

Glimpses of the future of the Medical Devices Industry

David Matheson, SmartOrg Inc.

Imagine picking up the Wall Street Journal and reading one of these headlines:

Medtronic moves its headquarters Minneapolis to Beijing, or

Success of in-home treatment causes 20% of hospitals to shut down due to lack of patients

Each of these headlines captures, in a dramatic way, one possible resolution of a major trend affecting the industry today, such as: What will happen with emerging markets? What is the impact of information technology? It doesn't matter whether you agree with the headline and its implications or not, but rather each headline is the starting point of a serious conversation for you and your business: What are the relevant headlines for us? Will we thrive or struggle if such a thing will come to pass?

At the 2011 Frost and Sullivan Medical Device Conference, executives from some 20 companies gathered and contributed their knowledge and perspectives to form a picture of the future of the industry. Participants ranged from companies like Abbot to Welch Allyn, from business in Hearing Aids to Insulin Pumps, from SVP level to Director Level, so we had a broad cross section of experience participants. None of us, of course, believes these headlines specifically will come to pass or that we can really predict the future. However, the trajectories of currently visible trends are visible—even if many are contradictory and confusing and they could unfold in significantly different ways. During the meeting, the group developed provocative headlines for a variety of scenarios so our companies are prepared to thrive, not just survive, no matter the outcome

We followed the general process below, based on the combined experience of medical devices thought leaders and session participants. You might apply the process to guide you as you consider your own scenarios, or to just learn from the collective wisdom we assembled. The process starts by identifying and prioritizing areas of concern, then crafting alternative headlines for each area, and finally considering the possible impact on your business based on each headline.

Identifying key trends

To start, we engaged in spirited discussion of major trends or potential changes that could profoundly challenge participants' companies and developed a set of nine challenges:

- Emerging Markets
- Modernization / impact of information technology
- Changing model of care
- Changes to reimbursement
- Changing healthcare systems

- Competition from low-cost players
- Personalized Medicine
- Drug / device integration
- Smart Devices

We prioritized and consolidated the areas of concern into a workable list for further development:

- Modernization
- Emerging markets
- Low-cost players
- The changing health-care system.

Creating Headlines

Session participants then broke into subgroups, self-selected by expertise and interest, to develop alternative future headlines. The idea in a headline is to capture in a dramatic way a scenario for how the future might unfold. Each headline needed to:

- Be real and plausible
- Be compelling and thought provoking
- Be witty and insightful.

Each set of headlines needed to have coverage, representing the different and possibly contradictory trends visible today. It is not useful to simply paint a picture of your dream or nightmare; it is the range of possibilities that is interesting. Each team brainstormed, argued, and developed three to four alternative headlines for each area.

Glimpsing the Future

In the area of **modernization**, headlines focused on the impact of information technology, telematics and devices to illustrate several very different directions these trends might unfold. The headlines were a bit extreme. However, each makes an important point.

- Epidemic of malpractice lawsuits from data-trolling lawyers leads insurance companies to provide steep discounts to doctors who avoid using electronic records
- Mortality rates skyrocket among seniors because of their inability to effectively use remote monitoring devices.
- Success of in-home treatment causes 20% of hospitals to shut down because of lack of patients.

In the area of **emerging markets**, headlines focused on the changing power and influence of geographic regions and their ability to define and shape the global medical device business. Participants cited China as the representative emerging power, but agreed that the headlines could apply more generally. (Company names were picked arbitrarily for dramatic reasons; nothing is implied about a specific company.)

- Medtronic moves its headquarters from Minneapolis to Beijing.
- Philips exits Chinese market because of 51% local ownership requirement.
- A boom in Chinese healthcare industry causes acute physician shortages in the US and EU.
- Flood of medical tourism from India and China to US and EU.

In the area of competition from **low-cost players**, headlines focused on the reverse of the emerging markets area: to what extent do medical device companies from these competitors affect business in the mature markets. China was used as the representative for many of these headlines.

- The WTO enforces global patent violations, shutting down 50% of global medical device companies.
- China Ortho Devices signs as exclusive supplier to the NBA for individual customized hip and knee replacements after a study shows superior outcomes at lower cost.
- Chinese government announces 50% device tax on all medical device imports.

In the area of the **changing health care system**, the group moved from global to US concerns.

- Majority of hospitals achieve successful Emergency Healthcare Reform implementation.
- Repeal of PPACA results in little change in the healthcare landscape.
- Medicare moves to 100% needs-based coverage (no more entitlement at 65).

What headlines are most relevant to your company?

Scenarios of Dreams and Nightmares

Finally, we looked at which of the headlines represented the greatest possibility for prosperity, and which companies were ill-prepared. The findings are suggestive and interesting. I've presented them below as narratives, selecting one or two headlines from each of the above areas to paint a picture.

The group felt that the headlines built into the following narratives would be generally bad for their businesses, and that they needed to take additional steps to prepare for such contingencies.

The US makes major commitments to embedding information technology into devices and throughout the medical industry. This backfires, resulting in skyrocketing deaths as aging seniors find it difficult to use at-home devices and physicians, faced with data-mining-based lawsuits and overwhelming data stop using the devices.

In the meantime, China becomes the global medical device center, with a boom causing acute physician shortages in the US and EU. Medtronic moves its headquarters from Minneapolis to Beijing. China announces 50% medical device tax on all imports. China Ortho Devices (COD) signs as exclusive supplier for the NBA for individual customized hip and knee replacements after a shows superior outcomes at lower cost. Patients ask for COD devices by name.

In contrast, the group felt that the headlines built into the following narratives would be generally good for their business, and that their current momentum path was generally adequate for these contingencies.

WTO enforces patent violations, shutting down 50% of global medical device companies. Medical tourism booms as patients from India and China travel to the US and EU for treatment. Readmission rates drop by 80% because of a dramatic increase in in-home treatment, causing 20% of hospitals to close.

What scenarios do you most need to prepare for?

Multi-scenario planning can help companies imagine and prepare for the future. Consider your strategic portfolio. How would you react to each of the above scenarios? Plan now and be ready as the future unfolds.

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