



Going to Great Lengths to Safely Treat COVID Patients

How TekniPlex Healthcare quadrupled its customer's IV tube capacity with the tightest of COVID-era turnarounds.



PROBLEM

For medical personnel, the impact of the protracted COVID-19 pandemic produced ripple effects in the workplace that were simply impossible to anticipate. The once-a-century contagion hospitalized millions, challenging the capacity limits of the global healthcare system and its supply chain. Due to COVID's atypically efficient transmission, the task of seamlessly treating patients while protecting healthcare personnel became one of the most pressing issues for medical facilities and the companies providing critical supplies.

One of these companies, a major U.S. medical technology manufacturer, found itself suddenly facing an unprecedented, immediate demand for tubing for intravenous (IV) infusion pumps. The rapid uptick in need exemplified the trickle-down trouble-shooting effect of the pandemic – small but stubborn issues stemming directly from the pandemic's disruption across the manufacturing sector.

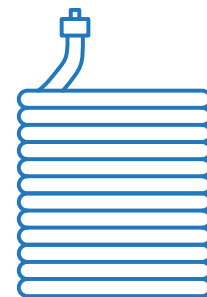
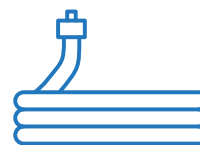
In normal hospital settings, six feet of tubing is sufficient for an IV pump stand – long enough for it to be positioned near the bed, while still allowing a patient to walk while connected to a drip.

But with COVID, six feet wasn't cutting it – not by a long shot. Given the virus' highly contagious nature, hospitals across the nation were forced to remove IV pumps from patients' bedsides, instead placing them just outside the room. In some cases, the tubing had to navigate through hastily constructed dividing walls. The obvious goal was to minimize risk of exposure for frontline doctors and nurses and enable them to monitor dosages and change IV bags from a safer distance.

TEKNIPLIX
HEALTHCARE
IV TUBING

**4X
LONGER**

STANDARD IV
TUBING



The TekniPlex Healthcare team developed and delivered IV tubing that was 4X the length and capacity of standard IV tubing



PROBLEM CONTINUED

Depending on the size of the room, this necessitated anywhere from 18-24 feet of tubing. Essentially overnight, the standard requirement had tripled or even quadrupled, while rapid turnaround times became a matter of life and death.

“Expanding our tube manufacturing capacity that dramatically – and that quickly – just wasn’t possible,” said an executive with the medical technology company producing the IV tubing. “Our infrastructure and human resources simply didn’t allow for it.”

For years, the company had manufactured its own tubing. However, its in-house operation could not handle the unexpected surge. The compound used to manufacture their tubes was supplied by TekniPlex Healthcare, a leading provider in the marketplace. Because that relationship had been a successful one, the immediate question arose... Could TekniPlex Healthcare pivot from being the compound supplier to becoming the company’s tubing manufacturer? And, could they do it in record time?

SOLUTION

To meet this urgent need and deliver the tubing with an incredibly tight turnaround, the TekniPlex Healthcare team had to move quickly. Fortunately, TekniPlex Healthcare’s vertical manufacturing integration of compounds and tubing – combined with its three manufacturing sites for both functions – allowed it to immediately begin coordinating supply lines and production capability across multiple plants.

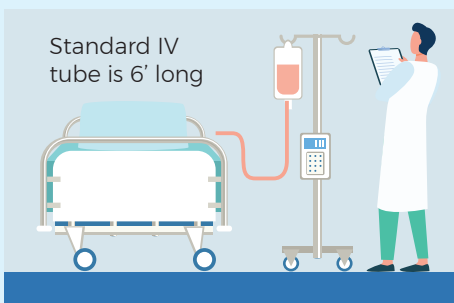
The initial planning conversation with the customer took place on a Monday, setting the wheels in motion. Because validated compounds were already at the TekniPlex Healthcare facility, production of the phthalate-free PVC tubing began within three days, and additional compound deliveries were immediately scheduled to meet the exponentially increased tubing need.

The turnaround time from initial discussion to first delivery – some two million feet of tubing – was 10 days. The medical technology company estimated it would have taken a new vendor up to 180 days to begin delivering a similar volume of product. That’s half a year neither the company nor the country had.

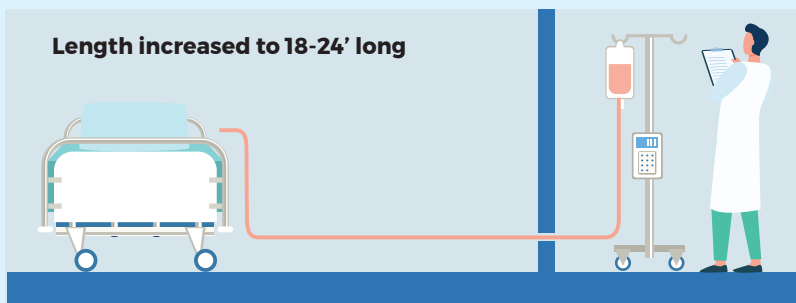
“Given both the unprecedented health crisis and our commitment to customer satisfaction, we were extremely grateful to have the capabilities in place to make this necessity a reality,” said Christopher Qualters, President of TekniPlex Healthcare. “Navigating this lengthy, lethal pandemic has meant urgent, mission-critical pivoting across the healthcare sector, and we’re proud and privileged to do our part.”

Production is currently ongoing at TekniPlex Healthcare’s facilities. Most critically, the medical technology company was able to meet demand even during the winter surge in COVID cases and hospitalizations, allowing severely ill patients to be treated without heightened risk to doctors, nurses and other frontline professionals.

To protect front-line medical personnel, hospitals needed IV tubes that were much longer. In fact, **four times as long** – and as **quickly as humanly possible**.



Standard length IV tubing limits proximity of IV pump stand to inside the patient's room.

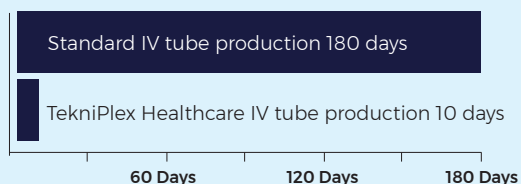


With increased length IV tubing, the IV pump stand can be placed outside the patient's room, passing through wall, limiting the risk of exposure for frontline doctors and nurses.

SOLUTION - CONTINUED

The solution even created a ripple effect all its own – this time, a positive one. Placing IV pumps outside hospital rooms led to an unforeseen benefit: a significant reduction in the frequency healthcare providers needed to change into fresh personal protective equipment. Given the scarcity of PPE equipment at the time, reducing unnecessary waste was vital. By successfully addressing one critical shortage during the pandemic, TekniPlex Healthcare had assisted with another.

“Our close partnership with existing customers, combined with the global reach of our integrated family of companies, enabled our team to deliver the perfect solution and the most critical of times,” said Qualters. “The product was manufactured in an expedited fashion, at-risk healthcare workers got the protection they needed, and our customer’s well-deserved reputation for delivering critical medical supplies was elevated to a whole new level.”



TekniPlex Healthcare produced tubing in lengths from 18'-24', and reduced production time from **180 days** to **10 days**.

BENEFIT

- Urgently needed IV tubing was immediately produced at **4x the standard length**.
- It was delivered with a **95% faster turnaround** than the average industry delivery time.
- Frontline healthcare workers were **safely protected** from close contact with COVID patients.
- Critical personal protective equipment (PPE) **waste was reduced**.



TekniPlex Healthcare delivered 2 million feet of product in 10 days. **95% faster** than average industry delivery!

ABOUT TEKNIPLIX HEALTHCARE

TekniPlex Healthcare deploys world-class material science expertise to deliver value in creating products for medical devices, diagnostics, and drug delivery. With a deep understanding of the needs of end-users, our offerings ensure we provide innovative solutions at the point of patient care. For more information about TekniPlex Healthcare and our solutions, visit www.Tekni-Plex.com/healthcare.