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As companies across the world are forced to examine the cracks in their supply chains in the wake of the Covid-19 pandemic, they are also having to reassess where they locate their on-the-ground operations. A total redrawing of the foreign direct investment (FDI) map is a distinct possibility.

“Every client is examining their footprint – where they should manufacture their products, store inventory, source materials from and do their final assembly,” says EY global and Americas supply chain leader Glenn Steinberg. “This is increasing the pressure on supply chains and requires a fundamental rethink of the concepts of supply chain management and supply chain strategy.”

A disruptive environment

This isn’t the first time a crisis has caused companies to re-evaluate their supply chain efficiency. There have been many disruptions even within the past decade – the Tōhoku earthquake and the Fukushima Daiichi nuclear disaster, both of which occurred in Japan in 2011, challenged the ethos of global supply chains. Alongside this, there has been a heightened number of large-scale cyberattacks in recent years and rising concerns over carbon dioxide emissions to contend with, but Covid-19 appears to be accelerating the need for new supply chain strategies.

A component-maker in Germany who wishes to remain anonymous believes that shortening supply chains will be the first strategic move for many companies. He says: “We have a very distributed network, with suppliers and plants scattered across the world. This model is going to go.” However, reshoring is a massive undertaking that forces companies to take many variables into consideration.

Pause for thought

Companies appear to be using this time to examine what has gone wrong in their supply chains and how to side-step these issues in the future. For many, there is a strong focus on diversifying their manufacturing out of China to alleviate their reliance on the country, with many left struggling after their Chinese manufacturers shut down during the onset of Covid-19.

China’s loss?

Reshoring would in many cases require companies to evaluate which is more important – cost efficacy or building factories closer to consumers. Phipson expands on this from a UK manufacturing perspective.

“Reshoring is a tricky thing,” he says. “It is really about making it competitive, and the main challenge we face is that we have spent many years off-shoring to Asia and [the region is] very cost-efficient. So, trying to reshore those things and keep the same costing is hard and, as a result, it is really difficult to get businesses to invest in [such moves]. “Until recently, the big emphasis was on cost-efficiency, but now more people are going to start incorporating risk more into their procurement decisions. They are going to look at shortening those supply chains – do they need to have that made in China? Is there another cost-efficient way of doing it? Can we reshore where possible and continue to encourage people to invest in the UK? Also, can we take advantage of looking at alternate sources, even having two sources for something instead of one?”

That is where locations looking for new investment could see a potential win. For many companies, completely reshoring their supply chains is not an option, even when taking into account the heightened interest in protectionism coming from the US and UK. Yet, finding alternative manufacturing locations and additional sources to work as future insurance policies does seem to be high on the agenda of these companies. This strategy could not only make supply chains more robust when disrupted but could work to lessen carbon dioxide emission concerns over supply chains that are spread out across large areas.

Future site selection

“Companies will think about their strategic global footprint in a way that is more than just a low-cost approach,” he says. “Furthermore, companies will carry more local safety stock and extend their supplier networks.”

“International business travel, which is vital to site selection, is non-existent right now,” says van Tilburg. “So obviously, there is a huge impact on my work. Nevertheless, most companies are getting prepared for reopening. Many companies have only postponed plans for site selection.” As eyes start to roam the globe for alternative manufacturing locations, and investment interest in secondary suppliers rises, locations should prepare themselves for the new opportunities that a post-Covid-19 supply chain environment may allow them.
Royal Philips has received 510(k) clearance from the US Food and Drug Administration (FDA) to market its ultrasound solutions for the management of lung and cardiac complications related to Covid-19. The clearance applies to the company’s ultrasound systems such as the EPIQ series, Affiniti series, Lumify, CX50 and Sparq diagnostic ultrasound systems and to off-cart solutions, including QLAB Advanced Quantification Software.

Following the regulatory clearance, Philips will now offer detailed, practical guidance to support clinicians, using its systems and software for patients affected by Covid-19.

The new guidance highlights the specific presets, transducers, quantification tools and other capabilities that are offered on Philips’ ultrasound systems relevant in evaluating and managing lung and cardiac complications.

Philips Ultrasound general manager and senior vice-president Bich Le said: “Many healthcare providers have told us that our handheld and portable ultrasound solutions are playing a valuable role in their efforts to combat Covid-19.

“With this regulatory clearance, we can offer clear guidance to ensure safe and effective use of ultrasound to manage Covid-19-related lung and cardiac complications. At the same time, we are investing significantly to ramp up production globally, including at our ultrasound manufacturing plants in the US.”

The company noted that ultrasound has proved to be effective in imaging peripheral lung tissue affected by pneumonia, which is closely associated with Covid-19 lung complications.

Covid-19 patients are considered to be at increased risk for cardiac complications as respiratory strain can also cause cardiac dysfunction.

A cardiac ultrasound exam can help in analyzing the effects that disease progression may have on heart function.

By imaging patients at the point of care such as in the Emergency Department (ED) or Intensive Care Unit (ICU), clinicians can diagnose and monitor patients without the need to move them around the hospital.

It also reduces the risk of virus transmission to other patients and healthcare professionals.
Aspenstate’s X-Ray system receives FDA clearance for human medical use

Aspenstate has received approval from the US Food and Drug Administration (FDA) for its portable X-ray system AiRTouch for human medical use.

The device is said to be a simple and efficient frontline tool to obtain chest X-rays for Covid-19 diagnosis.

Furthermore, the handheld design and high-performance battery of AiRTouch enables screening centers to quickly process high volumes of patients.

AiRTouch can acquire images directly to the device and wirelessly transmit to PACS, using the built-in workstation.

The company noted that the drive-through screening centres in South Korea have benefited from its portability.

Aspenstate vice-president and COO David Lee said: “Our clients have noticed a dramatic increase in capacity and the ability to move patients through quickly and efficiently. They find that the device is very simple to use, and the integrated software and portable features allow them to work outside of the limitations of traditional X-ray solutions.”

Livermoretech Korea, the parent company of Aspenstate, developed the device, which is equipped with an all-in-one PC that loads the customer’s acquisition software.

AiRTouch’s built-in PC also enables remote diagnostics and service and eliminates the need for costly and timely service calls by maximising the uptime of the equipment.
Control Medical Technology has received the US Food and Drug Administration’s (FDA) clearance for its Aspire MAX 7 – 11F Mechanical Thrombectomy platform to remove blood clots from peripheral vessels.

The new system includes 7F (0.090”) outer diameter (OD) to 11F (0.140”) OD catheters with flexible dilators for improved tracking. For increased speed, force, volume and control, the catheters may be connected to the Aspire Aspirator or an electromechanical pump.

Additionally, new large-lumen, flexible and kink-resistant catheters with dilators powered by the Aspire Aspirator and/or an electromechanical pump are included in the new system.

Thrombectomy, also known as blood clot removal, is a common procedure, according to the company.

Coronary thrombectomy is associated with acute myocardial infarction (AMI), neurovascular thrombectomy with acute ischemic stroke and peripheral thrombectomy is associated with peripheral arterial disease (PAD).

The clinicians usually access the femoral artery or vein and track a catheter over a guidewire to the thrombus during the procedure. Then, they apply low-performance suction with a basic syringe or pulsed continual high-performance vacuum.

Control Medical technology president Shawn Fojtik said: “This FDA clearance quadruples our product offering and improves our ability to help patients.”

“Blood clots range from soft-fresh clots to hard-aged thrombus. Clinicians need more cost-effective tools to remove blood clots.”

The new catheter platform also includes the Aspire MAX 5 – 6F Mechanical Thrombectomy System with over-the-wire catheters for peripheral vasculature and the Aspire RX-LP Mechanical Thrombectomy System with rapid exchange catheters for peripheral and coronary vasculature.

The company expects to launch additional catheter and electromechanical pump innovations for use in peripheral, coronary and neurovascular procedures.

Control Medical Technology designs, develops and commercialises medical devices.

Covid-19: Vyaire Medical and Spirit to scale up ventilator production

Vyaire Medical has initiated manufacturing and supply collaboration with Spirit AeroSystems to scale up critical care ventilator production at a converted facility in Wichita, Kansas, US, amid the Covid-19 pandemic.

The temporary partnership will enable Vyaire to swiftly build critical care ventilators to meet unusual demand for ventilation equipment during the Covid-19 pandemic.

It follows the company’s move to accelerate the production of ventilators and other related respiratory equipment at its main production facilities in North America.
Medical device company Cerus Endovascular has developed 021 Contour Neurovascular System for the treatment of saccular intracranial aneurysms. The device is compatible with smaller commercially available 021 microcatheters and was developed to provide a combination of flow diversion and flow disruption through a single device implant.

It is a fine mesh braid that targets the neck of the aneurysm away from the vulnerable dome. In addition, the device is designed to be self-anchored for stability, re-sheathable for precise placement.

The new, lower profile system will enable physicians to access more distally challenging vascular anatomies.

Cerus Endovascular president Dr Stephen Griffin said: “In response to numerous requests from the clinical community and physicians we work closely with, we continue to aggressively expand our product portfolio to offer an even more comprehensive suite of products to meet market needs, complementing our Contour 027 device and Neqstent platform, which recently received CE Mark approval.”

The company’s was designed for the treatment of a range of aneurysm morphologies, including wide-necked bifurcation and bifurcation aneurysms.

Cerus Endovascular chairman Dr Sam Milstein said: “This latest approval testifies to the strength of our product pipeline and represents another critical step in our go-to-market strategy via a controlled roll-out.

**LivaNova to modify cardiopulmonary products to fight Covid-19**

The US Food and Drug Administration (FDA) has permitted LivaNova to modify several of its cardiopulmonary products for extended use in Extracorporeal Membrane Oxygenation (ECMO) therapy longer than six hours to address Covid-19.

The move is intended to temporarily expand the availability of devices for the pandemic.

A patient’s blood is externally oxygenated and recirculated for circulatory and respiratory support during ECMO procedures. To expand the availability of such therapies, the agency is now allowing manufacturers of applicable devices to modify their indications without prior submission of pre-market notification.