



The Scottish Government  
Health Delivery Directorate:  
Improvement and Support Team

# The Scottish Primary Care Collaborative Summary



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*“All practice staff who have participated in this Programme over the last 5 years should be very proud of what has been achieved. The model for improvement has produced real benefits for people accessing services in general practice and undoubtedly, standards of care have improved. Real health benefits for patients with long-term conditions, such as diabetes, heart disease, lung disease and chronic kidney disease have been realised through the Primary Care Collaborative and I am extremely grateful to all staff, GPs, nurses, receptionists and other professionals who have put so much effort into this Programme.”*

**Harry Burns, Chief Medical Officer, Scotland**

The **Scottish Primary Care Collaborative (SPCC)** was launched in April 2003 to improve patient’s access to a healthcare professional and to improve the outcomes for people with diabetes.

The Collaborative programme aimed to develop skills and knowledge within General Practice to deliver rapid, sustainable and systematic quality improvements in the care provided to patients.

Phase I (waves 1 and 2) October 2003 to May 2006 resulted in significant improvements in access and in the care of people with diabetes.

From July 2005-March 2009, phase II (waves 3-5) of the SPCC programme focused on improving access to health care professionals.

Waves 3 and 4 worked to improve outcomes for people with proven Coronary Heart Disease (CHD). Wave 5 worked to improve outcomes for people with Chronic Obstructive Pulmonary Disease (COPD) and Chronic Kidney Disease (CKD).

## **Practice Involvement across Scotland**

Over the five waves of the programme we worked with 776 GPs and 500 practice nurses, reception staff and practice managers across 492 practices out of a total of 1014 practices across Scotland.

### **■ General aim**

The programme assisted primary care organisations to develop their capability to deliver rapid, sustainable and systematic improvements in the care they provide to their communities through a sound understanding and the effective application of quality improvement methods and skills.

The collaborative process is a tried and tested method used world wide, focusing on improved outcomes for patients, making Scotland part of the largest health care improvement movement in the world.

## ■ Philosophy

The philosophy underpinning the Collaborative is people working together to share, learn and apply the best practice in order to improve the delivery and quality of patient care. The programme provided General Practice with the tools to develop, or build on already created systems to ensure accurate practice registers and active call and recall systems. The Collaborative is not a one size fits all solution but a mature approach that genuinely acknowledged the diversity of General Practice in Scotland.

## The Model for Improvement

The Improvement Model, developed by Nolan *et al.*<sup>1</sup> was central to the success of the SPCC programme.

The Improvement Model allowed practices to introduce change and bring about rapid improvements in the quality of their services.

Participants in the SPCC were encouraged to try out new ways of working in small incremental cycles that build on what they have learned in each cycle. In this way change can be introduced to traditional ways of working in a safe, gradual and purposeful way.

Participants have coached members of their team in the use of the model, becoming the teacher rather than the pupil. Many practices have found the Improvement Model invaluable for introducing change.

## Scottish Primary Care Collaborative – High Impact Changes

The changes which brought about the greatest improvements are distilled into eight High Impact Changes.

### Improve patient access

Understand the practice's demand and its capacity to provide services at a time and date convenient to the person. Through handling the demand for care, the practice can provide unrestricted pre-bookable and bookable on the day appointments.

### Improve care through systematic review of patient feedback

Feedback can be at practice and/or individual practitioner level. Practices who act on these results provide accessible and effective services which matter to patients. Clinicians who act on their feedback achieve better health outcomes for their patients and improve their communication and diagnostic skills.

### Improve care for patients through use of skill mix in general practice

Changing the way people work either through developing or expanding the role of existing staff should build on growing evidence and good practice leading to improved access, care and diagnosis, as well as reducing waiting times.

### Use data and information to drive improvement

Using data as a tool, i.e. QOF data, prescribing information and in house practice data, practices can now look at areas of their practice in order to review current arrangements and target areas for improvement.

<sup>1</sup> Gerald J. Langley, Kevin M. Nolan, Thomas W. Nolan, Clifford L. Norman, and Lloyd P. Provost, 1996 *The Improvement Guide*, San Francisco: Jossey-Bass

### **Improve the management of patients with long-term conditions**

Changing the emphasis of care from acute episodic care to structured, proactive care using “bundles of care” where appropriate. Using templates to develop an active call and recall system where all elements of the bundle of care are reviewed with the patient and developed to best support each person to stay as well as possible. Care should be provided holistically to those people with multiple health needs, i.e. one visit should cover several needs.

### **Avoid unnecessary follow-ups in primary and secondary care**

Where appropriate, develop a one-stop-shop approach to tests and consultations where possible. If follow-ups need to take place consider telephone or e-mail and which health care professional needs to carry this out.

### **Provide services closer to patients**

Services which relied on the secondary care infrastructure can now be provided closer to the patients, either by the practice or the Community Health Partnership in a local community setting through the use of technology or skill mix e.g. Community CHD/COPD nurses and rehabilitation services.

### **Promote patient self-care and self-management**

Ensure that patients contribute as much as possible to their own needs, assessment and care planning through providing information on their condition. Evaluate the education and self-help/self-management groups available to them, e.g. Breathe Easy<sup>2</sup> for people with COPD, the voluntary sector and local self-help groups.

## **Programme Achievements**

### **Patient access to Primary Care Health Professionals**

#### **Waves 1 and 2**

- The average waiting time to see a GP in all practices across Phase I has reduced from 4.7 days to 1.4 days
- The average time to see a Practice Nurse across Phase 1 has reduced from 3.1 days to 1.4 days
- Patient satisfaction improved from 76% to 91% across all Phase 1 practices

#### **Waves 3 and 4**

- The average waiting time to see a GP in all practices across Phase II has reduced from 4.88 days to 1.66 days
- The average waiting time to see a Practice Nurse across Phase II has reduced from 3.03 days to 1.53 days
- Patient satisfaction improved from 77% to 91% across all practices in Phase II

<sup>2</sup> The British Lung Foundation (BLF) set up the Breathe Easy Support Group network to provide support and information to people living with a lung condition and for those who look after them.

## Patient access to Primary Care Health Professionals (contd)

### Wave 5

- The average waiting time to see a GP reduced from 6.33 days to 2.15 days
- The average waiting time to see a Practice Nurse reduced from 3.40 days down to 2.26
- Patient satisfaction improved from 76.73% to 91.52%

### Management of care for people with diabetes

- 28% improvement in the percentage of people with diabetes with a blood sugar level (HbA1c) less than 7.5
- 57% improvement in the percentage of people with diabetes with a cholesterol level less than 5 mmol/L
- 36% improvement in the percentage of people with diabetes with a blood pressure (BP) level less than 140/80
- 128% improvement in the percentage of people with diabetes who received a digital retinopathy screening

### Management of care for people with Coronary Heart Disease

- 13% improvement in the percentage of people with CHD on aspirin
- 26% improvement in the percentage of people with CHD with a blood pressure (BP) level less than 140/80
- 28% improvement in the percentage of post MI on beta-blockers
- 24% improvement in the percentage of people with CHD on Statins

### Management of care for people with Chronic Obstructive Pulmonary Disease

- 22% improvement in the percentage of people with a diagnosis confirmed by spirometry

### Management of care for people with Chronic Kidney Disease

- 34% improvement in the percentage of people with a diagnosis confirmed by 2 eGFRs
- 74% improvement in the percentage of people with their proteinuria checked
- 500% improvement in the percentage of people with proteinuria now on ACE/ARB
- 29% improvement in the percentage of people with a BP of less than 130/80

# Delivering Improvements in Access

*Advanced Access from the patients' perspective means making a request for an appointment only once, regardless if that appointment is for today, tomorrow, next week or next month.*

## Introduction

The Advanced Access model requires practices to change their thinking about access: it is no longer just about an appointment system but about the way that the practice team functions to meet patient demand for the service they provide. Demand no longer translates only to an appointment with a doctor, but to a range of needs that can be met by a variety of skills available through various members of the team. It involves a process of continuous development and improvement.

## Measurement and measures for improvement in access

In order to track their improvements, every participating practice collected and recorded the following measures on a monthly basis:

- GP 3rd Available Appointment (AA)
- Practice Nurse (PN) 3rd Available Appointment (AA)
- Percentage of patients seen by practice on day of their choice (PDOC)

## Figure 3: Advanced Access model

- Understand the profile of demand
- Shape the handling of demand
- Match the capacity of the team to the reshaped demand
- Establish and implement robust contingency plans
- Communicate effectively with patients and across the totality of the team

Collaborative practices use the measure of the 3rd Available Appointment (3rd AA) to reflect routine availability of clinicians. The measure is based on a simple count of the number of days that a patient would need to wait for a routine appointment with each doctor and nurse in the practice. The first and second free appointments are not counted, as they are subject to random variation, e.g. a recent cancellation.

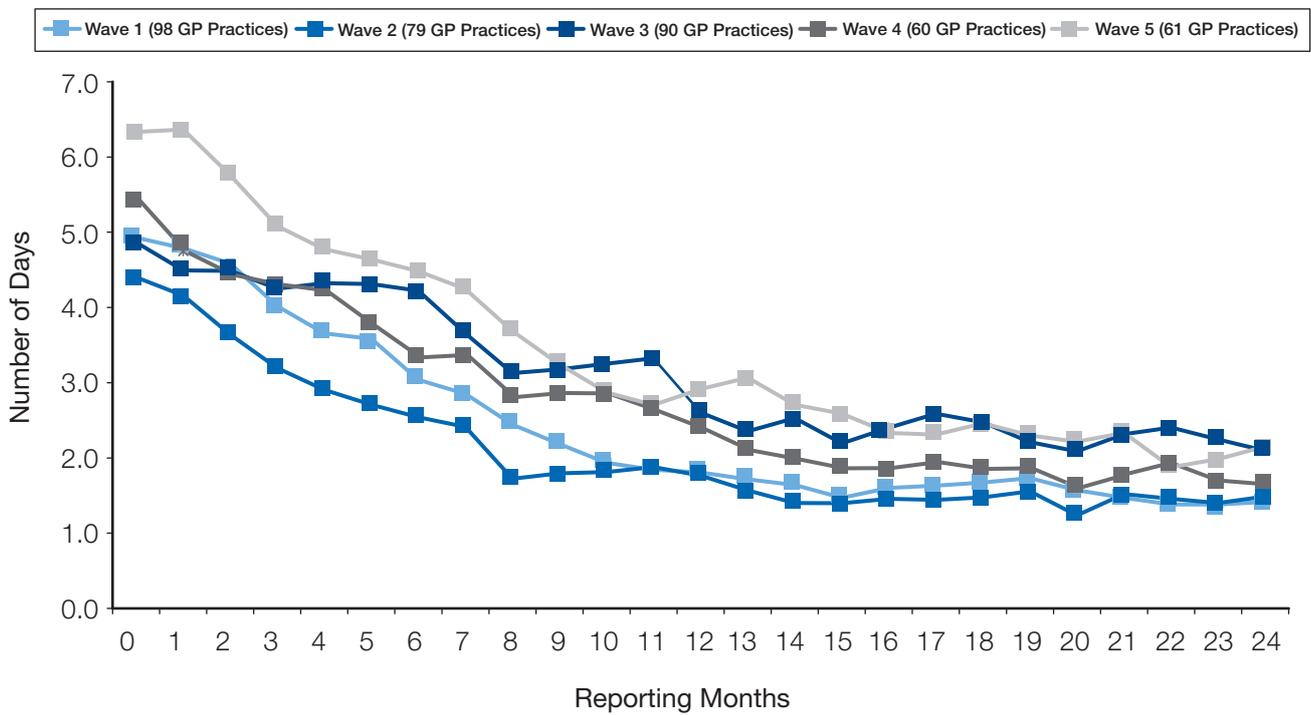
Monthly measurement helps a practice see the impact of their improvements on patients' access and is useful in the longer term in proactively managing systems. Practices also ask a sample number of patients whether they obtained an appointment on their day of choice. This measure of satisfaction helps the practice understand the impact of their changes from the patient's perspective.

*“It is boring collecting the data, however, once that is done you can make informed decisions.”*

### Business Manager, Williamwood Medical Centre

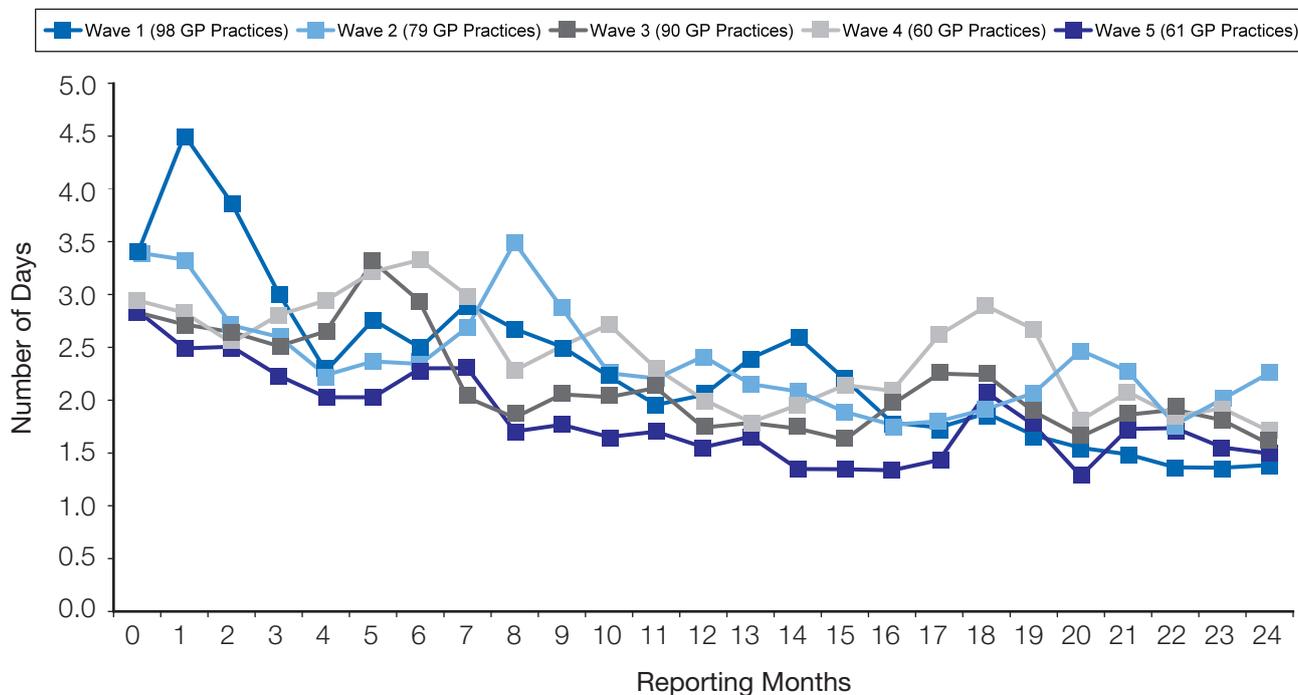
On completion of waves 1- 5 the average waiting time to see a GP in Collaborative practices reduced by 66% from 5.11 days at baseline to 1.74 days in month 24.

### Scottish Primary Care Collaborative 3rd Available Appointment for GPs

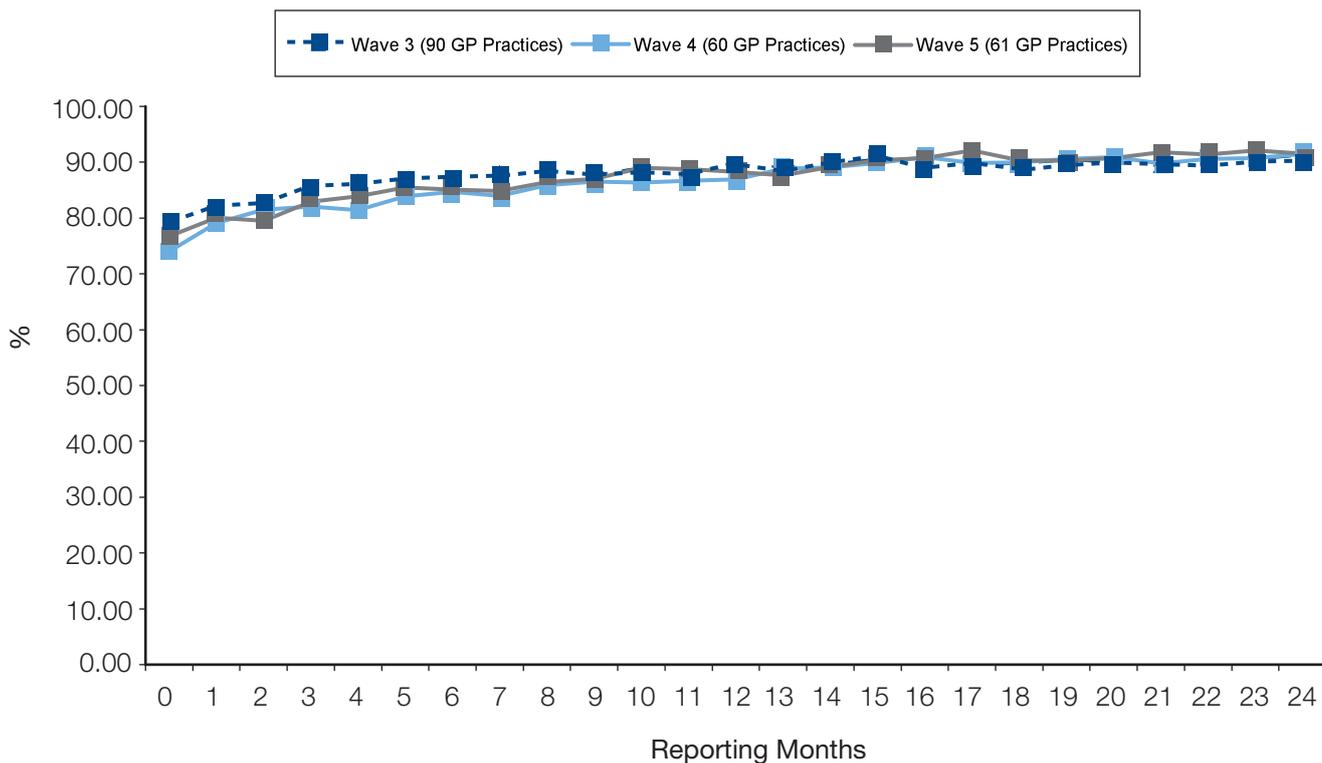


The average time for an appointment with a member of the nursing team improved by 47% across all waves.

### Scottish Primary Care Collaborative 3rd Available Appointment for Practice Nurses



### Scottish Primary Care Collaborative Percentage of People seen by a GP on their Day of Choice



*“We would not go back to the old pre-collaborative way of working at all.”*

## **Dr MEGGS and Partners**

### Understanding Capacity and Demand

Understanding capacity and demand often has a dramatic impact on a practice and it's the obvious place to start the work on improving patient access to services.

Using a simple measure of patient demand (counting requests for appointments each day across a week) and subsequently placing available capacity where it is needed can have a huge impact.

Understanding the pattern of demand across a week has given practices the information needed to redesign their systems: follow-ups moved from the busiest day usually Mondays, clinics transferred to quieter days and patterns of working altered; all to ensure that patients can be seen when they need to be seen.

Exploring different ways to handle demand appropriately means that practices can make the best use of their capacity and offer patients a choice of ways in which to access care.

The introduction of telephone consultations, telephone management of home visits, same day requests, emails for repeat prescription requests and altering the frequency of follow-up appointments are all ways of 'shaping' demand which in turn creates capacity by reducing the number of face to face appointments required. Reducing the backlog of long waits means that patients no longer book 'just in case' their condition does not improve and they cannot get an appointment, it reduces unnecessary consultations and also results in a reduction in the number of people who do not attend for their appointments.

As well as looking at simple ways to move capacity to where it is needed, many practices have looked at developing the capacity within their teams. Optimising how people are working or developing new skills can lead to dramatic improvements in access. Developing skills within the practice team frees up GP and nurse appointments and ensures patients are managed in

the most appropriate way.

Understanding what patients think about access has been central to the work of Collaborative practices. Patient satisfaction was measured monthly, for the duration of the programme to enable practices to track the impact of their changes on patients. Many practices developed other approaches to understand what patients feel about changes that they have made.

Clinicians and administrative staff, especially receptionists, have vital skills in supporting patients to make the best choice about who and when they need to be seen. Many practices worked with reception teams to develop their knowledge in order to inform patients of appropriate ways to access care and thus increase patient choice.

Having practical contingency plans in place means that a practice can manage at times when capacity will be reduced, either through planned or unplanned absences or there is increased demand for appointments. Such times often means an increased workload for a short time in order to ensure that delays do not build up again knowing that the system will return to normal once full capacity returns. Popular contingencies include increasing the amount of 'shaping' carried out, particularly telephone management, postponing meetings and outside commitments until capacity is restored to the necessary levels.

Advanced Access has helped many practices to free up capacity in order to develop other work. Moving appropriate work to nurses from doctors, or from nurses to other team members, has meant that clinicians have been able to concentrate on other priority areas.

Transferring some of the work traditionally undertaken by nurses to other members of the team such as the Phlebotomist or Health Care Assistant has enabled nurses to expand their role, particularly in the area of

long-term condition management.

**Kennoway Medical Group**, Glenrothes and North East Fife, started the programme with a 3rd AA of 20 days. Early capacity and demand work highlighted that the majority of their emergency appointments were unused. Further work on understanding demand showed that the nurse had insufficient smear appointments to meet the demand which led to further demands for appointments with the female GP. Demand also outstripped capacity for phlebotomy time. All of which has led to:

- extra phlebotomy hours
- timing of telephone consultations amended due to insufficient lines being available
- 'signposting' patients to the appropriate healthcare professional

- staff asking patients if their condition could be dealt with by the local pharmacist
- GPs increasing the number of sessions from 8 to 9 and all work on the highest demand days, Monday and Friday
- minor surgery clinics moved away from Mondays
- holiday rota developed to ensure adequate capacity during times of annual leave.

At the end of the programme the GP 3rd AA was

Kennoway Medical Group	Baseline	Month 24	Percentage improvement
GP 3rd Available Appointment	20 days	1.33 days	93%

1.33 days, an improvement of 93%.

# Improving Care for People with Diabetes

*“The Scottish Primary Care Collaborative has demonstrated clear evidence of delivering rapid sustainable and systematic improvement in diabetes care across Scotland. The development of a sound understanding and the effective application of quality improvement methods and skills has been key to success to date. In addition, joint working between the Collaborative, the Scottish diabetes group and local Managed Clinical Networks has been very effective in driving change. The work is a model for other long-term condition quality improvement programmes/projects throughout Scotland.”*

**Professor Andrew Morris, Professor of Diabetic Medicine at the University of Dundee.**

**Professor Morris was chair of the Scottish Diabetes Group (2002-2006) and Lead Clinician for Diabetes in Scotland.**

## Collaborative Approach

- Establish a system for creating, validating and updating a register of people with Diabetes
- Be systematic and pro-active in managing the care of people with Diabetes
- Involve patients in delivering and developing their care
- Adopt a multi-skilled, multi-agency approach to ensure effective co-ordination of the care of people with Diabetes

The Collaborative approach to improving care for people with Long Term Conditions was based around clinical evidence of the effectiveness of medication and best practice in delivering care.

The approach provides a simple framework which, when implemented systematically, enables practices to maximise health gains for people in their practice with Long Term Conditions.

## Diabetes Aim

The aim of this part of the programme was to ensure that a minimum of 60% of all the people with diabetes (both type 1 and 2) within participating sites had an HbA1c<sup>3</sup> of less than 7.5%.

## Diabetes Measures

The following measures were used and reported on monthly and reflect the improvement work on diabetes:

<sup>3</sup> In the blood stream are the red blood cells, which are made of a molecule called haemoglobin. Glucose sticks to the haemoglobin to make a 'glycosylated haemoglobin' molecule, called haemoglobin A1C or HbA1C. The more glucose in the blood, the more haemoglobin A1C or HbA1C will be present in the blood.

- Percentage of people with Diabetes with a last recorded HbA1c of less than 7.5 within the previous 12 months
- Percentage of people with Diabetes with a last recorded cholesterol reading of less than 5mmol/L within the previous 12 months
- Percentage of people with Diabetes with a last recorded blood pressure reading less than 140/80 within the last 12 months
- Percentage of people who received a digital retinopathy screening recorded within the previous 15 months

## Diabetes Achievements

On completion of Phase 1 of the programme the following results were achieved by the 178 practice who took part in waves 1 and 2:

The percentage of people with a blood sugar level (HbA1c) improved from 41.28% to 52.77% an improvement of 28%.

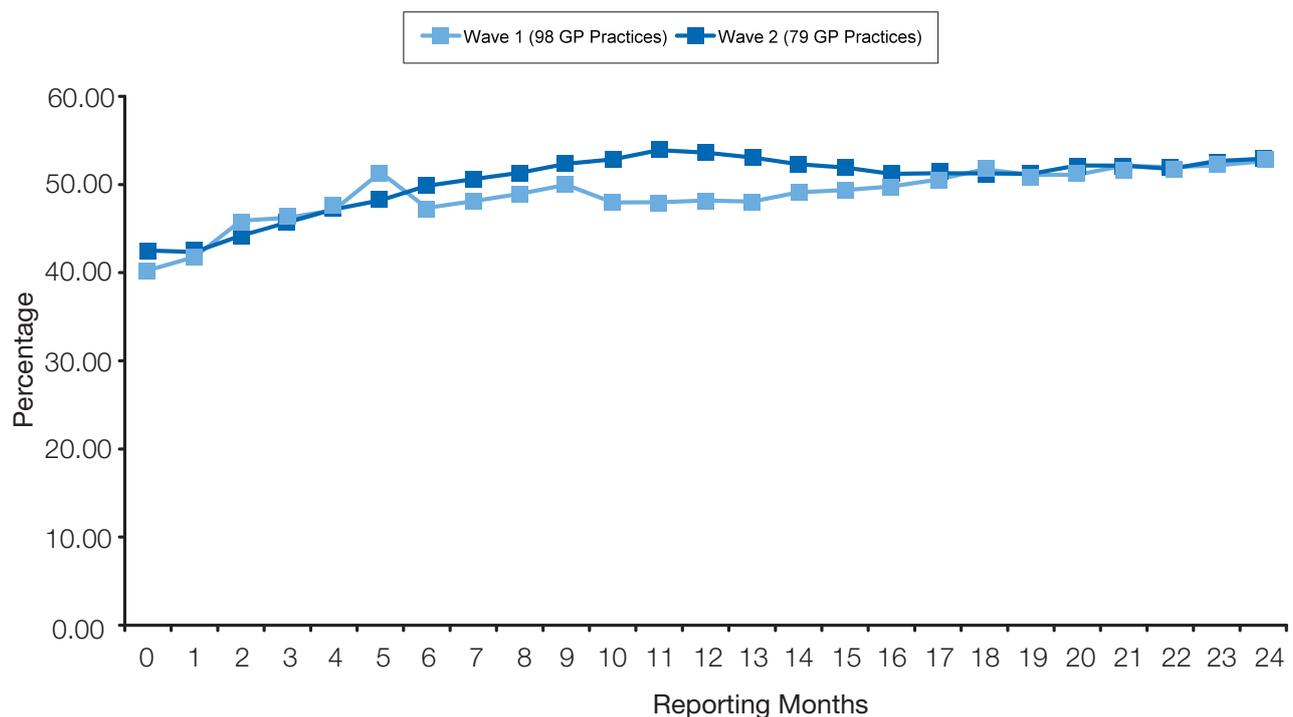
The percentage of people with a cholesterol level less than 5 mmol/L improved from 44.41% to 69.85% an improvement of 57%.

The percentage of people with a blood pressure measure less than 140/80 improved from 40.38% to 54.91% an improvement of 36%.

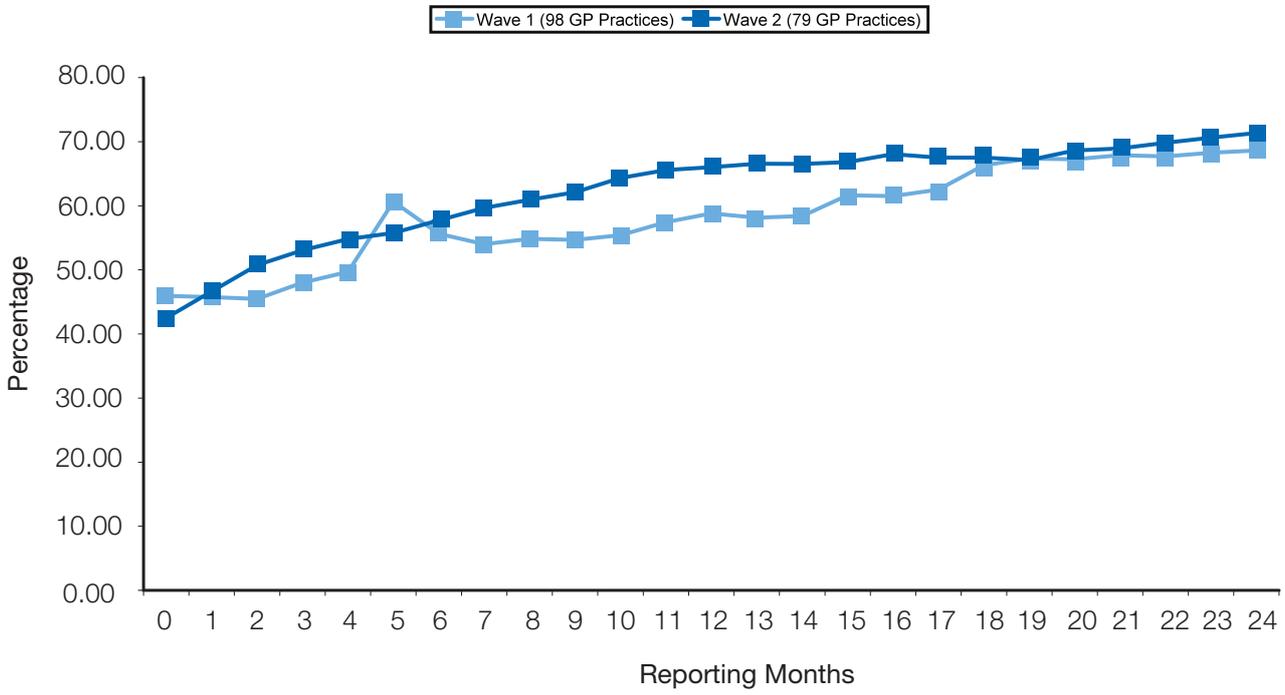
The percentage of people who received a digital retinopathy screening improved from 16.11% to 36.66% an improvement of 128%.

Exemptions: The only people exempt from participating in the long-term condition element of the SPCC programme are those people who are unable to take medication, medication is contraindicated or medication is refused.

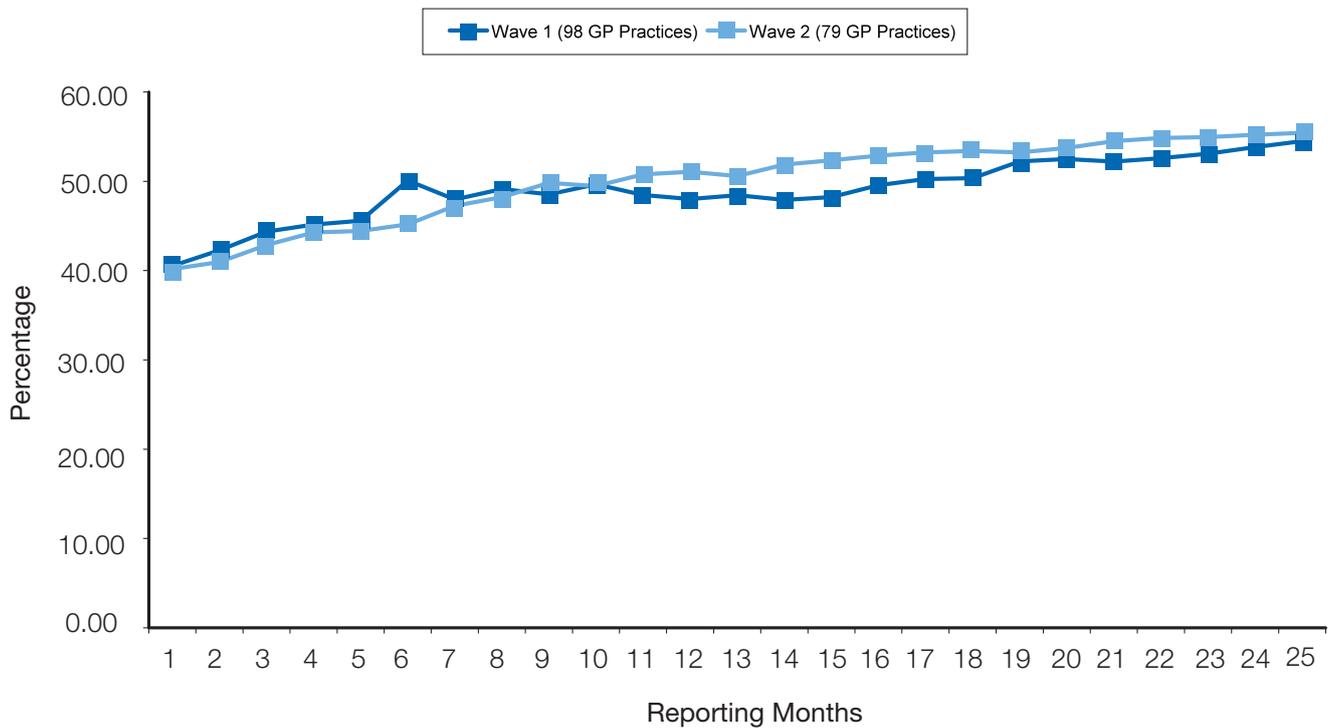
### Scottish Primary Care Collaborative SPCC - Diabetes - percentage of people with a HbA1c <7.5



### Scottish Primary Care Collaborative SPCC - Diabetes - percentage of people with a Cholesterol < 5 mmol/l



### Scottish Primary Care Collaborative SPCC - Diabetes - percentage of people with BP < 14/80



**Armada Medical Practice** in North Highland, used PDSAs to undertake their diabetes improvement work in a systematic and managed way. Their PDSAs took them through checking that their register included all their patients with diabetes and that all were receiving the appropriate medication, being treated to target and that all of those living in nursing homes received the same high standard of care. The practice can demonstrate that it has a valid register and managed programme of care for their diabetic population.

Armada Medical Practice	Baseline	Month 24	Percentage of improvement
Percentage of patients with HbA1c <7.5	29%	63%	117%
Percentage of patients with a cholesterol of <5 mmol/L	38%	53%	39%
Percentage of patients with a BP <140/80	45%	70%	56%
Percentage of patients who received a digital retinopathy screening	16.11	36.66	128%

The aim of this part of the programme was to ensure that a minimum of 60% of all the people with diabetes (both type 1 and 2) within participating sites had an HbA1c of less than 7.5%. At the end of the

programme 53% of people with diabetes had a HbA1c of <7.5. This was achieved despite an increase in the number of people diagnosed with diabetes.

	Patients on Diabetic Register	Prevalence	Practice Population
Baseline	32,508	2.96	1,099,106
Month 24	35,319	3.20	1,103,135
Increase	8.65%		0.37%

Based on the achievements made in the management of diabetes, if every practice in Scotland achieved the same results and sustained these results across a 10-year period we would see the following reduction in complications from diabetes:

- 5178 fewer patients with complications of diabetes\*
- 4735 fewer patients suffering strokes or heart attacks\*
- 1678 fewer deaths of patients with diabetes\*

Calculated using the UK PDS (1998) and HPS – *Patients with Diabetes Subset (2002)*

# Improving Care for People with Coronary Heart Disease

*“The Scottish Primary Care Collaborative successfully achieved improved delivery of secondary prevention in primary care, relating to medical cardio-vascular risk factors and optimal prescribing of appropriate medication.”*

**Dr Paul MacIntyre, Consultant Cardiologist, Royal Alexandria Hospital**

## Collaborative Approach

- Establish a system for creating, validating and updating a register of people with Coronary Heart Disease
- Be systematic and pro-active in managing the care of people with Coronary Heart Disease
- Involve patients in delivering and developing their care
- Adopt a multi-skilled, multi agency approach to ensure effective co-ordination of the care of people

The Collaborative approach to improving care for people with long Term Conditions was based around clinical evidence of the effectiveness of medication and best practice in delivering care.

The approach provides a simple framework which, when implemented systematically, enables practices to maximise health gains for people in their practice with Long Term Conditions.

## Coronary Heart Disease (CHD) Aim

To generate early demonstrable reductions at a rate of 10% per year in the mortality of patients with established coronary heart disease by the prompt application of proven management as outlined in the Coronary Heart Disease and Stroke Strategy for Scotland.<sup>4</sup>

## CHD Measures

The following measures were used and reported on monthly and reflect the improvement work on coronary heart disease:

- Percentage of people with CHD taking aspirin
- Percentage of people with CHD taking statins
- Percentage of people who had had a heart attack (myocardial infarction) within the past 12 months taking beta-blockers
- Percentage of people with CHD with a last recorded blood pressure reading less than 140/80 within the last 12 months
- Number of people who had died from CHD with a proven history of CHD

Exemptions: The only people exempt from participating in the long term condition element of the SPCC programme are those people who are unable to take medication, medication is contra-indicated or medication is refused.

<sup>4</sup> Coronary Heart Disease and Stroke in Scotland (2004)  
ISBN 0-7559-4376

## CHD Achievements

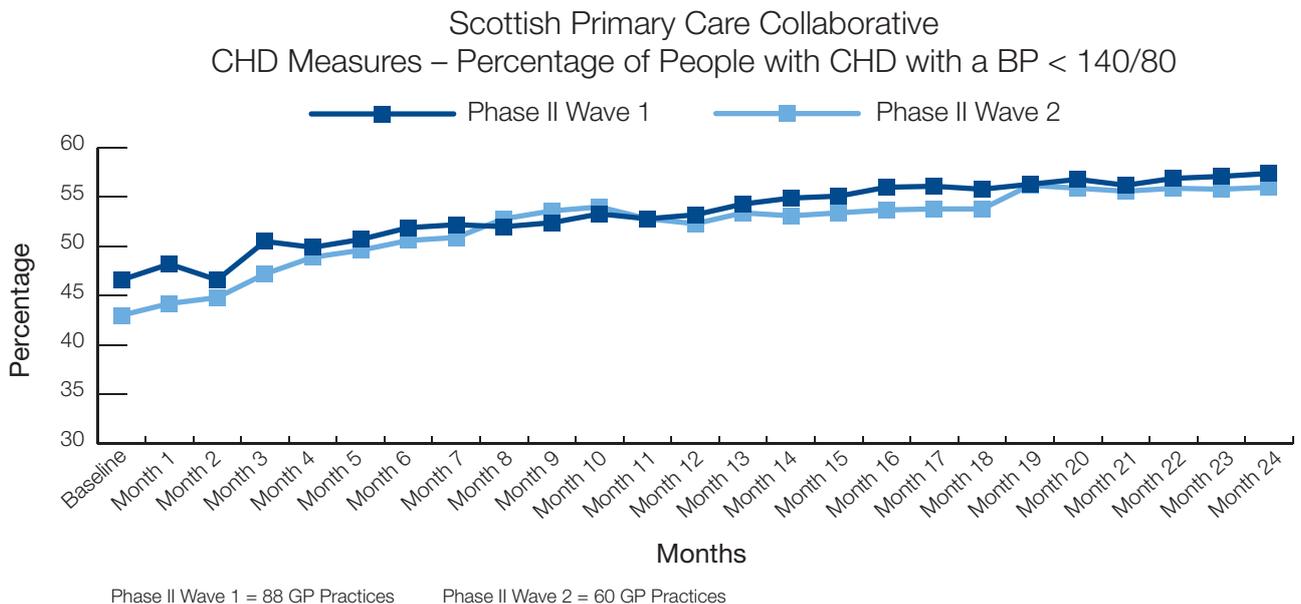
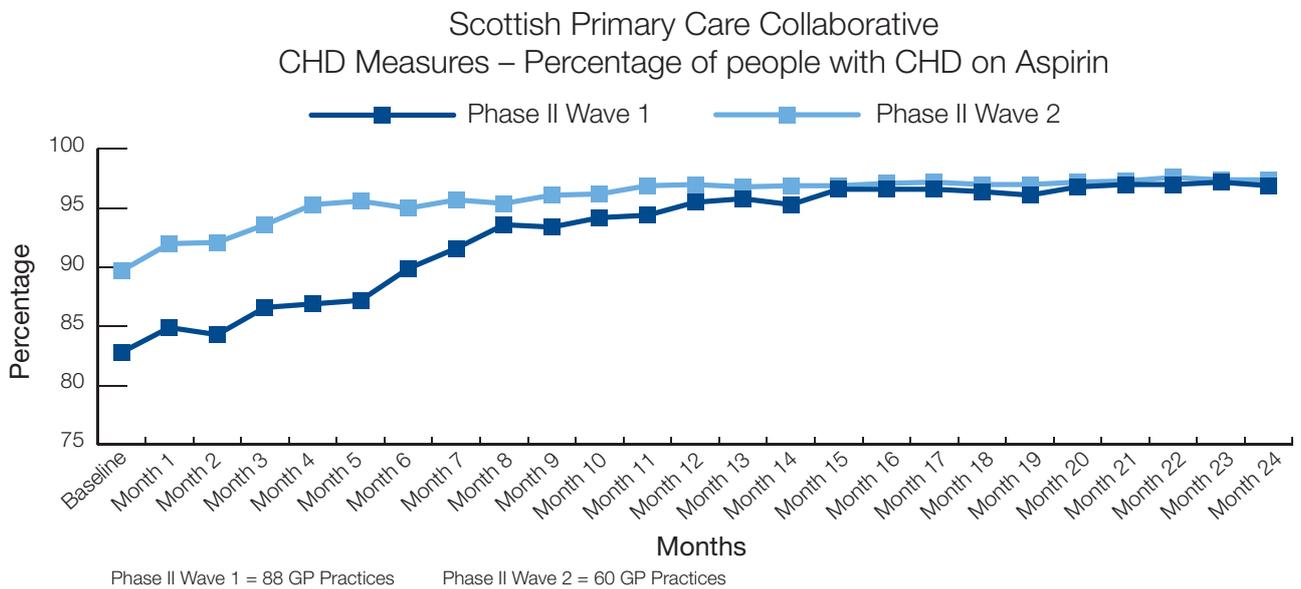
On completion of Phase 2 of the programme the following results were achieved by the 148 practice who took part in waves 3 and 4:

The percentage of people with Coronary Heart Disease on Aspirin improved from 85.59% to 97.09% an improvement of 13%.

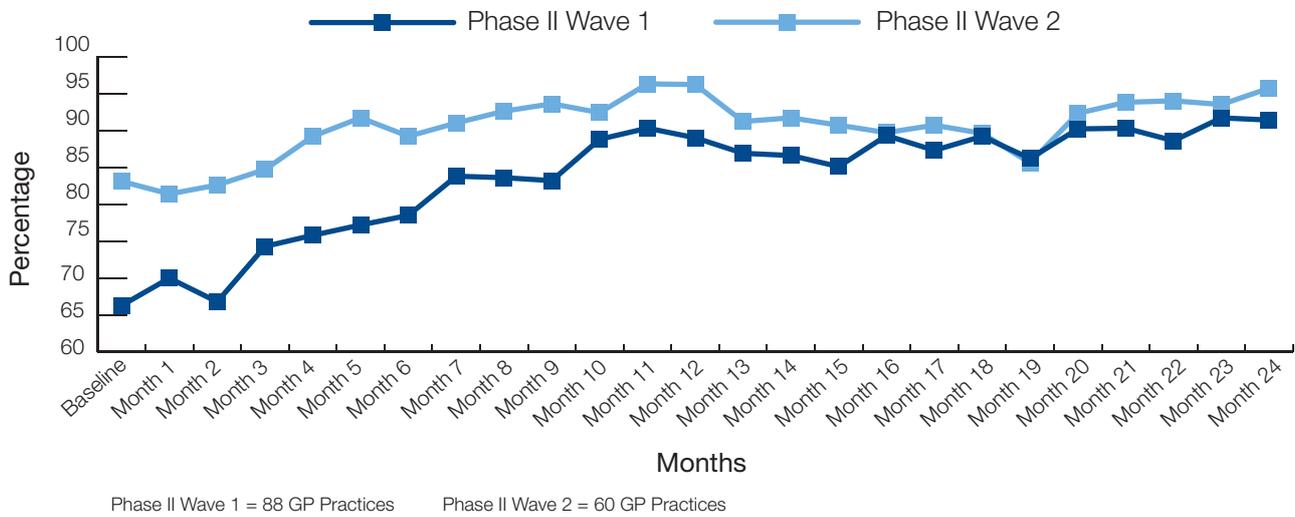
The percentage of people with a blood pressure measure less than 140/80 improved from 45.14% to 56.85% an improvement of 26%.

The percentage of people with a Myocardial Infarction on a beta blocker improved from 72.91% to 93.14% an improvement of 28%.

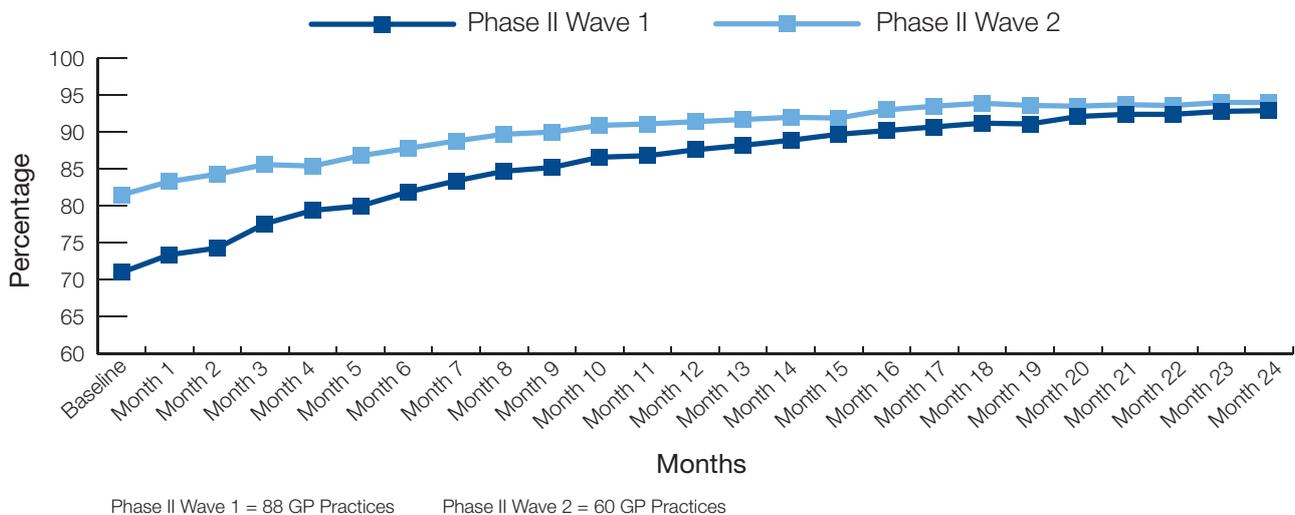
The percentage of people on a statin improved from 75.30% to 93.36% an improvement of 24%.



### Scottish Primary Care Collaborative CHD Measures – Percentage of People with CHD with a BP <140/80



### Scottish Primary Care Collaborative CHD Measures – Percentage of People with CHD on Statins



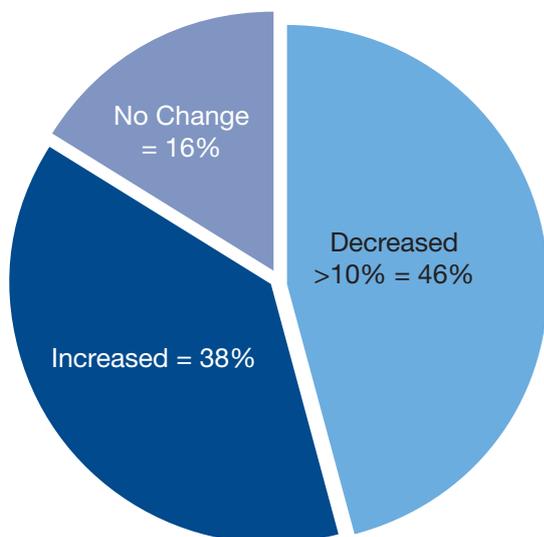
**Kilcreggan Practice**, Argyll & Bute Community Health Partnership (CHP), validated their register in July 2005 using the Plan, Do, Study, Act (PDSA) methodology. Practice staff identified missing key indicators from their register and, using the patient's birth date, invited patients to attend the CHD clinic for a review. The GP lead introduced the use of flow charts and action cards to improve blood pressure

management. Issues with the practice nurse's capacity was addressed through developing a protocol which would allow other staff to take blood pressure and training one member of staff as a phlebotomist. The practice also removed people from the register who were identified as not having CHD. Through their proactive work the practice have seen their measures improve over the 24 months.

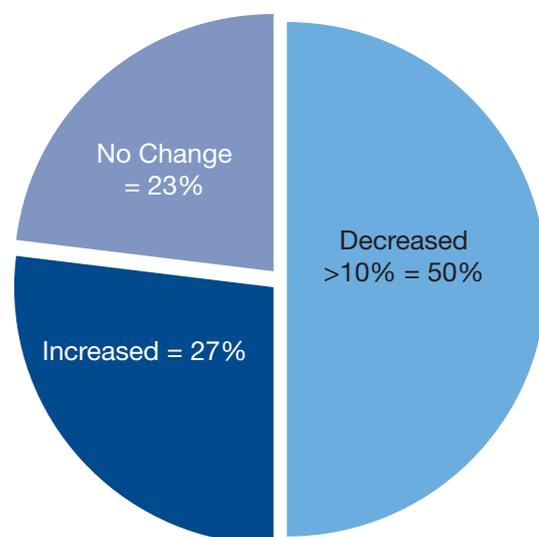
Kilcreggan Practice	Baseline	Month 24	Percentage improvement
Percentage of patients taking aspirin	68%	100%	47%
Percentage of patients taking a statin	75%	93%	24%
Percentage of patients taking beta-blockers	20%	100%	400%
Percentage of patients with a BP <140/80	11%	64%	482%

The programme aimed to reduce deaths from CHD by 10% year on year.

SPCC – Phase II Wave 1  
Average Reduction in CHD Deaths  
From Year 1 to Year 2  
*n = 90 Practices*



SPCC – Phase II Wave 2  
Average Reduction in CHD Deaths  
From Year 1 to Year 2  
*n = 60 Practices*



As this data was not recorded routinely by practices we have used year one figures as the baseline and compared that figure with year two. Wave 3 saw a decrease of more than 10% in deaths in 46% of the practices and wave 4 a decrease in deaths of more than 10% in 50% of the practices.

# Improving Care for People with Chronic Obstructive Pulmonary Disease

*“I was delighted to be involved in this initiative, which has brought about real and lasting improvements in our ability to identify and treat patients with COPD, a disease which has, all too often, and for too long, been marginalised or ignored. At a time when we are waking up to the impact of long term conditions on our health and health services, this work has resulted in a real and positive impact for many patients, with potentially life changing results. I hope and believe that many of the lessons learned from the SPCC programme will be incorporated into clinical practice, not only in Scotland, but throughout the UK, through the development of Standards, and Clinical strategies for COPD.”*

**Iain Small, General Practitioner, Clinical Lead Grampian Respiratory Managed Clinical Network, Chair of Executive General Practice Airways Group (GPIAG)**

## Collaborative Methodology

- Establish a system of creating, validating and updating a register of people with Chronic Obstructive Pulmonary Disease
- Be systematic and pro-active in managing the care of people with Chronic Obstructive Pulmonary Disease
- Involve patients in delivering and developing their care
- Adopt a multi-skilled, multi-agency approach to ensure effective co-ordination of the care of people with Chronic Obstructive Pulmonary Disease

## Chronic Obstructive Pulmonary Disease (COPD) Aim:

The aim of this part of the programme was to achieve a reduction in patient admissions to hospital by 20% in comparison with the previous 12 months.

## COPD Measures

The following measures were used and reported on monthly and reflect the improvement work on Chronic Obstructive Pulmonary Disease (COPD):

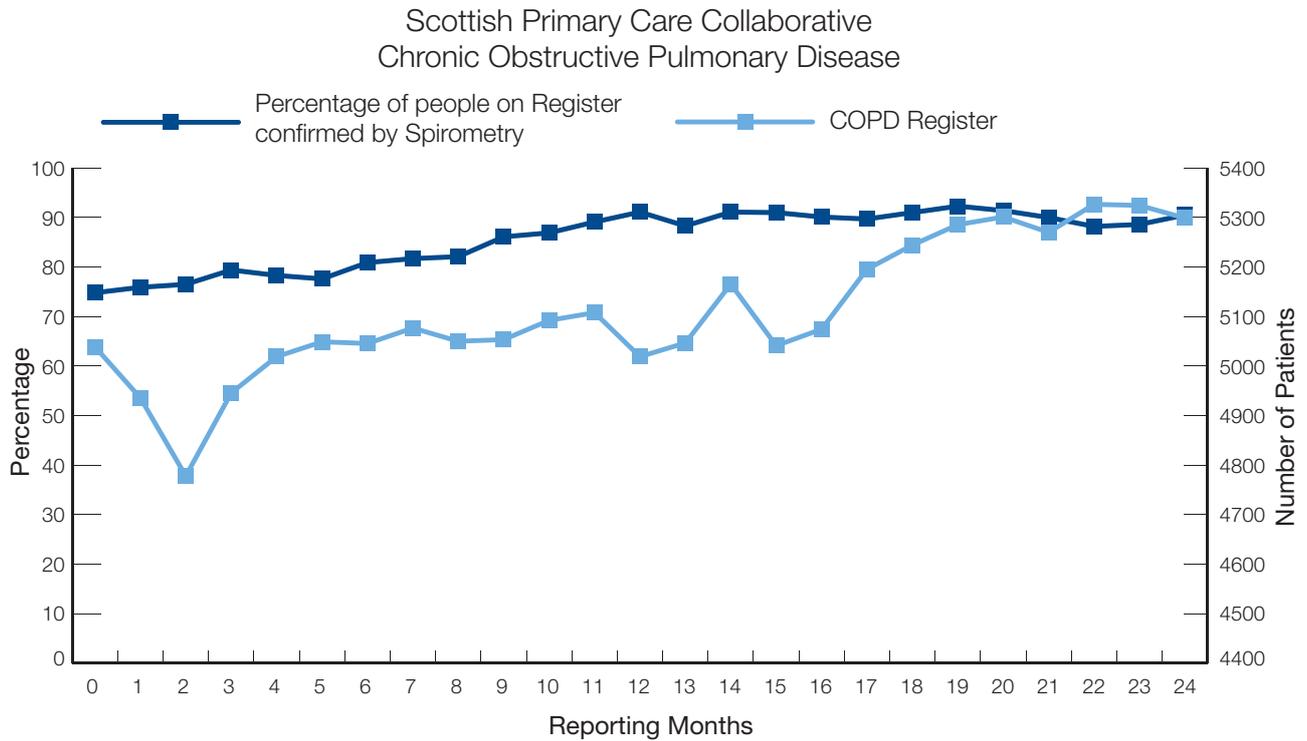
- Percentage of people with COPD where diagnosis has been confirmed by spirometry including reversibility ( $FEV^1 < 80\%$ ,  $FEV^1/FVC$  ratio  $< 70\%$ )<sup>5</sup>
- Percentage of people on COPD register with an unscheduled admission to hospital within previous 12 months
- Percentage of people with severe COPD ( $FEV^1 < 30\%$ , MRC5 or episode of assisted ventilation)<sup>6</sup> referred to Primary Care Palliative Care Team

**Exemptions:** The only people exempt from participating in the long-term condition element of the SPCC programme are those people who are unable to take medication, medication is contraindicated or medication is refused.

<sup>5</sup> Forced Expiratory Volume in one second/Forced Vital Capacity

<sup>6</sup> Medical Research Council

## COPD Achievements



On completion of the programme, the 60 practices who took part in wave 5 achieved a 22% improvement in the percentage of people with a diagnosis confirmed by spirometry.

*“The collaborative work has improved all our working days with successful improved access and certainly improvement to COPD care. Thank you for all your hard work and patience with us.”*

### Practice Nurse, Renfrewshire CHP

The Practice Nurse at **Strathest Medical Group**, Midlothian CHP checked patients notes in order to:

- classify patients as having mild, moderate or severe COPD
- noted patients last review date
- clarify patients smoking status
- identify reason for any exclusion from the QOF register
- identify people not on the register but receiving inhalers
- identify patients who had an exacerbation resulting in a hospital admission and requesting repeat medication in the last six months
- Identify the number of patients who had completed a Rehabilitation course and had an exacerbation
  - 3 patients had completed a course none of whom had an admission to hospital
  - 2 patients had an exacerbation which was treated at home.

The practice went on to use Scottish Patients at Risk of Readmission (SPARRA) data to identify patients admitted over the last 12 months and identify reasons for poor attendance for spirometry testing. The practice developed an information leaflet which is now sent out with the spirometry appointment informing patients that if they are taking a course of antibiotics or steroids to please cancel their appointment and staff ensure that a further appointment is made at a more suitable time.

Strathest Medical Group	No. of people on register	No. of people with diagnosis confirmed by spirometry
Baseline	296	75%
Month 24	293	100%

The programme aimed to reduce admissions by 20%.

COPD exacerbations had not previously been recorded, therefore, the first 12 months were taken as the baseline measure. From month 13 the rate of unscheduled admissions fell from 5.06% to 4.14% at month 24 despite a 5% increase in the rate of patients on practice registers. However, due to the number of people on the register initially reducing and then increasing and the variation in the reporting of this figure it was felt that the information on this measure was not as robust as information presented in other sections of the report.

# Improving Care for People with Chronic Kidney Disease

*“Chronic kidney disease is a relatively new area for primary care staff, so it has been heartening that the SPCC approach has led to improvement across all 4 measures. Proteinuria identifies a group of patients at increased risk of deteriorating kidney function and death, so the marked improvements in testing and treating proteinuria will lead to substantial benefits to these patients. The enthusiasm of the SPCC practices should make it possible to build on these gains, and the challenge now is to spread this good practice across the whole of the primary care population.”*

**Mark S. MacGregor, Clinical Director, Medical Specialties, Consultant Physician and Nephrologist**

## Collaborative Approach

- Establish a system for creating, validating and updating a register of people with Chronic Kidney Disease
- Be systematic and pro-active in managing the care of people with Chronic Kidney Disease
- Involve patients in delivering and developing their care
- Adopt a multi-skilled, multi-agency approach to ensure effective co-ordination of the care of people with Chronic Kidney Disease

## Chronic Kidney Disease (CKD) Aim

The aim of this part of the programme was to achieve demonstrable improvements in the care and management of people with Chronic Kidney Disease.

## CKD Measures

The following measures were used and reported on monthly which reflect the improvement work on Chronic

Kidney Disease (CKD):

- Total number of people on the CKD register (stages 3-5) (diagnosis confirmed by eGFR<sup>7</sup> – repeated after an interval of at least 90 days)

The failure to identify all CKD patients and the misdiagnosing of people with CKD after one eGFR prompted this measure.

- Percentage of people on the register with assessment of proteinuria checked in the previous 12 months (using dipstick/PCR/ACR)<sup>8</sup>

This simple intervention identifies those who are at risk and who may require investigation and

treatment.

- Percentage of people with a PCR <100mg/mmol on ACE Inhibitors<sup>9</sup> and/or ARB<sup>10</sup> in the previous 12 months

The prescribing of ACE Inhibitors for this group of people is one of the few evidence-based interventions for CKD.

- Percentage of people on the register with a BP of less than 130/80 mm Hg in the previous 12 months

Treatment of hypertension is considered the single most important intervention in CKD.

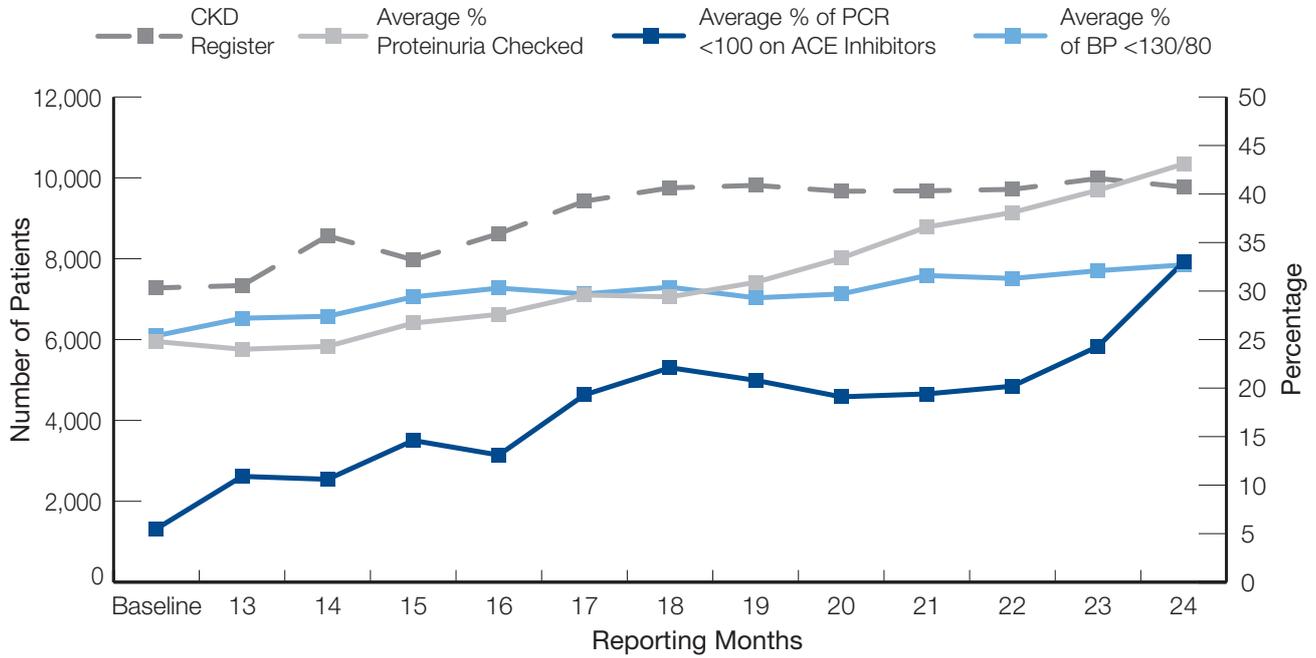
<sup>7</sup> Estimated Glomerular Filtration Rate

<sup>8</sup> Protein Creatinine Ratio/Albumin Creatinine Ratio

<sup>9</sup> Angiotensin converting enzyme inhibitor

<sup>10</sup> Angiotensin receptor blocker

### Scottish Primary Care Collaborative Chronic Kidney Disease\*



\*CKD was only measured in Wave 5 Year 2 – Months 13-24

*“The Practice has seen an improvement in BP control as a result of the PDSA’s methodology.”*

### **Wigtownshire LHP practice**

**Glennifer Group Practice**, East Renfrewshire CHCP carried out a PDSA to identify patients who had an estimated Glomerular Filtration Rate (eGFR) recorded in the last 18 months of less than 60 not recorded on the CKD register. The search identified 213 patients with either one eGFR or multiple eGFRs of less than 60 and not on the register. Those with 2 or 3 eGFRs with consecutive readings of 60 or less were added to the register. Patients were also coded through stages 1 – 5 with stage 3 being subdivided into 3a and 3b in line with new CKD coding guidelines.

The programme aimed to demonstrate improvements in the care and management of people with CKD. The results achieved by the practices in 12 months show that the management of people with COPD has improved and that the appropriate coding of disease severity will influence care and outcomes for people with CKD.

The practices worked on improving outcomes for people with CKD for 12 months. Over that period:

The number of patients on practice CKD registers increased from 7278 to 9773 an increase of 34% through actively ensuring that a diagnosis was based on two eGFRs at least 90 days apart.

The percentage of patients who had their proteinuria checked increased by 74%.

The percentage of patients with a PCR >100 on an ACE Inhibitor increased by 500%

and

The percentage of patients with a BP of <130/80 increased by 29%.

## Summary

Practices have used the simple methodology illustrated in this short report to address several long-term conditions. The methodology has provided a structure for practices to work through with many patients reaping the benefits of improved care.

Early diagnosis, appropriate medication, disease coding and classification, active call and recall systems can prevent complications and improve outcomes for people with long-term conditions.

The practices have shown innovation, enthusiasm and commitment regarding the implementation of change whilst coping with the pressures and challenges of general practice. The collective achievements of the practices and the practice staff are too numerous to mention in this short document, however, those mentioned illustrate the type of work undertaken by all participating practices.

Participating practices have contributed to NHSScotland's Quality Strategy through working collaboratively to improve communication with patients and staff and ensure care is patient centred and clinically effective in the way that treatment and care is delivered. The practices have also contributed to the Patient Safety agenda in primary care through the use of the improvement tools, data, adopting best clinical practice, the use of bundles of care for optimal clinical outcomes as well as reducing variation in care across Scotland.

The work carried out by practice staff in improving the care of people with Diabetes, Coronary Heart Disease, Chronic Obstructive Disease and Chronic Kidney Disease is an excellent foundation for continuing work on the long-term conditions agenda.

Full SPCC reports are available on-line

Waves 1 & 2 -

[www.scotland.gov.uk/Publications/2008/01/14161901](http://www.scotland.gov.uk/Publications/2008/01/14161901)

Waves 3, 4 & 5 -

<http://www.scotland.gov.uk/Publications/2010/08/09162114/0>



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