

Scenario Generator is the only simulation software tool for strategic planning that enables design and simulation of care pathways within whole health and social care systems.

The evidence for change

Scenario Generator

Scenario Generator enables the design and simulation of care pathways within whole health care systems, including social care, that are driven by population demand over time. This supports strategic decision-making and the planning, financing and design of new models of care.

Manage Risk

Simulation modelling helps decision-making in any part of a health and social care system. Using simulation organizations can develop strategies to become more efficient by effectively managing the risks of any system changes and design of new models of care.

Test contingency plans

Users can test the possible impact of many different types of change; like increase in demand for services, changes to the way services are delivered, or the implementation of a new national policy initiative to help understand how their system might behave as a result of any change.

Visualize and gain consensus

Scenario Generator allows you to create a visual representation of your care pathways that will assist in engaging all levels of management and help in gaining consensus from decision makers.





Scenario Generator can help answer these questions

- Where should we target our interventions?
- How can we explore the impact of system-wide changes with our partners and stakeholders?
- How can my service be more efficient and how best to invest or disinvest in a service?
- What happens when more activity is managed outside the hospital?

- What is the impact of housing and population growth?
- ✓ How much capacity will be needed and when, in the case of increased demand?
- How can a system be made more resilient in the case of high demand (flu epidemics, winter pressures)?

The knowledge to improve

Real world data

Scenario Generator works on the basis of generating patient related events e.g. admissions and consultations, based on national or local information on population, prevalence of conditions and health and social care services utilization. This information is matched to key population characteristics to allow the impact of population health, size and demography to be modelled.

Current Projects

Used by the NHSIQ Year of Care for Long Term Conditions Early Implementers as well as by many CCGs, Public Health Teams and Local authorities in England and Health and Local government in Scotland. Scenario Generator is also being used internationally in Italy, Netherlands, Canada, USA and Australia

Community

Our international community brings our people together to share knowledge, provide support, and connect with others committed to improving healthcare across the world.





Improving Stroke Pathways

Providing the evidence for change



"Clinicians and managers can understand together how their system works, and refine and develop the model as they define the key questions central to decision-making."

Andrew Hughes, SEPHO

Improving patient outcomes without increasing costs

Scenario Generator allowed clinicians, staff from the South East Public Health Observatory (SEPHO), commissioners and clinical academics to work together to test the impact of moving to the NICE and National Stroke Strategy best practice pathway for emergency stroke care.

A high level simulation of the flow of patients from initial event to diagnosis was created. 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

The simulation provided the commissioners with compelling evidence to demonstrate that it was possible to reduce stroke deaths by up to 18% with very little cost impact and also laid the groundwork for ongoing collaboration and improvement.

Planning Integrated Care

Understanding the impact of an ageing population



"We felt we really needed to test this change out in a computer simulation to see what the impact would be and to manage any risks."

Ken Laurie, Director of Strategic Change, NHS Fife

Transforming care and improving outcomes

NHS Fife used Scenario Generator to understand the impact of an aging population on demand for services, and to test the impact of the introduction of a virtual ward on bed capacity requirements.

One of the key modelling questions was to test what would happen if the staff assessing patients for the virtual ward worked 5 days a week or 7 days and week, and how many patients would still need an inpatient bed when the assessment centre was closed.

Evidence for change

NHS Fife tested the simulation results with real data over a number of years to be absolutely confident in the results. Now NHS Fife is helping the Scottish Government to use this model with other health and social care services partnerships to test their investment decisions.