Background and aims
The association among SLEDAI, SF-36 and HADS in China was unknown. Smart System of Disease Management (SSDM) is a series of mobile applications for chronic diseases management. The purpose of this study is to determine major clinical characteristics of Chinese SLE patients using SSDM and analyse the potential association among SLEDAI, SF-36 and HADS.

Methods SSDM includes physicians’ and patients’ application system. The patient application system includes SSDM, SF-36, HADS and medication management. After data entry, patients can synchronise data to the mobile terminal of authorised rheumatologist. All patients fulfilling the 1997 ACR criteria for SLE were recruited.

Results A total of 3717 SLE patients from 490 rheumatologists in 214 rheumatology centres across China participated in the study (89% were women). The mean age was 34.09±11.87 years and the median disease duration was 3.15 years. 1,908 patients performed self-assessment for 3,085 times. The mean score of SLEDAI, SF-36, HADS-Anxiety (HADS-A) and HADS-Depression (HADS-D) were 9.41±2.52, 60.09±20.01, 7.86±4.09 and 8.77±4.25 respectively. According to the SLEDAI criteria, 43.71%, 18.50%, 13.42% and 24.37% patients achieved Remission, Low, Moderate and High disease activity. SLEDAI was significantly correlated with SF-36 and HADS-A independently. The regression equation was “SLEDAI=0.461+1.114*HADS-A” (p=0.028).

Conclusions SSDM is an effective mobile interface to serve for SLE patients performing self-management as well as to supply physicians with valuable data. SSDM was significantly correlated with SF-36 and HADS-A independently.