

應用 Application of Gerontech products 樂齡科技產品

本港人口持續趨向高齡化，按政府統計處 2020-2069 年人口推算及 2021 年數字，香港男女性平均壽命分別達到 83 歲和 89 歲，85 歲以上人口，會由 2020 年的 20 多萬，急增至 2049 年的 80 多萬。人口老化對醫療系統、經濟發展、安老和照顧服務帶來重大的挑戰，而使用樂齡科技產品，成為其中一個可改善服務使用者的生活，並減輕照顧者或員工負擔和壓力的工具。因此，政府聯同香港社會服務聯會及香港科技園公司自 2017 年起每年舉辦「樂齡科技博覽暨高峰會」，政府又於 2018 年 12 月撥出港幣 10 億元設立「樂齡及康復創科應用基金」，透過應用創新科技加強支援，以及提升在社區長者的生活質素和自理能力。本會同樣面對服務使用者老齡化的問題，因此申請「樂齡及康復創科應用基金」，採購樂齡科技產品以提升服務使用者的生活質素，產品大致可分成以下三類：

1. 康復及認知訓練

服務單位訂立個別訓練目標後，會利用治療器材的鏡頭和感應器，監測服務使用者的活動範圍和行為反應。部份單位增設互動類產品，服務使用者透過觸碰螢幕進行互動訓練，也利用不同的遊戲加強活動的娛樂性，吸引他們接受訓練。治療師也使用軟件，實時監察和紀錄服務使用者的進度和進展，從而使他們的健康得到改善。

2. 監察系統

運用網絡及監察系統，員工可以實時觀察服務使用者的活動，並且防止意外發生，當中包括離床警報器及防遊走系統、跌倒偵測及防跌裝置。本會亦引入了健康監察儀器，例如血壓機、膀胱掃描儀、骨質診斷儀、壓瘡防治和監測器材、電子磅和其他非接觸式健康監察系統，更有效地照料服務使用者。

3. 支援和輔助工具

活用不同的支援及輔助工具，例如電動移位機、電動輪椅護理床、電動樓梯機、電動沖涼床和浴椅、陪伴機械人等，除了可以加強服務使用者的活動能力，改善生活質素外，也可以減少員工的體力處理操作和發生意外的機會。



多功能監察系統
Multifunctional monitoring system



虛擬走廊 Virtual corridor



互動訓練牆 Interactive training wall

Hong Kong's ageing population continues to grow. According to the Census and Statistics Department's 2020-2069 population projections and 2021 statistics, the average life expectancy in Hong Kong has reached 83 years for men and 89 years for women. By 2049, the number of people aged 85 or above will rise sharply to over 800,000 from around 200,000 in 2020. An ageing population is an unprecedented challenge to the medical system, the economy and elderly care services. Gerontechnology is a solution that enhances the wellbeing of our service users, while reducing the burden and stress of carers and staff. In view of the above, the government has joined hands with The Hong Kong Council of Social Service and the Hong Kong Science and Technology Parks Corporation to organize yearly Gerontech and Innovation Expo cum Summits, starting from 2017. In December 2018, the government allocated HK \$1 billion to set up the "Innovation and Technology Fund for Application in Elderly and Rehabilitation Care" as a means of support. Ultimately, its aim is to improve the quality of life and self-care ability of the elderly through innovative technologies. To take better care of our ageing service users, the Society has applied for the "Innovation and Technology Fund for Application in Elderly and Rehabilitation Care". The fund is utilized to purchase Gerontech products that can be roughly divided into the following three categories:



實時監察系統 Real-time monitoring system

1. Rehabilitation and cognitive training

After setting individual training targets, the service unit will monitor the activities and behavioral responses of service users through the therapeutic device's lenses and sensors. Some units have fitted interactive devices that allow service users to engage in interactive training through touch screens. Activities are also gamified to enhance their attractiveness through their entertainment value. In another effort to enhance our service users' physical wellbeing, therapists also utilize software that monitors and records service users' progress in real time.

2. Monitoring system

Network and monitoring systems, including bed monitoring and anti-wandering system, fall detection and prevention devices enable the observation of service users in real time and accident prevention. Health monitoring devices, such as blood pressure monitors, bladder scanners, bone sonometers, pressure ulcer prevention and monitoring devices, electronic weight scales and other non-contact health monitoring systems are introduced to take care the service users effectively.

3. Supporting and supplementary tools

Not only do supporting tools, such as an electric transfer hoist, robotic care bed/wheelchair, powered mobility stair climber, powered shower/commode chair, and companion robot, enhance service users' mobility, the tools also create a more pleasant experience for our service users. What's more, the tools reduce the physical strain of our staff and the chance for them to be injured.