In LMICs, COPD is mostly diagnosed and managed in hospitals, often miles from people’s homes. Primary care is the first point of contact with healthcare services and is strategically placed in local communities. It has the potential to prevent, diagnose and treat COPD, but is either poorly resourced, without adequately trained staff or does not have the authority to diagnose and treat COPD.

COPD can leave people breathless, fatigued and prone to chest infections. This results in high personal, healthcare and societal costs through loss of work. In many LMICs, COPD hospitalisation and care can cause financial hardship impacting social and mental health. However, these problems can be avoided or managed by timely diagnosis and the right care.

BREATHE WELL IS A COLLABORATION BETWEEN THE UNIVERSITY OF BIRMINGHAM AND RESEARCHERS FROM 4 LMICS TO PRODUCE EVIDENCE FOR IMPROVED PREVENTION, DIAGNOSIS AND MANAGEMENT OF COPD

BREATHE WELL RESEARCH STUDIES

Brazil
- Identifying cost-effective screening/testing strategies for finding people with undiagnosed COPD in primary care/community hospitals

China
- Exploring views of patients and clinicians in the design of a new Lung Health Service

Georgia
- Testing the feasibility of a culturally adapted pulmonary rehabilitation service

Republic of North Macedonia
- Testing smoking cessation interventions in primary care
We have also demonstrated the feasibility of delivering culturally adapted rehabilitation programmes for individuals with COPD. Our research has shown that primary care systems play an essential role in the prevention, early diagnosis and management of people with COPD, improving their quality of life.

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<th>Stakeholder Engagement</th>
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<td>Supporting &amp; monitoring research</td>
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|  - Trial steering committees  
  - Stakeholder advisory groups  
  - Patient support groups  
  - Primary care engagement aided recruitment to studies |  - Peak flow is a useful low cost tool for COPD case finding  
  - Culture impacts engagement with exercise interventions  
  - PR is feasible to deliver in a low resource setting  
  - Effectiveness of smoking cessation interventions are context specific  
  - Smoking cessation success is hampered by lack of access to pharmacotherapy |  - Conducting and interpreting spirometry  
  - Pulmonary rehabilitation delivery  
  - Identifying and engaging with key stakeholders |
| Prioritising research questions | Developing protocols | Training needs assessment |
|  |  | |

Breathe Well studies have identified the most appropriate, low cost approaches for COPD case finding, applicable in low resource settings. Our research has highlighted the pressing need for culturally relevant smoking cessation support in LMICs where smoking prevalence remains high and where policies are poorly implemented.

**WHAT WE LEARNED**

**Stakeholder Engagement**
- Design COPD care pathway
- Inform implementation of COPD case finding
- Implement PR programme
- Embedding smoking cessation education into the medical student curriculum

**Research**
- Conference presentations
- >10 papers prepared
- Research recommendations for key stakeholders
- New collaborative research

**Sustainability & Capacity Building**
- New CPD courses
- Medical training
- Pulmonary Rehabilitation Training manuals
- Research and clinical skills
- Patient education material

Learn more at [www.ipcr.org/breathewell](http://www.ipcr.org/breathewell)
Influence individuals to quit smoking by providing smoking cessation as a preventive service and enlisting pharmacological treatments in the state health insurance coverage.

Build the capacity of primary care practitioners in smoking cessation support and COPD care through clinical curricula and cascaded education programmes.

Increase community awareness about the risks and symptoms of COPD and influence timely care seeking through primary care teams, community networks and uptake to PR and behaviour change programmes.

Evaluate the implementation and long term benefit of low cost COPD case finding approaches in a range of LMIC settings.

Invest in capacity building and infrastructure to deliver high quality research in primary care. Evaluate locally relevant interventions to improve population health.

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