

In 2019, 27<sup>th</sup> HPH Conference Title:

**Balancing high tech and high touch in health care: Challenges and chances of digitalization and dialogue**

**Efficacy of Health Self-Management App - Associations between Using App, the Frequency of Services Received and Blood Pressure Control**

《探討雲端服務站個案使用自我健康管理 APP 與接受服務次數對血壓控制影響》

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Background/Problem/Objective

[英]

Since 2014, Mackay Memorial Hospital cooperates with community associations nearby to establish 18 cloud health stations in 5 administrative districts. The volunteers of health stations provide services measuring which include BMI, blood pressure (BP) and abdominal circumference, and then volunteers upload data to cloud system. Medical staffs provide periodically health consulting, checking blood sugar and cholesterol. Combining technology and health promotion, the residents at cloud stations could download health self-management app for BP control.

(74)

[中]

本院與社區組織合作成立雲端健康服務站，自 2014 發展以來已成立了 18 站，分佈在本院鄰近的 5 個行政區(淡水.蘆洲.五股.三芝.八里)，由服務站志工應用雲端設備提供 BMI、血壓及腰圍等檢測服務，也安排專業人員定期巡迴健康站提供健康諮詢與血糖、膽固醇檢測，更開發手機自我健康管理 APP 在社區護理師諮詢衛教的同時引導個案做自我血壓管理，結合雲端科技提升健康促進成效。

Methods/Intervention

[英]

The residents at cloud stations received measuring services. Their measuring data identified by "RFID member card" have been stored in cloud system, which allow the residents to check their data by app. In order to understand the residents' participation status of cloud stations and their app usage for health management, we collected residents' data in recent two years and explored the impact of the app usage and the frequency of services received ( $\geq 52$  or  $< 52$  times/2years) on blood pressure control.

(80)

[中]

社區民眾在雲端服務站接受志工量測血壓，透過個人健康卡辨識身分將量測數據儲存至雲端，藉由下載個人 APP 檢閱量測數據，為瞭解社區民眾參與雲端健康站及利用 APP 做健康管理的情形，以 2017 及 2018 年接受服務的個案，探討有無使用 APP 以及個案接受服務的次數對血壓控制的影響。

## Results (of evaluation)

[英]

There were 826 cases from 2017 to 2018. The cases number with and without downloading app were 237 and 589. The downloading group has better BP control rate 85.05% than no-downloading group 77.59% ( $p < 0.001$ ), no matter what they received high ( $\geq 52$  times/2years) or low ( $< 52$  times/2years) frequent services. But in no-downloading group, the high frequency services received group has better BP control rate 83.87% than low frequency services received group 76.99% ( $p < 0.05$ ).

(73)

[中]

兩年內到雲端服務站接受服務個案數有 826 人，下載 APP 使用有 237 人(28.7%)，未下載 APP 有 589 人(71.3%)，下載 APP 組的平均血壓控制良好比率 85.05%高於未下載 APP 組的 77.59%(T 檢定 P 值  $< 0.001$ ， $\alpha = 0.05$ )；以接受服務次數分高頻組( $\geq 52$ )及低頻組( $< 52$ )，有下載 APP 使用的 237 人，高低頻兩組平均血壓控制良好比率未達統計顯著意義，而未下載 APP 組 589 人中，高頻組的平均血壓良好控制比率 83.87%高於低頻組的 76.99%(T 檢定 P 值  $< 0.05$ ， $\alpha = 0.05$ )。

## Conclusions/Lessons learned

[英]

The residents using self-management app have better BP control rate. The residents without using app also can have better BP control rate while they received high frequency health services. Our hospital establishes accessible health stations, develops health management app and encourages communities to use these resources. The volunteers and nurses at health stations provide these warm services. Combining hard and soft powers (self-management app technology and manpower services) can let the residents at health stations reach the health promotion goal.

(80)

[中]

根據統計結果，有下載 APP 使用的雲端服務站個案，血壓控制較好；但未下載 APP 使用的個案，常接受檢測與諮詢服務的頻次較高，血壓控制也較好。本院多年持續在社區建置可近性的雲端健康服務站並發展自我健康管理 APP，利用管道宣導並鼓勵社區民眾這些資源，更透過社區護理師衛教、健康促進志工的服務、服務站負責人的參與，讓雲端服務站的個案血壓控制更好，應用檢測服務與雲端科技的軟硬實力，達成健康促進與科技的結合。

## Relevance to HPH Please explain the relevance of your work for health promoting hospital and health services. max 80

[英]

Our department implements community health promotion of government's programs and activities with local organizations. We achieve the health promotion goal through establishing health stations and training local volunteers.

[中]

代表院方與地方組織連結，執行社區健康促進政策事宜  
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If this submission is a contribution to an organized Workshop/Symposium.

Insert Title and Organizer of the session

Mobile app on health promotion

**Abstract type**

Best practice abstract

**Subject**

Digitalization in health promotion and public health

**Keywords**

Mobile App, Health stations, Blood pressure control