



**Service Priorities and Programmes**  
**Electronic Presentations**

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**Submitting author:** Dr Samuel Lap Shing TSE

**Post title:** Senior Medical Officer, Tai Po Hospital, NTEC

**Is the P4 Concept Applicable in Reducing Unplanned Re-admissions?**

*Tse S(1), Tse R(2), Wong C(2) and Kun E(1)*

*(1)Department of Medicine & Geriatrics, Tai Po Hospital, (2)Medical Records Office, Alice Ho Miu Ling Nethersole Hospital*

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**Introduction**

The P4 concept, originated from the genomic medicine stream, and stands for "predictive, preventative, personalised and participatory" approach, has remarkable similarities with the emphasis of modern clinical medicine with paradigm shift from reactive to proactive, and from 'sick care' to health care. The latter focuses on strengths, interests and abilities of patients, bases on good rapport, and the collaborative nature of the processes involved, eventually leading to desired healthy outcomes, particularly for the frequent emergency service users (FESUs).

**Objectives**

To conduct a prospective pilot study to examine whether an analogy could be drawn from the concept of P4 medicine, in its 'back-to-basic, high touch' version, in the out-patient setting targeting home-living elderly FESUs in Hong Kong, through predicting clinical course of diseases, preventing further complications secondarily, uniquely personalised evidence-based care plan, and active participation of patients and caregivers.

**Methodology**

Information on the demographics and usage pattern of this group of FESUs were analysed daily. Selected subjects were those home-living FESUs who could potentially benefit from timely, intensive and P4 concept-focused approach after recent emergency service use, and then being seen at P4 clinic as a division of the main Geriatric out-patient clinics. The patients and/or caregivers were contacted beforehand, with their consent obtained.

**Result**

A total of 15 patients, including 10 female and 5 male, who all met the selection criteria have participated in this programme from April 2012 to Feb 2013. The number of unplanned emergency attendances and medical readmissions, ranges from 3-37 episodes (total= 122, mean=8.1)(total in one year before intervention). The number of active diagnoses were 2-7 (mean=4.2), and the number of regular drugs were 4-11 (mean=8.1). 2-15(mean=5.1)of P4 clinic sessions were required, focusing on specific education and support, acute symptoms control, medication reconciliation and need-based referrals, coupled with interval phone calls for monitoring and support.

The follow-up periods were 7-292 days (mean=100.4). The number of unplanned early emergency department attendances and medical readmissions after intervention were 0-4 (total=16, mean=1.1), with 9 out of 15 patients totally free from emergency department attendances or readmissions in the studied period. We conclude that the concept of P4 medicine could be successfully adopted, at least in a small scale pilot study, with patient-related and service-oriented outcomes achieved.