

Crossing the chasm: A journey to commercialisation in MedTech

Geoffrey Moore's seminal 1991 book, *Crossing the Chasm*, has been a go-to source for technology entrepreneurs looking to take a product to the mass market. Moore argues technology products do not follow a gentle path from early adopters to the majority, but must cross a chasm between the two.

One of the universal truths I have experienced during my 25-year commercial career has been the chasm is challenging to cross. Never has that been more true than in bringing a medical device to market.

Innovation in medical technology (MedTech) is critical to the future of healthcare. As populations age, breakthrough MedTech will need to bridge the gap between affordable healthcare systems and high levels of care. Particularly important are 'platform' innovations: those technologies solving more than one medical issue.

OnPulse is one example. Used to stimulate the common peroneal nerve, it activates the calf and foot muscle pumps to increase blood flow in the lower leg equal to 60% of walking without raising someone's blood pressure.

At Sky Medical Technology, we spent time turning this technology into a device, where that capability to stimulate blood flow could be brought to life. By 2015, we had embedded OnPulse technology into the geko device, that offers positive patient outcomes to multiple medical conditions.

Challenging the status quo

The support of early adopters was the most critical part of our journey to mass commercialisation. Early adopters in the medical industry are open to change, but are also pragmatic. They are also visionary, believing that patient outcomes can be improved by challenging the status quo.

One such individual was Dr Indira Natarajan, from Royal Stoke University Hospital. Early data from our innovators convinced Dr Natarajan to look at what the geko device could do for patient outcomes.

Crucially, he had access to a large number of stroke patients, some of whom needed an alternative to intermittent pneumatic compression devices (IPC) – a cumbersome, full or half leg plastic sleeve that repeatedly inflates and deflates to move blood through the veins. He deployed the geko device in the 30% of patients that were either unable to tolerate or should not receive IPC treatment.

An initial one-month audit was extended to three months, then a year and then to 2,500 patients. We were beginning to see the positive impact that the geko device had.

Multiple stakeholders

It is essential companies recognise multiple stakeholders are involved in the decision making, with different responsibilities and accountabilities. Companies can help speed adoption by providing support for aspects such as staff training, information manuals and a better understanding of the process through what innovation is adopted in healthcare services.

Always remember it is not the primary focus of a clinician to see that your product is adopted, so providing them appropriate support is essential.

Bridging the chasm is tough in any technology business but in MedTech, the bar to bringing innovation to the mass market is rightly extremely high. Technology investors – perhaps more used to a five-to-seven-year runway before seeing a return on investment – need to remain patient and see that, while timescales may be longer in MedTech, the rewards can also be significant.

Carrying the torch

These factors mean the chasm between early adopters and the early majority in MedTech can seem more like a canyon; medical innovation requires a high level of evidence to ensure technology that does get adopted has been through the most rigorous processes.

Technology adoption relies on the commitment and determination of clinicians, who carry the torch of innovation through the system, driven only by the passion to improve patient outcomes.

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