
REVIEW OF MEDICINES OPTIMISATION FOR VULNERABLE ADULTS

NORTH EAST AND CUMBRIA

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Report Summary

From data available across the North East and Cumbria there is consistent evidence that pharmacist led medication review is generating a net saving in annual medicines costs of £153 / review. Expansion of medication review to all nursing and residential home residents could save at least a further £2.5 million. Improved use of medicines is also thought likely to result in reduced hospital admissions. These services would benefit from;

- Being more widely and systematically commissioned
- Development of and collection of an agreed /standardised data set
- Development of a validated tool to support measurement of the likely impact on hospital admission and / or social care service usage
- Real time read write access to patient record
- Further research on the impact of this type of activity on social care costs

Introduction

The Medicines Optimisation Steering Group of the Academic Health Sciences Network North East and Cumbria has commissioned this report to provide information about current activity being undertaken across the North East and Cumbria in relation to models of care that support vulnerable adults to get optimum benefits from their medicines. The report includes a proposed service specification for such services including suggested outcome measures.

The main focus of the report is to look at medication reviews undertaken by clinical pharmacists targeted at the elderly population predominantly in nursing and residential homes.

Background Information

Medicines Optimisation

Medicines prevent, treat or manage many illnesses or conditions and are the most common intervention in health care.

36% of over 75 year olds are taking 4 or more medicines.

Optimising a person's medicines is important to ensure they are taking a medicine as intended and are getting the best possible outcomes from their medicines. Furthermore it may help minimise harm; 5-8% of unplanned hospital admissions have been reported to be due to medication issues.

Optimal use of medicines may also help reduce avoidable admission to hospital e.g.; reduction in hip fractures through better identification and treatment of osteoporosis.

The principles of medicines optimisation are;

- Aim to understand the patients experience
- Evidence based choice of medicines
- Ensure medicines use is as safe as possible
- Make medicines optimisation part of routine practice

Medication Review

In 2001 the National Service Framework for Older People included a target that 'all people over 75 years should normally have their medicines reviewed at least annually and those taking 4 or more medicines should have a review 6 monthly'. To support the achievement of this target it was included in the QOF from 2006 until 2013.

Guidance issued to support the implementation of this target suggested the following definition of a full structured medication review:

A structured critical examination of a person's medicines with the objective of reaching agreement with the person about treatment, optimising the impact of medicines, minimising the number of medication related problems and reducing waste.

It would be expected to occur with access to full medical notes.

In the development of NICE guidelines on Medicines Optimisation (March 2015) a systematic literature search was undertaken to consider what evidence there was for the effectiveness and cost effectiveness of medication reviews in reducing suboptimal use of medicines and medicines related safety incidents compared to usual care. The economic evidence presented to the guideline group was limited to medication review undertaken by hospital and community pharmacists. The evidence was reported as being conflicting and of varying quality, however the guideline development group did conclude that there was sufficient evidence of the cost effectiveness of medication reviews by these two groups. No economic evidence was found for primary care pharmacists carrying out medication reviews.

NICE has recommended further research that will deliver good quality evidence, such as a RCT to address the following research question;

Is a medication review more clinically and cost effective at reducing suboptimal use of medicines and improving patient reported outcomes, compared with usual care or other intervention in a UK setting. It also advises for results to be valid and reliable, outcomes should be ideally measured using validated tools.

NICE also made the additional following recommendations for a structured medication review;

- Target at those with a clear purpose for a review e.g. taking multiple medicines, with long term conditions and older people.
- Who undertakes the reviews should be locally determined
- The review must take into account the person's or, where appropriate, their family member's or carer's; views and understanding about their medicines, and address concerns, questions or problems with the medicines.
- Include all prescribed, over the counter and complementary medicines used by the patient.
- How safe the medicines are, how well they work for the person, how appropriate they are, and whether their use is in line with national guidance.
- Whether the person has had or has any risk factors for developing adverse drug reactions (if so report)
- Any monitoring that is needed

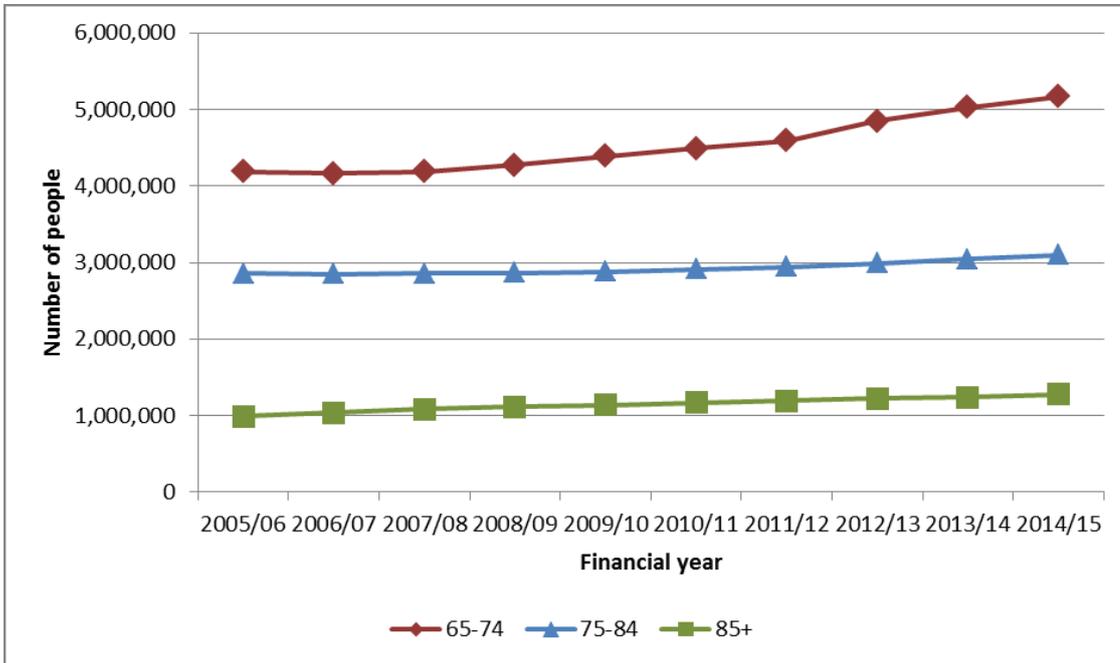
NICE did not recommend that recording a change in the number of medicines prescribed was an indicator of the quality of the review.

Population Data

Our growing older population

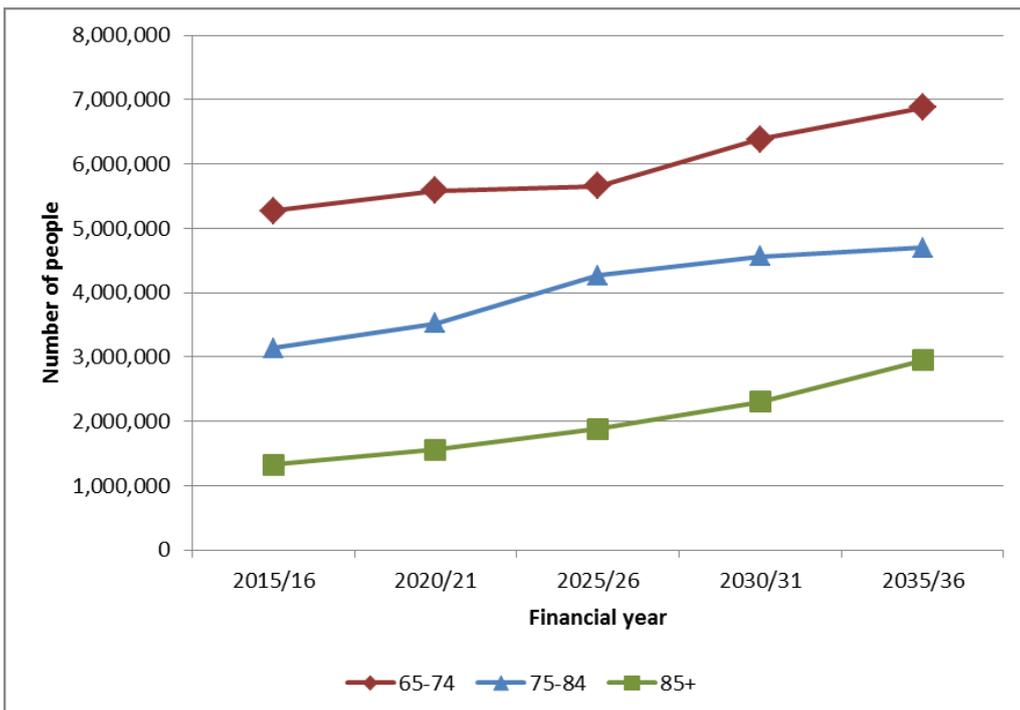
The population is ageing, which means we are living longer and there are more older people as a proportion of us all; between 2005/06 and 2014/15 the number of people aged 65 or over in England increased by almost a fifth and the number aged 85 and over rose by approaching a third.

Figure 1: Number of people aged 65 or over in England by age group, 2005/06 to 2014/15



The increase in the older population is projected to accelerate over the next twenty years. Over the 20 years between 2015 and 2035 the 65+ population is estimated to grow by 49.2 per cent, or more than 4.7 million people. Once again, those aged 85+ will be the fastest growing group. The number of people aged 85 and over is projected to increase by 122.4 per cent from 1.3 million to 2.9 million.

Figure 2: Projected number of people aged 65 and over in England by age group, 2015/16 to 2035/36



Source: Office for National Statistics

How are the older populations health and care needs are being met

Across the North East and Cumbria 27715 people are in receipt of home care, 14335 in residential care and 5365 in nursing care that is Local Authority supported.

Age 65+	Population 65+ years	Number of service users			
		Home care	Residential Care	Nursing Care	Total number
Darlington	19,648	970	605	170	1,745
Durham	99,000	5,795	2,580	970	9,345
Gateshead	37,205	1,445	875	390	2,710
Hartlepool	16,650	885	410	150	1,445
Middlesbrough	21,662	1,415	820	270	2,505
Newcastle upon Tyne	40,813	2,440	890	460	3,790
North Tyneside	37,836	1,590	650	405	2,645
Northumberland	68,997	2,155	1,520	525	4,200
Redcar & Cleveland	28,019	1,235	760	250	2,245
South Tyneside	28,222	2,140	750	215	3,105
Stockton-on-Tees	32,343	1,855	820	280	2,955
Sunderland	49,817	1,675	1,135	455	3,265
Cumbria	110,431	4,115	2,520	825	7,460
North East & Cumbria Total	590,643	27,715	14,335	5,365	47,415
ENGLAND	9,305,179	371,770	160,745	77,300	609,815

Source: NASCIS RAP return, 2013/14

*Extent of self funders / Independent sector is unknown therefore total numbers in receipt of above will be much higher.

1 in 10 people age 65 and over are 'frail', rising to one in four of those aged 85 and over.

Between 2005/06 and 2012/13 emergency hospital admissions of people aged 65 or older rose by a fifth, which is more than the increase in the number of older people.

Between 2005/06 and 2010/11 emergency hospital re-admissions of people aged 75 or older increased by a quarter.

Medicines Optimisation for Vulnerable Adults – North East and Cumbria

Funding

As highlighted in the initial report much of the existing pharmacist led medication review activity has been established for a number of years and was done so on the basis of demonstrated costs savings / improved quality of care. More recently these existing schemes have been 'subsumed' into newer models of care linked to better care in care homes (Better Care Fund), readmission avoidance, and more recently new models of care (Transformation Fund).

Some schemes are linked to broader multispecialty teams supporting care homes (incorporating Link GP schemes) or admission avoidance schemes. In North Tyneside / Northumbria activity is linked to a Frail Elderly pathway. In broader projects pharmacist led medication review seems to work 'alongside' the project and is often focused on undertaking a systematic review of all residents within certain homes. The amount of pharmacist resource appears to be largely based on what has been historically provided.

In July 2015 NHS England announced a three year pilot to test the role of clinical pharmacists working in general practice. In October 2015 the funding for this initiative was increased from £15 million to £31 million. This will part-fund 403 new clinical pharmacist posts across 73 sites, covering 698 general practices

in England, supporting over 7 million patients. It is likely that medication review activity will be undertaken as part of this scheme. Across the North East and Cumbria 4 sites were initially selected to take part. A further scheme linked to Newcastle Hospitals FT has also now been approved.

Activity

Following an initial survey to establish current activity across North East and Cumbria early in 2015 all areas were contacted again in August 2015 and asked to provide the total number of medication reviews done by their pharmacists / providers in 14/15 financial year and the total savings generated from this activity. A table detailing the information provided is included in appendix 1.

Since the initial report and the 14/15 financial year activity has increased across a number of areas across the patch either through commissioning of new activity e.g. Northumbria or through redeployment of existing resource e.g. Tees.

In 14/15 4 areas were specifically commissioning a pharmacist led service to support either care home residents or other frail elderly patients (North Tyneside / Northumberland FEP Project/ Sunderland CCG/Gateshead CCG/S Tyneside CCG). Since the beginning of this financial year 2 additional areas have commissioned a specific pharmacist led medication review service (Northumbria/ Newcastle CCG). In all other areas it is part of activity carried out by practice based pharmacists.

In two areas services are providing medication review to people in their own homes. In North Tyneside / Northumberland a service has been established specifically to support high risk elderly patients who are identified by other health care professionals as being in need of a domiciliary medication review. In Sunderland a team of pharmacists are supporting patients who are identified during admission as 'high risk' providing domiciliary post discharge support including medication review. The latter project is still being evaluated.

The data collected across the North East and Cumbria varies considerably. In those areas where data is collected it usually includes;

- number of reviews,
- annualised cost saving on medicines (this usually seems to be based on 13 x monthly savings), in some areas they specifically refer separately to 'one off' savings i.e. a saving that was unlikely to have resulted in a recurrent savings so is only counted once,
- number of medicines stopped / started,
- total number of medicines before and after review,
- number and type of interventions (which may or not be graded).

Number of Reviews 14/15

Data was provided for 4 CCG areas (South Tees, Gateshead, North Tees and Hartlepool and Sunderland*). 2935 reviews were reported across these areas. Health and Social Information data suggest a potential target population of approximately 6615 patients in a residential or care home in these CCG areas. Data on number of reviews is being collated by systems out with GP clinical systems i.e. medication review numbers are not being routinely extracted from data held on GP systems.

*Sunderland data not for full CCG area

Annualised Medicines Costs Savings 14/15

For 14/15 the total annualised medicines savings reported by the 4 CCG areas was £412,600. This equates to an average saving per review of £140 in 14/15.

Cost Saving / Review

As noted above there may be some variation in how individual areas calculate these savings. Across the North East and Cumbria, from a review of all available data (NB not just 14/15 data – SHINE and Newcastle data from July 2015 also considered) the annualised saving per review ranges from £124 to

£305. The higher end of this range relates to Newcastle CCG which is a relatively new service that has only 3 months data – if this data is excluded the range of saving / review is much more consistent between £124 - £205. The average saving per review across the schemes is £153 .

Grading of Interventions / Assessment of Admission / Harm Avoidance

This varies considerably. Three areas (S Tyneside/ Gateshead/ Newcastle) report using 'RiO' – which is based on work done by NHS Croydon adapted from The Hospital Avoidance Scale within the RiO healthcare management system. A qualitative assessment is made of the potential impact of each intervention allowing the assignment of a value of likelihood with regard to the intervention preventing a hospital admission. Each intervention is assigned to one of three categories;

Level 1 = No Likelihood

Level 2 = Possible

Level 3= Likely

Each level 3 equating to one avoided admission and 10 level 2 interventions equating to one avoided admission. Local data e.g. for average length of stay of a care home resident presenting in A&E can then be used to estimate admission avoidance saving. This is subjective and also it is not clear if this is being calculated per review i.e. if one patient had 2 level 3 interventions is that counted as one or two potential admissions avoided?

Examples of the type of interventions graded as level 3 include e.g. antibiotics not supplied on discharge to complete course of treatment for community acquired pneumonia, prophylactic PPI started for 94 year old on oral corticosteroid + anticoagulant. It is not clear if these 'gradings' are independently reviewed / moderated or just self assigned.

One scheme (S Tees) has developed its own system with input from local GPs – in this scheme the likely impact on admission is assessed on a 'per review' basis and grading is peer reviewed.

Another scheme (Newcastle) is also estimating harm avoidance costs using Eadon Criteria / SchARR model.

Estimates of potential cost avoidance benefit of medication review are reported as being significantly greater than medicines savings cost alone.

Medication Review Rates

Using data from areas where the 'wte' dedicated to support medication review is defined (Gateshead / Newcastle/ Sunderland) the number of reviews carried out per wte pharmacist is consistently 2.5 reviews per day. In the SHINE project they reported each review requiring an average of 67.7 minutes (although they had excluded some time linked to data collection for project).

Data from outside North East and Cumbria (Leeds West) – reports a similar review rate of 2.4 reviews per wte pharmacist per day.

In the development of NICE guidelines on Medicines Optimisation (March 2015) as part of their review of the evidence around medication review they made estimates of the cost per medication review delivered by a variety of health professionals. For a hospital pharmacist they estimate a salary cost of £6.36 per 20 minutes. Based on this data and the North East and Cumbria 'average' of 2.5 reviews per day the 'cost' in pharmacist time can be estimated at £57.24 per review. This compares to an average saving in medicines cost in North East and Cumbria of £153 per review.

Case Study – Northumbria Foundation Trust

SHINE project – Over 12 months 422 residents reviewed across 20 care homes. Net annualised savings against medicines budget of £77703 or £184 per patient reviewed. Looked a number of different models for how medication reviews undertaken. Utilised shared decision making model.

Concluded multidisciplinary team model most efficient (most interventions but at a higher cost) but independent pharmacist prescriber undertaking review without GP involvement was more cost effective. For the latter the cost of delivering the intervention was £32670, so for every £1 invested, £2.38 could be saved on medicines.

An article about the project has been published as a BMJ Quality Improvement Report on bmj.com.

Case Study – Newcastle Care Home Project

In first quarter 15/16 164 reviews completed by 1 wte band 8a Pharmacist and 1 wte pharmacy technician employed by NECS funded by Newcastle CCG to work as part of multidisciplinary Newcastle Care Home team. Net annualised savings against medicines budget of £50037 or £305 per patient reviewed.

Project is using Eadon criteria to grade interventions. SchARR model being used to estimate potential cost avoidance through harm reduction of £33000-£75,000 for same period.

RIO scores also being used to estimate impact on admissions – this method estimates a saving of £41,000-£80,000 for same period.

Case Study – The Argyle Care Home Service – Ealing CCG

Commissioned service to provide medical and pharmaceutical care to 900 patients across 19 nursing homes. Multidisciplinary team comprising 8 GPs, 1 nurse prescriber, 5 pharmacist (4 prescribers) and 4 pharmacy technicians.

20% reduction in hospital admissions and A&E attendances reported over 12 month period.

In this model pharmacist prescribers are involved in long term management and prescribing for this patient group

Discussion

Currently clinical pharmacist medication reviews are being reported as only being undertaken for a small proportion of the population that would potentially benefit i.e. 2935 out of 19700 (15%) local authority supported residential / nursing home residents across the North East and Cumbria. If the average savings / review reported to date were replicated for this whole population there are potentially further medicines savings of £2.5 million pounds across the North East and Cumbria. The actual care home population is also significantly higher than this figure as it does not include those patients that self fund. For example in Stockton on Tees the number of local authority supported residential beds is reported as 820 but the actual number of residential beds is 1098.

There appears to be consistent quantitative evidence both locally and elsewhere that clinical medication review by pharmacists is a cost effective intervention. A variety of models are in place. The model used will need to be determined by local requirements / circumstances. A number of areas are establishing separate multidisciplinary care home services to meet the needs of their care home population other areas are still building services around the patients registered GP. It would be still advantageous to gain further good quality evidence of the cost effectiveness of medication review by primary care pharmacists in line with NICE research recommendations.

Further research to quantify the impact or benefit of such activity on hospital and social care admissions is necessary although intuitively it is difficult to imagine how optimising someone's medicines would not have a positive impact on these parameters. Validated tools/methodology to support this research are also needed. One option may be to agree across North East and Cumbria a limited list of 'common' interventions e.g. starting an anticoagulant in a patient with AF, starting a bisphosphonate in a patient at high risk of fracture. If everyone recorded just these interventions then we would at least have a set of common data. For these interventions we could also agree a 'value' in terms of likelihood of preventing an admission.

In addition to recording a few specific agreed interventions it would be helpful if all providers recorded the number of reviews completed and the wte pharmacist or technician used to achieve this. The collection of a standard data set would allow a better understanding of activity and allow for benchmarking of services. More detailed data collection e.g. medicines cost saving per review and other interventions could then be collected on an agreed proportion of reviews. The latter could be used to help inform and update the proposed standard interventions that all could be recording.

Current service specifications do not state that structured medication reviews undertaken by pharmacists are to be recorded on GP systems using appropriate read codes. Agreement of and use of agreed read codes would allow easier validation and monitoring of activity.

Dr Baqir, Northumbria Foundation Trust is working with both the NHS Business Services Authority and with the Royal Pharmaceutical Society to look at data collection standards and methods. This work may help further inform local practice. The work with the NHSBSA is linked to being able to link prescribing data and patient data which would allow prescribing analysis down to patient level. Potentially this could allow comparison of prescribing costs across specific care homes.

An increasing proportion of the elderly population are being supported to continue living in their home with domiciliary care services. Domiciliary care services cover a wide range of interventions including home care, day centres etc. AGE UK locally is looking at models to provide support in some of these settings e.g. nurse input into day care centres. Research and / or schemes that explore opportunities for and benefit of medication review in this population would be desirable and useful.

Only 2 areas (Northumbria and Newcastle) specify that a pharmacist prescriber must undertake reviews. Medication review can and is being undertaken successfully in other areas mainly by non prescribing pharmacists. Whilst a prescribing qualification can enable the review to occur independent of the patient's GP, access to patients' medical record would still be needed. Those areas that do not use prescribing pharmacists feel that the shared 3 way decision between patient, reviewing pharmacist and usual prescriber helps improve acceptance of and compliance with interventions and also helps embed good prescribing practice. The SHINE project, which utilised and advocates pharmacist prescribers, does

acknowledge that involvement of the GP does increase the number of interventions but obviously comes at a greater overall cost. The care home population lends itself to becoming an appropriate population for pharmacists to take on as 'caseload' whose on-going prescribing needs could be managed by a prescribing pharmacist – this has been successfully demonstrated in the Ealing CCG model above. Whichever model is used, reviews need to be appropriately documented in the patient's medical record.

Many of the existing models also have a pharmacy technician working alongside the pharmacist – their role tends to be focussed on working with the care home staff to improve ordering and storage of residents' medicines and therefore help reduce waste. This activity will need different outcome measures to monitor.

The amount of pharmacist resource needs to be based on the number of reviews anticipated to be required – based on limited locally reported data this would seem to suggest 2-3 reviews can be completed per day. Based on 2.5 reviews per day, every 100 care home residents to be reviewed annually would need 0.15wte pharmacist. To review the 16765 patients in care homes not currently having an annual pharmacist led medication review we would therefore need an additional 25 pharmacists across the North East and Cumbria. Time taken to complete the review will depend on the overarching model in place. Better data collection will help further inform the right 'wte' to undertake the required number of reviews.

Recommendations for AHSN / Medicines Optimisation Steering Group

- ***Agree most appropriate forum / mechanism to share content of report with relevant commissioning organisations / stakeholders.***
- ***Liaise with local educational institutions to consider potential to formally evaluate cost benefit of pharmacist medication review on admissions / social care requirements.***
- ***Agree 'basket' of high level interventions to be recorded and their likely impact on admissions.***

Recommendations for Commissioners

- ***Need to target patients for reviews in line with recommendations in NICE optimisation guidance***
- ***Service specifications to include an agreed methodology for assessing impact of reviews on admissions***
- ***Specifications should specify an amount of reviews expected to be undertaken.***
- ***Need to help facilitate read write access to medical notes***
- ***A standard set of data should be agreed and collected across all activity to allow for effective monitoring and benchmarking.***
- ***Need to consider pharmacist role in the context of how medical and nursing needs of the local care home residents are being met.***

Recommendations for Providers

- ***Need to consider local service requirements for pharmacist prescriber qualification***
- ***Need technology in place to support real time read write access to medical notes***
- ***Need to use a standard template / process that meets recommendations NICE Guidelines Medicines Optimisation / Managing Medicines in Care Homes***
- ***Should record all structured clinical medication reviews undertaken by pharmacists using standard agreed read code.***

Bibliography

A Guide to Medication Review NPC 2008

Medicines Optimisation: the safe and effective use of medicines to enable the best possible outcomes, NICE guideline 4 March 2015

Managing Medicines in Care Homes, NICE guideline 2014

The Health and Care of Older People in England 2015 – Age UK

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About the Author

Following an early career spent in hospital pharmacy Jo moved into primary care in 1996 working initially as a practice pharmacist within a 5 practice GP fund holding group. Jo then went on to establish and lead the medicines management service to each of the subsequent PCO's in Tees culminating in managing the NHS Tees Medicines team. Since 2013 Jo has provided pharmaceutical advice to the Tees Valley Public Health Shared Service which supports the 5 local authorities in the Tees Valley. Jo is also a lay representative for HENE.

Appendix 1 – Summary of Current Activity – 20/11/15

Clinical commissioning Group	Medicines Services Commissioning Lead	Medicines Services Provider	Specific Initiatives	Details
Newcastle CCGs	NECS	NECS/ Newcastle FT	From July 15 1 wte band 8a Pharmacist / 1 wte pharmacy technician in NECS funded by CCG to work as part of multidisciplinary Newcastle Care Home Programme (GP lead Richard Croft). Adhoc reviews also undertaken by practice team.	No 14/15 data. In first quarter 15/16 164 reviews completed, Net annualised savings against medicines budget of £50037 or £305 / patient reviewed. Project is using Eadon criteria to grade interventions. SchARR model being used to estimate potential cost avoidance through harm reduction of £33000-75,000. RIO scores also being used to estimate impact on admissions – this method estimates a saving of £41,000-£80,000.
North Tyneside CCG	NECS	NECS / Northumbria	SHINE Project previously undertaken Northumbria FT funded by Health Foundation. Domiciliary medication review service 1 wte Band 8a funded by Northumberland and North Tyneside CCG employed by Northumbria FT. Adhoc reviews undertaken by practice team . In addition from Oct 15 0.4wte practice pharmacist time and 0.2wte technician time within NECS team reallocated to focus on care home reviews / support.	SHINE project (Health Foundation funded) Data for Feb 13 – Jan 14 – 422 patients reviewed across 20 care homes. Net annualised savings against medicines budget of £77703 or £184 / patient reviewed. Tested a number of different models of pharmacist working with GP. Utilised shared decision making model. Pharmacist prescribers used. An article about the project has been published as a BMJ Quality Improvement Report on bmj.com.

Clinical commissioning Group	Medicines Services Commissioning Lead	Medicines Services Provider	Specific Initiatives	Details
Northumberland CCG	NECS	NECS	<p>Share domiciliary medication review service 1 wte Band 8a funded with North Tyneside CCG employed by Northumbria FT.</p> <p>From 1/11/15 NHCT commissioned to provide 1.2wte pharmacist and 1.0wte technician time to provide care home medication review service.</p> <p>Northumbria Primary Care Ltd is supporting a number of GP practices across Northumbria and North Tyneside – approx 4.2wte pharmacists providing support which will include medication reviews based on SHINE project.</p> <p>Pharmacists employed by Northumbria FT.</p> <p>Northumberland CCG in partnership with Northumberland FT - New Models of Care Vanguard site for - Integrated Primary and Acute Care Systems.</p>	<p>Domiciliary medication review service reported as showing an annualised saving of £ 134 / review plus a one off saving of £55/review.</p> <p>No data as yet for new service</p>
Gateshead CCG	NECS	NECS Commissioner /Independent Provider (Pharmicus)	<p>Specific contract with pharmacy service provider to deliver medication reviews in care homes linked to broader Gateshead Care Home initiative – 0.5wte pharmacist equivalent (New Models of Care Vanguard site - Enhanced Health in Care Homes)</p>	<p>14/15 326 care home reviews. Net annualised savings against medicines budget of £67078, £205 per patient reviewed. Using RIO estimate admission cost avoidance benefit of £700,000.</p>
South Tyneside CCG	NECS	NECS Commissioner /Independent Provider (Pharmicus)	<p>Specific contract with pharmacy service provider to deliver medication reviews in care homes .(0.8wte pharmacist, 0.2wte technician)</p>	<p>In 14/15 (10 months data only) - Net annualised savings against medicines budget of £51025. Medication review numbers to be confirmed.</p>

Clinical commissioning Group	Medicines Services Commissioning Lead	Medicines Services Provider	Specific Initiatives	
Hartlepool & Stockton CCG	NECS	NECS commissions and provides	Delivered as part of practice based pharmacist work programme- from 1/4/15 1wte pharmacist and 1wte band 5 technicians allocated from within existing NECS team to focus on care home agenda. Remaining practice based team continue to undertake as required.	14/15 1101 care home reviews. Net annualised savings against medicines budget of £136805, £124 per patient reviewed
South Tees CCG	NECS	NECS commissions and provides	Delivered as part of practice based pharmacist work programme –focus of practice work programme shifted from April 2015 shifted to focus on care home medication reviews. 3 practices successfully applied for NHSE GP Practice Pharmacist Pilot.	14/15 868 care home reviews. Net annualised savings against medicines budget of £119048, £137 per patient reviewed.
Cumbria CCG	NECS	NECS commissions and provides	Delivered as part of practice based work programme 12.5 wte approximately half of time devoted to medication review - elderly adults and care home residents targeted. Linking in to 2 projects where working as part of multidisciplinary teams supporting care homes	No data avail for 14/15

Clinical commissioning Group	Medicines Services Commissioning Lead	Medicines Services Provider	Specific Initiatives	
Sunderland CCG	CCG	CCG commissions / Independent provider - Intrahealth / Pharmicus, Sunderland Foundation Trust	<p>4.0 wte pharmacists commissioned to undertake care homes reviews. Part of resource been supporting Coalfield Care Home Project - this now expanded to cover all localities - New Models of Care Vanguard site for Multispecialty Community Provider. Pharmacists work into model but commissioned as separate service.</p> <p>3.0wte pharmacists commissioned from Sunderland FT to support readmissions avoidance team this is a pilot funded currently until March 2016.</p> <p>15 practices successfully applied for NHSE GP Practice Pharmacist Pilot.</p>	Data for April 14- March 15 – 441 (out of reported 648 care home residents) reviews – generating a saving in medicines costs of £57675 (£130/ review), across 3 localities. In a separate locality (part of vanguard project) 199 reviews carried out (out of a reported care home population of 405) generated a saving in medicines cost of £31995 (£160/review). This activity equated to 1.0wte pharmacist time. Data for other area not reported in same way. Do grade interventions on basis of harm avoidance but no cost impact of this estimated.
North Durham , DDES CCG & Darlington CCGs	CCG	Independent Provider/ individual sessional pharmacists / NECS employed staff	<p>Delivered as part of practice based pharmacist work programme – amount of activity not set. Has been increase in number of practices employing pharmacists direct.</p> <p>13 practices successfully applied for NHSE GP Practice Pharmacist Pilot.</p>	No data routinely collated

SERVICE SPECIFICATIONS

Service Specification No.	
Service	Pharmacist Medication Review
Commissioner Lead	
Provider Lead	
Period	
Date of Review	

1. Population Needs
<p>1.1 Regional and local evidence has shown the benefit of undertaking structured clinical medication review of vulnerable adults living in nursing and residential homes.</p> <p>1.2 In x CCG area there are x residential home and x nursing home residents (ideally these should be total actual rather than just those financially supported by the local authority).</p>
2. Key Service Outcomes
<p>2.1 Service is expected to support delivery of the following NHS Outcomes Framework domains;</p> <ul style="list-style-type: none"> • Preventing people from dying prematurely • Enhancing quality of life for people with long term conditions • Ensuring people have a positive experience of care • Treating and caring for people in a safe environment • Helping people to recover from episodes of ill health following injury * <p>*Schemes targeting recently discharged from hospital.</p>
3. Scope
<p>3.1 Aims and objectives of service</p> <p>The aim of the service is to:</p> <ul style="list-style-type: none"> • Increase care home patients access to structured medication review to support optimum use of medicines • Improve quality of prescribing in care homes • Reduce avoidable admissions from care homes • Reduce medicines waste in care homes • <i>Integrate / establish effective working relationship with the broader multidisciplinary team</i> <p>The objectives of this service are to:</p> <ul style="list-style-type: none"> • Complete structured medication review in x residents in care homes within x locality / CCG area within 15/16 financial year. Reviews should be completed and targeted in line with NICE medicines optimisation Guidance (2015). • For each medication review complete standard required data set. • Record review and outcomes of review of patients medical record – actual review should be documented using standard read code

3.2 Service description/pathway

- X wte pharmacist and x wte technician will undertake the medication reviews
- Provider will undertake a structure medication review using a standard agreed template which is line with NICE Medicines Optimisation guidance
- Provider will ensure shared decision making where possible
- Provider to identify strategy used to prioritise patients for review e.g. STOPP/START
- Arrangements in place to allow real time read write access to medical notes
- Reviews will be carried out in collaboration with link GP / registered GP
- Care home staff will be involved in each medication review
- *Arrangements for prescribing by pharmacist if required to be defined including if any on-going involvement / management required*

3.3 Population covered

To be defined locally

3.4 Any acceptance and exclusion criteria and thresholds

n/a

3.5 Interdependencies with other services

The service will work with GP practices, community pharmacies and care homes within the designated area. The service will need to be able to either undertake medication reviews independent of GP through use of an independent pharmacist prescriber or will need to agree recommended changes with patients GP. In both circumstances the provider must be able to ensure their actions are recorded in the patient's medical record ideally through real time read write access to patient notes.

Service will work as part of multidisciplinary team supporting care homes within x CCG

3.6 Any activity planning assumptions

If prescribing pharmacist will need to define how prescribing will be undertaken and at whose cost.

4. Applicable Service Standards

4.1 Applicable national standards eg NICE

NICE Medicines Optimisation Guidance

4.2 Applicable local standards

For each medication review undertaken provider must complete a minimum defined data set.

Any changes made to a patient's medication must be recorded in the patient's medical record – this must occur no later than 2 working days after the change has been made.

5. Location of Provider Premises

The Provider's Premises are located at:

[Insert address of Provider's Premises if applicable]

6. Insurance

7. Quality Outcome indicators

A standard set of data will be provided quarterly by the provider. The standard data set will be coded on the primary care system by the provider. This standard data set will be:

- Number of medication reviews completed
- Number of specified agreed local interventions made
- Number of wte provided

A more detailed evaluation will be carried out on an agreed proportion of reviews this will include:

- Medicines cost saving – this must differentiate between potential on-going medicines cost savings i.e. change in regular medicine and 'one off' savings i.e. change to a short term or prn medicine / ordering issue.
- Interventions made
- Assessment of impact of interventions on admissions

For those service using technicians to support improvements in medicines use in homes a separate report (content to be determined locally)should be provided quarterly