



Healthy London  
Partnership

directors of  
**adass**  
adult social services

## → *Using QI tools: Action Effect Diagrams*

Tom Woodcock

Supported by and delivering for:



Public Health  
England

**NHS**

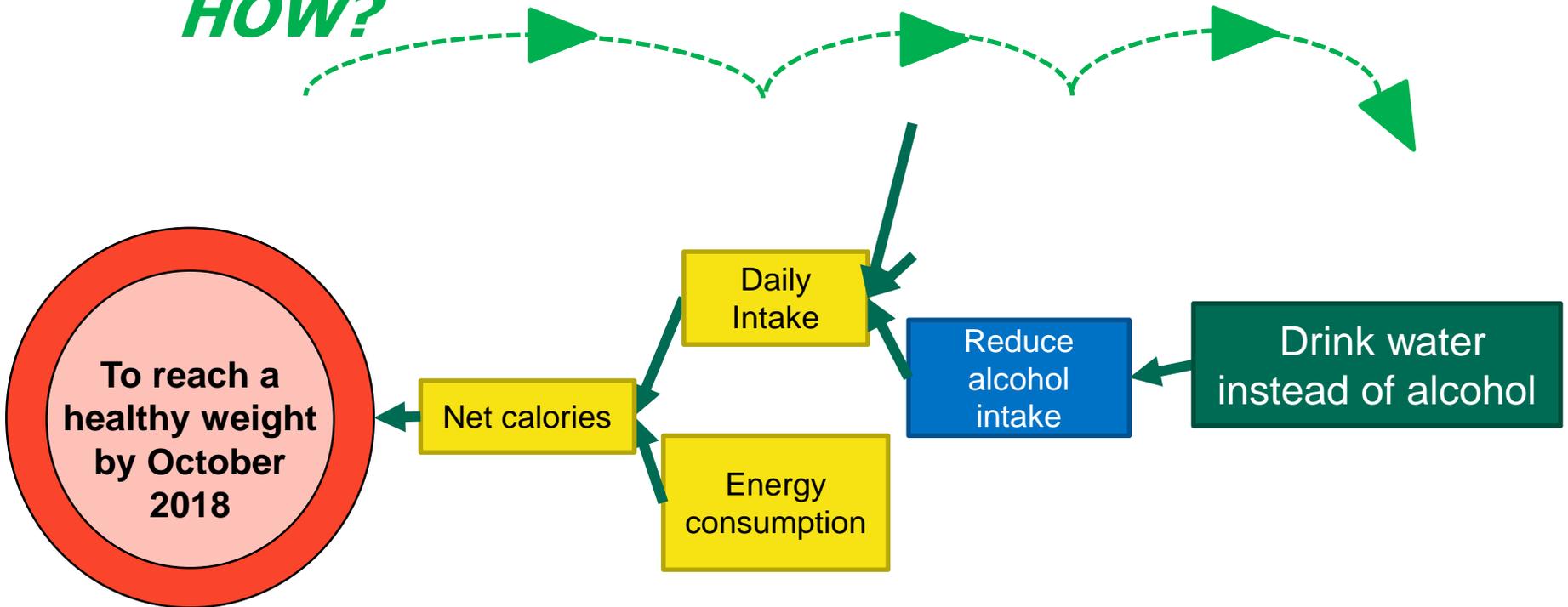
SUPPORTED BY  
**MAYOR OF LONDON**

# Learning Objectives

- Understand how to apply Action Effect Diagrams in practice
- Understand the benefits of using Action Effect Diagrams
- Understand how Action Effect Diagrams fit with other Quality Improvement methods

# Bob's Action Effect Diagram

*HOW?*



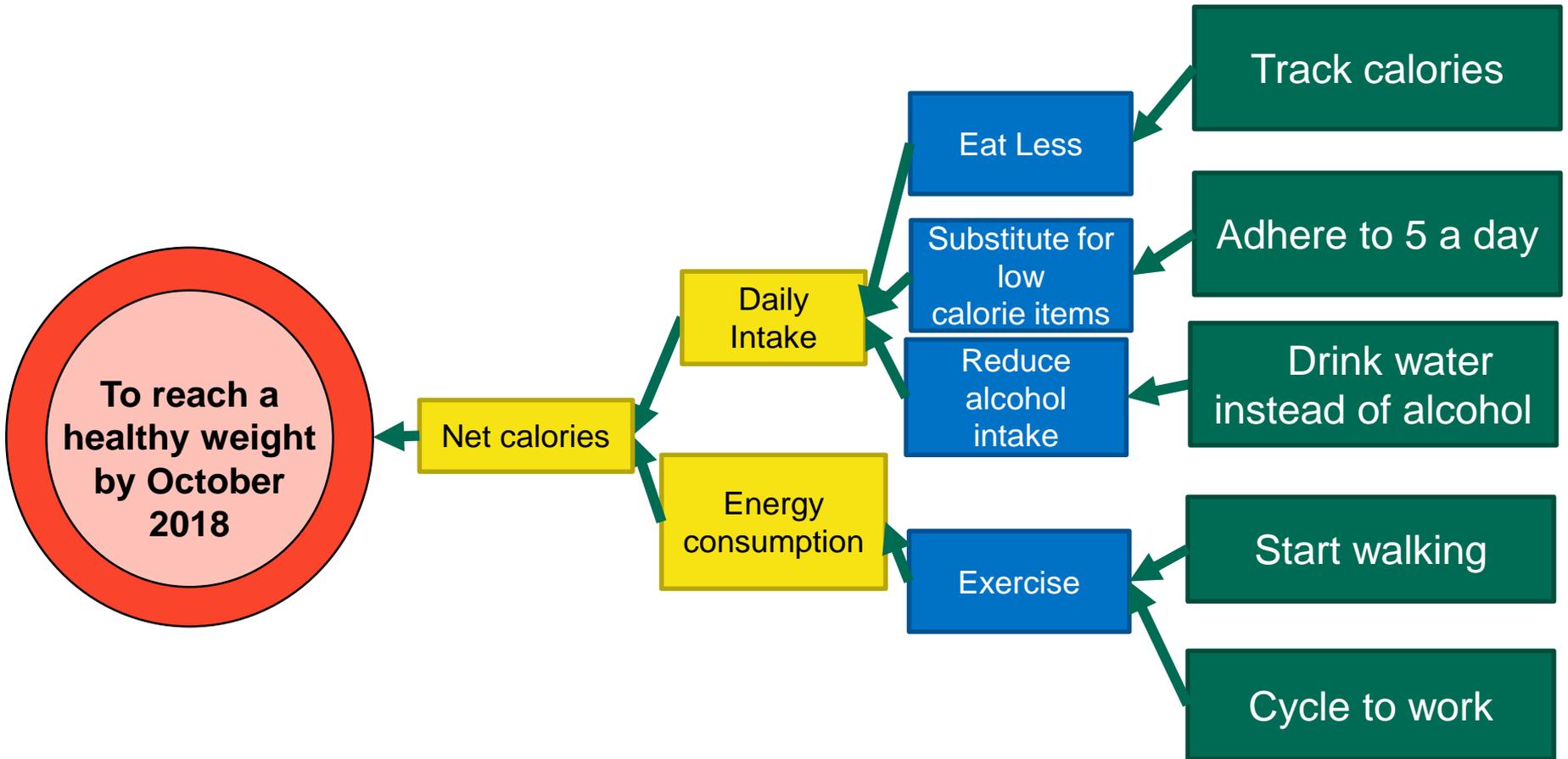
*WHY?*

# In groups...

Think of additional factors that will help Bob achieve his aim.

- What else will help him reduce his calorie intake?
- What will help increase his calories out?
- Make each factor clear and explicit
- Join the factors to the things they will help with: cause and effect

# Bob's Action Effect Diagram

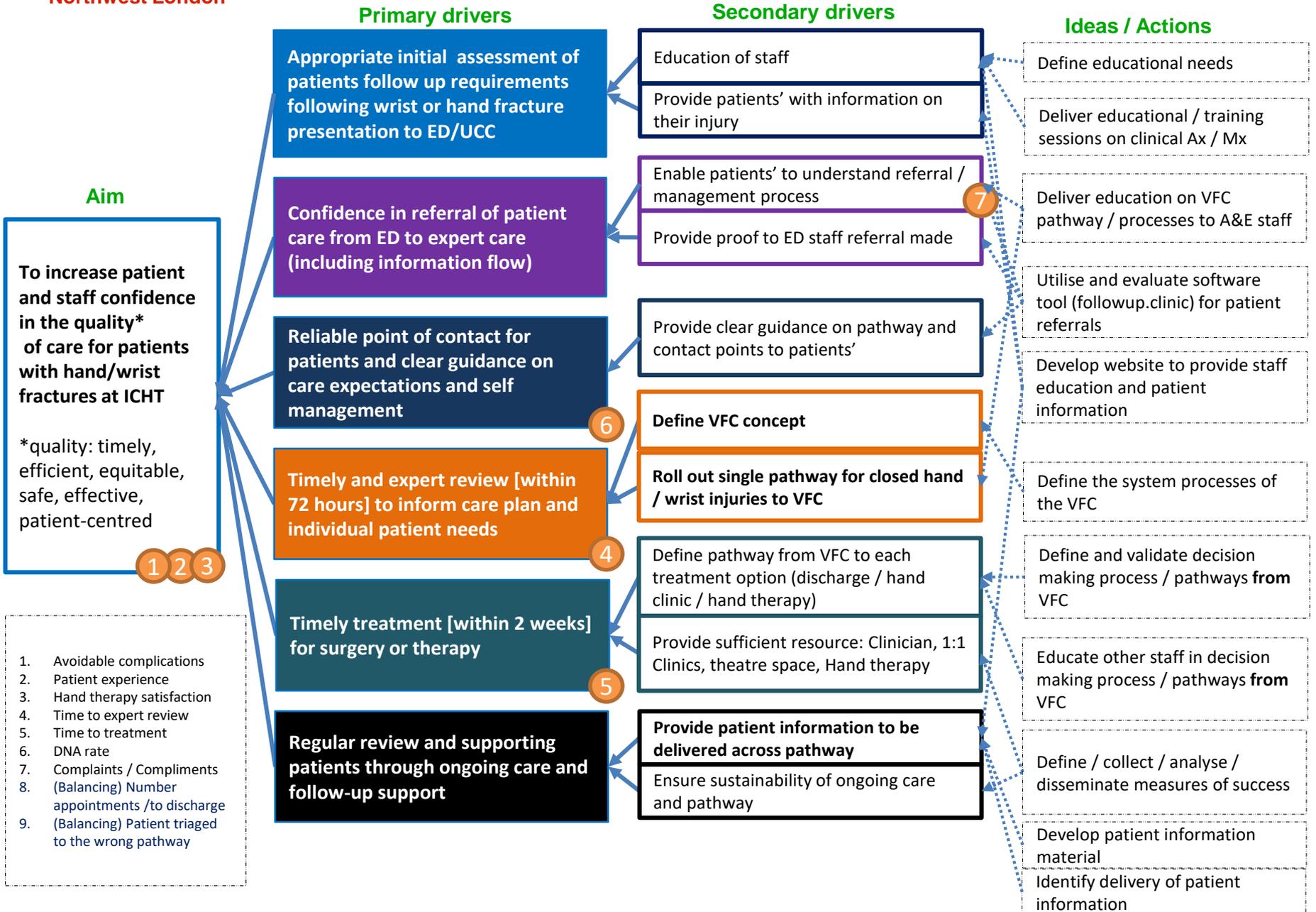


# Action Effect Diagrams

Communicate *programme theory* :

- an overall aim
- potential intervention(s) to be tested
- evidenced or hypothesised cause and effect relationships, linking intervention(s) to the aim
- measure concepts linked to the cause/effect chains

# Action Effect Diagram

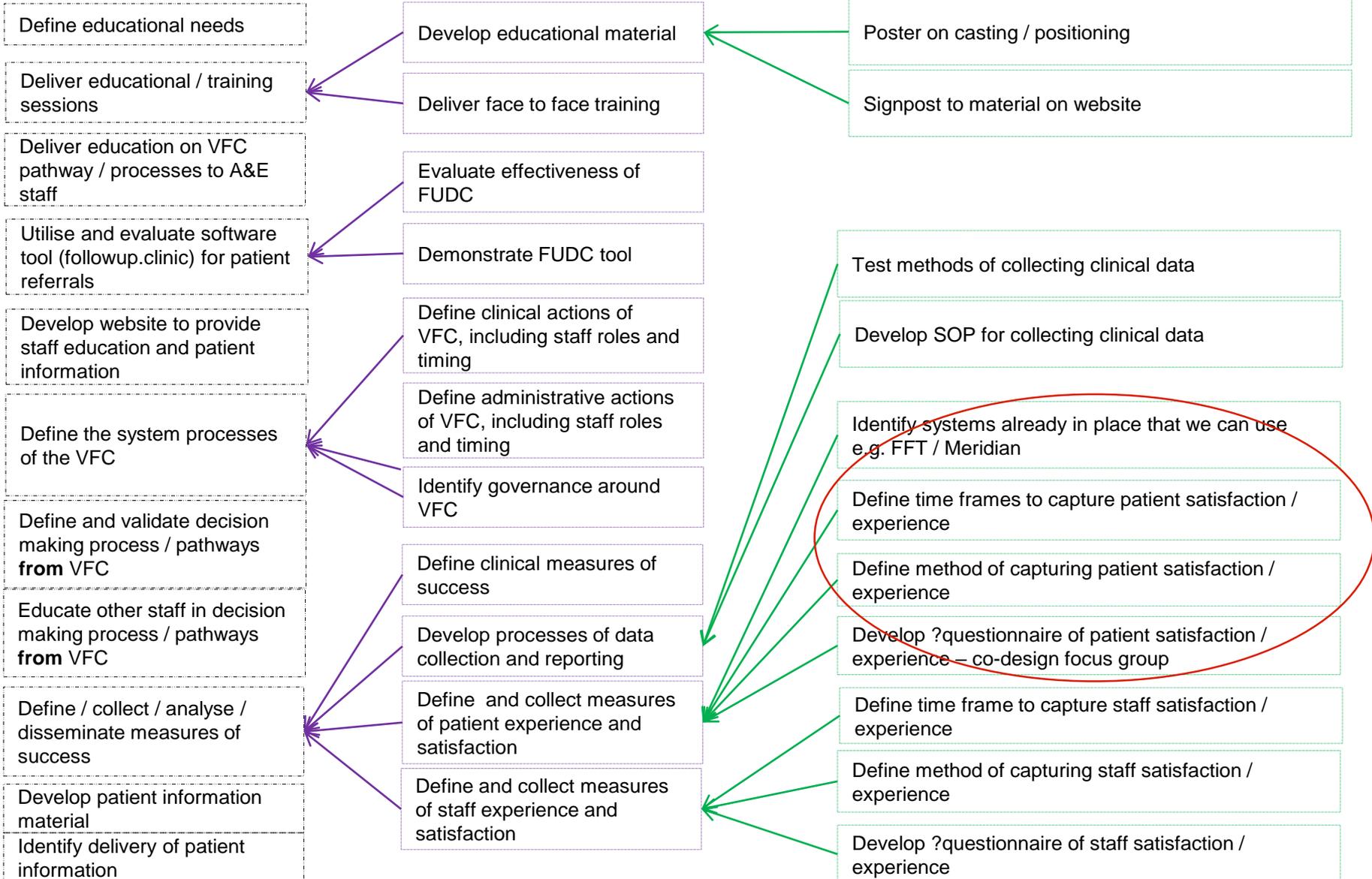


# Action effect Diagram- Contd.

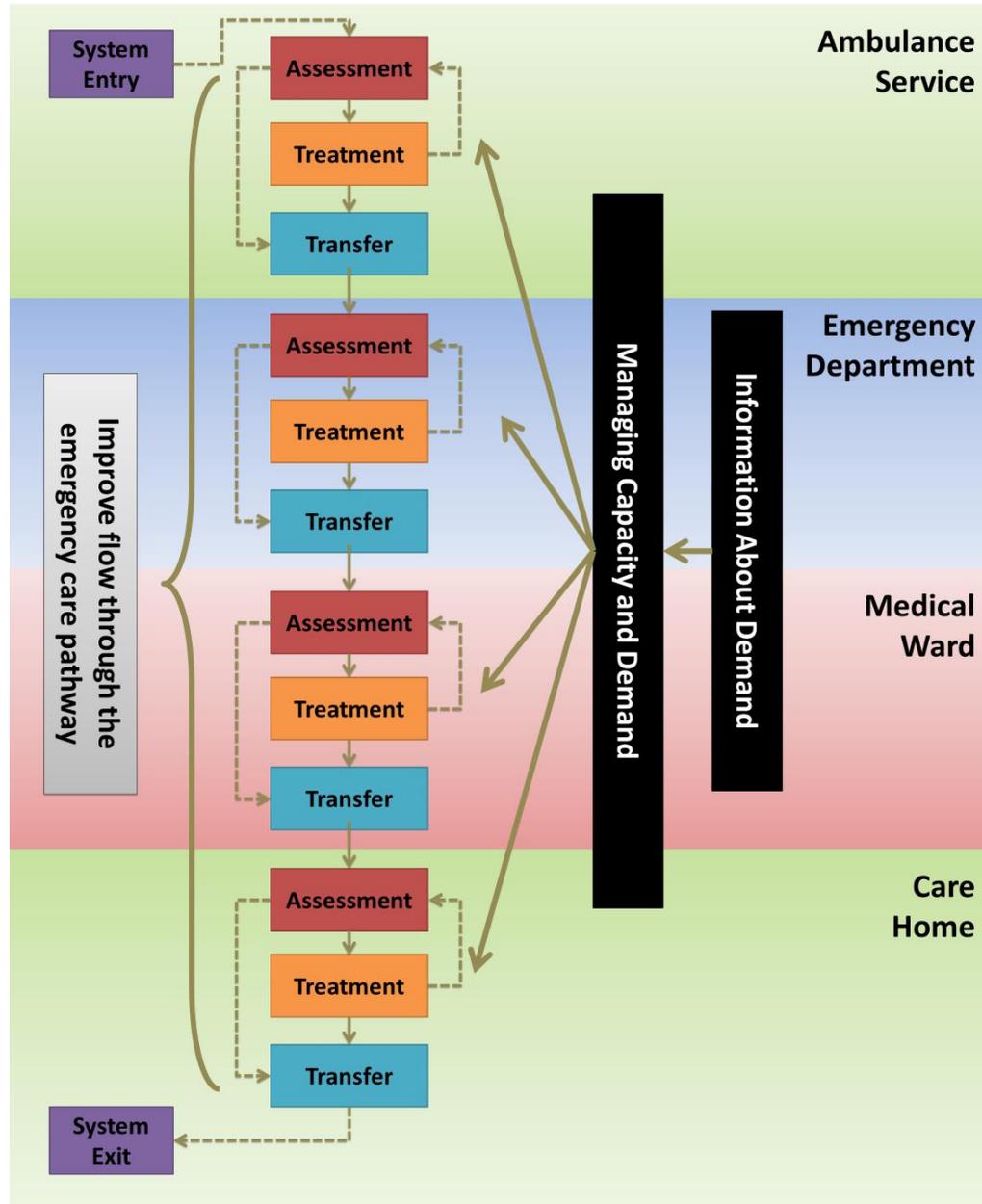
*Breaking down the Problem down - PDSAs*

## Ideas / Actions

## Interventions



## High Level Example





The Scottish Government

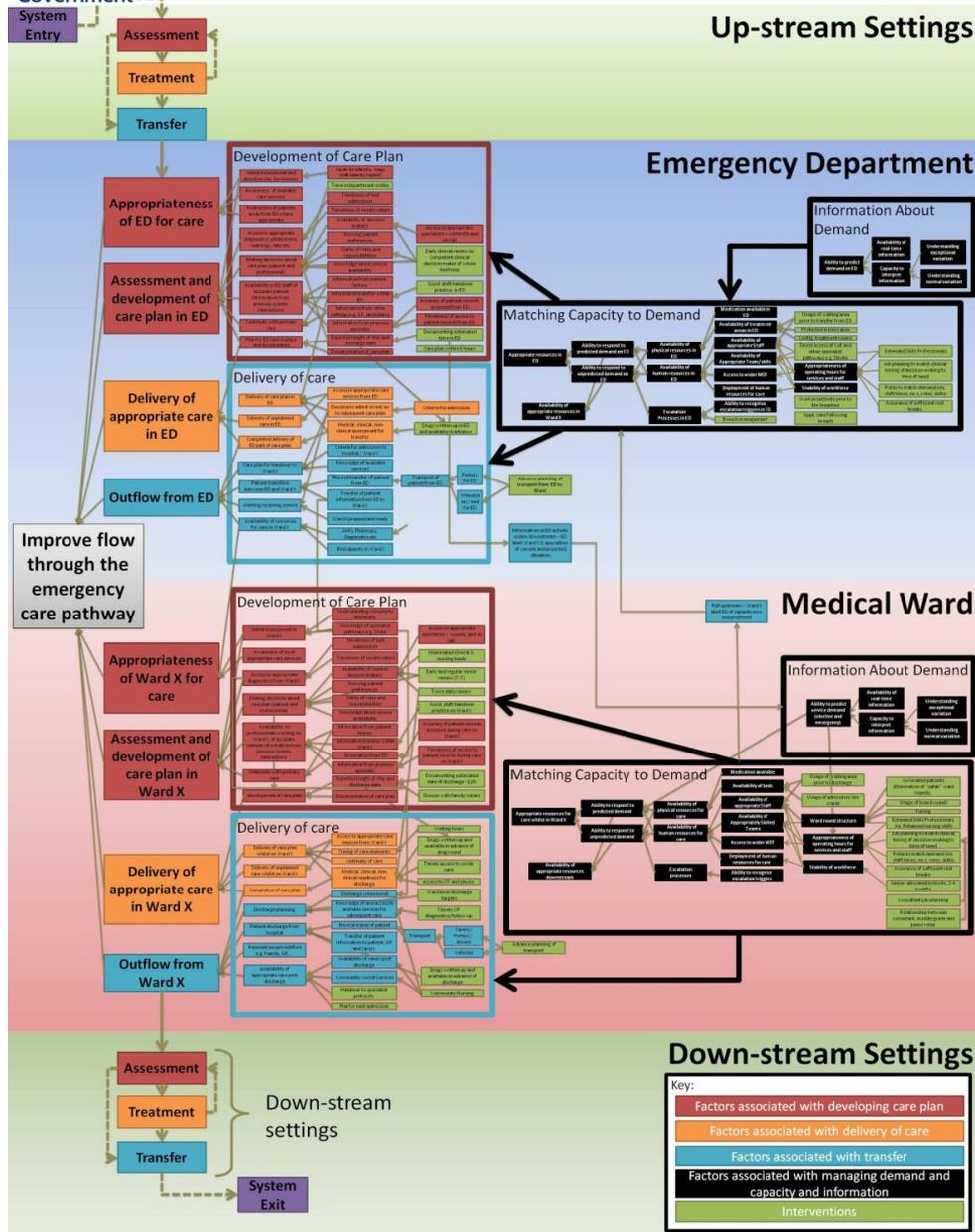
# Emergency Flow Action Effect Diagram

## Emergency Department and Ward

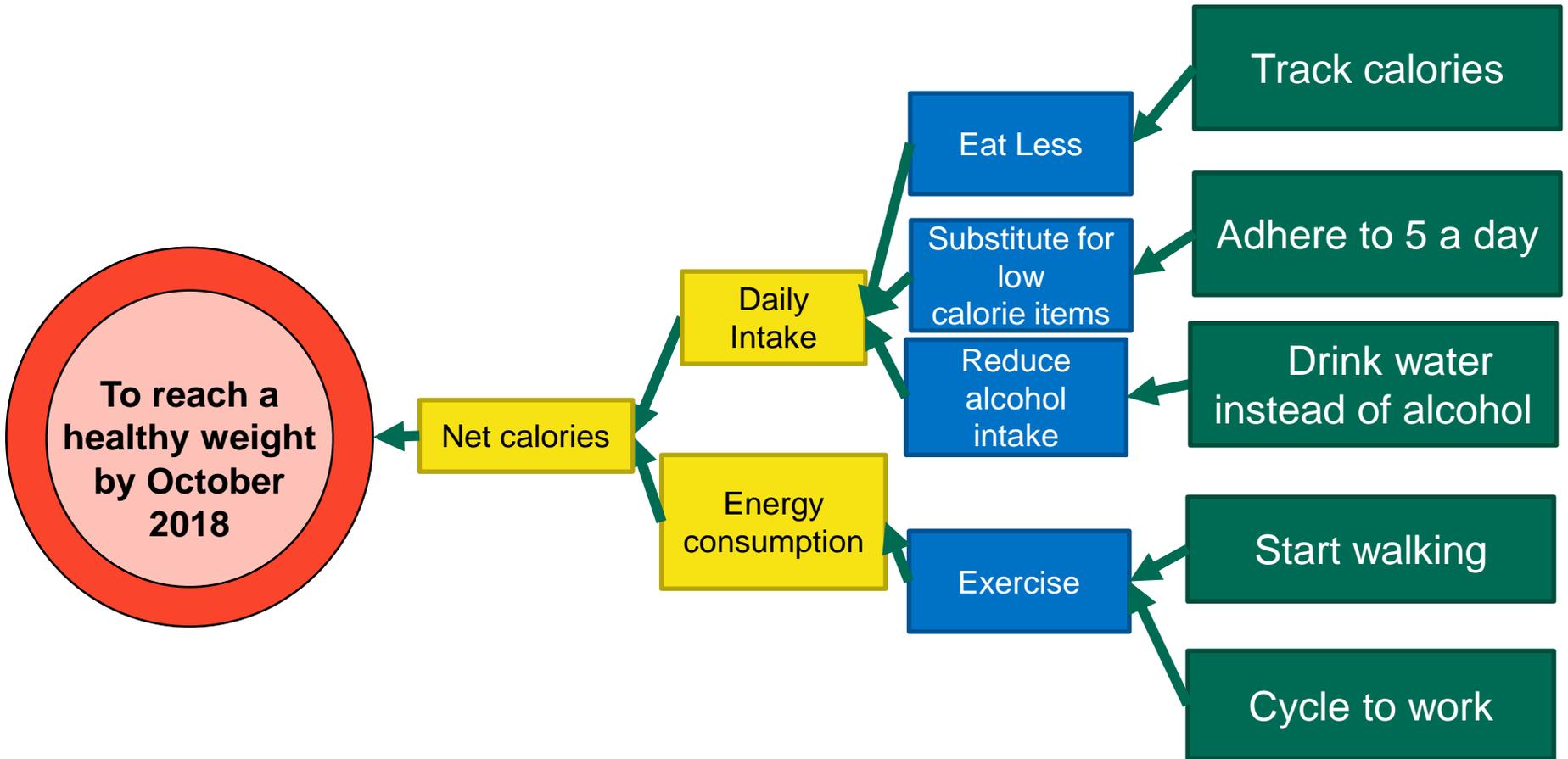
NIHR CLAHRC  
for Northwest London

Centre for Healthcare  
Improvement and Research

programme funded by: **NHS** **NHS**  
Improvement England



# Bob's Action Effect Diagram

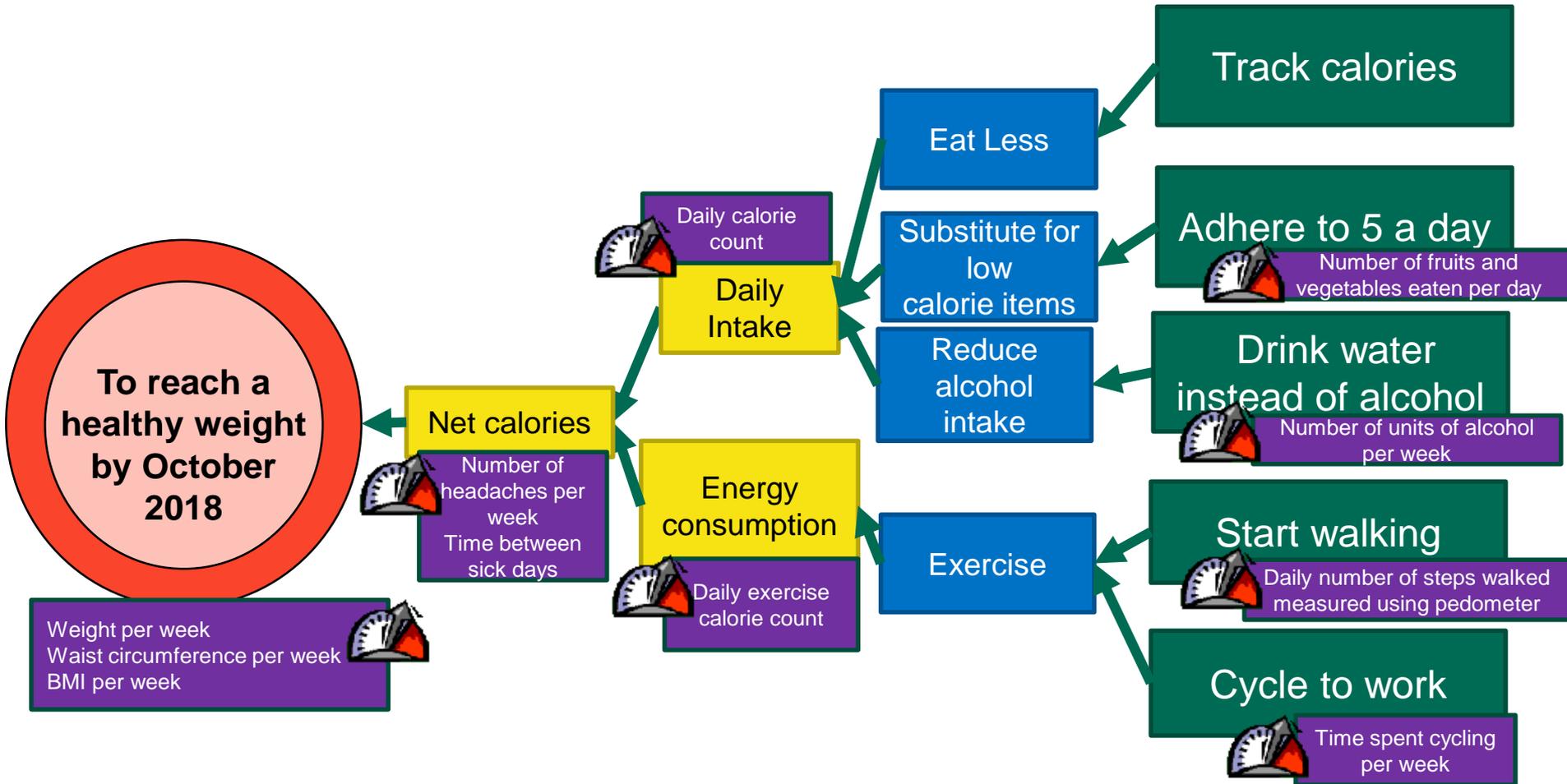


# In groups...

Think of measures that will help Bob achieve his aim.

- Write a numbered list of measures on the bottom left
- Annotate factors to indicate measures of that factor
- Include process, outcome and balancing measures. Where do they go on the diagram?

# Bob's Action Effect Diagram



# Types of Measures

- **Outcome measures** reflect the impact on the patient and the system and shows the end result of your improvement work
- **Process measures** reflect the way your systems and processes work to deliver the outcome you want
- **Balancing measures** reflect unintended and/or wider consequences of the change (which may be positive or negative)

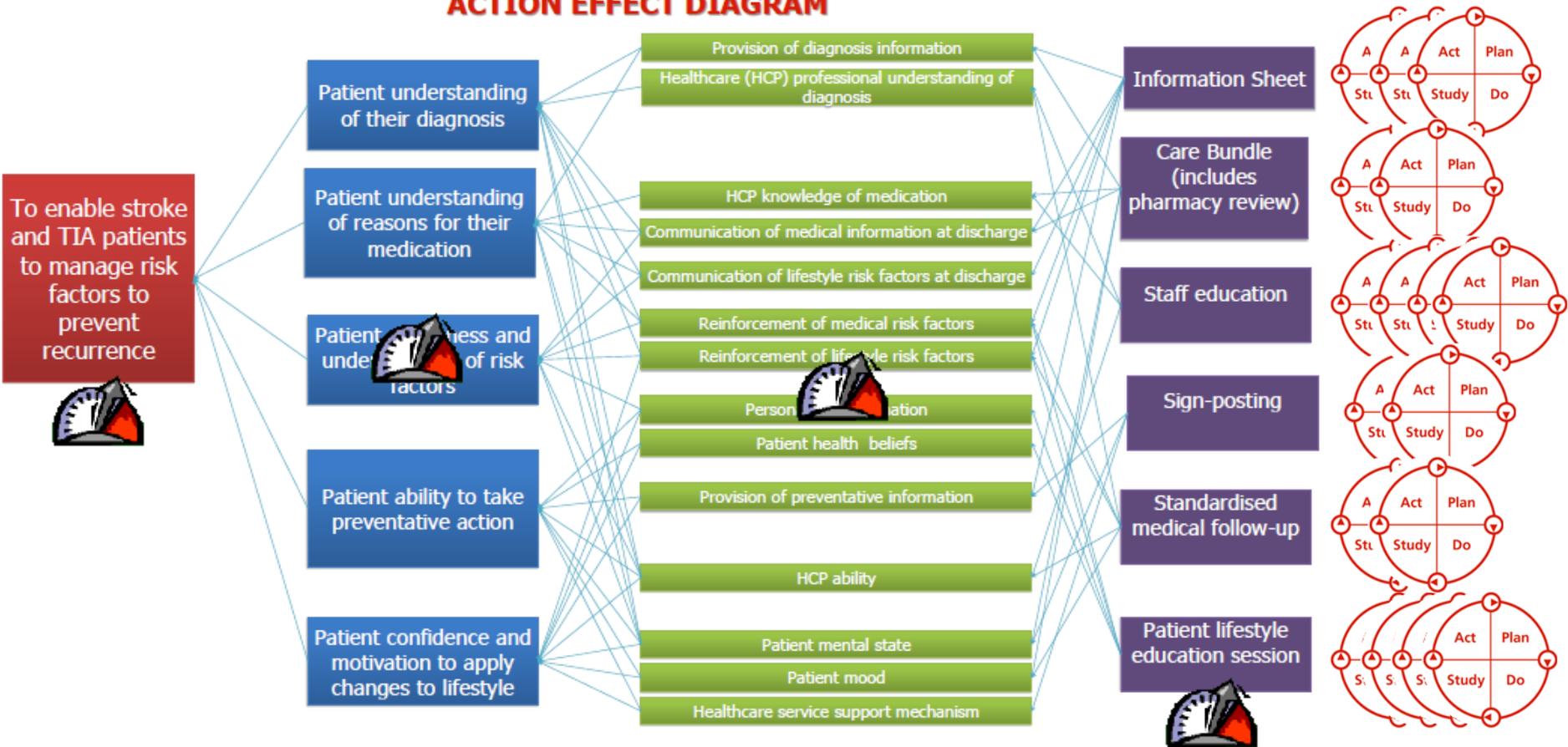
# **Benefits of the AED in Quality Improvement**

- Stakeholder engagement
- Effective project planning
- High-quality measurement and evaluation
- Clarity around causality
- Local improvement linked to system priorities and evidenced measures
- Boost for sustainability and spread

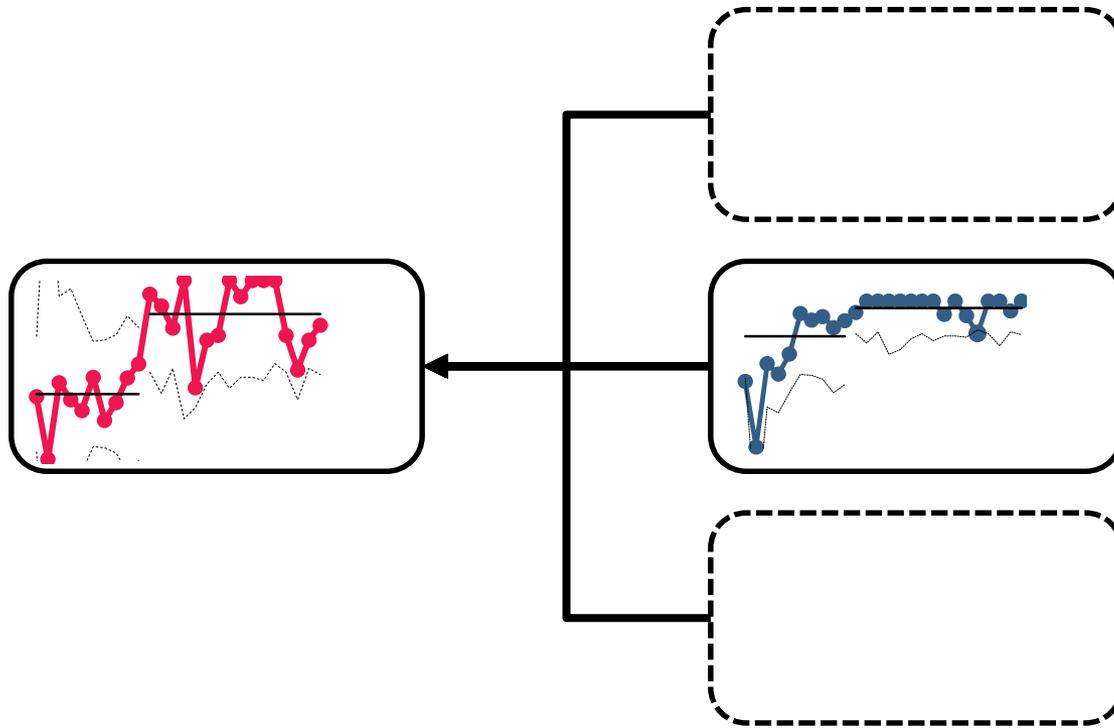
# Applying the AED in practice

- Develop an AED as a team – involve people!
- Draw on relevant
  - research evidence
  - data & measures
- Revisit and update your AED regularly
- Part of a suite of tools: Plan-Do-Study-Act, Statistical Process Control, Process Mapping...

## StrokePREVENT ACTION EFFECT DIAGRAM



# Link with measurement



**QI4U** NIHR CLAHRC Northwest London

Home Modules Reflective Diary demo 1 Feedback

Welcome Back **demo 1** Subscription ends: 31/12/2015

### Learning Module

- Action effect diagram ✓
- Mental and physical wellbeing ✓
- Public and patient engagement/involvement ✓
- Process Mapping
- Long Term Success
- Stakeholder engagement
- Plan Do Study Act cycles PDSA
- Measurement for improvement

**Modules To Start (0)**

**Modules To Resume (5)**  
Click a module to continue learning...

- Process Mapping
- Long Term Success
- Stakeholder engagement
- Plan Do Study Act cycles PDSA

**Modules Completed (3)**  
Click a module to download a certificate...

- Action effect diagram
- Mental and physical wellbeing
- Public and patient engagement/involvement

[View all](#)

<http://hlp.qi4u.org>

# Action Effect Diagram Summary

- A structured approach to improvement, technical and social functions
- Integrates with other Quality Improvement methods
- Resources available to support use (QI4U, publication, CLAHRC team)

# References

- Reed, E. J., mcNicholas, C., Woodcock, T., Issen, L., & Bell, D. (2014). Designing quality improvement initiatives: the action effect method, a structured approach to identifying and articulating programme theory. *BMJ Quality & Safety*, doi.org/10.1136/bmjqs-2014-003103
- Provost LP and Murray SK. 2011. *The Health Care Data Guide: Learning from Data for Improvement*. Jossey-Bass. ISBN 978-0-470-90258-5
- Lloyd R, *Quality Health Care A Guide to Developing and Using Indicators*

