INNOVATION IN PHYSICS DA-1

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Abstract:

The MED-BOX is an automatic medicine vending machine, that has the capability to receive input from the user and then dispense the required dose and quantity of medicine. The input, here means, the prescription by the physician to the user. The system features a machine that is capable of handling a complete range of prescriptions.

It gives the availability of medicines all the time, also in rural areas. It is very helpful, it gives ease of access also. It is sales person-less service that is based on a smart card. MED-BOX can be viewed as an automated pharmacy placed on a commercial scale so that an infinite number of users will be able to access it anytime.

MED-BOX will cater to the needs of the customers with no further human intervention required. The machine is user-friendly and is very simple to operate. With this, labor costs will be minimized and it will also give entrepreneurs the opportunity to attract more customers with this innovation. The design is based on simplicity and the utilization of low-cost materials and components that can be easily available.

MEDBOX will improve the quality of health action especially at local/national levels. The vision is to contribute to quality patient care, increased efficiency, standardization and accountability of health action in humanitarian work, and enhance quality assurance, capacity building and learning especially on local or national level.

First, customers would enter the store and need to identify themselves using a finger-print recognition device.

Next, a special card, separate from the ones that will potentially be issued by the state, will have to be scanned to further prove the identity of the patient.

Once the patient was properly identified, they would walk with the store clerk into a secure area, where they could get access to the vending machine.

Once in the room, the clerk could select the product that the patient wanted, and have it drop from inside the machine for purchase.

MEDBOX aimed at closing this gap by collating quality, open-access, practical documents such as clinical guidelines, assessment checklists or textbooks on one homepage. The MEDBOX team started to better apply what we know already by allowing easy access to what is available. In addition, MEDBOX started developing innovative generic checklists and survey tools for humanitarian practitioners for all aspects of work. These tools can be adjusted to any given setting and tailored for specific needs.

Motive behind the project:

Most impoverished people in most nations are caught in a vicious cycle in which poverty fosters illness, and illness breeds poverty.

Medicine vending machines may be beneficial and hence significant in poor nations such as India, where healthcare is nearly non-existent.

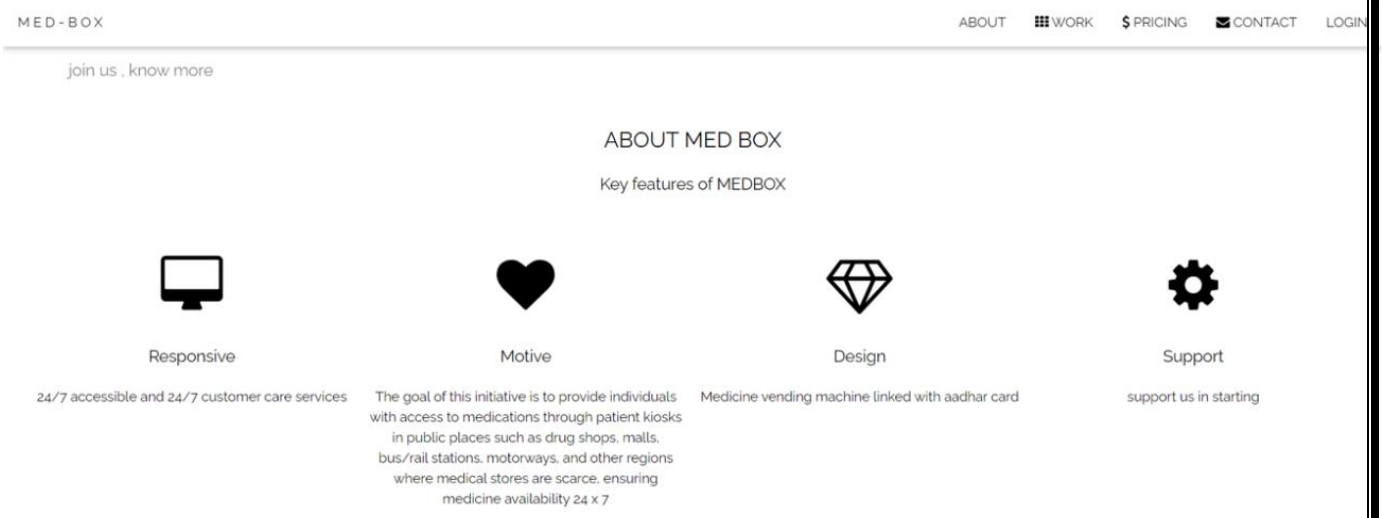
People in remote areas are unable to obtain medicines that the government provides them for free.

The goal of this initiative is to provide individuals with access to medications through patient kiosks in public places such as drug shops, malls, bus/rail stations, motorways, and other regions where medical stores are scarce, ensuring medicine availability 24 x 7

Estimated benefit - Effect measure: this is the clinical outcome that was reported in the clinical trial such as BP, FEV, CD, VL etc. Risk benefit this should be reported in the clinical trial and, in most cases, includes the 95% confidence level (95% CI).

Absolute risk reduction, also termed risk difference, is the difference between the absolute risk of an event in the intervention group and the absolute risk in the control group.

Number Need to Treat (NNT): gives the number of patients who need to be treated for a certain period of time to prevent one event. It is the reciprocal of the absolute risk.



How this idea came to your mind:

It all started during a Health Cluster Meeting in college. During a discussion concerning the sharing of information many participants observed that they were struggling to access WHO guidelines and other practical guidelines, although internet access was not a problem.

That was the moment when the Medical Mission Institute in Wuerzburg had the idea of creating an open-access website where all the relevant health documents are collected and readily available for everyone and everywhere.

Health information is vital. Healthcare workers worldwide can only work efficiently and effectively if they have access to the right information at the right time. But finding the right information quickly is a challenge. Especially for busy healthcare workers who have limited time to search for the information needed.

The excessive number of materials, documents and data available online. Created an overflow of information. Adding to that, this information can draw reliable information and compete for attention. This phenomenon is also called epidemic. With the online library MEDBOX, we want to make your life easier.

MEDBOX provides high quality health information on a single website. The systematic structure allows a quick overview of the most important topics and easy access to the required information. That way you can have time. Access to high quality and trusted information and all free of charge at their cost.

The interdisciplinary team behind the MEDBOX sources thousands of documents from different trusted sources. Content experts provided a quality check before the document is added to the library. MEDBOX collects those documents and sorts them into different categories such as key resources, Clinical guidelines or pharmacy and technologies.

The content is aimed at healthcare workers, public health professionals, patients, policymakers and much more. For selected issues, our Med box experts even packaged the most relevant documents and information into tool boxes ready to access when you need them and where you need them.

This is how we support healthcare workers worldwide to fulfil their work.

Confronted with disasters or crises, local or national organizations, or authorities in charge, do not often have necessary information or tools readily available to facilitate rapid, quality actions. Currently, many practitioners rely on piecemeal information and guidelines that are available to them through their own searching, recommendations or hearsay.

Although most of the standardized tools and guidelines in humanitarian practice are available online it is not always easy to locate them. Finding relevant documents for medical humanitarian work on the WHO online library, for example, is often challenging. During some of the more recent, large-scale emergencies in Pakistan or Haiti, UN OCHA offered only selected documents on their country specific internet sites.

Yet, both websites contained any medical documents! Commonly, not even the Health Cluster leads are aware of the existence or quality of hands-on guidelines available online. The consequence can be a variable quality of medical responses. Importantly, this situation is not necessarily the fault of healthcare providers or managers in humanitarian assistance.

Healthcare providers can function effectively if their basic professional needs are met. It has been proven that lack of access to information for health professionals is a major contributing factor for child and maternal mortality.