Introduction
Studies showed that it will have more effective outcomes for low back patients if they are stratified into different subgroups and receive treatment according to their targeted treatment pathway (Hill et al 2011). Therefore, a comprehensive patient-empowered active back program was designed at the outpatient physiotherapy department to categorize the low back pain patients into different subgroups of disability and to direct them into targeted treatment pathways for better outcomes.

Objectives
To evaluate the effectiveness of targeted treatment pathway of the comprehensive patient-empowered active back program on different subgroups of low back pain patients.

Methodology
Low back pain patients were firstly screened by a validated predictive screening tool, the STarT Back Tool, to classify them into the low-risk, medium-risk and high-risk subgroups. All the patients of different subgroups would attend the one-session active back class which included a back pain management video, individual assessment and group exercise. Patients of the low-risk subgroup would be discharged after the class. Patients of the medium-risk subgroup would further receive 4 to 6 sessions of individual evidence-based treatment, whereas the patients of high-risk subgroup would attend 6 sessions of individual treatment addressing their physical and psychosocial components. Outcome measures included: (1) Numerical Global Rating of Change Scale (NGRCS) as subjective outcome; (2) Numeric Pain Rating Scale (NPRS) as pain level; (3) Roland Morris Disability Questionnaire (RMDQ) as level of functional limitation due to back pain; (4) Fear-Avoidance Beliefs Questionnaire (FABQ) as fear avoidance belief; and (5) Hospital Anxiety and Depression Scale (HADS) for anxiety and depression. (6) Satisfactory level after the program. Data were collected at the beginning and 3 months after the program.
Result
A total of 75 low back pain patients were recruited into this pilot program from August 2015 to January 2016. There were 24, 24 and 27 low back pain patients in the low-risk, medium-risk and high-risk subgroups respectively. There were 47 patients (33 female and 14 male) of mean age 52.2 + 10.1 returned the questionnaires 3 months after the program. The response rate was 62.7%. The satisfaction level was 7.51 + 2.39 out of 10. RMDQ (10.28 + 5.39 to 6.81 + 5.23) (p<0.01), FABQ-Physical Activity (14.94 + 5.26 to 13.36 + 5.40) (p=0.048), FABQ-Work (23.06 +10.15 to 19.47 +10.84) (p=0.016), HADS-Anxiety (7.17 + 4.29 to 5.78 + 4.12) (p=0.004) and HADS-Depression (6.09 + 3.66 to 5.17 +3.74)(p=0.031) were significantly improved from the beginning to 3 months after the program. Subjective improvement as measured by NGRCS was 5.94 + 2.37 (p<0.01). However, there was no significant change for the pain level as measured by NPRS.