SIGN/BTS
British guideline on the management of asthma

Asthma priorities: influencing the agenda

Scottish Intercollegiate Guidelines Network

SIGN/BTS British guideline on the management of asthma

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February 2013

Contents

1   Background

Following the launch of the revised BTS/SIGN British guideline on the management of asthma in May 2011, it was agreed that a collaborative approach to support local implementation should be developed in partnership with the National Advisory Group (NAG) for respiratory Managed Clinical Networks (MCNs).

In preparation, a prioritisation process was piloted at the respiratory MCN learning forum in September 2011. The outcome of the workshop was very positive, demonstrating the benefits of involving delegates in the identification of priorities and corresponding 'measurements of success'. Consequently, the Scottish Intercollegiate Guideline Network (SIGN), the NAG, Asthma UK and the Scottish Respiratory Industry Group (SRIG) agreed that the process should be taken forward through a national survey to identify the top priorities followed by a series of regional workshops to agree the corresponding 'measurements of success'.

2 National Advisory Group for respiratory MCNs asthma survey

The 'take home messages' from the SIGN/BTS conference in May 2011 and the outcomes of the learning forum asthma workshop were combined to create a questionnaire for local respiratory MCNs to be distributed via the NAG. Local respiratory MCNs were presented with a list of 10 options and asked to rank them in order of importance and results were collated on a national basis taking regional variations into consideration.

The opportunity was also taken to survey local respiratory MCNs on the extent to which they included/linked with services for children and young people, to ascertain whether it would be appropriate to incorporate the recommendations of the recent Healthcare Improvement Scotland Clinical Standards: Asthma Services for Children and Young People update report within the asthma priorities process.

The NAG survey was completed by 11 NHS board respiratory MCNs across Scotland. The following **six** asthma priorities were identified for Scotland along with two optional priorities proposed by the west of Scotland (WoS) and east of Scotland (EoS) regions:

1. Self management

2. Patient engagement

3. Education and training

4. Data and communications

5. Patient review

6. Transitions and schools

7. Difficult asthma (optional priority proposed by WoS)

8. Occupational asthma (optional priority proposed by EoS)

The **Children and Young People with Asthma** section of the survey was completed by **10** respiratory MCNs, the results of which are summarised below:

1. **Four** MCNs confirmed that they covered services for children and young people

   Six MCNs reported that they did **not** cover services for children and young people

   One of whom advised that the matter was under discussion

2. **Eight** MCNs reported that they had established links with paediatric respiratory services within their NHS Board

3. **Four** MCNs confirmed that they had a remit to implement and monitor HIS Clinical Standards: Asthma Services for Children and Young People

   Six MCNs reported that they did **not** have a remit to implement and monitor HIS Clinical Standards: Asthma Services for Children and Young People

   One of whom advised that the matter was under discussion. In addition, the following alternative arrangements were identified:

   • Discussions ongoing to re-establish Paediatric Asthma Group
     » Via children and young people services
     » Via clinical governance

In conclusion, there is a mixed picture across Scotland with current arrangements being more suggestive of linkages between MCNs and paediatric services. However, the trend would appear to be moving toward incorporation of responsibility for children and young people with asthma within respiratory MCNs.

3   Regional workshops

Three regional workshops were organised in Glasgow, Edinburgh and Aberdeen during May and June 2012 with an accumulated attendance of 120 delegates. The main objective of the workshops was to allow delegates the opportunity to discuss the priorities in detail and identify corresponding 'measurements of success' against which a national benchmark could be assessed.

The three regional workshops were run in an identical format, outlined below, with the only variation being the asthma priorities under discussion within the breakout sessions, which were determined by the top six priorities identified within that region.

Welcome and introduction was provided by the chair of each event, presenting the background to the meeting and an overview of the asthma priorities process and next steps.

A keynote address was then provided by leading clinicians within the field of respiratory medicine and public health, each setting the scene and giving an overview of:

THE GLOBAL BURDEN OF ASTHMA

- Asthma is one of the most common chronic diseases in the world, currently affecting 300 million people worldwide
- Increasing prevalence, in recent years, of asthma associated with an increase in atopic sensation, paralleled with increases in other allergic disorders such as eczema and rhinitis
- Asthma rates increase as communities adopt Western lifestyles and become urbanised with a projected increase in the world's population that is urban from 45% to 59% in 2025 leading to an estimated additional 100 million cases
- An estimated 15 million disability life adjusted years are lost every year worldwide due to asthma which is similar to that of diabetes, liver cirrhosis and schizophrenia
- There are 250,000 deaths globally per year mostly within low and lower-middle income countries
- Asthma causes 1 in 250 deaths worldwide most of which are considered to be preventable
- Symptoms are most prevalent in the UK, Ireland, Australia, New Zealand
- Considerable economic costs of asthma are associated with direct and indirect medical costs ie hospital admissions, pharmaceutical costs, lost time from work, premature death

THE UK/IRELAND BURDEN OF ASTHMA:

- The prevalence of asthma in the UK is 16.1% - 18.4% in Scotland; 16.8% in Wales; 15.3% in England; 14.6% in Ireland
- There is recent emerging evidence of clear link to poverty
- Poor outcome associated with low health literacy
- Annual costs associated with asthma are estimated at £2.5 billion, of which £900 million are directly related
- to public health service
- 50% of all annual healthcare costs for asthma relate to the most severely affected 20% of the asthma population
- 20 million working days are lost per year
- Asthma accounts for 1,200-1,500 deaths per year with preventable factors in up to 90% of cases

The patient's perspective was delivered by two patient representatives from Asthma UK, providing delegates with a very frank and highly incisive understanding of what it actually means to have and live with asthma as a long term condition. In both instances, the patient representatives were not only able to provide an appreciation of what is good in healthcare but also what it means to their daily routine and quality of life. The organising committee and delegates are exceptionally thankful to both patient representatives for taking the time to attend the event and most importantly, sharing their experiences.

An introduction to the breakout sessions provided delegates with an understanding of the process being adopted to identify the 'measurements of success' and encouraged participants to have their say thus, influencing the agenda to ensure a collaborative approach to improving the care and experience of people with asthma across Scotland.

The two breakout sessions each comprised three workshops focusing on the top six priorities identified within that region. Each workshop started with a short presentation providing examples, where available, of 'best practice' already in place in one or more NHS board areas to help set the scene and stimulate discussion. The main objective of the sessions was to work with stakeholders to identify the 'measurements of success' by which a local respiratory MCN could self-assess progress against implementation, ie the core elements associated with each priority required to achieve success.

Feedback from the three regional workshops was then collated and amalgamated for each priority thus providing a coherent set of indicators to enable benchmarking across Scotland in a consistent manner. The resulting asthma priorities for Scotland and associated 'measurements of success' are provided within Section 4 along with some more detailed feedback from the workshops to help guide implementation and provide practical examples of service delivery.

4   Asthma priorities for Scotland

Measurement of success	Workshop feedback
1. Self-management	

a) Patient self-management
   i. paediatric action plan
   ii. adult action plan
	➢ Patient self-management action plans
	  » literacy/language/visual
	  » focus on age; gender; ethnicity
	➢ Define self-management in asthma
	➢ Targeted approach to patient groups: diagnosis; post admission; elderly; parents; children; young people
	➢ Patient education on self-management
	  » triggers
	  » goal setting
	  » address patient expectations of symptom control
	  » drug/device explanation and assessment
	  » health promotion opportunity – smoking; alcohol; physical activity
	  » signposting to appropriate agencies
	➢ Patient coaching on how to self-care appropriately including emergency management
	➢ develop patient self-management toolkit approach (**NAG action**)
	➢ Consider offering group sessions - expert patients/support groups/internet focus groups
	➢ Parent/guardian education at time of diagnosis – group sessions
	➢ Training for healthcare professionals
	➢ Guidance notes for delivering patient self-management and asthma action plans
	  » recognition that self-management is a process
	  » education should be delivered across the patient journey
	  » multiple contacts – opportunistic and structured

b) Educational opportunities along the patient journey eg opportunistic, group sessions	
c) Simple and tailored approach targeted at diagnosis, post admission, annual review, elderly, parents, schools	

d) Patient resources:
   i. toolkit
   ii. self-management action plans
   iii. rescue medication packs (where appropriate)	

e) Self-management skills for healthcare professionals	

Measurement of success	Workshop feedback
2. Patient engagement	
a) Patient centred approach: i. focus on what patients can do, e.g. measurement ii. personalised menu of options	➤ Patient engagement strategy at MCN level » social marketing » attendance at MCN meetings » peer support networking
b) Links with voluntary sector to encourage participation in peer support groups/forum	➤ Strategy for patients to attend annual review (see Data and communications)
c) Patient engagement strategy at individual level: i. Encourage attendance at annual review ii. Encourage active participation within annual review	➤ Strategy to engage patients within the annual review ➤ Use of technology – consider mapping technology across the patient pathway ➤ MCN questionnaires and/or focus groups:
d) Patient engagement strategy at MCN level: i. social marketing ii. participation within MCN iii. patient experience iv. Voices Scotland	» children » parents » adults » adults with occupational asthma

Measurement of success	Workshop feedback
3. Education and training	

a) Local asthma guidelines
 	
  i. paediatric
 	
  ii. adult
	➢ Structured patient educational programme (see self-management)
	➢ Education for wider community groups – schools; scouts; brownies; sports clubs
	➢ Healthcare professionals core competencies: novice – expert **[Scottish Respiratory Nurses Forum/Scottish Pulmonary Rehabilitation Action Group]**

b) Education strategy for public; patients; carers; parents/guardians	➢ Healthcare practitioners education
	  » asthma
	  » consultation skills/telephone reviews/brief intervention skills

c) Respiratory core competencies	» managing appointment systems

d) Education and training strategy for healthcare professionals (including the wider MDT) incorporating:
 	
  » clinical management; consultation skills; brief intervention/motivational skills; annual review; self-management; engagement strategies
	» communication skills
	  » medication therapy including step-up and step-down
	  » how to deliver patient education and self-management
	➢ Portfolio of educational opportunities
	  » learning by example
	    • coaching
	    • shadowing of expert
	    • peer support

e) Different levels and methods of delivery including:
 	
  i. national online education and training site
 	
  ii. telehealth solutions
	» standardised training
	  » educational modules
	    • small bite sized chunks
	    • practical
	    • generic set of skills

f) Medicines management – link to step-up and step-down process	» multi-disciplinary training to utilise the skills of each professional within the team

g) Spirometry training programme incorporating:
 	
  » basic skills; interpretation; shadowing; machinery quality assurance; accreditation for competency (e-version for pre-course learning)
	» e-learning modules
	  » healthcare professional resource pack
	➢ GP protected learning/revalidation – linking education and audit
	➢ Practice nurse protected learning
	➢ Core skills for school nurses
	➢ Education for community pharmacy
	➢ Community pharmacy contract negotiations re incorporation of inhaler technique **[NAG action]**

h) Education and self-management skills (training for trainers)	➢ Spirometry training for primary care staff » elearning module for pre-course learning followed by practical session
i) Linking audit and education	» incorporate basics; interpretation; shadowing; accreditation of competency » machine quality assurance ➢ Utilise review of audit data to motivate learning and improvement planning across the MCN

Measurement of success	Workshop feedback
4. Data and communications	
a) Communication systems between primary and secondary care and pharmacy eg SCI gateway/patient discharge summaries	➢ Strategy for communications between healthcare professionals ➢ SCI Gateway referrals/discharges – transferable information between systems to help inform and guide consultation ➢ Utilise concept of care bundle
b) Asthma templates to provide a structured and consistent patient review	➢ GP practice system asthma templates ➢ Incorporate asthma control test (ACT) in all IT systems ➢ Electronic links with community pharmacy
c) Electronic flags – identification and prioritisation of patients at risk	➢ Out-of-hours flags ➢ Electronic flags ➢ NHS 24 algorithm **[ADASTRA]**
d) IT communication system with patients; 'my asthma", 'remote review', 'DNA texting', on-line ACT	➢ Text appointment reminder ➢ Text RCP questions/ACT ➢ Patient action plans/discharge letters cc to patients ➢ Text as follow-up/did not attend (DNA) ➢ 'my asthma' patient accessible data ➢ Patient electronic self-management tool – goal setting; education; triggers ➢ Inhaler technique DVD/podcast/webstream: should incorporate 'how to use'/ 'how not to use' reflection on own technique
e) Mapping technology across patient pathway	➢ Mapping technology across patient pathway
f) Strategies to use data for improvement planning at NHS board level	➢ Social marketing campaign **[NAG action]** ➢ Incorporate ACT into GP contract quality and outcomes framework (QOF) **[NAG action]**

Measurement of success	Workshop feedback
5. Patient review	
a) Clinical protocol backed up with IT template	➢ Clinical protocol for structured annual review supported by IT asthma templates/screens
b) Guidance on developing robust call and recall system and strategy for addressing DNAs	➢ Triage by compliance to identify and prioritise patient at risk
c) Mechanism to prioritise patients e.g. identify 'at risk' patients	➢ Issue all patients with 'What to expect from your asthma review'
d) Incorporate formal assessment of asthma control eg ACT/ACQ6 Min: AQLQ	➢ Review prescription before appointment to check compliance and ask patients to bring inhalers with them
e) Strategy to review treatment level eg step-up/ step-down maintenance	➢ Appointment letter should incorporate reasons for attending even when well
f) Incorporate structured patient education and self-management action plans	➢ Phone call to confirm appointment
g) Links with local pharmacy (eg action plans and inhaler technique)	➢ Individual patient centred consultation: discussion re symptoms; concerns; understanding treatment; lifestyle; triggers; smoking; occupational history; compliance; inhaler technique
h) Education for healthcare professionals	➢ Incorporate:
i) Encourage audit and improvement planning at practice and NHS board level	» self-management training and action plans
	» structured education for patients
	» test patient knowledge and perception of control
	» invite patients to become partners and participate fully in the clinical setting
	» RCP questions
	» Formal asthma control test eg ACT/ACQ6/mini AQLQ
	» Strategy to review treatment level eg step-up/ step-down/maintenance
	➢ Robust call/recall admin system
	» Letter to direct patient to make their own appointment
	» Telephone consultation
	» Reminder system (see data and communications)
	» NHS Lothian 3 letters achieve 100% attendance
	➢ Links with community pharmacy: action plans and inhaler technique
	➢ Recommend extended appointment (minimum of 20 minutes)
	➢ Consider remote reviews
	➢ Audit and improvement planning at GP practice and NHS board/MCN level (Vision 360 / EMIS Web)

Measurement of success	Workshop feedback
6. Transitions and schools	

a) Local transitional care guidance	➢ Local asthma guidelines (paediatric and adult)
	➢ Patient pathway within and between primary and secondary care incorporating:
	  » patient orientation in acute adult services/adult annual review
	  » split consultation to support transfer of responsibility
	  » joint working between paediatric and adult respiratory services

b) Transitional care educational programme
  i. specialist staff
  ii. GP practice team
	➢ Communications and information sharing protocol
	➢ Patient and parent/guardian education

c) Patient and parent/guardian information and education	➢ Allow young people to take control of asthma action plans

d) Transitional care pathway within and between (including communications)
  i. primary care
  ii. acute services
	➢ Support parent/guardian to transfer responsibility to young person
	➢ Patient and parent/guardian engagement – focus groups/survey monkey
	➢ Consider on-line interactive patient toolkit

e) Implementation of schools asthma policy (including inhaler policy)	➢ Visit to schools to deliver training to young people with asthma ➢ Utilise teacher 'in-service' training opportunities ➢ Asthma passport /school card
f) Individual asthma passport/ school cards	➢ Inhaler policy
g) Guidance on occupational choices	➢ Address myths and misconceptions of asthma, missing out on school trips, gym ➢ Education to all pupils

h) Schools education
  i. teachers/staff
  ii. general pupils
  iii. pupils with asthma
	➢ Occupational choices – establish links with voluntary sector to develop/obtain guidance

Measurement of success	Workshop feedback
7. Difficult asthma (optional)	
a) Primary care algorithm to assist management and determine appropriate patient referrals to secondary care	➢ Local implementation of WoS difficult asthma standard operating procedures
b) Patient focused pathways across primary and secondary care	➢ Referral forms/referral pathway - development of a standard referral form with details of who can refer, eg practice nurses etc
c) Screening tools to standardise care and assist diagnosis (including psychological screening)	➢ Development of an algorithm before referral to secondary care by checking smoking history, home visits, prescription records, inhaler technique, anxiety/depression
d) Access to services and wider MDT (reference to difficult asthma standard operating procedures)	➢ Standardised screening needed for psychological disorders such as dysfunctional breathing using hospital anxiety and depression score (HADs) etc
e) Tailored patient and parent/guardian education	➢ Access to services - access to respiratory physiotherapists, psychologists, psychiatric services, speech and language therapy (SALT), sleep studies
f) Links with voluntary organisations to encourage: i. participation in peer support groups/forum ii. liaison with schools/workplace	➢ Development of non-professional groups such as peer support groups, etc, to provide support for those with severe asthma ➢ Liaison for school/workplace - development of a standard letter with patient consent for schools/workplaces to promote education about difficult asthma ➢ Standardised protocol for monitoring the effects of steroid side effects
g) Implementation of therapy management protocols, including follow-up and ongoing monitoring arrangements	➢ Development of a protocol for suitability of omelazub

Measurement of success	Workshop feedback
8. Occupational asthma (optional)	

a) Links with voluntary organisations to raise awareness and develop guidance for local industry	➢ Awareness raising campaigns with local industry
	
	  » Voluntary organisations' leaflets and information sheets
	
	  » Workplace spirometry
	
	  » Develop occupational asthma guidance for companies incorporating: identifying; monitoring; referring staff to occupational health

b) Develop local referral pathways for:
 	
  i. diagnostic assessment
 	
  ii. clinical management
 	
  iii. occupational health service
	➢ Develop referral pathways
	
	  » clinicians with expertise in occupational asthma
	
	  » occupational health
	
	  » support services

c) Implementation of standard operating procedures for identification, diagnosis, assessment and management	➢ Establish occupational asthma subgroup **[NAG action]**
	
	  » Develop guidance and information sheets for clinicians, ie legal issues; triggers; management; occupational advice
	
	  » Develop standard operating procedures for local implementation
	
	  » Statistical breakdown of actual/projected prevalence and incidence

d) Patient and employer information and education	» Partnership working with voluntary organisations to access/develop patient/employer information
e) Clinical training across primary and secondary care	» Establish clinical training programme/e-learning module » Establish links with Scottish government healthy working lives and back to work programmes ➢ Identify availability of diagnostic testing across Scotland **[NAG action]**

5   Asthma priorities benchmark

A reporting template will be circulated to local respiratory MCNs in January 2013 for completion as part of a national benchmarking process. The results of this will inform the development of local and national asthma improvement plans to drive forward implementation. The national benchmarking process will be voluntary and anonymous, however, it will provide the NAG with vital intelligence to identify the need to commission any national and/or regional developments required to address risks and/or challenges to local implementation.

It is then proposed that progress against the asthma priorities will be monitored on an annual basis via the NAG to encourage a continued focus on improvement. In addition, the process aims to encourage progression, implementation and improvement planning in a motivational way that supports MCNs and allows for consistent comparison across Scotland. It should be noted that the focus of the national benchmarking process is to encourage the development of strategy and the implementation of infrastructure and local processes rather than a self-assessment of operational delivery.

The self-assessment benchmark criteria will be:

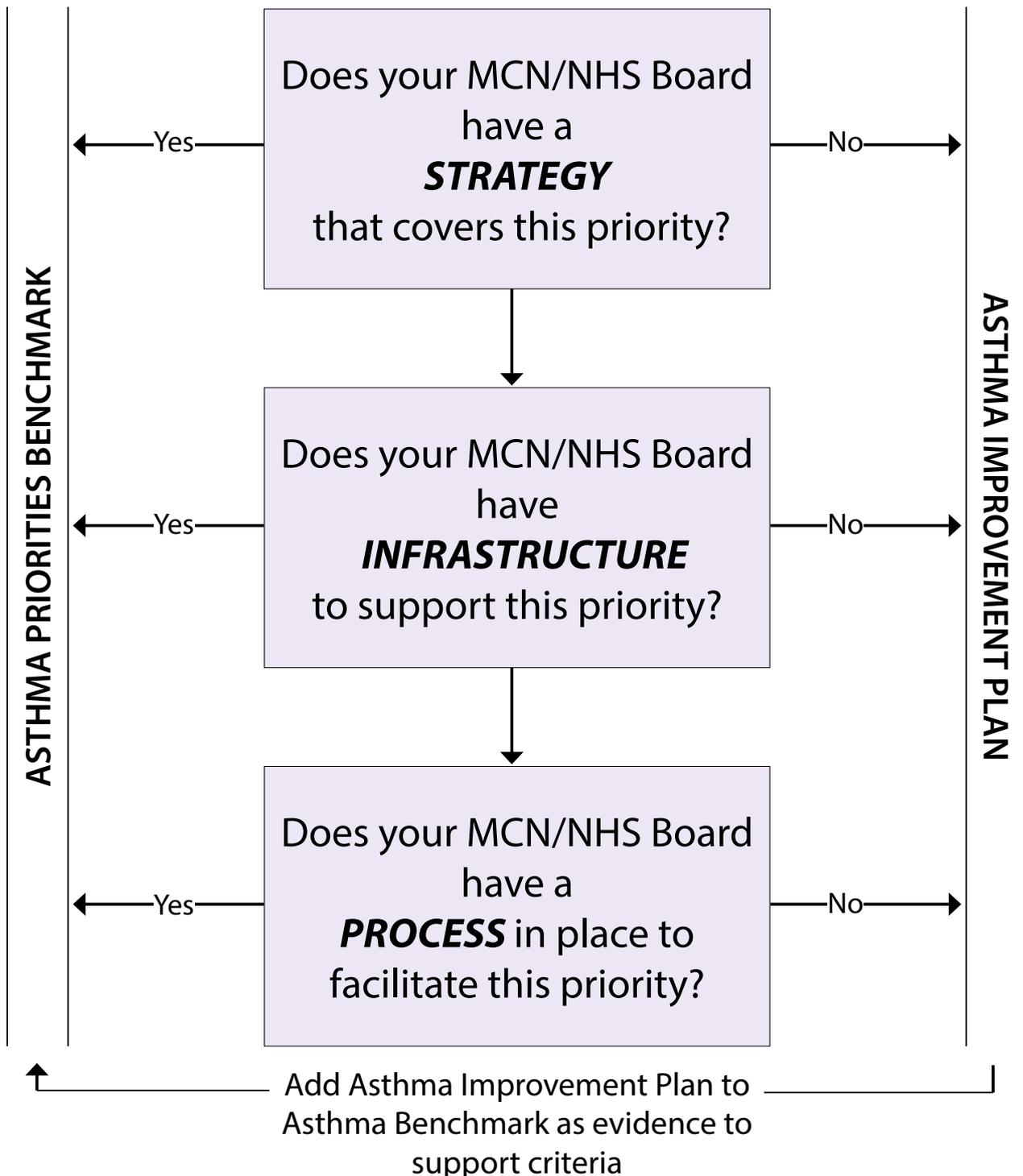| Level 1 – Planning	Level 2 – Implementing
• Benchmarking against 'measures of success', undertaken and analysed • Planning arrangements have been initiated • Improvement plan developed and forms integral part of local NHS board respiratory work plan	• Implementation plan is developed and associated working group tasked to progress workstream • Pilot project or 'spread plan' agreed • Full range of 'measures of success' being taken forward with evidence of actions being delivered
Level 3 – Monitoring	**Level 4 – Reviewing**
• Full range of 'measures of success' implemented consistently and geographically across NHS Board • Mechanism to monitor delivery of 'measures of success' • Associated learning and improvement planning in place to ensure standard of delivery	• Full package of 'measures of success' has been mainstreamed into existing services • Quality assurance and performance management established to review actions on an ongoing basis

6   Asthma strategy

In progressing this project, it has become apparent that the self-assessment benchmarking process provides respiratory MCNs with an opportunity to develop a coherent asthma strategy comprising the six core asthma priorities and associated 'measurements of success'. Implementation of such a strategy will require the necessary infrastructure and process to support service delivery.

The diagram below provides respiratory MCNs with a simple checklist to assist the self-assessment process and encourage the development of improvement plans to focus necessary work required to deliver the asthma priorities. However, it is acknowledged that in these times of financial constraints, securing funding to provide additional resources will be challenging. Respiratory MCNs are, therefore, encouraged to focus attention on the development of a strategic approach and ensuring effective processes are in place that, as far as possible, utilise existing infrastructure efficiently.

Likewise, the benchmarking process will provide the NAG with the opportunity to consider emerging themes from locally identified challenges, risks and barriers to implementation with a view to formulating national and/or regional solutions.

ASTHMA PRIORITIES IMPLEMENTATION

ASTHMA PRIORITIES BENCHMARK

ASTHMA IMPROVEMENT PLAN

Does your MCN/NHS Board have a *STRATEGY* that covers this priority?

—Yes—

—No—

Does your MCN/NHS Board have *INFRASTRUCTURE* to support this priority?

—Yes—

—No—

Does your MCN/NHS Board have a *PROCESS* in place to facilitate this priority?

—Yes—

—No—

Add Asthma Improvement Plan to Asthma Benchmark as evidence to support criteria

7   Acknowledgments

Developing the asthma priorities has been a significant project taken forward in partnership between SIGN, NAG, Asthma UK and SRIG. In addition, participation from the wider community of respiratory stakeholders was crucial in identifying the asthma priorities and associated 'measurements of success'. Consequently, grateful thanks are extended to all participants who attended the three regional events and in particular the following individuals for their valued contribution.

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The Healthcare Environment Inspectorate, the Scottish Health Council, the Scottish Health Technologies Group, the Scottish Intercollegiate Guidelines Network (SIGN) and the Scottish Medicines Consortium are key components of our organisation.

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