

PROBLEM: Make sure older adults drink and store their medications properly.

KEY CHALLENGES

Users can conveniently store multiple medications, such as traditional Chinese medicine and Western medicine are stored in different ways. Among them, the storage method of decocted Chinese medicine is also different from that of undecocted Chinese medicine.

1

In this project, you are expected to find a solution in which users can master and understand complex medication, such as needing to take medication at different times, simultaneously with meals.

2

User-friendly design

Adjust the dose of the drug in a timely manner: The physical function of elderly people gradually declines, and their metabolic ability decreases. It may be necessary to adjust the drug dosage according to individual circumstances.

Designed for flexibility

3

Designed for ease of use

Take your medication correctly: Due to memory decline or cognitive decline, elderly people may be more likely to forget to take medication or mix up medication. As people age, they usually need to take multiple drugs simultaneously to manage chronic diseases.

The combination of multiple drugs may increase the risk of drug interactions and the possibility of adverse drug reactions.

4



Storyboard



**I forgot.... Which
should I eat**



**Oh my gosh,I've
added more**



**It's hot,wait
a minute**



It's so bitter

The process of using traditional Chinese medicine

Background and Storage of Traditional Chinese Medicine



here are roughly 13,000 medicinals used in China and over 100,000 medicinal recipes recorded in the ancient literature. Plant elements and extracts are by far the most common elements used. In the classic Handbook of Traditional Drugs from 1941, 517 drugs were listed – out of these, only 45 were animal parts, and 30 were minerals. For many plants used as medicinals, detailed instructions have been handed down not only regarding the locations and areas where they grow best, but also regarding the best timing of planting and harvesting them.

Herbal medicine is an important treatment modality of Traditional Chinese Medicine (TCM) and is probably more widely used in China than acupuncture. Herbal treatment includes: dry herbs to be taken as tea, tablet and capsule format, as well as powders, creams and lotions for external use. Often used in conjunction with acupuncture, Chinese herbs can have powerful therapeutic effects. A formula may contain between two and twenty herbs depending on the patient's presentation. Raw herbs are prepared at home and taken as a liquid decoction. They are harder to prepare and often bitter. Freeze-dried granule concentrates are now also available, as are dozens of traditional formulae in pills and tablets to enable patients to fit treatment into a busy lifestyle.

With other herbs, they lose their potency when stored poorly and can suffer from condensation-caused damp or degradation from sunlight. Herbs and moxa work best when they're within their sell-by-date and have been stored under the proper conditions. Otherwise, you might find they smell off (or of nothing) or have started to go bad (herbs aren't completely resistant to mould).

Picture display



Traditional Chinese Medicine Soup

photo's link: <https://zhuanlan.zhihu.com/p/441849733>



Various medicinal herbs

photo's link: <https://www.nipic.com/show/15650529.html>

Background and Storage of Traditional Chinese Medicine



Chinese medicine shops often put them in opaque cabinets (made of wood) . When the patient buys it, open the corresponding cabinet according to the label on the outside of the cabinet to grab the herbs, mix them, pack the herbs in paper or sealed bags and hand them to the patient, and the patients will boil them before drinking the medicine according to the required amount after returning home. Of course, patients can also ask the store to boil directly for customers, and the boiled liquid is sealed and packaged and handed over to the patient. Generally, this kind of liquid that is boiled directly by the store needs to be refrigerated.



Traditional Chinese medicine decoction, that is, the hospital and the decoction outsourcing prescription use the decoction machine to decoction pieces, and package and seal it as a single-dose small package decoction for patients. This method is convenient and fast for patients who do not have the conditions for home decoction, especially for inpatients. In the case of room temperature of 25 °C and below, the medicine(liquid) should not be stored for more than 7 days. In the case of refrigeration at 0 °C ~ 5 °C in the refrigerator, the medicine(liquid) should not be used for more than 14 days, and the storage time in summer should be shortened accordingly.



Herbal products that are completely dry should be kept in a cool, dark, well-ventilated place that's free from excessive moisture. Do not store Chinese herbs in direct sunlight or an area that's exposed to steam or heat. The room should ideally maintain a steady temperature throughout the year. Storage in this kind of environment will lessen the likelihood of mold or pest infestation occurring. Some formulations contain moist, sticky ingredients like red dates. These products require refrigeration to ensure they do not spoil.



Picture display



Preservation of medicinal materials

Photo's link: <https://www.gaonaojin.com/info/528306.html>



Traditional Chinese Medicine Packaging

<http://www.labthink.com/zh-cn/literatures/18167.html>

Background and Storage of Traditional Chinese Medicine

About why the Chinese medicine cabinet is wooden: The storage of Chinese medicine needs to be hygroscopic, heat-insulated, and moisture-proof. It just so happens that the wood material meets the above needs, coupled with the low density of the wood itself, many pores and good moisture absorption. For herbs that are not very dry on their own, they can also absorb water. to regulate the dryness and humidity of the herbs. For the case that the external environment is relatively humid, because the design of the Chinese medicine cabinet is relatively tight, the area of direct contact between the medicinal materials and the air is very small, and the front of each medicine bucket, that is, the exposed side, is brushed with paint, and the painting process is very strict, so as to ensure that the medicinal materials are properly isolated from the outside world, so as to slow down the impact of external humidity on the quality of medicinal materials, and play a very good role in moisture absorption and moisture-proofing.



<http://cmstop.zt.jszw.com.cn/p/176652.html>

Product Requirements

Time

Give us multiple design directions as early as possible for the next step

Delivery

The final product is presented in the form of A3, which includes design descriptions, product renderings, product details display drawings, use renderings, exhibit explosion drawings, story boards (inspiration), model making, hand-drawn effects, color schemes, dimensional drawings and three-view drawings, and even product packaging solutions.

Style

Pay attention to the humanization and emotion of the product, and pay attention to the emotional needs of users.

Color

The color design of the product should meet the psychological needs of consumers. It is necessary to balance safety and pioneering.

Form

Designers need to determine the size, proportion and lines of the product according to the function and use scenario of the product, taking into account factors such as the size of the human body and the use habits. At the same time, it is also necessary to pay attention to the aesthetics and novelty of the product form to attract the attention of consumers.

Material

Designers need to choose the appropriate material and surface treatment process according to the positioning and use environment of the product to achieve a balance between the practicality and aesthetics of the product design.