

Q&A with **CARGOCONNECT** May 2012
Connecting Cargo Professionals
PHARMA COLD CHAIN

1. HOW SHOULD YOU MANAGE THE SUPPLY CHAIN NETWORK OF PHARMA WHICH IS BOTH TEMPERATURE AND TIME SENSITIVE?

A. The question is generic & obvious reference to the service providers' obligation towards managing sensitive products; all management is born from knowledge based on experience and translated into risk mitigated execution. Like all supply chains, this too has to be managed through clearly defined & well thought out SOPs which are regularly audited and monitored for compliance.



The pharma supply chain is not only at risk due to temperature & time excursions but also needs to be managed & protected against active infiltration & theft – spurious drugs are a big concern to the principals and IPR infringement adds yet another criterion to cater for. Another intense actionable worry point is diligent inventory management. The ordinary FIFO is inadequate; instead FEFO (First Expire First Out) is to be implemented.

In stating all above, it is already assumed that appropriate tools and infrastructure are deployed. After all, the involved processes, balances and checks required will require the right equipment not only to service, but also to monitor the supply lines.

To summarise, a good understanding of each particular need that require fulfilling, the appropriate tools and of most importance, processes that ensure compliance of cargo parameters and operations involved.

2. WHAT KIND OF TECHNOLOGIES IS BEING EMPLOYED BY LOGISTICS PROVIDERS TO ADDRESS SPECIFIC PROBLEM AREAS LIKE SECURING THE SUPPLY CHAIN FROM COUNTERFEIT DRUGS, PROTECTION FROM CONTAMINATION, ETC?

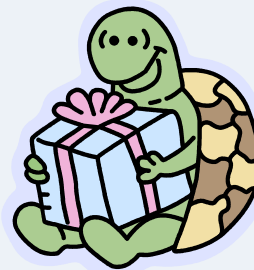
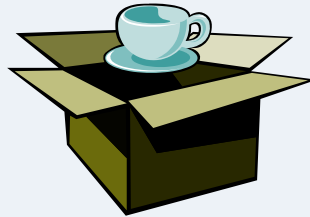
A. Technologies abound from thermal sensitive inks to hologrammed packaging. Covert & overt anti-theft and anti-tampering labels involving multi-layered printing, 2D bar codes, nano-coding and OCR technologies are in use and under development. But sadly the counterfeiter is also at it to counter these!

In my personal opinion, active track & trace as a process and for checks, coupled with extensive user awareness programs should be undertaken. Even a simple a technology like a scratch card number verifiable against a central database (like with lotteries) would be most effective and involve customer participation. I have always maintained that technology can only facilitate, while it is intelligent application that makes it fool proof.





Another method is for pharma companies to remodel their supply systems. Move long haul in tertiary packaging (which is easily secured against theft and is more robust), secondary packaging at the next stage and for retail distribution. With this, options are also presented for localised packaging that can be changed dynamically under control. It will additionally allow for capacity stowage over long hauls and ensure improved compliance as well. Cost optimization through local hubbing & packaging operations is also possible. Unlike farm produce, pharma products are not inherently allergic to multiple handlings.



3. REGULATORY APPROVALS HAVE A DIRECT IMPACT ON THE SHIPMENT OF MEDICATION. HOW DO YOU SEE THE SITUATION? WHAT ROLE CAN GOVERNMENT PLAY TO KEEP IT NO MORE STRINGENT?

A. Regulatory approvals are quite well thought out and furthermore are developed in consultation with pharma companies. I am sure any requisite changes where required will be incorporated by our policy makers. The pharma companies have to be clear of their needs as an industry under a collaborative environment. It is in everyone's interest that the right medicines reach the users under right conditions. The real impact is felt in the delivery leg for which compliance rules and penalties could be improved upon.

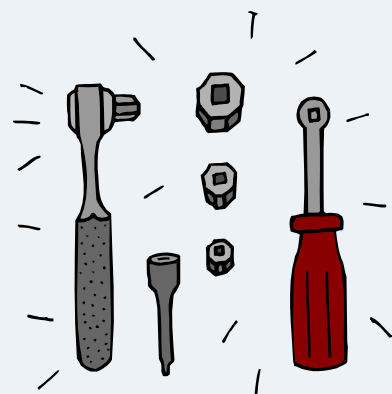


4. LACK OF ACCURATE LOGISTICAL KNOWLEDGE OF THE STUDY SITES AND POOR KNOWLEDGE OF THE MEDICAL SITES, CAN BE A HURDLE IN THE LOGISTICS OF PHARMA. DO YOU THINK THERE IS A NEED TO CONCENTRATE ON SPECIALIZED TEAM? WHAT INITIATIVES CAN BE TAKEN?

A. I presume you are referring to life sciences & clinical research here.

Unlike the pharma medicine supply systems, the clinical research supply chain directly impacts the cost of research and development. Every leg of each link would be evaluated for equipment, resource deployment and countermeasures; including mapping of location. Here the logistics chain is specially deliberated upon and the logistics partner is involved during site selection (or should be).

A failure in these cases is not a matter of loss of inventory, but that of loss and delay to the research undertaken – the impact could escalate into years wasted. The need definitely indicates a specialized tem with pin-point responsibility.





It should involve multi-fold audits and checks, both internal and outsourced so as to mitigate risks and safe guard the project deliverables. In fact, the supply chain service is the most critical to arrive at any logical conclusion in such studies.

5. THE PHARMACEUTICAL INDUSTRY IS FACING ENORMOUS PRESSURE TO REDUCE GLOBAL LOGISTICS COSTS. HOW CAN YOU MANAGE?

- A. This is of great interest to both the public serving government and user companies. Revisiting the packaging as well as the delivery mechanism are important steps.



Within India, I have promulgated a pit-stop distribution concept (with participating pharma companies) which more than halves the cost of medicine delivery. Yet, it needs process changes in both the user companies as well as their distribution partners. It is also misconstrued that pharma goods are typically time sensitive – they have far larger shelf lives than other items in the cold chain.

In temperature sensitive pharma, time sensitivity is a decreteive due to the passive carrier box, not due to the medicine itself. So there is real scope to rework a distance-time-cost matrix all around. With increasingly large bulk volumes under shipment, the scope for cost reduction on the packaging front is possible. Another cost impact is due to specialized care involved; here too packaging improvements involving design and materials would be required.

Blue-sky thinking and progressive innovation initiatives from pharma companies & their logistics design partners is needed help to hasten such developments.

The respondent is Pawanexh Kohli, has 3 decades of experience in the logistics and supply chain industry and is founder of CrossTree techno-visors, a professional mentoring and knowledge dissemination platform. Capt Kohli is a member of Industry councils like CII's National Logistics Advisory Council and of the National Task Force on Cold Chain Development. He is also an avid participant in policy reforms to the cold chain sector with focus on agri-marketing and is a well renowned resource advisor in this sector.