTM is the only intervention that manages the entire workflow for oncology therapy, with advantages over robotics in terms of efficiency and cost
- Automated compounding and workflow technologies complement, rather than compete with one another

In this Webinar, our three presenters describe how they used BD Cato™ in their pharmacies during the COVID-19 pandemic.

The Radboud University Medical Center, The Netherlands

Anna de Goede, Hospital Pharmacist

In addition to preparing medicines for administration in both in and out-patient settings, the Pharmacy's compounding unit has production/manufacturing capabilities. BD $Cato^{TM}$ is an integral part of the pharmacy workflow. Once a medication order is manually entered into the system, BD $Cato^{TM}$ is used in the preparation of all drugs and to assist compounding.

With the onset of COVID-19, it was vital to maximise nursing bedside time. So, the pharmacy took over the preparation of several essential ICU drugs, a task usually done by nurses on the ward, saving nurses' time and reducing the risk of medication error in a highly stressful environment. Also, in anticipation of drug shortages, the pharmacy team undertook batch preparations of essential drugs, such as propofol, drawing smaller doses from larger one litre bags.



"BD Cato™ is an integral part of our pharmacy workflow".
"During COVID, BD Cato™ helped us save nurses' time".



The University Hospital Birmingham NHS Foundation Trust, UK

Professor Inderjit Singh, Chief Pharmacist

The Pharmacy Department has been using BD CatoTM for many years. Just as in The Netherlands, COVID-19 impacted on the ICU, with many critical care patients requiring sedation and continuous infusions. In response, the pharmacy established a CIVAS (Centralised Intravenous Additive Service) for the ICU.

As BD Cato TM was already well integrated into the pharmacy workflow, only two aspects of the process required additional staff training:

- \bullet setting up stock solution and / or stock batch template on BD CatoTM
- transcribing onto BD CatoTM stock solution and / or stock batch template and generating a worksheet

The team was able to implement these changes with vital customer support from the BD Cato™ team.

With the system now in place, there is potential for additional functionality in BD Cato $^{\text{TM}}$ should there be a second COVID-19 wave, including gravimetric preparation, use of cameras for final check and QA release, and using the system to barcode scan at ward level.



"Our pharmacy department has been using BD Cato $^{\text{TM}}$ for many years".

"During COVID and with vital support from the BD Cato™ team, we established a CIVAS (Centralised Intravenous Additive Service) for the ICU".

The University Medical Center Johannes Gutenberg, Germany

Professor Irene Kräemer, Director of Pharmacy

The Pharmacy Department has been using BD Cato TM with the ApotecaChemo robot since 2016, permitting efficient prescribing and drug preparation. While COVID-19 increased the number of ICU patients and the demand for ICU drugs, the government also determined that there should be no cancellations of therapies for cancer patients.

So, the German team continued producing CMRs and other parenteral medications at their usual level, while expanding the production capabilities for other medicines to address specific shortages. Consequently, they instigated the manufacture of hand sanitiser as well as ICU medication, producing in just one week, 10,000 vials of midazolam 2mg/ml, 50ml. The pharmacy's capacity combined with the government's support, meant that they could supply medication to other inpatient and outpatient settings throughout the country. As BD CatoTM was already well integrated, there were no differences in software/paperwork with the new applications. Ultimately, shortages of vital medication were avoided with pharmacy-based production, while automation was key to increasing capacity and productivity.



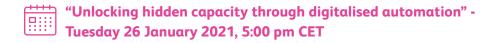
"The pharmacy department has been using BD Cato $^{\text{TM}}$ with the ApotecaChemo robot since 2016. This allows efficient prescribing and drug preparation".

"At the onset of COVID, we continued producing chemotherapy drugs and other parenteral medications at their usual level, while diversifying production of other medicines to mitigate shortages. As the BD Cato $^{\text{TM}}$ was already well integrated, there were no differences in software/paperwork with the new applications".

BD Oncology Webinar Series 2020-2021: What is it and why should you participate?

- Each month, you have the exciting opportunity to join oncology experts live for sessions during which they will share their expertise in, and experience of, using BD medical oncology solutions.
- Learn how BD makes a meaningful difference to medical care, supporting and advancing clinical practice.
- Discover how BD works with oncology leaders to meet challenges, innovate workflow and address pressing issues such as the response to COVID-19.
- Find out how by working in tangent with BD, these experts are changing the landscape of oncology and cancer care.

What is next on the programme?



Future webinars will cover the following topics: Tune into our upcoming Webinars. The topics we plan to cover include:

- The importance of choosing the right vascular access February 2021
- Hazardous drug contamination: assessing the risks and setting up a monitoring program February 2021
- Developments in barcoded medication administration March 2021

BD Oncology Live Webinar Series: hear from experts how BD oncology solutions are advancing the world of health.

BD - Europe, Terre Bonne Park – A4, Route de Crassier 17, 1262 Eysins, Switzerland





^{*} Compounded medications are prescription-based personalised doses, in which individual ingredients are mixed in the exact strength and dosage form required by a specific patient.