Royal College of Physicians | NACAP

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

COPD clinical audit 2018/19

Key findings, recommendations and quality improvement

Audit participation

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

- Includes patients discharged between 1 October 2018 and 30 September 2019.

82,268 hospital admissions

From **189** hospitals in England, Scotland and Wales
(**86%** of eligible hospitals)

Key findings and recommendations

This is an overview of results and findings for the 2018/19 clinical audit. For more detailed information, see the COPD clinical audit 2018/19: Data analysis and methodology report.

General information

Demographics

The **median age** at admission was **71 years**.

A higher proportion of admissions **(53.8%) were women**.

The **highest proportion of admissions** came from **the most deprived quintile** of England (35.6%), Scotland (37.7%) and Wales (36.3%).

Admissions

Median **time from arrival to admission** was **3.9 hours**

The median **length of stay** was **4 days**

Respiratory review

Respiratory team review

86.5% of admissions were **reviewed by a member of the respiratory team** (84.7% in 2017/18).

66.1% of admissions were **reviewed within 24 hours** (64.0% in 2017/18)

Changes over time

(Patients reviewed by member of the respiratory team within 24 hours)

Oxygen

Patients prescribed oxygen

60.7% of admissions **were prescribed oxygen***

** This data has been calculated in a different way, therefore is not directly comparable with previous audit results*

Target range

Of the patients prescribed oxygen, **2.3% did not have a target range stipulated**

Non-invasive ventilation (NIV)

Patients receiving NIV

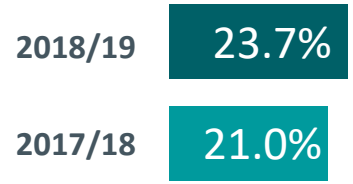
Receiving NIV in under 2 hours

Of those who received NIV, **23.7% received it within 2 hours of arrival**

10.2% of admissions received treatment with NIV (10.3% in 2017/18)

Changes over time

(NIV received with 120 minutes of arrival)



1

QI priority: Ensure all patients who arrive in hospital with an acute exacerbation of COPD who require NIV receive it within 2 hours of arrival.

Spirometry

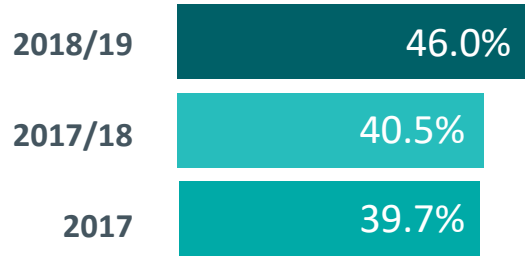
Spirometry result recorded

Of all patients admitted for AECOPD, **54% had never had a spirometry result recorded** (60% in 2017/2018)

Of those patients who had a spirometry result recorded, **13.8% had a spirometry result not consistent with airway obstruction** (12.1% in 2017/18)

Changes over time

(spirometry result recorded)



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

94.8% of patients admitted had a **smoking status recorded**

Of those with smoking status recorded, **34.2% of patients were current smokers** (32.3% in 2017/18)

1.1% of patients were vaping (1.1%)

Smoking prescribed smoking cessation pharmacotherapy

47.4% of current smokers were referred to behavioural change intervention and/or prescribed a stop smoking drug during the admission

3

QI priority: Ensure that all current smokers are identified, offered, and if they accept, are referred to behavioural change intervention and/or prescribed a stop smoking drug.

Acute observations

NEWS2 score recording

74.1% of patients had a **NEWS2 score recorded**

Recording of NEWS2 was **lower in England** (73.0%) than in Scotland (96.3%) and Wales (95.4%)

Risk category

50.4% of patients admitted were in the **lowest risk category (0–4)**

Comorbidities

Recorded history of comorbidities

16.3% of patients had a recorded **history of a mental health condition**

37.7% of patients had a recorded history of **cardiovascular disease**

New interventions

21.4% of patients with recorded history of **cardiovascular disease received new interventions** during this admission

14.1% of patients with recorded history of a **mental health condition received new interventions** during this admission

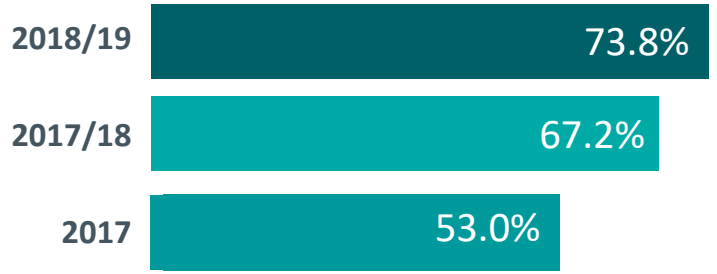
Discharge process

Discharge bundle received

73.8% of patients admitted **received a discharge bundle** compared with **67.2%** in 2017/18

Changes over time

(patients receiving a discharge bundle)



Discharge day

The lowest number of discharges took place on the weekend: **8.1% on Saturdays and 6.2% on Sundays**

The highest number, **17.9%**, took place on **Mondays**

Recommendations

Recommendations for national (NACAP and national data collection) organisations

The National Asthma and COPD Audit Programme (NACAP) should work with NHS Digital in England, the Scottish electronic Data Research and Innovation Service (eDris) and Digital Health and Care Wales (DHCW) to maximise opportunities to support hospitals to identify COPD admissions and prospectively collect audit data.

How:

By implementing information systems to identify patients early in admission, alerting teams and facilitating audit collection.

Recommendations for commissioners

Recommendation 1:

Ensure all acute trusts/units are taking part in the audit and using audit data to support QI. There should be sight of this at board level.

Recommendation 2:

Support working across traditional primary, community and secondary care boundaries to facilitate information sharing of spirometry results therefore enabling seamless care.

Recommendation 3:

Invest in high-value interventions with robust evidence of benefit in COPD, notably smoking cessation services and pulmonary rehabilitation.

Recommendations for primary care providers

Recommendation 1:

Support data sharing across primary, community and secondary care teams, notably in the provision of diagnostic spirometry.

Recommendation 2:

Commit as a practice to ensure that all staff who have contact with patients undertake online ‘very brief advice’ (VBA) training in relation to smoking cessation (www.ncsct.co.uk/publication_very-brief-advice.php).

Recommendations for patients, their families and carers

Recommendation 1:

Understand that important measures of care quality include:

- being seen by a member of the COPD specialist team within 24 hours of admission
- receiving a ‘discharge bundle’ prior to discharge. This typically includes:
  - advice and help to quit smoking
  - ensuring correct use of inhalers
  - referral to pulmonary rehabilitation
  - arranging appropriate follow up

Feel empowered to ask for these if they are not offered.

Recommendations for patients, their families and carers

Recommendation 2:

Take the **Asthma UK and British Lung Foundation Partnership (AUK-BLF) COPD patient passport** (**https://passport.blf.org.uk**) to hospital if you are admitted. Use it to:

- Understand the care you are entitled to
- Know how to ask for this

Recommendation 3:

Ask for copies of your breathing tests results, and take these to hospital if you are admitted. This helps hospital teams to see and access results of breathing tests (spirometry) which you may have had at your GP surgery or in a different clinic.

How to use the results for quality improvement (QI)

National quality improvement (QI) priorities for hospital services

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

1. Ensure **all patients** who arrive in hospital with an acute exacerbation of COPD who **require NIV receive** it **within 2 hours** of arrival.

2. Ensure that **all patients** who arrive in hospital with an acute exacerbation of COPD have a **spirometry result available**.

3. Ensure that **all patients** who arrive in hospital with an acute exacerbation of COPD who are **current smokers** are **identified**, **offered**, and if they accept, **prescribed smoking cessation** medication and services.

Getting started

For health care providers:

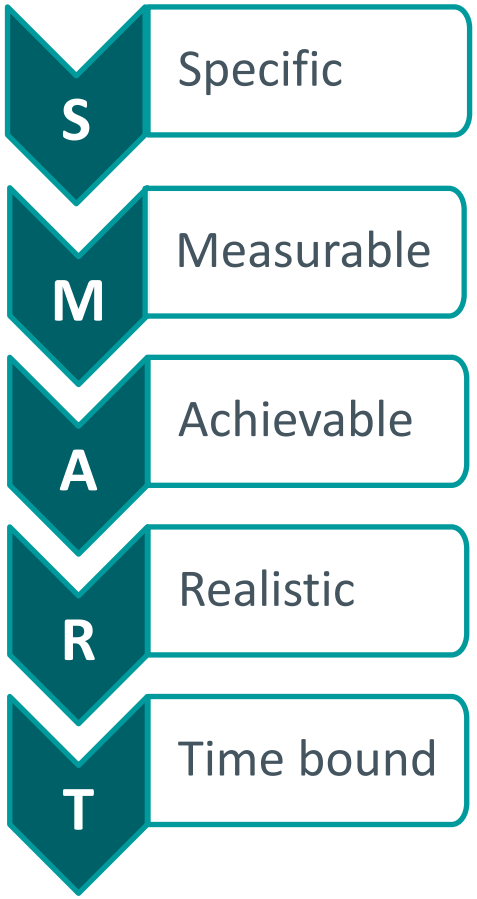
- Use the **QI priorities** from the previous slide and look at your run charts to help you identify areas where you can **realistically** make improvements.
- **Run charts** can be viewed by logging onto the **web tool** and going to the 'Reports' tab.
- Look to see if there are any **issues** that stand out (e.g. declining or erratic performance).

For team leaders:

- Build a **multidisciplinary team** and understand your **stakeholders**.
- Meet with your multidisciplinary team regularly to **review your performance** and have **clear responsibilities in managing the outcomes**.

Developing 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 the number of respiratory reviews from 10% to 20% of all patients*.

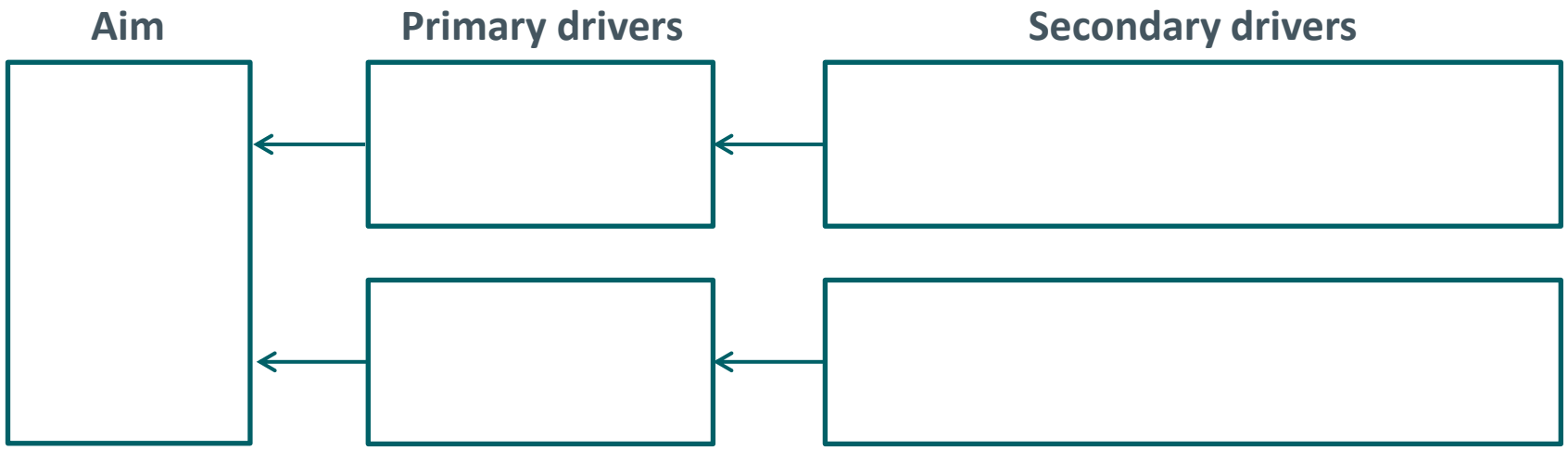
> An **achievable** and **realistic** aim is one where **success would be likely** eg *don't aim to increase respiratory review by 100%*.

> A **time bound** aim is one that has a **defined end point** when success can be measured eg *within 6 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.ihi.org/resources/Pages/Tools/Driver-Diagram.aspx

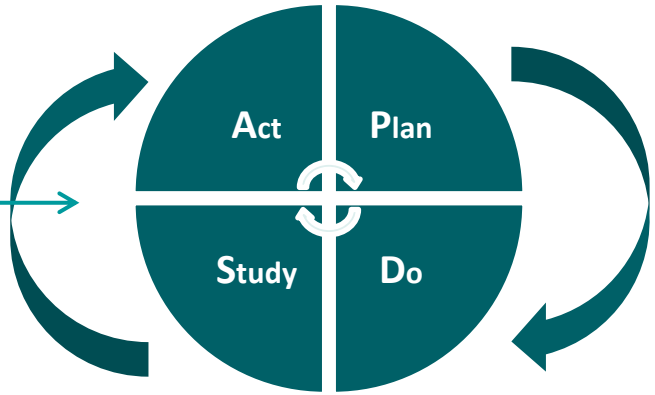


The model for improvement (PDSA)

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

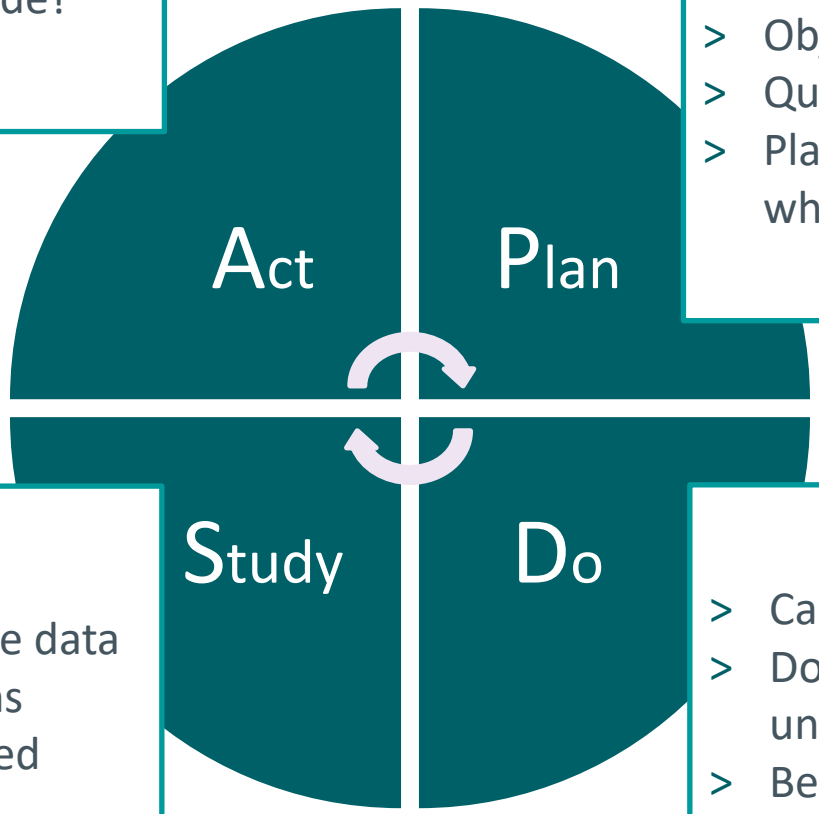
Model for improvement	
Aim	What are we trying to accomplish?
Measure	How will I know that a change is an improvement?
Change	What changes can we make that will result in improvement?

Rapid cycle improvement



PDSA cycles

- What changes are to be made?
- Next cycle?



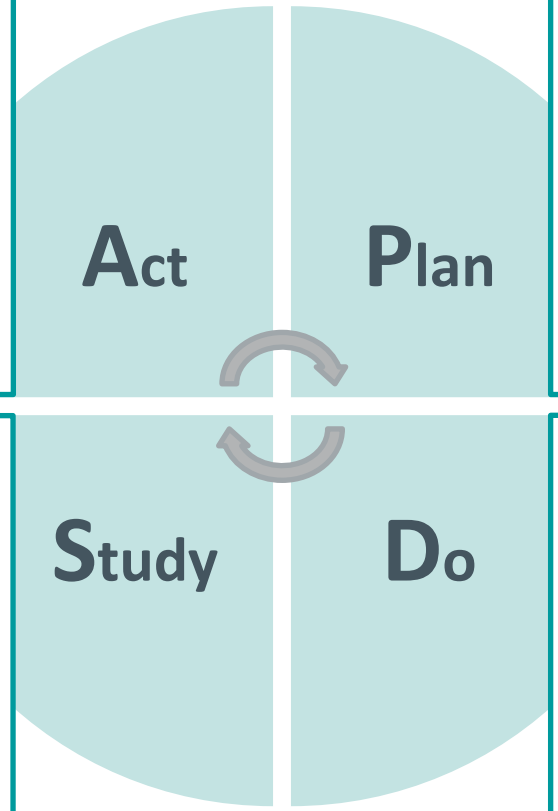
- Objective
- Questions and predictions (why)
- Plan to carry out the cycle (who, what, where, when)

- Complete the analysis of the data
- Compare data to predictions
- Summarise what was learned

- Carry out the plan
- Document problems and unexpected observations
- Begin analysis of the data

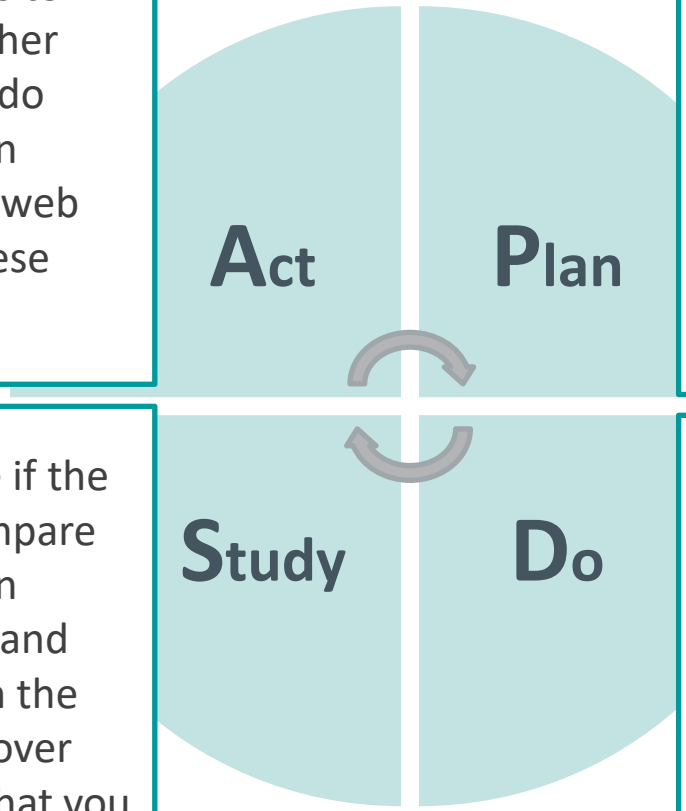
An example PDSA cycle (NIV)

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).	Use your audit run charts provided on the web tool to determine the proportion of COPD patients admitted that haven't received NIV within 2 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.	**Decide on a small change that can be tested easily**: Initiate two emergency department 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 2 hours.



An example PDSA cycle (Smoking)

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).



Use your audit run charts provided on the web tool to determine the proportion of COPD patients discharged with smoking cessation drugs/behavioural change referral, compared to national average.

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.

Decide on a small change that can be tested easily:
Promote smoking cessation on wards with posters and leaflets with referral information.
Organise brief intervention training sessions for new staff.

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 achievements in the provision of quality COPD care.

www.rcp.ac.uk/nacap-copd-resources


Royal College of Physicians

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 biograpies_London 8 March 2019 338.83 KB

NACAP QI Workshop Slides - London 8 March 2019 4 MB

Quality improvement workshops

In 2019, the NACAP team ran a series of QI workshops.
A selection of QI resources from these events have been published online:
www.rcp.ac.uk/projects/national-asthma-and-copd-audit-programme-nacap-quality-improvement

Hospital teams are encouraged to attend a second series of NACAP QI workshops which will be held in 2021. Further details regarding these workshops will be circulated to participating hospital teams in due course.

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