## Additional Case Studies

## **Chapter 3**

## Safer Syringes – Trying to Capitalise on a Perceived Opportunity

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Spring 2002 appeared to mark a turning point for Medisys plc, founded by David Wong in England. The company's flagship product, a retractable syringe had been adopted for sale by Smiths Industries (an FTSE 100 conglomerate) and a well-established player in the medical devices field. Medisys had been formed a few years earlier and one of the key businesses in which it hoped to carve a niche was medical devices that were compliant with the latest healthcare worker safety regulation. This had become a potent issue, in 2001 newly passed legislation in the United States required hospitals to use safer syringes. But Medisys was not the only new competitor in this market. NMT (New Medical Technology), a Scottish company and RTI (Resistance Technology Inc.), an American firm as well as a number of others, also had new, safer syringes planned. All these new firms would face challenges in entering the healthcare market. These three, in particular, were proposing products relying on new technologies – but overall with the same effect – their products would retract the needle back into the syringe after it had been used, so that it would present less of a danger to healthcare workers and patients.

Medisys' offering was considered superior to a number of others because it had a passive system. Once the plunger had been depressed all the way into the syringe, the needle would *automatically* retract into the barrel, pulled up by an elastomer (rubber band). Other competitors did not have such a simple offering, for example one involved the healthcare worker covering the needle with a tip.

Larger competitors such as Becton Dickinson (BD at the time had a market capitalisation of over US\$4bn) of the United States dominated the medical devices market. As far as syringes were concerned, annually around 10 billion units a year were being sold worldwide. Medisys was gearing up to sell around 1 billion per year. However, whereas ordinary syringes had become a commodity product, the healthcare safety worker dimension would allow any successful offering, with its patent protection to be sold at premium. A key

issue for all new firms would be to minimise manufacturing cost and Medisys management believed that a unit cost of under 10 US cents per unit could be achieved, but this would only really be possible with high volume manufacture. Nevertheless there were obvious barriers to entry, large firms such as BD would not passively allow new entrants to take their market share and would also introduce their own offerings. In addition small, new entrants such as Medisys would face a 'chicken and egg' problem, whereby low cost manufacture could only be obtained at high volumes and in order to secure high volumes they had to promise low prices to their customers.

In addition to the syringe Medisys considered that it was important for the company to offer a portfolio of products that emphasised healthcare worker safety. Following good investor reaction to the development of the syringe the company raised fresh funds on the London stock market with which it would acquire other safety products, including a safety scalpel.

In 2000 when Medisys had first applied for FDA (Food and Drug Administration) approval for their product, it had widely been felt that success on this front would lead to the company being acquired by a large firm in the healthcare market. Following approval it became clear that this was unlikely to be the case and that Medisys would need to bring the safety product range to market itself. This development posed a number of challenges. The company would have to prove itself in a number of different areas. One of the most challenging would be production; the firm would have to show potential marketing partners that the Futura syringe could be manufactured to a consistent level of quality in large quantities and at the prices promised. During this period Medisys would invite analysts from brokerage houses to visit their factory in Singapore in order to demonstrate their production capabilities. Generating credibility amongst potential customers was essential and the company had also established trial sites in various American hospitals where medical staff could actually use the products and assess whether they performed in line with expectations. Helping with the establishment of credibility was the appointment of Joseph Costa as Vice President of Futura. Joseph Costa had been a senior marketing figure within BD.

Alongside these developments Medisys continued in its hunt for a large credible marketing partner who would have the resources to market the product to healthcare buying organisations and hospitals.

Smiths Industries, a large medical products company was interested in such a deal, it already sold safety products and under the terms of its offer wanted to rebrand the Medisys' Futura syringe as the Smith's safety syringe. Although Smiths already had its own range of safety syringes these were made from an older technology that was considered less safe than the Futura. Safety products represented a small proportion of Smiths overall medical product portfolio, and medical products themselves were a small though growing portion of Smiths' overall business mix, which focused on defence and security systems. Smiths had a respectable amount of sales in the U.S. but it was not one of the larger players in the market. The Futura syringe would benefit from Smiths already having contracts to supply syringes to various hospitals. Medisys accepted Smiths' offer, partly because they felt that Johnson and Johnson, which had also expressed an interest and had a much stronger healthcare presence, would not be as willing to intensively promote the Medisys offering.

As part of the deal with Medisys, Smiths would undertake all the sales and marketing activities for Futura in the United States, the UK and Japan, and Medisys would retain the rights to sell the syringe in other countries. In addition Medisys' safety scalpel would be rebranded as the Smiths scalpel. However on the signing of the deal between the two companies Medisys would only receive a quarter of the signing fee (US\$1m) the balance of \$4m being dependent on the syringe meeting various milestones.

By September 2003, however, things were looking much worse. The contract with Smiths was terminated, because the milestones were unlikely to be met, there had been continuing problems associated with the product's design that needed to be resolved. The company reverted to an older marketing programme which involved using its own sales personnel, but this did not succeed. Moreover it was rapidly becoming clear that the safety syringe market was not going to develop in the way companies such as Medisys had originally hoped, staff education and training were increasingly seen as reducing needlestick injuries significantly, and niche safety products filled the rest of the gap. There really did not appear to be a market need for a very low cost safety syringe that would sell in the substantial quantities that had been anticipated by Medisys management.

## Source

Medisys plc annual reports from 2000, 2001, 2002 and 2003. Subsequent developments at the company can be tracked by searching for media reports from this period.