

J-M. CHEN, S-Y. LU. **Research of part-time base human resources management system.** *Gerontechnology 2014; 13(2):183*; doi:10.4017/gt.2014.13.02.365.00 **Purpose** Elderly home care is one of the most important services in the implementation of long-term care services. In Taiwan, a large proportion of the elderly lives in the rural areas, but most of the human resources for elderly home care is concentrated in the urban areas<sup>1</sup>. This paper discusses how IT technology can improve the care quality for rural areas to a level similar to that in the urban areas. With the help of information technology, not only can the caregivers perform home care services easily, but the elderly are more likely to have a caregiver they know and trust. The families of an elder can learn how to reduce the institutional side manpower expenses, including scheduling, billing, collecting working hours, and filling care records. **Method** A Global Positioning System (GPS) logger is carried by caregivers that can record home care services track during the moving. When caregivers report back to agency at a certain time, the data obtained through Geographic Information System (GIS) analysis can describe the statistics of each elder's care time and can get the moving path between elders. A combination of GPS data analysis and integration can easily to be used for caregiver spanning time and tracking to accomplish effective billing and care records reports<sup>2</sup>. This study uses Near Field Communication (NFC) technology, so each elderly has a NFC card that records some basic information belong to elder caregiver. Then caregivers can read NFC to confirm and identify the elderly and their care list, and the family of the elderly can write to NFC internal records with feedback, as illustrated in *Figure 1*. **Results & Discussion** Home care services are professional and complex. Using ICT technology for care records and calculating caregiver salary will influence their cost and reduce the chance of error. By the results of this thesis, caregiver carries GPS and NFC-enabled smart phones can be conveniently used for home care service record. Our contribution can improve home care efficacy including automated dispatching, care records, feedback, fee calculation, grant reporting, enhance the effectiveness of home care, and increase efficiency.

References

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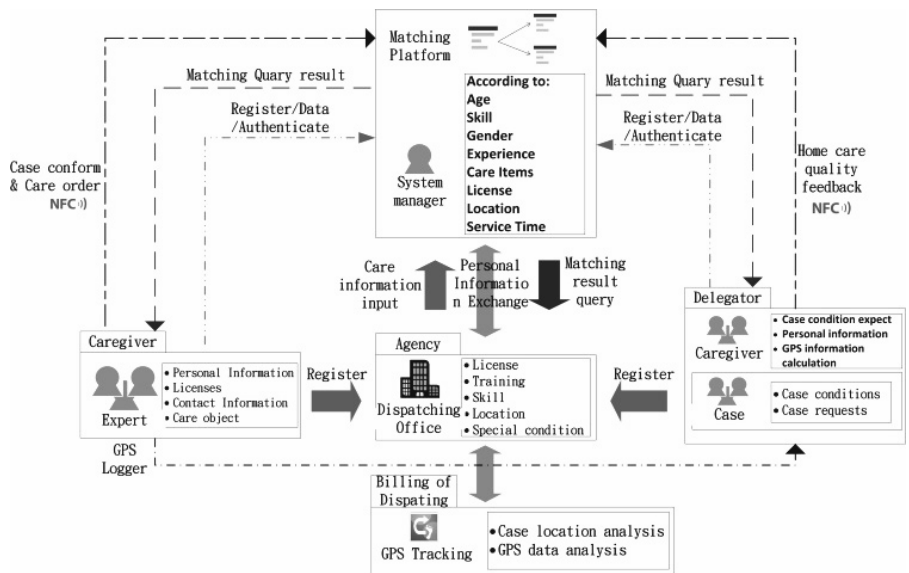


Figure 1. Home care platform information exchange