

# National Asthma and Chronic Obstructive Pulmonary Disease Audit Programme (NACAP)

## **COPD clinical audit 2017/18**

## **Findings and quality improvement**



# Key findings and recommendations

Royal College of Physicians | NACAP

National Asthma and Chronic Obstructive Pulmonary Disease Audit Programme (NACAP)

## COPD clinical audit 2017/18

(people with COPD exacerbations discharged from acute hospitals in England and Wales between September 2017 and 2018)

### Clinical audit report

Published May 2019



In association with:



Commissioned by:



NACAP: COPD

# Audit participation

All hospitals in England and Wales admitting patients with acute exacerbations of COPD (AECOPD) were invited to participate.

Includes patients discharged between 14 September 2017 and 30 September 2018.



**74,645** hospital admissions\*

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By **179** hospitals in England and Wales

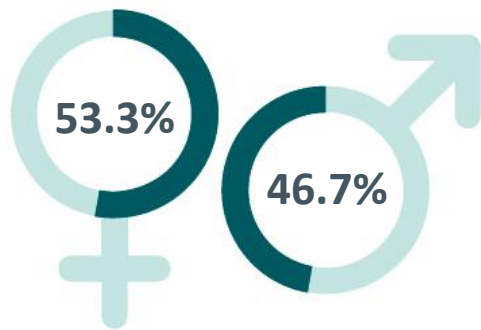
\* This figure includes patients that died in hospital



# General information

## Demographics

A higher proportion of admissions were female



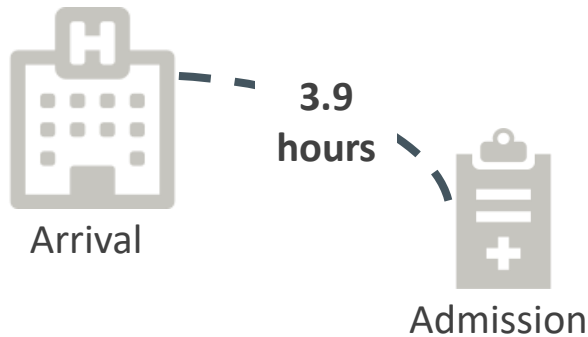
The median age at admission was: **73** years



The highest proportion of admissions came from **the most deprived quintile** of England (34%) and Wales (39%)

## Time from arrival to admission

Median time from arrival to admission increased (3.4 in 2017)



## Length of stay

Median length of stay (4 days) remained unchanged from 2017





# Provision of timely care

## Acute physician review



**86.2% of admissions** were reviewed by an acute physician of ST3 or above (82.3% in 2017)

## Respiratory specialist review

**84.7% of admissions** were reviewed by a member of the respiratory team (78.0% in 2017)



**64.0% of admissions** were reviewed within 24 hours (54.8% in 2017)



### Patient priority

Timely access to / review by respiratory specialist



# Oxygen

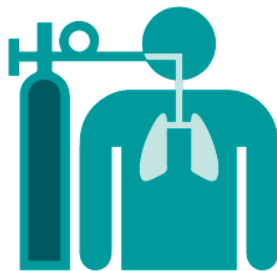
## Patients prescribed oxygen

There was a **considerable improvement** in the number of admissions being prescribed oxygen:



**72%**  
of patients that  
**required oxygen**  
were prescribed it.

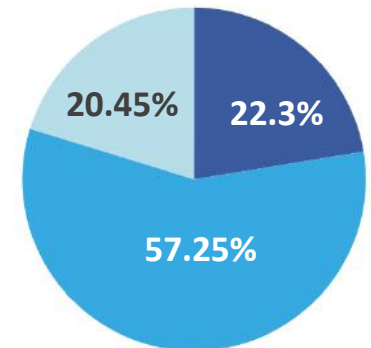
## Target ranges



Of the patients prescribed oxygen **3% did not have a target range specified.**

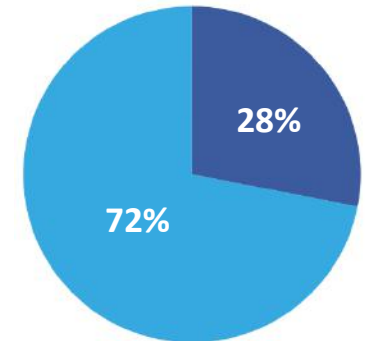
## The detail

2017/18



Proportion of total patients (N=74,645)

- Oxygen required but not prescribed
- Oxygen required and prescribed
- Supplemental oxygen not required



Proportion of patients requiring oxygen (n=59,379)



# Non-invasive ventilation (NIV)

## Patients receiving NIV



**10.3% of admissions** received treatment with NIV (10.9% in 2017)

## Those receiving NIV in under 2 hours



Of those that received NIV, only **21.0%** received it within 2 hours of arrival\*

## Waiting times



Median waiting time from arrival to NIV was **4.6 hours** (4.3 hours in 2017)

1

**QI priority:** Ensure that all patients requiring acute NIV on presentation receive it within 2 hours of arrival.

\* The audit did not distinguish patients who deteriorated later in the admission and were appropriately managed with late NIV from those that presented with an acidosis and received inappropriate late NIV.



# Spirometry

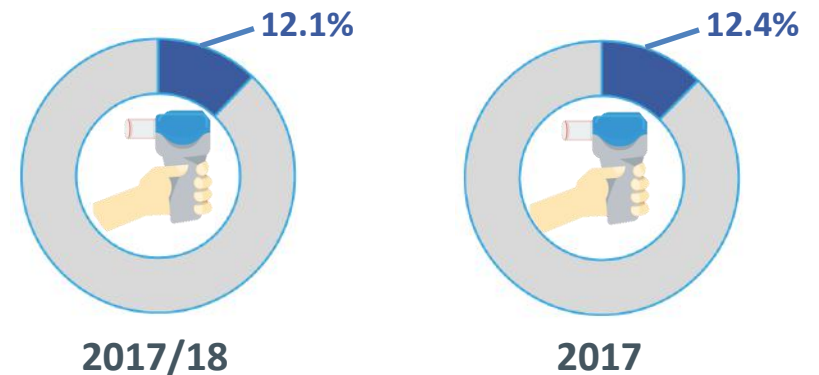
## Spirometry result recorded



**59.5% of patients** did not have a spirometry result recorded (60.3% in 2017)

## Those with a spirometry result recorded

Some spirometry results of patients treated for a COPD exacerbation showed no evidence of airway obstruction



■ Patients with a spirometry result not consistent with airway obstruction

2

**QI priority:** Ensure that a spirometry result is available for all patients admitted to hospital with an acute exacerbation of COPD.



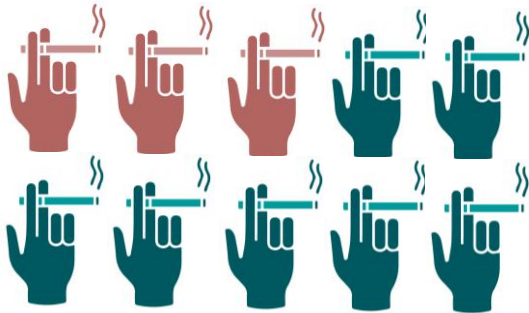


# Smoking

## Smoking status

**Improvements** were made in recording of smoking status:

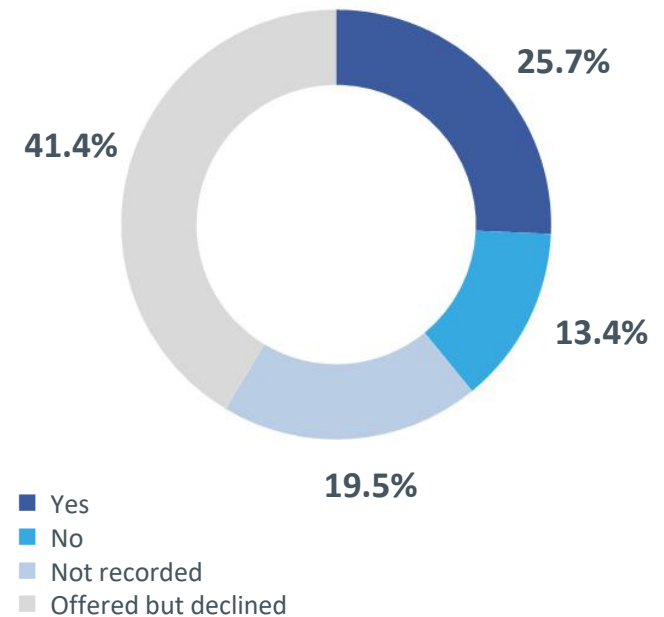
**94%** of patient admissions had a smoking status recorded (90.9% in 2017).



**32% of patients were smokers** (31% in 2017)

## Smokers prescribed smoking cessation pharmacotherapy

**67%** of patients that were smokers were offered smoking cessation medicines and services (61% in 2017).



- Yes
- No
- Not recorded
- Offered but declined

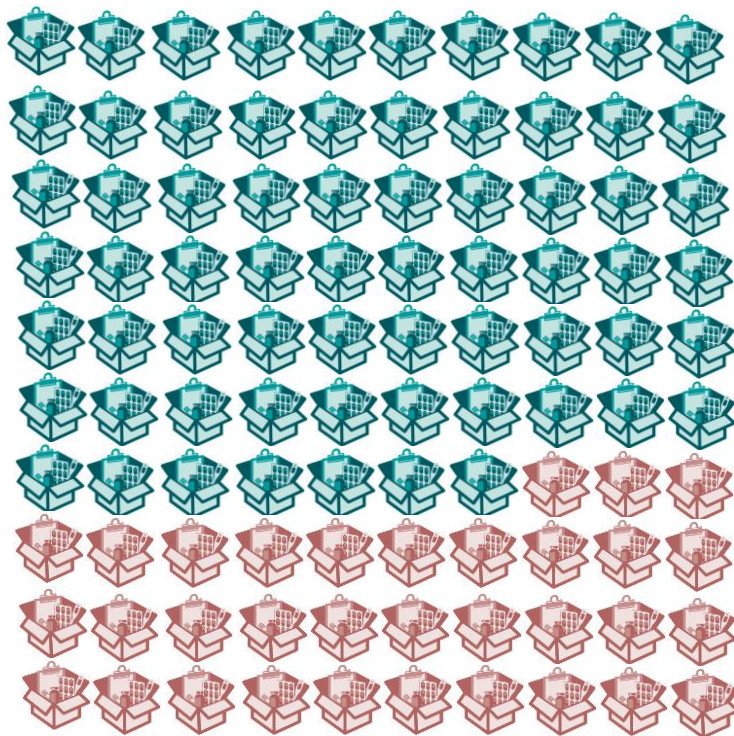
3

**QI priority:** Ensure that all current smokers are identified, offered, and if they accept, prescribed smoking cessation pharmacotherapy.



# Discharge processes

## Discharge bundle received



**67%**

of patient admissions **received a discharge bundle** compared with 53% in 2017.

## Follow-up arrangements

There was a **reduction to 16%** in the number of admissions with **'no follow-up arrangements apparent'** (down from 19% in 2017)





**From results to  
quality  
improvements (QI)**





## QI priorities

There are **three QI priorities** for hospital teams:

1. Ensure **all patients** that arrive at hospital with an acute exacerbation of COPD that **require NIV** receive it **within 2 hours** of arrival
2. Ensure that **all patients** that arrive at hospital with an acute exacerbation of COPD have a **spirometry result available**
3. Ensure that **all patients** that arrive at hospital with an acute exacerbation of COPD that are **current smokers** are **identified, offered**, and if they accept, **prescribed smoking cessation** medication and services





## Getting started



Use the QI aims from the previous slide and look at your run charts to help you identify areas where you can **realistically** make improvements.

**Run charts** can be viewed by logging onto the web tool and going to the Reports tab.

Look to see if there are any **issues** that stand out (eg declining or erratic performance).

Build a **team** and understand your **stakeholders**.

Meet with your team regularly to **performance manage** yourselves and have **clear responsibilities**.



## Develop a SMART aim

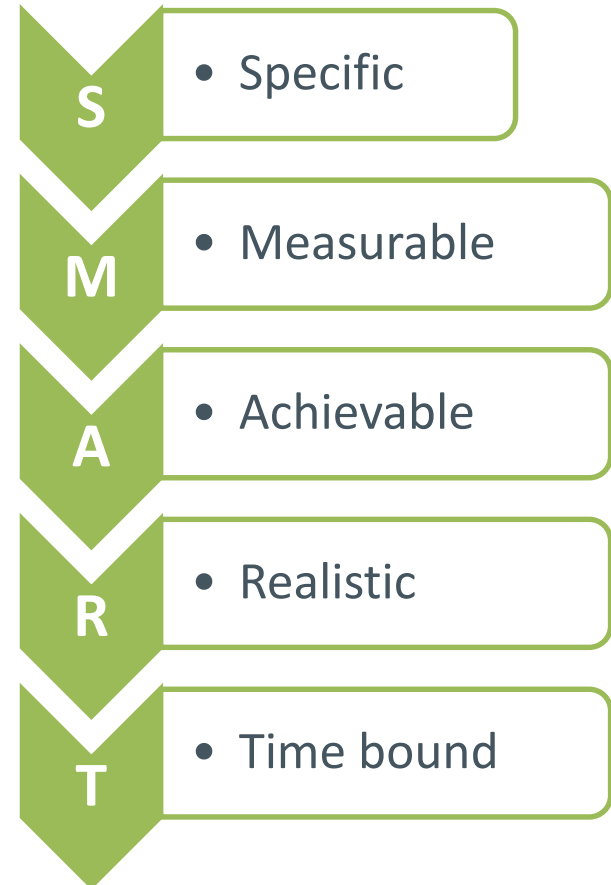
Decide on an **aim**. This should be **SMART**.

A **specific** aim is one that describes exactly **what you want to do** eg increase the number of patients having a respiratory review.

A **measurable** aim is one that allows you to **track progress** eg increase from 10 to 20%.

An **achievable** and **realistic** aim is one where **success would be likely** eg don't aim to increase respiratory reviews to 100%.

A **time bound** aim is one that has a **defined end point** when success can be measured eg within six months.



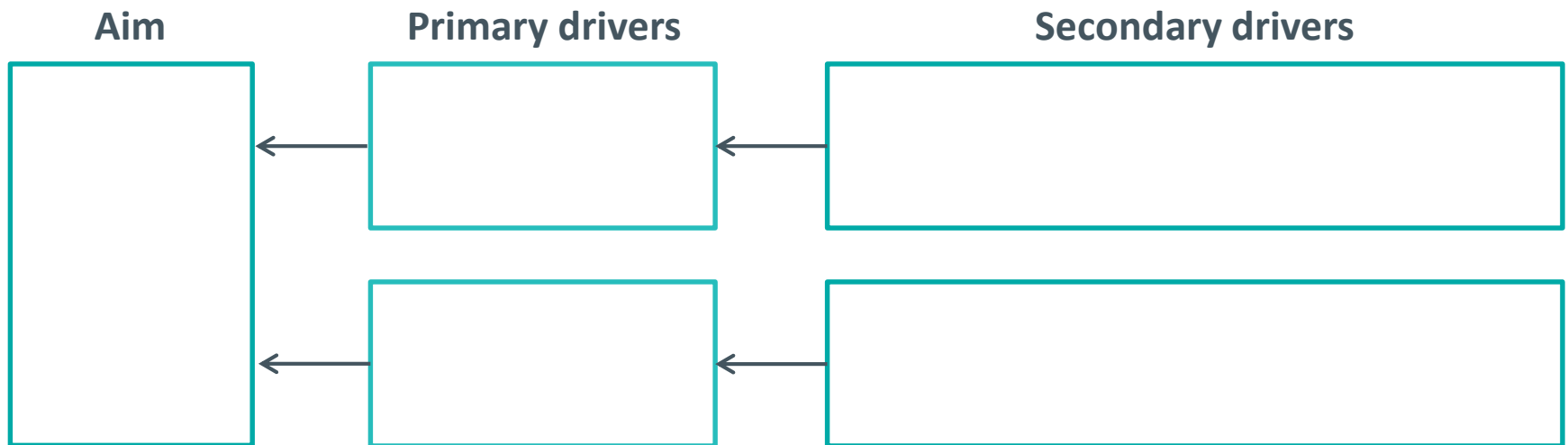


## Using driver diagrams

Once you have established your aim, you can start to think about change priorities.

To decide on your change priority, you may find it helpful to understand the drivers behind your aim. A driver diagram can help you to do this.

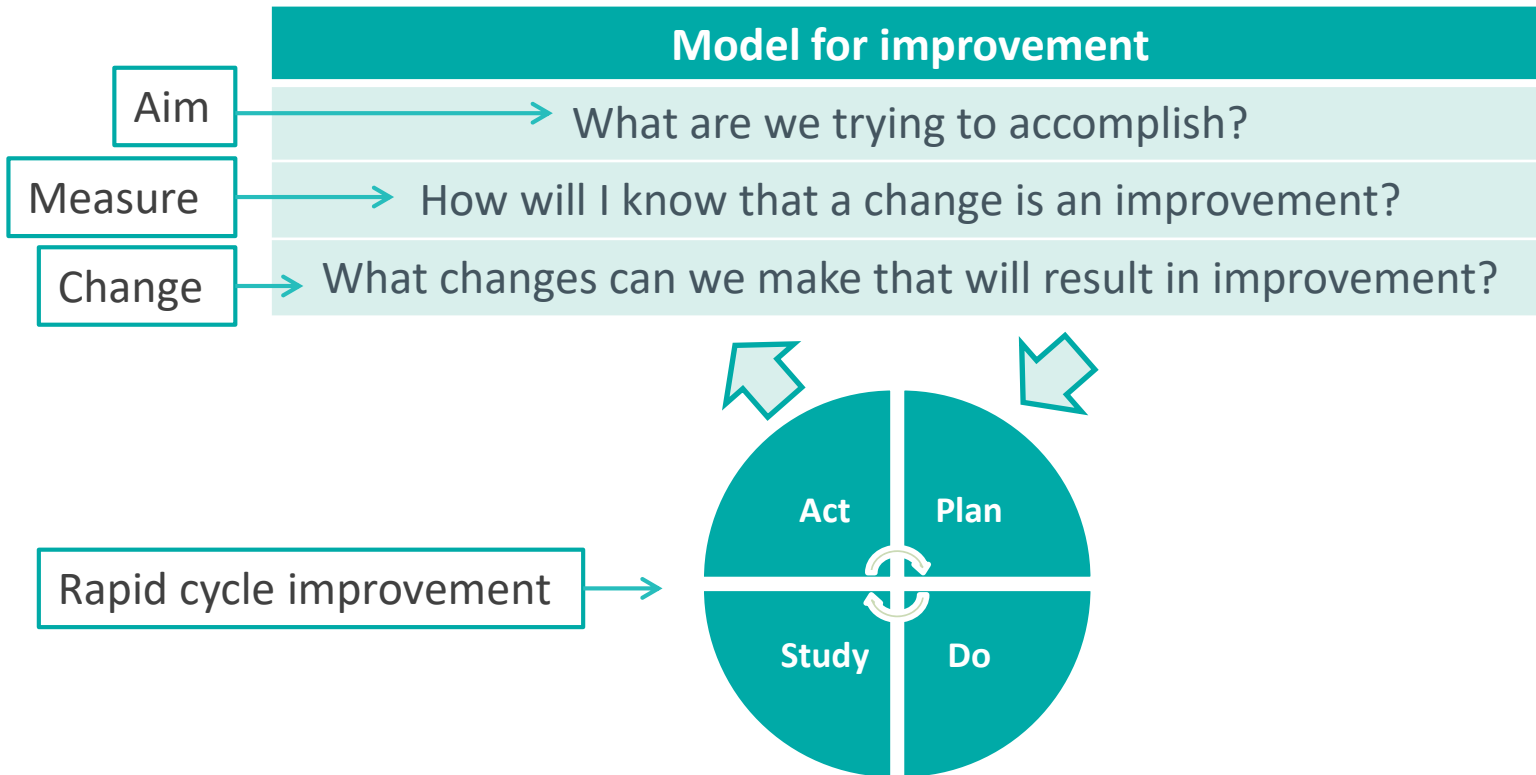
The Institute for Healthcare Improvement has a helpful guide on how to use them <http://www.ihl.org/resources/Pages/Tools/Driver-Diagram.aspx>





# The model for improvement

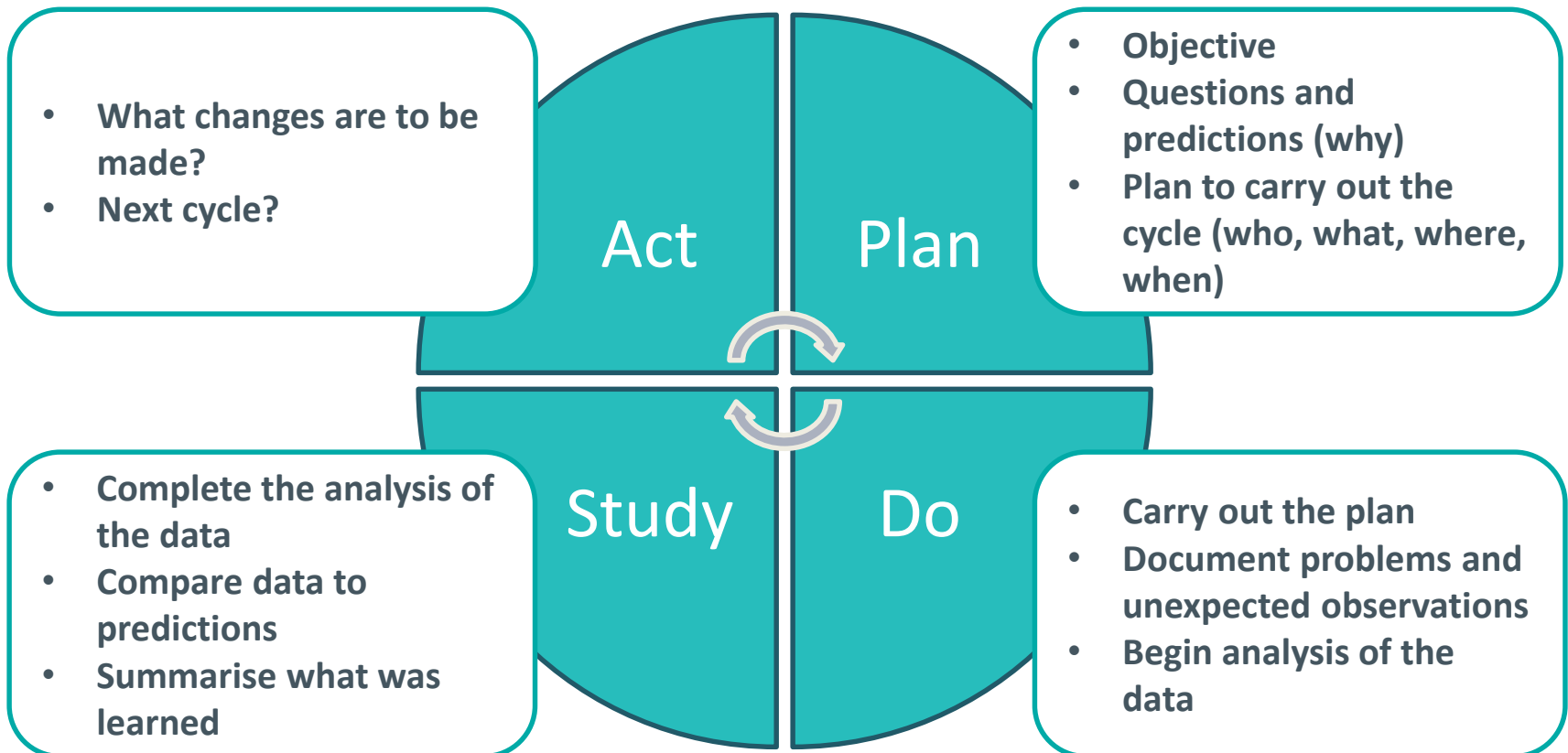
To plan your change, it is important to regularly measure and study your activity using:







## PDSA cycles





## An example PDSA cycle (NIV)

Identify what still needs to change to improve further and plan what you will do next. Use your audit run charts provided on the web tool to help identify these (next PDSA cycle).

**Act**

**Plan**

Use your audit run charts provided on the web tool to determine the proportion of COPD patients admitted that haven't received NIV within two hours.

Analyse the data to see if the rate has improved. Compare results to your audit run charts on the web tool and your results reported in the last audit. Plot change over time and summarise what you have learned.

**Study**

**Do**

Initiate two ED ward rounds per day to identify COPD patients being admitted and check to see whether they required NIV, and if so, were provided it within two hours. Decide on a small change that can be tested easily.



# Other NACAP QI resources

## Good Practice Repository

View our secondary care repository sharing stories from teams across the country about their challenges and achievements in the provision of quality COPD care.

[www.rcplondon.ac.uk/nacap-copd-resources](http://www.rcplondon.ac.uk/nacap-copd-resources)



## National Asthma and COPD Audit Programme (NACAP): quality improvement resources

Produced by:  
National Asthma and COPD Audit Programme (NACAP): quality improvement

This page contains information and resources developed to help organisations participating in the National Asthma and COPD Audit Programme (NACAP) with quality improvement.

Resources from London QI Workshop - 8 March 2019  
(This document was provided specifically for the workshop which took place on 8 March 2019)

[NACAP QI workshop speaker and facilitator biographies\\_London 8 March 2019 338.83 KB](#)

[NACAP QI Workshop Slides - London 8 March 2019 4 MB](#)

## Quality Improvement workshops

During 2019, the NACAP team will be running a series of QI workshops. A selection of QI resources from the events have been published online.

<https://www.rcplondon.ac.uk/projects/national-asthma-and-copd-audit-programme-nacap-quality-improvement>

**National COPD Audit Programme**

**Section 1: Data collection and entry**

**Reminder (Hospitals/Primary Care/ NHS Foundation Trusts)**



- The audit process has been integrated with clinical responses to be made service, which identifies all patients admitted with a respiratory problem and ensures that they are followed by a specialist nurse and receive a complete discharge bundle.
- The team have a dedicated administrator to manage the data input workload, with oversight from clinicians. This has freed up clinical time, and allows the clinician to focus on the clinical activity of the team.
- A weekly audit 'handoff' email is circulated to the team, to remind them of audit standards, to highlight what is going well, and to bring in to those areas that need improvement or where the team can fix a fault.

**There is a general sense of pride within the team and a commitment to improving the lives of patients with COPD. The team will continue to focus on the audit that it will help to deliver improvements in the delivery of care for patients with COPD.**

**Help (Hospitals/Primary Care/ NHS Foundation Trusts)**



- The clinical audit team reviews a list of COPD coded patients from the information department on a weekly basis. This is generated for all patients who have been discharged and clinically coded by the central clinical coding department.
- The audit officer assigned to the COPD audit requests the notes for these patients, and reads through to extract the necessary data and to ensure they meet the audit eligibility criteria.
- The clinical audit officer visits the wards daily to check for patients who have been discharged with a primary diagnosis of acute exacerbation of COPD, and talking to both the clinical and administrative teams to identify any patients suitable.
- Copies of the British Thoracic Society (BTS) discharge bundles are also reviewed on a weekly basis and notes are requested for these patients if necessary.
- In order to ensure if patients are fully compliant with the NHS COPD audit criteria, the respiratory service has employed a part time auditor to lead this project.
- Audit results and compliance against the Best Practice Tariff is then reviewed in service level meetings as well as audit contracting and governance meetings to discuss compliance and consider options for improvement.

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