Introduction

It is generally recognised that long-term care (LTC) is an increasingly important issue in our ageing society. Governments around the world have been alerted to the potential difficulties in funding and managing the LTC system.

In England, due to regulatory requirements, local authorities have a keen interest in knowing the behaviour of the LTC system, in particular,
- how long residents stay in the system, and
- how much the system will cost.

Results

The model shows a short-stay and a long-stay component in both residential and nursing home care.

In October 2005, the (gross) cost of Merton’s known commitments was projected to be £10.7 million for RC and £12.6 million for NC to the end of the financial year 2006/07.

Methods and Data Requirement

The movement of residents within and between residential home care (RC) and nursing home care (NC) is modelled by a continuous-time Markov process.

The cost of care is modelled as an incremental process with annual increments at the beginning of financial years. This reflects the reality that prices are usually negotiated with care home providers at the beginning of a financial year.

The data needed is collected routinely by local authorities as part of their everyday operation. The essential information is the date of admission, type of care, date of discharge (if applicable), and destination of discharge (if applicable).

The London Borough of Merton provided the data, expert domain knowledge and feedback during the model development.