

## CASE TEN

### Medtronic in China: Where “Simpler” Serves Patients Better

#### Case Synopsis

The heart pacemaker that Medtronic—the world leader in pacing devices—sells in the West is too expensive for Chinese heart patients and those in many parts of today’s world. Medtronic’s Bobby Griffin interviewed Chinese physicians and found they sought a lower-priced device and considered many of the high-technology features on Medtronic’s pacemaker less important than reliability, simplicity, and low price. So Medtronic designed its Champion heart pacemaker to meet these criteria, built a plant in Shanghai, and developed a sales force in China. The case has new product, social responsibility, and global marketing dimensions.

#### Teaching Suggestions

Prior to teaching the case, instructors may wish to:

1. Have students read the Medtronic mission statement in Figure 2-2 in Chapter 2 of the text and keep it in mind as they discuss the case and questions #4 and #5 at the end.
2. Ask students what broader implications the Medtronic decision to design a new pacemaker for Chinese patients and build a manufacturing plant in Shanghai has for: (a) world understanding and peace, (b) world trade, (c) China, and (d) the U.S. Some brief comments on these issues:
  - a. **World understanding and peace.** In a 1987 *Journal of Marketing* article, Richard Farmer describes a benefit of global trade: “People doing business at a rapidly growing rate do not fight. One really big surprise of the postwar era has been that historic enemies, such as Germany and France, or Japan and the U.S., have not had the remotest threat of war since 1945. Why should they? Anything Japan has that we want we can buy. In short, if you trade a lot with someone, why fight? The logical answer, ‘you don’t,’ is perhaps the best news mankind has had in millennia.” [NOTE: See pages 114-115 of his article, “Would You Want Your Granddaughter to Marry a Taiwanese Marketing Man.”]
  - b. **World trade.** There are complementary flows of trade (see trade feedback effect in Chapter 7). U.S exports stimulate output and income here, which increases demand for imports. The U.S. demand for imports increases China’s exports, which increases output and income in China. As trade continues, this cycle of output and growth continues, which may raise the standard of living for people in both countries.
  - c. **China.** Chinese physicians get advanced training from Medtronic sales and service personnel. Also, better health for Chinese people increases national productivity and decreases demand for social services.
  - d. **The U.S.** Higher revenues help fund the medical device industry’s efforts to develop new products and increase the industry’s global trade competitiveness.

## Case Questions and Answers

### *Question 1*

*Assess Medtronic's decision to develop and market the new Champion heart pacemaker in terms of the following reasons for new-product success: (a) point of difference, (b) market attractiveness, (c) bad timing, and (d) economic access to doctors and patients.*

- a. **Point of difference.** The Champion product needs to be perceived as a better treatment for heart arrhythmia. It could also be vulnerable to models with more features, especially if competitors decide to enter the China market.
- b. **Market attractiveness.** The China market of 1.3 billion people is certainly large, but pacemaker-type medical treatments are expensive (relative to disposable income) and are new to many doctors and patients. It is uncertain to what extent these Chinese doctors and patients will accept the product/concept.
- c. **Bad timing.** It may be too late for a lower featured pacemaker. Global access of information means doctors/patients may demand more sophisticated pacemakers, now or in the near future, and global competitors (such as Guidant and Boston Scientific) may enter the market.
- d. **Economic access.** Medtronic will need low-cost strategies to reach and train Chinese physicians to diagnose and treat heart arrhythmia with a pacemaker. In addition, shipping pacemakers in a country with a developing transportation infrastructure could present economic and logistical challenges. As shown on the map, the heaviest concentration of population in China is in provinces near the coast. These are the provinces where the sales force will focus its initial efforts and Chinese surgeons will be trained. Finally, even at \$1,000, the Champion pacemaker (and associated hospital stay) is unaffordable to many people in China.

### *Question 2*

*Discuss the steps of the new product process as they relate to the Champion Pacemaker.*

- a. **New-product strategy development.** Champion pacemakers established Medtronic in the China market before competitors, and helped it exploit its knowledge of pacemaker technology.
- b. **Idea generation.** The Quest program, where the Champion pacemaker was developed, allowed employees to work on their “dream” project.
- c. **Screening and evaluation.** Chinese physicians wanted a simple, reliable pacemaker.

- d. **Business analysis.** Griffin’s “audacious goal” of a \$1,000 pacemaker was a key factor to the success of Medtronic’s entry to the China market. The product had to be affordable and Medtronic had to find ways to drive costs out of the pacemaker to maintain its margins.
- e. **Development.** Hooper had been working on a lower-featured pacemaker within the Quest program, which significantly cut product development time.
- f. **Market testing.** Medtronic needed to confirm Griffin’s belief that \$1,000 pacemakers would sell in China. Pre-production pacemakers (produced in a U.S. pilot plant) would need to be shown to leading Chinese heart surgeons to gauge acceptance.
- g. **Commercialization.** Hooper is an engineer with significant experience developing pacemakers and building manufacturing facilities. Meyer, and perhaps a cross-functional team from Medtronic, needs to concentrate on the sales and distribution systems. Parallel development of a Medtronic salesforce and logistics organization is needed so Medtronic is ready to sell and service the Champion product when the manufacturing plant is ready.

*Question 3*

*New product development is important to a company like Medtronic, but it is hard work, and often leads to failure. How can a company encourage its employees to take initiative, make a profit, and be ethically and socially responsible?*

The following quotations can be used in class to illustrate how Medtronic does it:

- a. **On values and commitment.** Ron Meyer, VP of a Medtronic pacing group: “The company must have the values and commitment to stay the course. You need clear direction on what is acceptable behavior and the strong backing of the highest levels of company management so that if you work within the guidelines, they will support the project and the issues that arise. I believe the number one reason for the failure of projects like ours in China is lack of total commitment by a company’s senior management to stay the course. We had direct support from both the CEO and COO.”
- b. **On the shared vision and experience of the team.** Ron Meyer, VP of a Medtronic pacing group: “This vision is both a business and a personal requirement. Vision is the most important thing a person possesses when he or she is faced with new or unique circumstances. If you really have the vision, failure is not an option. Also, this team knew Medtronic. It was easy to follow business conduct guidelines because we had seen them practiced. It would be difficult for someone to implement our policies after only having read them.”
- c. **On developing a personal and internal vision.** Bill Hooper, Engineering Design Manager: “We had a clear objective: to design and manufacture a pacemaker for developing markets and to design and construct a building in which to manufacture these systems. Clear guidance and direction in the area of business conduct make it seem obvious how to operate but did not dictate specific actions. The combination of internal vision and business conduct boundaries significantly clarified the ambiguous situations and dilemmas in which we found ourselves.”

*Question 4*

*Relate Medtronic's decision to sell pacemakers in China to its corporate mission statement.*

*How does the decision relate to these Medtronic stakeholders:*

*(a) shareholders of Medtronic stock, (b) Medtronic employees, and (c) Chinese patients?*

- a. **Medtronic shareholders.** Sales of pacemakers (and other medical devices) will make a significant contribution to Medtronic's earnings due to the (relatively) low development costs for the Champion pacemaker line and associated margins. In addition, the expectation for strong sales growth in China and other less-developed countries should have a positive effect on the price of Medtronic stock.
- b. **Medtronic employees.** Employees often hold stock in the company, but many Medtronic employees also believe strongly in its mission: "To contribute to human welfare [by producing devices to] alleviate pain, restore health and extend life." The Champion pacemaker helps fulfill that mission by making a pacemaker available to Chinese cardiac patients.
- c. **Chinese patients.** These devices were previously unavailable/unaffordable in China for most patients and pacemakers are nothing short of a miracle for those suffering from the debilitating effects of heart arrhythmia. See ([www.medtronic.com/rhythms](http://www.medtronic.com/rhythms)) for personal stories of patients restored to health by a Medtronic pacemaker.

*Question 5*

*Medtronic chose to design and build a new low-priced, highly reliable, reduced-feature heart pacemaker in its Shanghai plant. What are the strengths and weaknesses of this decision from*

*(a) a marketing viewpoint and (b) an ethical viewpoint?*

- a. **The marketing viewpoint.** Medtronic's market entry via direct investment into China gives Medtronic some control while physicians get the lower priced product they want (see Chapter 7).
- b. **The ethical viewpoint.** Utilitarianism is associated with selling a low priced but less than state-of-the-art pacemaker product in China. Medtronic also fosters a certain level of moral idealism within its people, as discussed in Chapter 4. Students may develop an argument in which Medtronic is held to a higher standard. A question to ask: "Should Medtronic be willing to forego profits to make state-of-the-art pacemaker technology widely available in China?"