



# CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) COLLABORATIVE

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Program Report 2017-2018

## Tackling COPD within primary care in the Nepean Blue Mountains region



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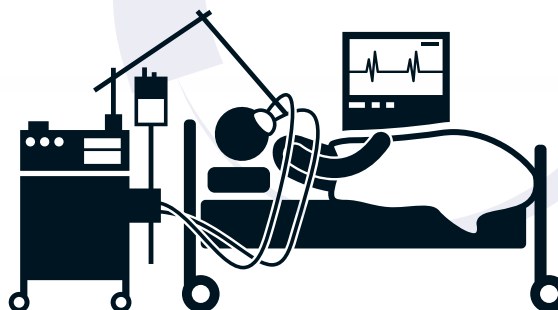
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# COPD in our region

**Chronic Obstructive Pulmonary Disease (COPD) is a serious, progressive and disabling condition that limits airflow in the lungs. It is a type of chronic airways disease.**

**In 2015-16, COPD was the **third** leading cause of death and the **leading** cause of potentially preventable hospitalisations in the Nepean Blue Mountains (NBM)<sup>1</sup>.**

## Did you know?



The average cost of a single hospital admission for COPD, without any other complication, is approx. **\$5,500**. With complications, it is around **\$9,700** per admission (2011-2012)<sup>2</sup>

The Nepean Blue Mountains Primary Health Network (NBMPHN) and the Nepean Blue Mountains Local Health District (LHD) share a joint board directive to reduce the growth in COPD-related emergency department presentations and subsequent hospital admissions.

**To work towards this objective, NBMPHN coordinated a COPD Collaborative to support earlier diagnosis and improved management of patients with COPD within the general practice setting.**

Alongside NBMPHN and LHD, this initiative has been governed and supported by representatives from local general practices, non-government and government organisations (including NSW Ambulance and Lung Foundation Australia), as well as local COPD patient support groups.

1. Source: Australian Institute of Health and Welfare, 2017. Potentially preventable hospitalisations by Primary Health Network area: 2015-16, [Online]. Available at: <https://www.myhealthycommunities.gov.au/interactive/potentially-preventable-hospitalisations>. [Accessed November 2017].

Source: NSW Combined Admitted Patient Epidemiology Data and ABS population estimates (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health. Health Statistics New South Wales. Sydney: NSW Ministry of Health.

2. 2017 Needs Assessment

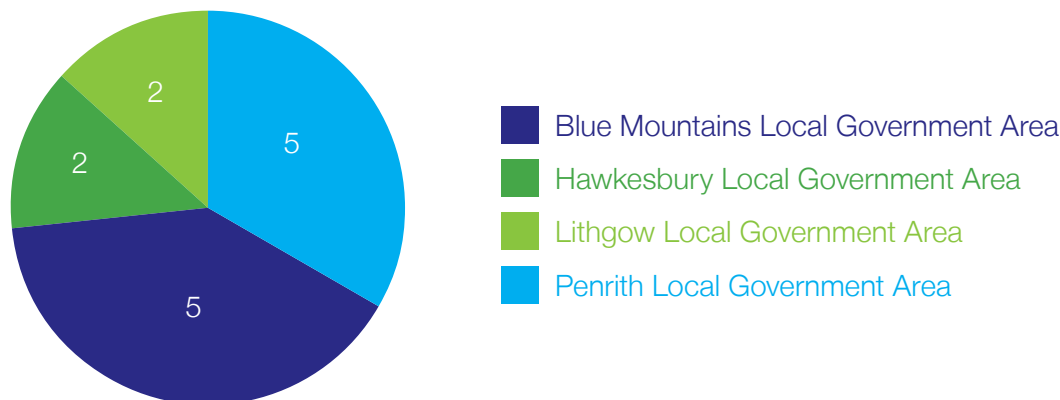
# About the COPD Collaborative

The COPD Collaborative commenced on 1 July 2017 and concluded on 31 March 2018. Fourteen practices from across our region participated in this initiative.

A Collaborative is a quality improvement approach used to share existing peer knowledge to multiple groups to achieve a common aim.

The COPD Collaborative was based on evidence-based 'Collaborative methodology' recommended by the Improvement Foundation. The Collaborative methodology uses the Model for Improvement framework to develop, test and implement small manageable changes to improve practice system processes. This promotes rapid change, allowing health services to experience the benefits of changes and create results in short time frames.

## Participating practices by LGA



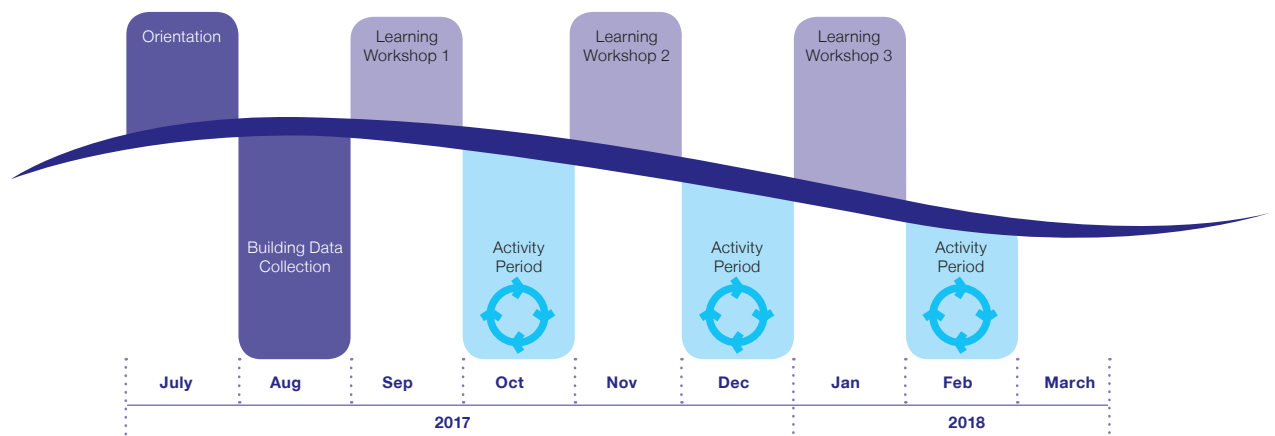
Prior to the commencement of the COPD Collaborative, an Expert Reference Panel, was convened to set the aims and measures for this initiative. Practices participating in the COPD Collaborative worked towards two aims:

↑ Increase to **50%** the proportion of **patients diagnosed with COPD** who have **spirometry recorded**

↑ Increase to **70%** the proportion of **patients diagnosed with COPD** who are on a **GP Management Plan**

The COPD Collaborative followed a 'wave' timeline, with participating practices attending learning workshops, undertaking activity periods and submitting data to track improvement during clinical audits.

### COPD Collaborative Timeline



Representatives from each participating general practice were invited to attend an orientation webinar and three Learning Workshops that provided information on quality improvement and best management of COPD. Additional training opportunities, including training in spirometry and inhaler device technique, were also offered to participating and non-participating practices within our region.

Following the Learning Workshops, representatives returned to practices to discuss shared learnings and ideas with the rest of the team and trial the new processes and systems the workshops recommended. Throughout the program, data was regularly submitted and reviewed to see if these changes had led to improvements.

*A Learning Workshop for the COPD Collaborative.*





During the nine month duration of the COPD Collaborative, the NBMPHN support officers provided practices with audit reports, assistance with implementing the Model for Improvement and regular feedback and support to guide quality improvement activities.

The COPD Collaborative Wave Chair, Dr Andrew Knight, provided clinical support and guidance to practices and updates on improvement at the Learning Workshops.

The Improvement Foundation provided continuous support and guidance to NBMPHN staff and general practices through the use of the Model for Improvement and principles to implement systematic change ideas within practice.

To support the work of the COPD Collaborative, mapping was undertaken to identify service gaps in our region. In response to this, NBMPHN has commissioned a Lungs in Action Class at Hawkesbury Hospital, supporting patients diagnosed with COPD in the Hawkesbury region to access a local community based exercise program.

We have also leveraged 'Lung Health Awareness Month' to raise the profile of COPD amongst the community and promote local support groups such as the Nepean Puffers and Wheezers.

## Did you know?

COPD was the **leading cause** of **potentially preventable hospitalisations** in the NBM region in 2015/16<sup>3</sup>



3. Source: Australian Institute of Health and Welfare, 2017. Potentially preventable hospitalisations by Primary Health Network area: 2015-16, [Online]. Available at: <https://www.myhealthycommunities.gov.au/interactive/potentially-preventable-hospitalisations>. [Accessed November 2017].

# Key Players

## Nepean Blue Mountains Primary Health Network

COPD Collaborative support officers (Jacquie Millynn, Maha Sedhom and Natalija Cugalj) provided practices with ongoing assistance. This included support with: PENCAT and clinical software; the development of audit reports; assistance with implementing the Model for Improvement; and regular feedback to guide quality improvement activities.



## Wave Chair (Dr Andrew Knight)

The Wave Chair provided clinical support and guidance to COPD Collaborative practices. Andrew also attended the Learning Workshops to provide feedback on progress, answer questions and provide encouragement to practices.



## Improvement Foundation

To design and deliver the COPD Collaborative, the PHN worked closely with the Improvement Foundation. Support included training NBMPHN staff in collaborative methodology, facilitate the Expert Reference Panel and the Learning Workshops, write the Collaborative Handbook, and provide ongoing support to assist practices with areas for improvement.



## Did you know?

COPD was the **third leading cause of death** in the NBM population in 2015<sup>4</sup>



4. Source: NSW Combined Admitted Patient Epidemiology Data and ABS population estimates (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health. Health Statistics New South Wales. Sydney: NSW Ministry of Health.

# Key Measures

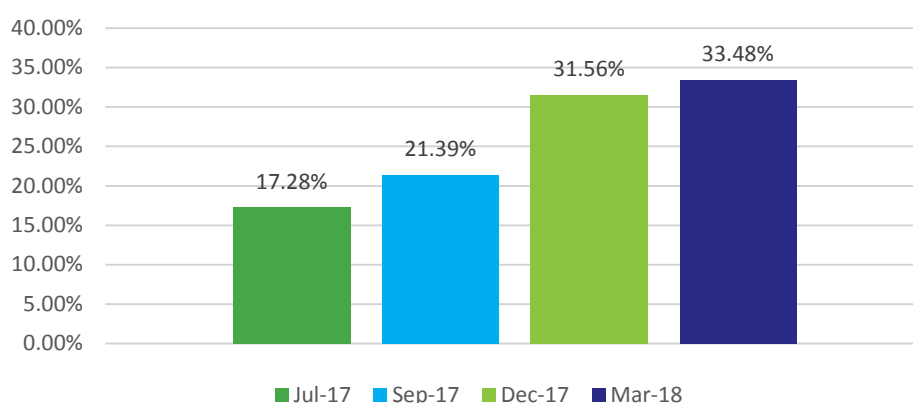
Within participating general practices, the following key measures were used.

## Key Measure 1:

### Number of COPD patients with spirometry results recorded

At the baseline data collection (July 2017), 17.28% of COPD patients had a recorded spirometry result. Throughout the program this number continued to rise, reaching 33.48% at the point of final data collection (March 2018) – almost double the initial number recorded.

#### Percentage of patients with a recorded spirometry result



## Key change ideas:

Successful system change ideas implemented by general practices included:

- Development of a 'Lung Function Checklist' to identify undiagnosed patients and coordinate a process for diagnosis and management of COPD patients
- Protected time for general practice staff to follow up patients with indicated COPD diagnosis to book spirometry
- Upskilling of GPs and practice nurses through spirometry training courses
- Improved practice system for management of spirometry referrals out-of-house

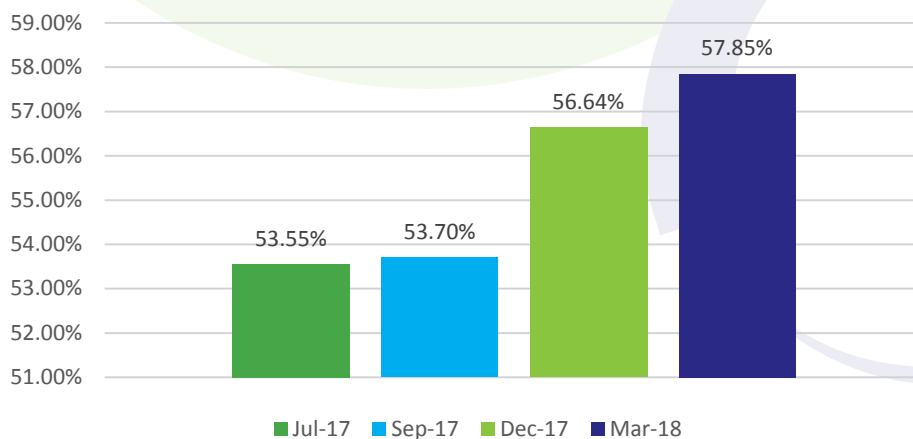


## Key Measure 2:

### Number of COPD patients with a GP Management Plan (721)

Throughout the program, the rate of patients with a GP Management Plan (GPMP) climbed from 53.55% (July 2017) to 57.85% (March 2018).

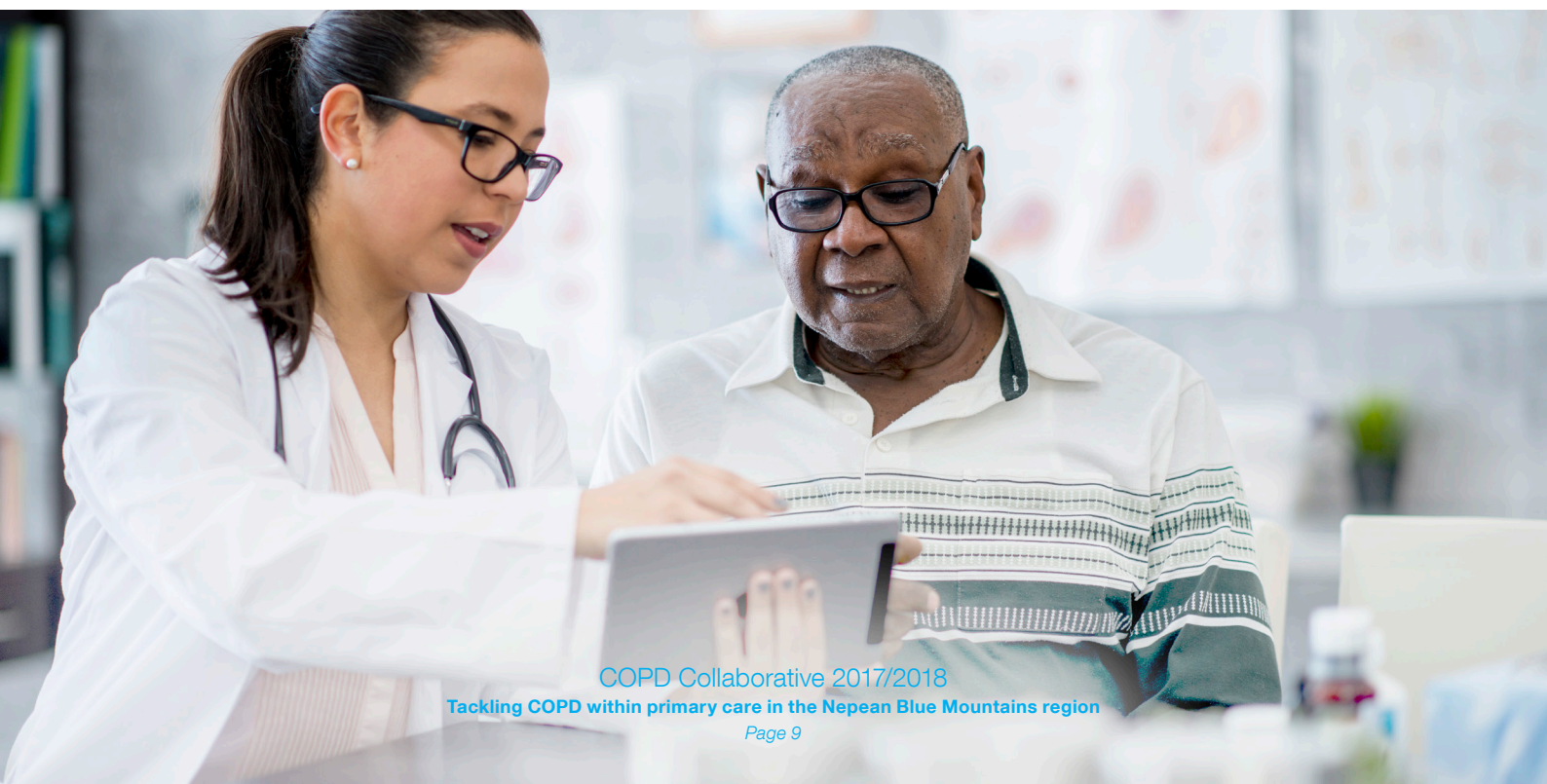
#### Percentage of patients with a GPMP



#### Key change ideas:

Successful system change ideas implemented by general practices included:

- Create a list of COPD patients eligible for GPMP through clinical software
- 'Data cleansing' and archiving of patients to identify patients eligible for a GPMP review
- Improved team communication to remind staff to review and put in place GPMP

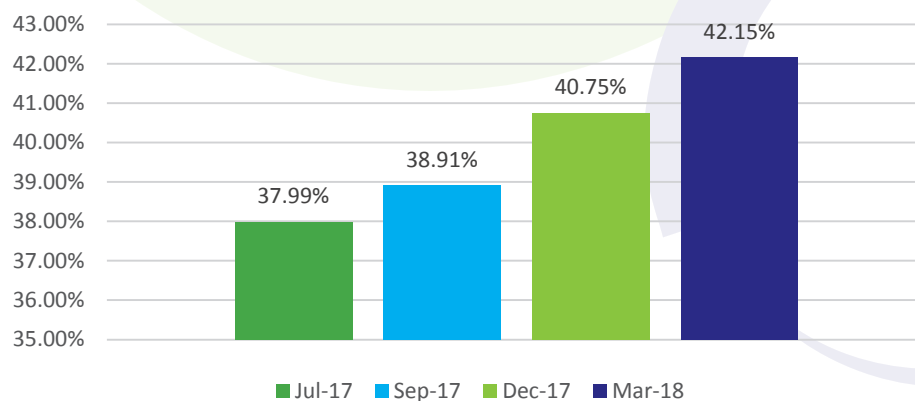


### Key Measure 3:

## Number of COPD patients with pneumococcal vaccination

In July 2017, 38% of COPD patients were recorded as having a pneumococcal vaccination. This rate increased to 42% (March 2018).

### Percentage of patients with Pneumococcal Vaccination recorded



### Key change ideas:

Successful system change ideas implemented by general practices included:

- Setup of pneumococcal/flu clinic room (GP and practice nurse team collaboration)
- Contacting eligible patients to book immunisation updates in preparation for flu season
- Practice nurse to visit local businesses and schools to perform bulk vaccinations
- Practice preparation included ordering increased vaccine stock and health promotion resources within waiting rooms
- Develop reminder letter with key messages for “free vaccination” to encourage patient vaccination

# Next steps for the COPD Collaborative

## Plans are underway for the COPD Collaborative 2018/2019.

In the next financial year we are aiming for 15% of total regional practices to participate in the next program. We also intend to continue momentum of the 14 practices who completed the COPD Collaborative (2017/18), by inviting them to move into a quality COPD improvement initiative. This will involve additional key measures, such as smoking reduction and cessation and the establishment of sick day plans.

A COPD Collaborative 2018/2019 is also planned, with general practices throughout the region currently being invited to register.

If your practice is interested in participating, please register your interest

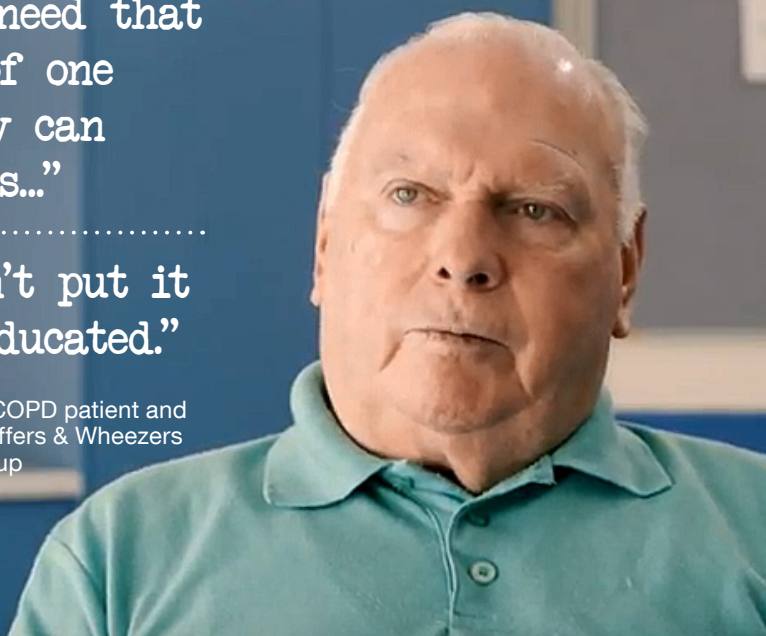
**[www.nbmphn.com.au/COPDCollaborative](http://www.nbmphn.com.au/COPDCollaborative)**

## A patient's perspective...

"I think you need that continuation of one doctor, so they can watch symptoms..."

.....  
"Be aware, don't put it off, and get educated."

Experience of John Ruttle, COPD patient and President of the Nepean Puffers & Wheezers Support Group



**[www.nbmphn.com.au/LungHealth](http://www.nbmphn.com.au/LungHealth)**





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