

Healthcare and dermatology on WeChat®

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Abstract

WeChat is a closed social networking platform that allows users to connect privately, providing instant text, photo sharing, voice, and video calls. It is now the most popular mobile chat app in China. The widespread use and ease of establishing technology made WeChat an ideal platform for healthcare, in which it has many uses that include scheduling, follow up, and post-procedure monitoring. In addition, one may make payments and handle prescriptions via e-pharmacy. Dermatologists are often looking for a secure and easy way to use mobile applications to share clinical images and to obtain photographs from patients. We aim to provide an overview of WeChat and its current applications for healthcare and dermatology.

Keywords: WeChat, social media, healthcare, dermatology, dermatology journals, organizations

Over 4.5 billion people worldwide have access to mobile technology [1]. China's population accounts for nearly 20% of the world population, and the task to deliver high-quality medical care to almost 1.4 billion people is understandably challenging. Taking advantage of its highly connected population, tertiary hospitals in China have undertaken an innovative approach to improve medical services; they have adopted the mobile platform WeChat. Created in 2011 by Tencent, WeChat replaced QQ and is now the most popular mobile chat application in China, where it is known as the "app for everything." WeChat is similar to WhatsApp, a closed social networking platform that allows users to connect privately, providing instant text, photo sharing, voice, and video calls [2]. Installed as an application in more than 94% of phone users [3],

WeChat revolutionized China's daily life and it is widely used at the workplace and schools to distribute essential messages. Families use the group chats to communicate within their close circle. News is delivered and even bill payments are made via WeChat pay. If you live in China WeChat is a must-have app!

Traditionally, China's healthcare system does not require a prior appointment to see a health care provider; appointments are often made in person on the same day. This leads to long wait lines, overbooked health care professionals, and patient frustration. In 2014, Tencent released WeChat Intelligent Healthcare, a platform that allows hospitals and medical facilities to build individualized accounts to provide medical services to public account users. WeChat has been adopted by several private dermatology clinics and also dermatology journals, including the Journal of American Academy of Dermatology, JAMA Dermatology, among others (**Table 1**).

The widespread use and ease of establishing this technology made WeChat an ideal platform for healthcare. A study evaluating the use of social

Table 1. Dermatology journals with WeChat account.*

Journal titles	
1	Journal of the American Academy of Dermatology
2	JAMA dermatology
3	British Journal of Dermatology
4	International journal of Dermatology
5	Journal of Dermatology
6	Journal of Investigative Dermatology
7	International Journal of Dermatology and Venereology

*Information obtained via WeChat search engine.

media found that 446 of the 537 hospitals with official social media accounts in China have adopted WeChat [2]. Between China's public hospitals and large private hospitals, over 100 million users sought medical care service through WeChat. In order to access the hospital's platform, WeChat's users simply write the hospital's name on the search engine, then click to follow the official hospital account. Users are then directed to the hospital's welcome interface, where, after providing identification and insurance card information, they choose the desired service. The services and features available vary from hospital-to-hospital. However, most commonly include scheduling appointments, follow up, payment of fees, and patient education. An example of a WeChat user interface can be found in **Figure 1**. WeChat is one of many mobile technology platforms available, that thus far seems a welcome solution for both patients and physicians, helping minimize the "three long, one short" (long registration lines, long waiting times, long discharge process, and brief medical visits) problem at China's hospitals [4]. The use of mobile technology is not consistent throughout China and WeChat is more often adopted by large tertiary facilities than primary and secondary hospitals.

Other types of medically-related services available through WeChat's platform is the e-pharmacy. One of the leading drugstores in China, Jo-Jo drugstore, has adopted the WeChat app to attract and enhance

customer experience. A more recent platform, WeSure is an internet insurance platform that collaborates with major insurance companies and enables users to purchase health, life, travel, and many other insurance services from their mobile phone with just a few clicks. The direct connection between users and insurance companies is not only convenient but also allows for personalized insurance choice and competitive prices.

Mobile technology is changing medical practice. A study conducted by Kantar Health evaluating online trends of Chinese physicians reported an increase in the number of hours spent online. On average physicians spend 29.2 hours online per week and over 50% of this time is spent on medical-related activities [5]. Moreover, according to the same report, WeChat was the app most chosen by physicians to connect with patients [5]. WeChat's platform has gained the attention of public health experts and researchers and has been used to promote health intervention campaigns, to increase treatment adherence, and to improve health literacy. The Center for Evidenced-based Chinese medicine has been using WeChat to disseminate Cochrane reviews and abstracts by translating into plain language messages to raise public awareness [3]. WeChat's user-friendly design allows the rapid spread of information and makes it an excellent tool for propagating medical information. High impact dermatology journals have taken advantage of WeChat's popularity and have established official accounts.

Recently, a study evaluating the clinical safety and treatment response of hemoporfin PDT for infant facial port wine stains successfully used Dermlink PWS, a WeChat consulting platform, to follow-up patients postoperatively. Patients' parents were asked to send photos via WeChat and also received postoperative care instructions and paid for the follow-up visit with WeChat pay [6].

Despite the vast potential to improve healthcare, the use of mobile platforms is not without issues. One of many concerns China is facing is the lack of trust in the accuracy of the health information shared via WeChat. To potentially address this issue WeChat has partnered with WebMD, a major source of health

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短文

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致编辑：随着高效的带状疱疹（HZ）重组亚
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免疫性皮肤病，哪些需要免疫调节治疗，以
保证HZ疫苗的接种。

Figure 1. WeChat user interface example from JAAD. **A)** WeChat JAAD platform. **B)** JAAD user interface, streaming article.

information in the United States. Another important issue is safety and privacy related to patient personal information. The Amnesty International report on encryption and human rights ranked WeChat the lowest among 11 technology companies evaluated in 2016 [7]. The absence of transparent reports, and unclear or non-existing encryption tools are problems that might limit its applicability to other countries.

A mobile technology that provides convenient scheduling and follow-up, better coordination of care, and enhanced patient-doctor communication would be a valuable resource in the busy setting of a dermatology clinic. Additionally, a mobile technology that directly links a patient clinic visit to billing and payment would be an interesting tool to

ultimately optimize, simplify, and possibly lower the costs of medical care. Moreover, WeChat may be a promising tool to share images of skin lesions among patients and dermatologists.

In summary, the establishment of a safe mobile interactive technology platform that allows for two-way communication between patients and dermatologists is a worthy goal. In addition, a mobile technology that allows dermatologists to safely share clinical images should be a helpful and promising tool in a visually-oriented specialty such as dermatology.

Potential conflicts of interest

The authors declare no conflicts of interests.

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