



## Scenario Generator | Success Story

### ORGANISATION

South Central PCTs

### INDUSTRY

Healthcare

### CHALLENGE

Implementing stroke best practice guidelines to improve patient outcomes without increasing costs

### SOLUTION

Using Scenario Generator to analyse current patient care pathways and test out change scenarios before implementation.

### BENEFITS

- Proved that implementing guidelines could reduce stroke deaths by 18% without increasing costs significantly
- Ability to make evidence based decisions
- New guidelines tested in risk free environment

“Scenario Generator helps clinicians and managers to understand together how their system works, and to refine and develop the model as they define the key questions central to decision-making in the health service”

*Andrew Hughes, SEPHO*

## IMPLEMENTING STROKE BEST PRACTICE

### South Central show that you can reduce stroke deaths by up to 18% with very little cost impact

In South Central England, PCTs needed to test the impact of moving to the NICE and National Stroke Strategy best practice pathway for emergency stroke care. The new pathway would give patients quick access to early treatment and better rehabilitation support but what would the resource and cost implications be?

### A COLLABORATIVE APPROACH

Scenario Generator allowed clinicians, staff from the South East Public Health Observatory (SEPHO), PCT managers and clinical academics to work together to answer two fundamental questions:

- What are the patient outcomes as a result of implementing best practice?
- How much specialist rehabilitation in the community is required and can it be paid for if patients are discharged from hospital earlier?

A high level simulation of the flow of patients from initial event to diagnosis, start of treatment and general rehabilitation, reflecting current practice for thrombolysis services, was built.

The simulation included several rehabilitation options: specialist stroke unit rehabilitation, non-specialist stroke unit and other intermediate care, as well as an option for early supported discharge.

### SIGNIFICANTLY IMPROVED PATIENT OUTCOMES

Scenarios were generated that tested various changes in GP referral behaviours resulting in more activity through the pathway as well as taking into account the expected demand as a result of population and disease prevalence changes. SEPHO also tested the impact of more non-stroke related activity being referred to stroke and then referred on after initial assessment.

The results demonstrated that the cost of the new pathway would actually be slightly cheaper as a result of early supported discharge from hospital and the delivery of specialist rehabilitation in the community would, therefore, be affordable. They also showed the very significant improvements in patient outcomes.

### EVIDENCE BASED DECISIONS

Simulation provided the PCTs with compelling evidence to demonstrate that the financial risk of recommissioning the stroke pathway was negligible and that showed the huge benefits of the new pathway for patients.

*“This model has enabled me to take a successful business case to my Executive Team, and we will be implementing the pathway this year”*  
PCT Manager

