

Notes on Case

“Newland Medical Technologies”

Overview:

Newland Medical focuses on the entrepreneurial adventures of a medical engineer turned MBA student; not an uncommon phenomenon. It chronicles the process of formal learning, career experience that leads to an MBA degree and an entrepreneurial alertness that result in an innovative medical device.

This case is very effective illustrating the intersection of technological awareness and entrepreneurial alertness. While in Newland this intersection is embodied in the lead entrepreneur, Sarah Foster, the process of bringing technology and design together through the entrepreneurial process to achieve commercialization in a new venture.

Opening the case:

The case is quite detailed but succinct in explaining the technology and the “pain” it solves. Indeed, students usually recognize the direct correlation between the product and the relief patience will receive. I usually start the class with the question,

“Has anyone ever had a kidney stone or been with someone with a kidney stone?” Even in an MBA class with no middle aged students someone will usually have some experience. If not you might quote the Medline Plus Medical Encyclopedia that says,

” Kidney stones may form when your urine becomes too concentrated with certain substances. These substances may create small crystals that become stones. The kidney stones may not produce symptoms until they begin to move down the ureter, causing pain. The pain is usually severe and often starts in the flank region, then moves down to the groin. The pain from a kidney stone is agonizing, comes in sharp, stabbing waves or spasms. Kidney stones are common. About 5% of women and 10% of men will have at least one episode by age 70. A person who has had kidney stones often gets them again in the future. Kidney stones are common in premature infants. “

The case covers the existing procedures to resolve kidney stones. While the case makes an effective statement regarding the intrusive nature of the current solutions versus Newland’s solution, there is ample room for discussion regarding the embedded solutions and what Newland might have to overcome.

The use of the whiteboard can help make the issues in the case more accessible for students.

The Problem	The Current Solutions	Stone Removal Stent
Crystalline stones in the ureter	Allow the stone to pass if you can handle the pain	Immediate action and quicker relief
Emergency room treatment for pain	Double J: reduces pain but doesn't remove the stones	Surgeon not required to do the procedure
Multiple solutions that vary in effectiveness	Ultrasound: Need a skilled surgeon and intrusive procedure.	More complete solution
Intrusive		

After establishing the nature of the pain and the relative effectiveness of the solution the case examines the market demand. The case does an excellent job of revealing the detail of the market. Review this with students

- The gross need is \$2 billion and the target is to replace the two most common procedures.
- \$7,000 per patient
- 258,000 people afflicted annually or about 8.5% of the population with larger stones.
- SRS might expand the market by 75% for those patients with smaller stones who suffer the pain for several days until the stones pass. SRS would allow them to get immediate treatment. Exhibit 4 shows a potential market of 800,000 stents annually.
- Total potential revenue would therefore be \$200,000,000.