

The inhibiting factors of the marketing development of medical devices

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Abstract. Medical device is an emerging industry and also a combination of high complex technologies. Medical device is managed by the government with special regulations. In recent years, however, the sale of medical device fast increases. Marketing in this field, first of all to be eligible, and then have the chance to sell. Once the sales start, they must be in accordance with regulatory requirements to the supervision and have the correct traceability system. If the company has any market feedback, it needs to be notified to recall and publish notices.

Introduction

Because in the industrial application, must involve interdisciplinary combining with the application. Such as nuclear magnetic resonance machine, involving nuclear energy, electronics, software, image rendering field son almost unrelated fields such as integration, a little bit more simple products, such as electronic ear temperature gun, requires electronic foundation, the foundation of the software and the collocation of infrared foundation, and like a gown, associated with textile and garment industry, such as syringe or catheter, is plastic injection or should be, of but materials than ordinary plastic products exquisite again [1].

Definition and classification of medical devices

In order to clear the medical equipment management, first must to define what is a medical device to the next, medical equipment is less medical devices refers to any instrument, equipment, tools, machinery, appliance, implant, in vitro test or corrector, software, material or other similar or related objects. This definition contains the current regulation of medical devices in the world are all countries proposed definition. Can see by this definition, medical apparatus and instruments is itself must not contain any pharmacological effects, but sometimes combined with drug use, such as dressing on coated drugs to increase curative effect, then the equipment through the two-factor authentication, medicine and medical material certification. Another regulation referred to in medical apparatus and instruments is directed on equipment used in the human body, animals, or equipment is not in the scope of this research purpose [2].

Some countries in vitro diagnostic reagents are separated from general medical apparatus and instruments, but does not affect the definition of the above. Only in accordance with the state of the need to manage time has successively promulgated. There is also a important concept is that the intended use of the equipment is defined by the manufacturer ratios, which is defined by the manufacturer to be responsible for the selling of equipment, the main scope of application. Pointed out that the so-called manufacturers in laws and regulations can be a manufacturer or dealer, who ultimately responsible people call it manufacturers, product liability must be marked on the product label.

Should how to classify, countries have different rules for classification, principle in contact with human body parts, enter the body, use the length of time as the basic classification rules, some points will have a neutral or live such as the European Union, in accordance with these principles will fall into different categories, medical apparatus and instruments [3]. Rules once in place, then the foot



shall be according to different risk management.

Rule set, in accordance with the rules of classification would still be controversial, some countries take the enumeration method, is to the equipment the semicolon type available in the market today, and then the article are rated list one by one, such as the United States, China, Taiwan is. Additionally one kind is the comparison method, classification by the manufacturers will equipment in accordance with the classification rules based on to apply to the regulatory authorities think if different direction of the industry, medical apparatus and instruments is a cross industry product, its areas include electrical, mechanical, metal, chemical, textile, biological materials, rubber and plastics, inspection test together, software..., and many other industries. In a single industry will often across multiple fields, such as electronic products electric gun, across the full infrared, electronics, software and plastics, and other fields, and like a nuclear magnetic resonance instrument across radiation, machinery, electronics, software, electronics, plastics, and other professional fields.

Marketing modes

Medical instrument marketing channel has the following several main pathways

The hospital. Contain clinic, health center, troops, medical association medical instrument drum is this a few channels such as Red Cross major point of consumption, is also the most closed markets. In these places marketing methods are mainly composed of tender, as mentioned in the above marketing, prone to tie the situation. Especially the recent hospital often or star system in the form of joint bidding price effect, caused the market conditions to target is becoming more and more obvious, so some manufacturers will unite the case, match with various advantages respectively to the purchasing goods.

Professional markets. Only selling medical devices in hospital often is visible around some small stores or retail stores, sales of home care in medical apparatus and instruments, such as wheelchair, crutch, etc. These small market turnover is not large, is relatively cheaper medical materials, or to provide home care with consumables. Object needs more family caregivers. General market such as medicine makeup shops, retail stores in addition to the general household goods trafficking and selling part of medical consumables, provide medical materials for consumption, such as dressing, hot and cold pad and other small objects [4]. The sales amount is not big.

Exhibition. Belong to the professional industry exchange purchase in marketing channel, foundries, manufacturers and dealers will get upstream or downstream pathways in this exhibition. This kind of exhibition is divided into general or general medical materials and medical materials specialist medical materials, such as the direction. General medical material is the most famous is jammed doffer in Germany in the medical exhibition held in mid to late November each year, and the United States medical apparatus and instruments exhibition, the exhibition is open all kinds of medical materials manufacturers, exhibition is more vendors, channel business. In addition, the specialized medical material development arm like a ophthalmic medical materials show, help line equipment exhibition, dental medical materials etc for a medical service content area don't field exhibition, usually in combination with academic event to attract more professional.

Insurance. The insurance company through the claims procedure will medical equipment delivered to the user. The channels are mainly in Europe and the United States and other advanced countries in the medical insurance system are easy to see. Pay more projects for auxiliary equipment such as car instead of walking, crutches, or the treatment equipment such as low frequency therapeutic apparatus to treat muscle discomfort, positive pressure breathing apparatus play well, by the hospital prescription after signed by the medical insurance company to pay the medical expenses. In Taiwan there are many professional contracted with the way sales production [5].



Influence factors

Interdisciplinary combination application. High technical complexity according to different purpose by design of medical materials, the use of technology also each are not identical, for example, the artificial joint with high precision steel or alloy car, the requirements of its shape will be slightly adjusted due to individual differences, so often need to customize. Previous home care needs regular track back to the hospital or clinic, now your own development through the network to physical parameters back to the doctor as home care monitoring system. The participation of more than electronics, network communications, software and other related technology, not only is in the process of measurement signals must be accurate, through the network and a later still need to keep correctness [6]. The uncertainty of profits high many research and development can not success in using or need high development costs. For a simple products such as syringes, a front has been the development of the so-called safety syringes, in order to make the disposable products can into the skin and should be within the needle back into the cylinder body after use, runs counter to the barge to the condition of combination on the cylinder, is a special design and production process, so the cost will be more expensive than the original general cylinder. But the price difference too much case is hard to have is market, so the profit condition is not good. In addition there are investment of time and future regulations authentication and the test of market acceptance, so the uncertainty of the high profits.

It is not easy to confirm the overall consumption. Health financial management in the projects of account is a confusion in the medical service cost, unlike drugs or simple medical doctors can be easily isolated from accounting item, so it is not easy to confirm the overall amount of consumption. Quickly to recruit industry experts, in the analysis of the above mentioned many times, the settlements for medical devices industry since the late again, the industry experienced personnel is not a lot, so I want to from other related industries, and look for a person to not easy, even from the pharmaceutical or other industry for, still takes a long time to develop, so can be quickly obtained in the form of poaching talent, is the key important step into the bank, saving time and cost for may.

Take shortcuts to replace development of mergers and acquisitions, purchase qualified or already listed on the existing products, can reduce the unnecessary waste of time, especially save listed verification time, tend to have years of gains. Borrow other derived from mergers and acquisitions and experience combined with its own industry expertise, to improve or develop new products can increase fast [7].

Careful consideration cost and risk, seemingly simple medical products or the price is low, the varying degree threshold. Sterile gauze piece, for example, the price is very low but involves disinfection sterilization need to have a professional operation, the strict control of the production, also need to do the packaging more standard is subject to inspection and specifications. Therefore into wood will most likely be more expensive than not sterilized gauze.

Laws and regulations have not yet become mature. Management in the history of law and order, as a drug, in accordance with the act of pharmaceutical affairs management, and it was only in recent year, independent management, so the laws and regulations have not yet become mature.

Basic research is not enough and the talent is lack. Medical instrument itself is must not contain any pharmacological effects, but sometimes combined with drug use, such as dressing on coated drugs to increase curative effect, then the equipment through the two-factor authentication, medicine and medical material certification. Another regulation referred to in medical apparatus and instruments is directed on equipment used in the human body, animals, or equipment is not in the scope of this research purpose. Some countries in vitro diagnostic reagents is separated from general medical apparatus and instruments, but does not affect the definition of the above [8]. Only in accordance with the state of the need to manage time has successively promulgated.

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manufacturer ratios, which is defined by the manufacturer to be responsible for the selling of equipment, the main scope of application. Pointed out that the so-called manufacturers in laws and regulations can be a manufacturer or dealer, who ultimately responsible people call it manufacturers, product liability must be marked on the product label.

It is more than a profitable investment. Product review threshold high medical equipment is the life off the product, so countries for medical material of the review is adopted or reporting requirements. In product review process, the simple way is put forward homogenous equality of documentary evidence, that is will be available for the listed products with self product comparison, proposed equals the listed product quality certificate. If efficacy or technology is listed products don't have the new product, it must be for clinical trials, clinical evidence that the actual report is put forward. In addition some medical material will be affected by the racial difference, so have to prove its efficacy or adjust the difference of the product [9]. Neither what kind of way, does it take time and money, especially for clinical trials.

To develop medical products, not only need the product in the use of the human body has a profound understanding of, still have to use the technology in the field experience, from the two aspects to find combining site is relatively difficult. It is better than a profitable investment. Tend to use objects of medical products are the people who need to be taken care of, such as the old and sick. Normal healthy people do not use medical device. So the market is far less food, consumer electronics quickly.

Conservatism is one of the limiting factors involved in the medical device industry. Most market closed higher consumption of medical equipment is in the hospital or health care institutions, and the market is also belongs to the closed market, its high demands and medical professionals familiar with specific or medical equipment trust, more of a closed market openness. And general home care medical equipment such as blood pressure, blood sugar machine gun or ear temperature, while it is possible in the open market sales, but the average person can't frequent often prepared at home or change, only need such as hypertension, diabetes, or has small old man might buy or home, this is also the market demand of autism.

Conclusions

More than a variety of reasons, however, is precisely the industry profit. No matter what medical products, as long as able to obtain authorisation, it must have a consolidation with more technologies and through the regulatory review, if we can success in consumer heart, won the trust of users, the consumption cycle is long than other products. And month do not fall in good quality, market volatility will not too big, unless the natural and man-made, is normally won't have too big market reaction.

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