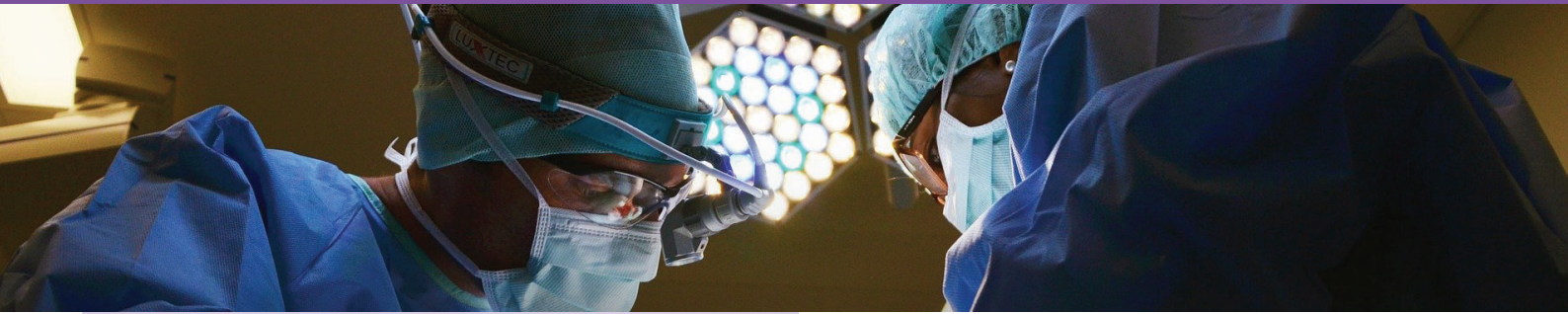


# MIDLANDS ENGINE HEALTH

## Focus on MedTech

### Essential Generic Medicines Manufacture

MIDLANDS  
ENGINE



**Even before the Covid-19 pandemic, the NHS was no stranger to medicines shortages.** In October 2019, the Healthcare Distributors Association reported that there were on average 100-150 medicines in short supply. Although this is often mitigated by the efficacy of our supply chain, unfortunately Covid-19 has exacerbated the problem, not just in the UK but across the globe.

The list of medicines in shortage includes anaesthetics, muscle relaxants, antibiotics and neuroleptics. In hospital geriatric and palliative care departments, midazolam and morphine, diazepam, and clonazepam are also in short supply. These shortages are forcing some patients on to second-line therapies, which have inferior outcomes and are often more expensive. The Department of Health and Social Care (DHSC) already has a robust mechanism for managing medicine shortages, including the extreme measure of banning the export of medicines. Currently, there are nearly 200 medicines on the list of those which cannot be exported from the UK - representing the unprecedented strain on the medicine supply chain.

Medicines in short supply are not expensive innovative medicines, but low-cost generic medicines. The race to drive down cost has been a race to offshore generic medicine manufacture. Nearly 90% of all generic medicines involve supply chains in low-cost countries; primarily, but not exclusively, India and China. The recent export bans on medicines from both countries has exposed the challenges to our supply chains.

As we begin to recover from Covid-19, a dynamic stockpile needs to be established across the four nations that enables the NHS to provide the optimal treatment to every patient in every hospital whenever needed.

An Arm's Length Body authorised by DHSC to source and distribute Essential Generic Medicines for the UK should be established. The medicines to be sourced would be transparently agreed upon by a cross-sector board based on prioritised clinical need, security of supply, pandemic preparedness, supply and price issues.

The Midlands is in a unique position to re-shore the manufacture of Essential Generic Medicines and a group of industrialists, clinicians and leading universities has come together to exploit the UK's leading position in continuous manufacture and green chemistry.



**Professor Mike Hannay, MTIF Managing Director and Midlands Engine Health Board Member**

"Midlands based research has driven the development of advanced manufacturing techniques. Our universities and industrial base offer the capability to rapidly develop new manufacturing methods for Essential Generic Medicines, exploiting Artificial Intelligence to model outcomes and digital technology to ensure the production of high quality, low cost medicines. Such an approach increases medicines availability, creates sustainable manufacturing jobs and boosts academic input to translational science, but it will require investment from Government to de-risk industries' transition to a new manufacturing platform.

"A portfolio of medicines defined by the NHS could be ready for approval by the Medicines and Healthcare products Regulatory Agency within six months and Midlands based production started shortly afterwards."