**UNIVERSITY OF BIRMINGHAM AND**

**UNIVERSITY OF YORK HEALTH ECONOMICS CONSORTIUM**

**(NICE EXTERNAL CONTRACTOR)**

# Development feedback report on piloted indicator

| | |
|---|---|
| **QOF indicator area:** | Peripheral arterial disease – BP control |
| **Pilot period:** | 1st October 2012 - 31st March 2013 |
| **Potential Output:** | Recommendations for NICE menu |

**Contents**



## Background

As part of the NICE-managed Quality and Outcomes Framework (QOF) process, all clinical and health improvement indicators are piloted, using agreed methodology, in a representative sample of GP practices across England, Scotland, Wales and Northern Ireland.

The aim of piloting is to test whether indicators work in practice, have any unintended consequences and are fit for purpose.

## Piloted indicators

1. The percentage of patients aged 80 years and over with peripheral arterial disease in whom the last blood pressure reading (measured in the preceding 15 months) is 150/90 or less.
2. The percentage of patients under 80 years old with peripheral arterial disease in whom the last blood pressure reading (measured in the preceding 15 months) is 140/90 or less.

| | |
|---|---|
| Number of practices participating in the pilot: | 37 |
| Number of practices withdrawing from the pilot: | 5 |
| Number of practices where staff were interviewed: | 32 |

*(29 GPs, 6 Practice Nurses, 19 Practice Managers = 54 primary care staff most involved in the QOF pilot)*

## Assessment of clarity, reliability, feasibility, acceptability and implementation

***Clarity***

- Indicator wording as stated, rated as clear and unambiguous by the experts and frontline GPs.
- The HSCIC has confirmed that they have been able to write Business Rules (and/or an Extraction Specification).

***Reliability[1] and feasibility***

| Indicator | Feasibility | Reliability | Implementation |
|---|---|---|---|
| **1** | **1** | **1** | **1** |
| **2** | **1** | **1** | **1** |
| **GPES conversion** | | | **3** |

***Acceptability***

General comments

Approximately two-thirds of pilot practices found this set of indicators acceptable, largely on the basis that practice staff were already treating patients with PAD to a BP target lower than that set out in current indicator PAD002[2], which sets an upper limit of 150/90 mmHg for patients of all ages. Sixteen pilot practices (46%) had a policy of treating patients to tighter BP targets, with two explicitly stating that they treat to the lowest BP possible and another overtly acknowledging latest NICE guidance[3] as the rationale for tightening. Assessment of the workload associated with this set of indicators was mixed, because, whilst just under half of the pilot practices were working to tighter targets, there were concerns about achievement against a formal indicator.

Five pilot practices commented on the importance of good BP control in the area of PAD specifically, as it was seen as a clinically high-risk condition. Five others, however, questioned the prevalence of patients suffering from PAD in isolation, and therefore being covered by other QOF indicators. One

[1] HSCIC provide guidance on whether the piloted indicators are, from a business rule perspective, suitable to become 'live' indicators. A notional 'scoring' system is used:

1. No problems to implement in live with other indicators
2. Minor re-work before it can go live with other indicators
3. Major re-work but do-able without recourse to anyone outside of the process
4. Major considerations to be made before the indicator can go live - possibly need to speak to CFH / suppliers
5. Not feasible

[2] PAD002: The percentage of patients with peripheral arterial disease in whom the last blood pressure reading (measured in the preceding 12 months) is 150/90 mmHg or less

[3] NICE. 2011. *Clinical Guideline 127: Hypertension*

GP calculated *"we have 81 patients recorded with PAD...so if I were to take … yeah, I've got 11 patients who have peripheral arterial disease but don't have coronary heart disease, diabetes, stroke or hypertension...so, if the others are all being managed for blood pressure already, so, I mean you're adding an indicator for 11 patients - the other 70 are already being paid for"* (GP:ID5). Nevertheless, another GP highlighted the value of adding an indicator for those few: *"...most of my people with PAD have also got ischemic heart disease... but there are a few people who should be aiming for lower and I have got some young people with peripheral vascular disease ... I mean there's people below the age of 50 and I would really like to be encouraged to be pushing them down and therefore encourages me if there's more money attached to peripheral vascular disease to run a call and recall system which I haven't needed to do historically"* (GP:ID20).

The pilot practices' views on patient reaction and impact of their daily lives in this disease area were also mixed. One GP felt that compliance in this group was problematic because *"a lot don't see themselves as having high CV risk which is not true but that is the way that often patients, if a patient presents just with peripheral vascular disease they don't see themselves in the same way as somebody who's had CHD"* (GP:ID3), whereas another GP found this group more compliant because *"they can see the risk - you can quant-, like you're able to give them a - they can see themselves quite a lot of time the claudication getting worse so I would think they're more likely to comply"* (GP:ID18). Equally, while one GP felt that *"impact on life probably in some cases is not as, erm, bad as - well in some cases it can be quite bad but in most cases they live with it and they, erm... and psychological trauma is less than having a stroke or a heart attack"* (GP:ID29), another pointed out that *"you've always got slight worries about stenosis and things in people with vascular disease and more side effects with medications"* (GP:ID13).

There was little ambivalence regarding this indicator set, although one practice team commented that these indicators are unnecessary as patients should be treated to the lowest BP target possible for their individual circumstances (though the targets themselves were seen as appropriate levels) and another GP felt that it would be too soon to update this clinical area, given the relatively recent addition of this domain[4]. Further comments regarding the timing of this potential inclusion in PAD are given below, under implementation. Pilot practices that were against inclusion of this set of indicators in QOF were generally concerned with potential over-treatment of patients, of poly-pharmacy and the side-effects of increased medication.

[4] The PAD domain was added in 2013/13.

Given that PAD is a relatively new domain in QOF, there were mixed feelings about the potential inclusion of this new indicator set at this stage. One GP observed that *"the PAD domain in itself has presented us with a workload issue because it's in a new, entirely new domain and so there's been a fair bit of work had to be done over the last few months to go through it and that's one of the few areas where we're not quite getting full points so I'm not convinced that adding another indicator to a new set of indicators is appropriate. It may be in another year, some things settled down..."* (GP:ID23). On the other hand, a PM at another pilot practice described how *"it wasn't something where ...perhaps if you took a domain that had been very…like say your diabetes level and actually having put a lot of work in over a lot years to get people to a certain level, that level then drops again, you could probably get a sense of frustration from the clinicians and you know you're going to go back and re-manage patients who have probably got quite used to a medication regime and then try and pull them down again to another level, but because this is quite a new area I think we just kind of rolled it into the work that we were doing anyway"* (PM:ID27).

<u>Acceptability indicator 1 (patients aged 80 years and over)</u>

Twenty-two practices (59%) were supportive of this indicator going into QOF, seven practices (19%) did not support its inclusion and three (8%) were ambivalent. Support for this indicator was based on it being reflective of current guidance and evidence, though the evidence-base was questioned specifically for over 80 year olds in two practices. Ambivalence and reservation about this indicator related to potential over-treatment, poly-pharmacy for these older patients and side-effects from medication. Seven practices commented that this indicator would be difficult to achieve.

The idea of including different BP targets for the two different age groups (under and over 80 years of age) was well received. Only one practice explicitly objected to the principle, on the grounds that *"it's wrong to send the message that over 80s don't have to be treated in the same way because they're over 80"* and this GP *"would make it the same as the under 80s but on the understanding that you know it's not going to be appropriate for everybody and that the threshold for reaching that target should probably be lower"* (GP:ID4).

One GP commented that these staged indicators may help to prevent any inadvertent over-treatment in the over 80 year olds. Having pursued a BP target of 145/85 for a number of years, this GP explained that this pilot indicator "*has generated much more discussion than we expected within the practice and I think it's - I think we have just been a little bit, you know, 'Right, this is good medicine. Let's try and treat as low as we can', and you think actually having a bit looser for that age*

*group is probably better... I mean they probably would like a bit more - a bit less intervention sometimes I wonder if it would just give us a bit, a bit more of a room to allow them to have symptoms or dizziness which, as soon as they do have anything, we stop it"* (GP:ID32).

Otherwise, any reservation tended to be around the age of 80, which was described as 'arbitrary' by three pilot practices, but as one GP reflected *"our patients here in their 70s are very fit and healthy so I would be very happy to treat those to 140/90. I can imagine in other parts of the country a lot of the 70 year olds are the equivalent of my 80 and 90 year olds and therefore actually treating them to 140/90 because they're physiologically older probably isn't appropriate, but I can't think of any better way of doing it really"* and concluded *"I guess you have to have some arbitrary cut off and the…I can't think of any more sensible way of doing it than the way that you've done it"* (GP:ID26).

Acceptability indicator 2 (patients aged less than 80 years)

Twenty four practices (65%) were supportive of this indicator going into QOF, six practices (16%) did not support its inclusion and two (5%) were ambivalent. Support for this indicator was based on it being reflective of the evidence-base, which was seen as stronger for this age group, relative to the previous indicator.

As set out above in the general comments, a significant proportion of pilot practices were already pursuing tighter BP control for their patients with PAD but, as with the previous indicator, there was some concern about over-treatment, poly-pharmacy and side-effects from medication. Whilst tighter targets were already being implemented, there was some concern about achievement against this indicator.

Good BP control was seen as important in this domain. Commenting on this indicator, one GP noted that *"patients with PAD are so much higher risk than patients who've merely had an acute coronary syndrome, er, that I think it probably applies even more so. I mean you know the, your average patient with PAD – their prognosis is far worse than somebody who's had an MI"* (GP:ID4).

Acceptability recommendation indicator 1 (patients aged 80 years and over)

- There are barriers/ risks/ issues/ uncertainties identified from the pilot *in terms of acceptability* that in themselves may not be sufficient to prevent an indicator being recommended by the AC, but require the particular attention of the AC.

Acceptability recommendation indicator 2 (patients aged less than 80 years)

- There are barriers/ risks/ issues/ uncertainties identified from the pilot *in terms of acceptability* that in themselves may not be sufficient to prevent an indicator being recommended by the AC, but require the particular attention of the AC.

## Implementation

***Assessment of piloting achievement***

1. The percentage of patients aged 80 years and over with peripheral arterial disease in whom the last blood pressure reading (measured in the preceding 15 months) is 150/90 or less.

| **PAD INDICATOR P706** | Baseline | Final |
|---|---|---|
| Number of Practices Uploading | **24** | **24** |
| Practice Population | **157,833** | **156,719** |
| | | |
| PAD Register | **1,141** | **1,102** |
| **Excluded regardless** | | |
| Patient aged 79 or under | 792 | 766 |
| **Excluded if they do not meet Numerator criteria** | | |
| Blood Pressure Exclusion in last 12 months | 0 | 0 |
| Registered in last 9 months | 1 | 3 |
| PAD Exclusion in last 12 months | 4 | 17 |
| PAD Date in last 9 months | 2 | 4 |
| HTMAX Date in last 12 months | 6 | 8 |
| **Total Exclusions** | 805 | 798 |
| PAD Denominator | **336** | **304** |
| PAD Numerator | **277** | **225** |
| Numerator as % of Denominator | **82.44%** | **74.01%** |

HTMAX = maximal tolerated dose of antihypertensive therapy.

Baseline data was extracted over a 12 month period whereas final data was extracted for the 6 months of the pilot only.

2. The percentage of patients under 80 years old with peripheral arterial disease in whom the last blood pressure reading (measured in the preceding 15 months) is 140/90 or less.

| PAD INDICATOR P707 | Baseline | Final |
|---|---|---|
| Number of Practices Uploading | **24** | **24** |
| Practice Population | **157,833** | **156,719** |
| | | |
| PAD Register | **1,141** | **1,102** |
| **Excluded regardless** | | |
| Patient aged 80 or over | 349 | 336 |
| **Excluded if they do not meet Numerator criteria** | | |
| Blood Pressure Exclusion in last 12 months | 0 | 0 |
| Registered in last 9 months | 5 | 9 |
| PAD Exclusion in last 12 months | 4 | 32 |
| PAD Date in last 9 months | 16 | 14 |
| HTMAX Date in last 12 months | 5 | 13 |
| **Total Exclusions** | 379 | 404 |
| PAD Denominator | **762** | **698** |
| PAD Numerator | **509** | **397** |
| Numerator as % of Denominator | **66.80%** | **56.88%** |

HTMAX = maximal tolerated dose of antihypertensive therapy.

Baseline data was extracted over a 12 month period whereas final data was extracted for the 6 months of the pilot only.

***Changes in practice organisation***

General comments

No changes were needed to practice organisation.

Specific comments indicator 1 (patients aged 80 years and over)

No specific comments.

Specific comments indicator 2 (patients aged less than 80 years)

No specific comments.

***Resource utilisation and costs***

General comments

There was a slightly greater workload perceived with this indicator set in PAD, relative to the other cardiovascular disease areas with potential new indicators piloted in this cohort. This was generally because the PAD domain is relatively new.

Specific comments indicator 1 (patients aged 80 years and over)

No specific comments.

Specific comments indicator 2 (patients aged under 80 years)

No specific comments.

***Barriers to implementation***

General comments

Five pilot practices raised concerns about threshold levels. For example, one GP already pursuing tighter BP targets commented that *"the difference is we're now going to have audit standard at the same level as clinical standard and I think that's the slight concern which is why I come back to my point about thresholds - I think up to now, clinical standard, it was very reasonable to achieve those levels but the worry now is that audit standards and clinical standards are going to be the same and that will only be deliverable and appropriate if the thresholds are appropriately lower than they exist at the moment and remain so. Because the worry is they will start to lower and they will be tightened again"* (GP:ID3).

Thresholds for the current PAD002[5] are 40-90%. Thresholds for the current HYP003[6] are 40-90%.

Specific comments indicator 1 (patients aged 80 years and over)

Indicator achievement during the six months of the pilot was 74.01%. The distribution of practice achievement at the final data upload was 20-100%.

Specific comments indicator 2 (patients aged under 80 years)

Indicator achievement during the six months of the pilot was 56.88%. The distribution of practice achievement was 20-84%.

***Assessment of exception reporting***

General comments

Four practices stated that there may be an increased use of exception reporting, specifically of maximal tolerated therapy.

Specific comments indicator 1 (patients aged 80 years and over)

[5] CHD002: The percentage of patients with coronary heart disease in whom the last blood pressure reading (measured in the preceding 12 months) is 150/90 mmHg or less.

[6] HYP003: The percentage of patients aged 79 years or under with hypertension in whom the last blood pressure reading (measured in the preceding 9 months) is 140/90mmHg or less.

Exception reporting for this indicator was 3.7% at baseline and 9.5% during the pilot period. Exception reporting for maximal tolerated dose rose from 1.7% at baseline to 2.4% during the pilot period.

Specific comments indicator 2(patients aged under 80 years)

Exception reporting for this indicator was 3.8% at baseline and 8.9% during the pilot period. Exception reporting for maximal tolerated dose rose from 0.6% at baseline to 1.7% during the pilot period.

***Assessment of potential unintended consequences***

General comment

No unintended consequences were detected.

Specific comments indicator 1(patients aged 80 years and over)

No specific comments.

Specific comments indicator 2 (patients aged under 80 years)

No specific comments.

**Implementation recommendation**

Implementation recommendation indicator 1 (patients aged 80 years and over)

- There are barriers/ risks/ issues/ uncertainties identified from the pilot *in terms of implementation* that in themselves may not be sufficient to prevent an indicator being recommended by the AC, but require the particular attention of the AC.

Implementation recommendation indicator 2 (patients aged less than 80 years)

- There are barriers/ risks/ issues/ uncertainties identified from the pilot *in terms of implementation* that in themselves may not be sufficient to prevent an indicator being recommended by the AC, but require the particular attention of the AC.

**Assessment of overlap with existing QOF indicators and potential changes to existing QOF indicators**

*PAD002. The percentage of patients with peripheral arterial disease in whom the last blood pressure reading (measured in the preceding 12 months) is 150/90 mmHg or less.*

It is proposed that the two piloted indicators replace this current indicator.

**Overall recommendation**

**Overall Recommendation indicator 1 (patients aged 80 years and over)**

There are barriers/risks/issues/uncertainties identified from the pilot that in themselves may not be sufficient to prevent an indicator being recommended by the AC, but require the particular attention of the AC.

**Overall Recommendation indicator 2 (patients aged under 80 years old)**

There are barriers/risks/issues/uncertainties identified from the pilot that in themselves may not be sufficient to prevent an indicator being recommended by the AC, but require the particular attention of the AC.

**Suggested amendments to indicator wording**

Suggested amendments to indicator 1

The percentage of patients with peripheral arterial disease in whom the last blood pressure reading (measured in the preceding **12** months) is 150/90 **mmHg** or less.

Suggested amendments to indicator 2

The percentage of patients aged **79 years or under** with peripheral arterial disease in whom the last blood pressure reading (measured in the preceding **12** months) is 140/90 **mmHg** or less.

These amendments are suggested to ensure consistency with existing QOF indicators in terms of timeframes for activity and descriptions of the target population.

## Appendix A: Indicator details

During a teleconference on 21st June 2012 the NICE QOF team advised the NEC that they would like the NEC to develop and pilot staged blood pressure control indicators for patients with CHD, peripheral arterial disease or a history of a stroke/ TIA.

Relevant NICE and other guidance was identified and target blood pressure thresholds extracted. From these the following questions were developed for discussion with the NICE identified clinical experts, Dr Melvyn Jones, Prof Jonathon Mant, Prof Richard McManus, Dr Kathryn Griffith and Prof Kamlesh Khunti.

**Stepped BP indicators for people with HYPERTENSION AND ALSO CHD, Stroke, PAD or Diabetes Guidance Table**

| Clinical condition | Current QOF target | Guideline | Year | Target BP | Target group |
|---|---|---|---|---|---|
| Angina | CHD6: 150/90 | CG126: Management of stable angina | 2011 | Recommendation 1.3.8: 'offer treatment for high blood pressure in line with 'Hypertension' (CG34)' (predates CG127, assume therefore that CG127 now applies) | Patients with stable angina and hypertension – drug treatment for secondary prevention of CVD |
| Secondary prevention of CVD post MI | CHD6: 150/90 | CG48: MI: secondary prevention | 2007 | Recommendation 8.1.1.1 (in full guideline): hypertension should be treated to the currently recommended target of 140/90 or lower given in 'Hypertension' (CG34) (again assume that CG127 now applies). Patients with co-morbidities, for example diabetes or renal disease, should be treated to a lower blood pressure target. CG48 does not detail these lower targets. | Patients with a previous MI and hypertension |
| Stroke | STROKE6: 150/90 | Royal College of Physicians | 2008 | Recommendation 5.4.1 A: 130/80 in | Patients post stroke |

| | | | | | |
|---|---|---|---|---|---|
| | | National Clinical Guideline for Stroke: third edition. | | patients with established cardiovascular disease.<br>For patients with bilateral severe (>70%) internal carotid artery stenosis a slightly higher target of 150 systolic may be appropriate. | |
| Stroke | STROKE6: 150/90 | SIGN 108: Management of patients with stroke or TIA: assessment, investigation, immediate management and secondary prevention | 2008 | Patients with hypertension should be treated to <140/85.<br>Patients who have had a stroke and who also have diabetes should be treated a blood pressure of <130/80. | Patients with hypertension post stroke |
| Stroke | STROKE6: 150/90 | CG68:Diagnosis and initial management of acute stroke and transient ischaemic attack (TIA) | 2008 | None given – guidance relates to diagnosis and **initial management** of stroke/ TIA. | |
| Peripheral arterial disease | PAD3: 150/90 | SIGN | 2006 | Hypertensive patients with peripheral arterial disease should be treated to reduce their blood pressure (Grade A recommendation).<br>No target given but 140/90 noted as a desirable upper limit.<br>Refers to 2004 British Hypertensive Society Guidelines recommendations which have now been superseded by CG127.<br><br>We piloted 140/90 in QOF pilot 2 but the | |

| | | | | | |
|---|---|---|---|---|---|
| | | | | June 2011 QOF AC moved this to 150/90 stating "The Committee also noted that the blood pressure target for indicator 5 is inconsistent with the other relevant QOF BP indicators (CHD6, STROKE6, BP5, DM30), and should therefore be changed to be brought in line with these." The changes at the last AC in June 2012 should however mean that 140/90 is now seen as appropriate by the Committee. | |
| Peripheral arterial disease | PAD3: 150/90 | NICE Guideline due October 2012 | | | |
| Hypertension | BP5: 150/90 but 2 new indicators piloted and recommended for 2013:<br>• 140/90 in patients aged under 80 years<br>• 150/90 in patients over 80 years | CG127: Hypertension | 2011 | 140/90 in patients aged <80 years<br>150/90 in patients aged ≥80 years | Patients with hypertension |

**Questions**

<u>CHD</u>

1. Should we keep the target BP at 150/90 for people aged over 80 years and reduce to 140/90 for people under 80 who have had an MI?
2. Should we construct an indicator for people with stable angina under 80 with a BP of 140/90? There may be some definitional issues and current QOF terminology talks about CHD rather than stable angina.
3. What is the evidence base for keeping at 150/90 in the over 80s? CG127 (page 171) states that most people in trials were well with fewer comorbidities so to apply clinical judgement.

<u>Stroke/ TIA</u>

1. Should we keep to a target BP of 150/90 for people aged over 80 years and reduce to 140/90 in people less than 80 years?
2. Should we drop to 140/85 for all patients in line with SIGN or 130/80 in line with the RCP Guidelines?
3. Do these lower targets apply to patients who have had a TIA as well?

PAD

1. Should we keep to a target BP of 150/90 for people aged over 80 years and reduce to 140/90 in people less than 80 years?
2. Should the BP target be 140/90? We last looked at this in 2010 in the context of QOF. Has more evidence been published since then?

Diabetes

1. Should we lower the target BP to 130/80 if the patient has comorbid diabetes, hypertension and stroke? This would probably sit in the Diabetes domain. Current diabetes BP targets are DM30: 150/90 and DM31: 140/80. In the pilot we can see how such an indicator which takes into account multiple co morbidities might work in practice.
2. Should we keep the target BP at 150/90 for people aged over 80 years?

*Summary of expert responses*

Discussions took place via email and teleconferences between 29th June 2012 and 6th July 2012.

CHD

There was support for different blood pressure targets based upon patient age. A separate indicator for patients with stable angina was not supported for definitional issues and difficulties arising from small denominators. Therefore indicators were developed for a target group of all people with CHD. It was proposed that these indicators should be aligned to annual reviews rather than limiting the incentive for treatment to the last nine months of the QOF year. There was support for ensuring consistency of targets across disease areas where possible.

Stroke/TIA

Prof Mant expressed an initial preference for a BP target of 130/80 for all ages noting that there was no evidence base for different BP targets based upon age in these patients. However, he also noted the advantages of consistency across disease areas in QOF and therefore agreed to a BP target of 140/90.

He was not supportive of a proposed indicator for patients with comorbid diabetes and questioned the aim of this.

PAD

Dr Jones confirmed that whilst there is evidence for treating raised blood pressure in patients with PAD there was little evidence confirming a specific BP target. Acknowledged that 140/90 represents the best available evidence.

Diabetes

A tighter BP target of 130/80 was preferred for patients with microvascular complications i.e. retinopathy, neuropathy and micro-albuminurea. The advantages of a single BP target were acknowledged.

Based upon these discussions two indicators relating to BP control in patients with CHD, stroke/TIA and PAD were taken forward for discussion with a focus group of frontline GPs. A potential indicator relating to comorbid diabetes and stroke was not progressed at this stage.

**Focus group discussion with frontline GPs**

A focus group was held on 10th July 2012 with 8 front line GPs recruited via the West Midlands Faculty of the Royal College of General Practitioners. They participated on a voluntary basis. The group included an equal number of men and women of whom 50% described their ethnicity as white British and included two QOF Assessors. There were also two representatives from the Health and Social Care Information Centre at the meeting and a representative from NICE.

Prior to the meeting the GPs were provided with written detail of the proposed indicators and the underpinning NICE recommendation/ quality standard. This included details of specific issues which we wanted them to discuss in relation to each indicator. The purpose of this meeting was to consider the clarity, feasibility and validity of the indicators, to suggest improvements where possible and to highlight specific issues that would need to be explored during piloting. The following indicators were discussed in turn.

**Stroke indicators**

| **Recommendations** | **Potential indicators** | **Questions/ issues for discussion** |
|---|---|---|
| Royal College of Physicians National Clinical Guideline for Stroke: third edition.<br>- Recommendation 5.4.1 A: 130/80 in patients with established cardiovascular disease.<br>SIGN 108: Management of patients with stroke or TIA: assessment, investigation, immediate management and secondary prevention. | The percentage of patients with a history of stroke or TIA AND hypertension in whom the last blood pressure reading (measured in the preceding 15 months) is 130/80 or less.<br><br>The percentage of patients with a history of stroke or TIA AND hypertension in whom | No specific issues |

| | | |
|---|---|---|
| - Patients with hypertension should be treated to <140/85. | the last blood pressure reading (measured in the preceding 15 months) is 140/85 or less. | |

**PAD indicators**

| Recommendations | Potential indicators | Questions/ issues for discussion |
|---|---|---|
| SIGN 89: Hypertensive patients with peripheral arterial disease should be treated to reduce their blood pressure (Grade A recommendation)<br><br>No target blood pressure is given but a target of 140/90 is noted as desirable. | The percentage of patients with a history of PAD AND hypertension whose last recorded blood pressure reading (measured in the preceding 15 months) was 14/90. | No specific issues |

**CHD indicators**

| Recommendations | Potential indicators | Questions/ issues for discussion |
|---|---|---|
| CG48: MI: secondary prevention<br>Recommendation 8.1.1.1 (in full guideline): 'hypertension should be treated to the currently recommended target of 140/90 or lower given in 'Hypertension' (CG34). Patients with co-morbidities, for example diabetes or renal disease, should be treated to a lower blood pressure target.'<br><br>CG126: Management of stable angina<br>Recommendation 1.3.8: 'offer treatment for high blood pressure in line with 'Hypertension' (CG34)'.<br><br>CG34 has now been superseded by CG127: Hypertension. | The percentage of patients aged under 80 years old with coronary heart disease AND hypertension in whom the last blood pressure reading (measured in the preceding 15 months) is 140/90 or less.<br><br>The percentage of patients aged under 80 years with a history of myocardial infarction AND hypertension in whom the last blood pressure reading (measured in the preceding 15 months) is 140/90 or less. | No specific issues |

Note: It is proposed that 'CHD6: the percentage of patients with coronary heart disease in whom the last blood pressure reading (measured in the preceding 15 months) is 150/90 of less' is retained alongside any indicator with a lower target BP.

*Summary of discussion*

- Immediate reaction to the BP target of 130/80 was that it was not manageable, and that 130/85 was the more pragmatic option.

- GPs were quick to raise the issue of co-morbidities, the lack of tolerance of anti-hypertensives & the side-effects of falls etc. A number of GPs stated that they would put the patient first & work to lower the BP based on their clinical judgement of the patient. Thus, it was raised, there may be a high exception rate for the tighter target.

- Two specific issues were raised that required further consideration from NICE (via Dan): differentiated targets for people aged under/over 80 years old; and whether these indicators related to people with the various conditions AND explicitly diagnosed hypertension.

- From this latter point, one person questioned why there were three sets of numbers, why they're not all treated the same due to there being one underlying condition, that of vascular disease.

- An added complication was raised regarding patients diagnosed with hypertension in secondary care, the accuracy of that diagnosis with another condition (e.g. angina/MI) and what then becomes the priority to treat, how frequently they should be checked etc.

- The general consensus was that the 'and hypertension' could be eliminated from the indicators because it would be justifiable to treat patients with the stated conditions to a tighter BP regardless of if they were specifically diagnosed with hypertension or not (on the basis that "it's not an illness", "it's a risk factor"). The difficulty, however, is then which NICE guidance to state as a reference for these indicators, specifically relating to the co-morbidities. Overall, it was felt that 'and hypertension' should be removed & that CG127 would be the reference point for the tighter BP targets for Stroke & CHD.

- There was greater resistance to tighter BP targets with regards to PAD, but it was agreed that it made sense to also tighten BP targets for this condition.

**Indicators for piloting post focus group**

**Stroke/ TIA**

The percentage of patients with a history of stroke or TIA in whom the last blood pressure reading (measured in the preceding 15 months) is 140/85 [or 140/90?] or less.

**PAD**

The percentage of patients 80 and over with peripheral arterial disease in whom the last blood pressure reading (measured in the preceding 15 months) is 150/90 or less.

The percentage of patients under 80 with a history of PAD whose last recorded blood pressure reading (measured in the preceding 15 months) was 140/90.

**CHD**

The percentage of patients 80 and over with coronary heart disease in whom the last blood pressure reading (measured in the preceding 15 months) is 150/90 or less.

The percentage of patients under 80 with coronary heart disease in whom the last blood pressure reading (measured in the preceding 15 months) is 140/90 or less.

**Final indicators for piloting**

**Stroke/ TIA**

- The percentage of patients 80 and over with a history of stroke or TIA in whom the last blood pressure reading (measured in the preceding 15 months) is 150/90 or less.
- The percentage of patients under 80 with a history of stroke or TIA in whom the last blood pressure reading (measured in the preceding 15 months) is 140/90 or less.

**PAD**

- The percentage of patients 80 and over with peripheral arterial disease in whom the last blood pressure reading (measured in the preceding 15 months) is 150/90 or less
- The percentage of patients under 80 with a history of PAD whose last recorded blood pressure reading (measured in the preceding 15 months) was 140/90.

**CHD**

- The percentage of patients 80 and over with coronary heart disease in whom the last blood pressure reading (measured in the preceding 15 months) is 150/90 or less.
- The percentage of patients under 80 with coronary heart disease in whom the last blood pressure reading (measured in the preceding 15 months) is 140/90 or less.