

# **Collaborative audit across England on the quality of medication related information provided when transferring patients from secondary care to primary care and the subsequent medicines reconciliation in primary care – Cumbria CCG**

## **Cumbria CCG Final Report**

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## Executive Summary

Medicines reconciliation is recognised as an effective way of reducing errors at transitions of care. Much of the focus in the UK has been on medicines reconciliation on admission to hospital. However, recent national guidance, a NHS England patient safety alert and changes to the NHS England Standard Contract have broadened the focus to primary care. The aim of this collaborative audit and service evaluation was to assess the quality of information regarding medicines within discharge summaries provided by secondary care (Acute, Mental Health and Community Services) and to determine whether GPs have correctly acted upon the information (regarding medicines) within 7 days of receiving the discharge information. Forty seven Clinical Commissioning Groups (CCGs) across England participated in this collaborative audit. Over 10,000 medicines were prescribed on the discharge summary/TTA across 1454 patients audited (mean of 6.9 medicines per patient).

The results found that patient demographics/identifiers were well documented on most of the discharge summaries, except allergy status which was only documented in 73% of cases (75.8% nationally). The majority of the medication details were prescribed well with the exception of documenting the formulation of the medicines 15% (60.3% nationally) and instructions for ongoing use or supply of medicines 43% (72.5% nationally). Eighty-six percent of patients had at least one new medicine started, in total 393 new medicines were started across the patients audited however a reason for the initiation was only documented for under half (41%) of these medicines. Thirty percent of patients had at least one medicine stopped whilst an inpatient, in total 97 medicines were stopped across the patients audited however a reason for stopping was only documented in 47% of cases (57% nationally). Twenty-seven percent of patients had the dose of at least one of their medicines changed, in total 76 medicines had dose changes across the patients audited and a reason for changing the dose was documented in 82% of cases. The documentation about dose changes in Cumbria is approximately double the national figure of 39%.

Apparent unintentional omissions of pre-admission medicines were noted for approximately one-fifth of the patients (one-third nationally). Intentional changes were actioned on the GP system within 7 days of the discharge for 72% of patients (42.5% nationally) primarily by the GP (65%), CCG or practice pharmacist (2%), or receptionist (4%). At least one change was actioned incorrectly for 3.3% of patients (5.5% nationally).

The results of this collaborative audit concludes and recommends that communication around medication changes when patients transfer from secondary care to primary care requires significant improvement. CCGs and secondary care providers should collaborate to review the local hospital discharge template to ensure that it meets the needs of all involved, is in line with the standards set by the RPS and Academy of Royal Colleges and supports transfer of medication related information. GP practices should have clear processes in place on how information provided on discharge summaries/TTAs is managed once received. . There should be a clear process in place that identifies who has the responsibility to review medicines on the discharge summaries and who should action on the GP prescribing system. Consideration should be given to the role of clinical Pharmacist's in GP practices reconciling medicines post discharge from secondary care. CCGs to consider developing CQUINs to drive improving the quality of discharge communication by secondary care as previously recommended by the CQC.

## 1.0 Introduction

There is a significant body of evidence that suggests that the transfer of information regarding medicines from secondary care to primary care is far from optimal<sup>1,2,3,4,5</sup>. The likelihood that an elderly medical patient will be discharged on the same medicines that they were admitted on is less than 10%<sup>6</sup>. Between 28-40% of medicines are discontinued during hospitalisation<sup>3</sup> and 45% of medicines prescribed at discharge are new medicines<sup>7</sup>. Furthermore evidence suggests that almost 60% of patients have 3 or more medicines changed during their hospital stay<sup>8</sup>. Despite the magnitude of medication changes occurring during a hospital stay it is evident that often the information provided to general practitioners (GPs) following discharge can be inadequate, inaccurate or not timely<sup>1,2,3</sup>. Similarly there is evidence that GPs do not always act upon the information provided in the discharge summary<sup>1,4,5</sup>.

There is limited UK evidence that evaluates the quality of information received into primary care when patients are discharged from secondary care. However, two studies of interest were identified during the literature search. A study conducted by Hammad et al<sup>9</sup> in the East of England audited 3444 discharge summaries of which approximately 70% were from two local teaching hospitals. The study reviewed the quality of medicines related information contained within the discharge summaries according to the standards set out by UK National Prescribing Centre (NPC). The study found that the majority of discharge summaries failed to fulfil the requirements set out by the NPC. Of significant concern was that only 48.9% of discharge summaries complied with standards set by the NPC on the reporting of medication therapy changes (medicines initiated, discontinued or doses changed with a corresponding reason). A similar study conducted by Grimes et al<sup>2</sup> that investigated the factors contributing to medication reconciliation on discharge, and identified the prevalence of non-reconciliation by conducting a cross-sectional, observational survey of consecutive discharges from two Irish acute hospitals. The study found that medication details documented at discharge from acute hospital care in Ireland frequently contain prescription writing errors or failed to communicate information regarding changes made during inpatient care; for example of the 1245 discharge summaries audited 21.5% of discharges failed to document that a medicine that the patient had been taking prior to admission had been stopped during the inpatient stay.

There are many factors that can influence the quality of medicines related information contained within discharge summaries. For example system related factors such as discharge summary template content, whether the document used to transfer information is handwritten or electronic, the time available to collect and communicate discharge information and whether the admission was planned or unplanned<sup>9</sup>. Similarly other factors such as the training and competence of the person completing and/or screening the discharge summary, the complexity of the patient's care and discharge medication may also affect the quality of medicines related information contained within discharge summaries<sup>9</sup>.

Several organisations such as the National Prescribing Centre (NPC)<sup>10</sup>, Royal Pharmaceutical Society<sup>11</sup> and Academy of Royal Colleges<sup>12</sup> have developed standards focussed on what (and how) medicines related information should be communicated on the discharge summary/TTA when patients are transferred from secondary care to primary care. Similarly many agencies have produced guidelines and toolkits to support

NHS organisations to improve medicines related information during transfer of care<sup>13,14</sup>. Despite these efforts between October 2012 and September 2013 there were approximately 10,000 patient safety reports to the NRLS related to discharge with communication at handover being identified as a particular area of risk and accounting for approximately 33% of the incidents<sup>15</sup>. In August 2015 NHS England issued a Patient Safety Alert on the risks arising from breakdown and failure to act on communication during handover at the time of discharge from secondary care.

## 2.0 Aims

- To assess the quality of information regarding medicines within discharge summaries provided by secondary care (Acute, Mental Health and Community Services)
- To determine whether GPs have correctly acted upon the information provided regarding medicines in the discharge summaries within 7 days of receiving the discharge information (NICE Medicines Optimisation Standard and GP contractual agreement)

## 3.0 Methodology

Based on the literature and evidence a proposal for a collaborative audit across England on the quality of medication related information provided when transferring patients from secondary care to primary care and the subsequent medicines reconciliation in primary care was considered and thought to be of value. An invitation to form a small steering group was sent to Pharmacists from primary care, secondary care, academia and the National Institute for Health and Care Excellence (NICE). The steering group (appendix 1) collaborated and developed the audit tools and methodology through a series of meetings in mid-2015. The standards/audit questions were drawn predominantly from the *RPS recommended core content of records for medicines when patients transfer care providers*<sup>11</sup> which in turn were drawn from the standards set by the Academy of Royal Colleges for medical records on discharge<sup>8</sup>. The audit tools and methodology were validated through a series of pilots.

A letter (see appendix 2) inviting Heads of Medicines Management/Chief Pharmacists in Clinical Commissioning Groups (CCGs) and Commissioning Support Units (CSUs) across England to participate in the collaborative audit was sent via the Medicines Use and Safety (MUS) and NICE networks in November 2015. Upon receiving an expression of interest each CCG lead was emailed the necessary tools (Audit Protocol, Audit Data Collection Form, Hints and Tips Document and a collation of Frequently Asked Questions) to conduct the audit. For instructions on how to conduct the audit in practice see the suite of tools described above which have been included as appendices 3, 4, 5 and 6.

Each CCG that participated in the collaborative audit returned their datasets via an excel spreadsheet. All data sets received were collated to form a master dataset that represented all the participating CCGs, these results were then cleansed/checked for accuracy and analysed to represent a national picture. Each CCG dataset was then compared to the national picture and benchmarked and these CCG specific reports were returned to individual CCGs.

## 4.0 Results and Discussion

In January 2016 a total of 1454 patient discharge summaries were audited across 47 CCGs in England, the list of participating CCGs is documented in section 6. This section displays and discusses the initial key findings from this collaborative audit and allows comparison of the national dataset versus the results found in Cumbria CCG. All results described take into account any missing data, the sample size (n) stated throughout the results section generally reflects the number of patient discharge summaries audited, where the sample size (n) is in the context of the number of medicines audited it is written in *italics* and where data was unavailable it is indicated as such.

**Table 4-1: Study sample data**

	Cumbria CCG	National Audit Results
<b>Total number of patient discharge summaries audited</b>	182	1454
<b>Total number of medicines prescribed across all discharge summaries audited</b>	1389	10,038
<b>Total number of participating CCGs</b>	1	47
<b>Total number of hospitals audited</b>	15	159
<b>Median age of patients audited (n=181)</b>	73 years (range 1-99)	72 years (range 0 – 102 years)
<b>Gender of patients audited (n=180)</b>	Female = 53% Male = 47%	Female = 53% Male = 47%
<b>Median length of inpatient stay for patients audited (n=182)</b>	4 days (range 0 -70)	4 days (range 0 – 208 days)
<b>Median length of time before GP received the discharge summary/TTA post patient discharge (n=182)</b>	2 day (range 0-21)	1 day (range 0 – 38 days)
<b>Route of admission for patients audited (n=178)</b>	Unplanned – 80% Planned – 20%	Unplanned – 78.6% Planned – 21.4%
<b>Allergy status documented (n=182)</b>	73%	75.8%

Table 4-1 sets out the key study sample data. Just fewer than 1500 medicines were prescribed on the discharge summary/TTA across 182 patients (mean of 7.6 medicines per patient, national 6.9 medicines per patient). This is slightly higher than a study conducted by Gallagher in which the median number of medications in older hospitalised population (median age 82 years) across 6 different centres in Western Europe was found to be 6<sup>16</sup>. The median length of inpatient stay was approximately 4 days, although 2 patients had a stay of over 50 days. The majority (80%) of patients audited were admitted to hospital unplanned.

An area of high priority within this collaborative audit was to ascertain the quality of allergy status recording on discharge summaries/TTA in line with the recommendations made in the NICE CG 183 on Drug allergy: diagnosis and management<sup>17</sup>. The audit methodology required the Pharmacist conducting the audit to review the allergy status on the GP system first, secondly review the allergy documentation on the discharge summary/TTA and interpret whether the allergy status on the discharge summary/TTA corroborated with those details kept in the GP electronic systems whilst taking into account that the patient may have developed new allergies whilst admitted as an inpatient. Omission of allergies on the discharge summary/TTA could be indicative of the hospital not having the correct allergy status of the patient whilst admitted as an inpatient. The results showed that in 73% patients the allergy status was correctly documented which was slightly lower than

the 75.8% documented nationally. In addition the audit methodology required the Pharmacist to explore whether the description of the allergy reaction was documented on the discharge summary/TTA which is a key quality parameter in documenting allergy status, unfortunately the design of the audit questionnaire led to different interpretations of how the question should be answered and therefore led to results that were ambiguous and therefore were excluded in the final analysis.

**Figure 4-1: Discharge summary demographic and information data compliance**

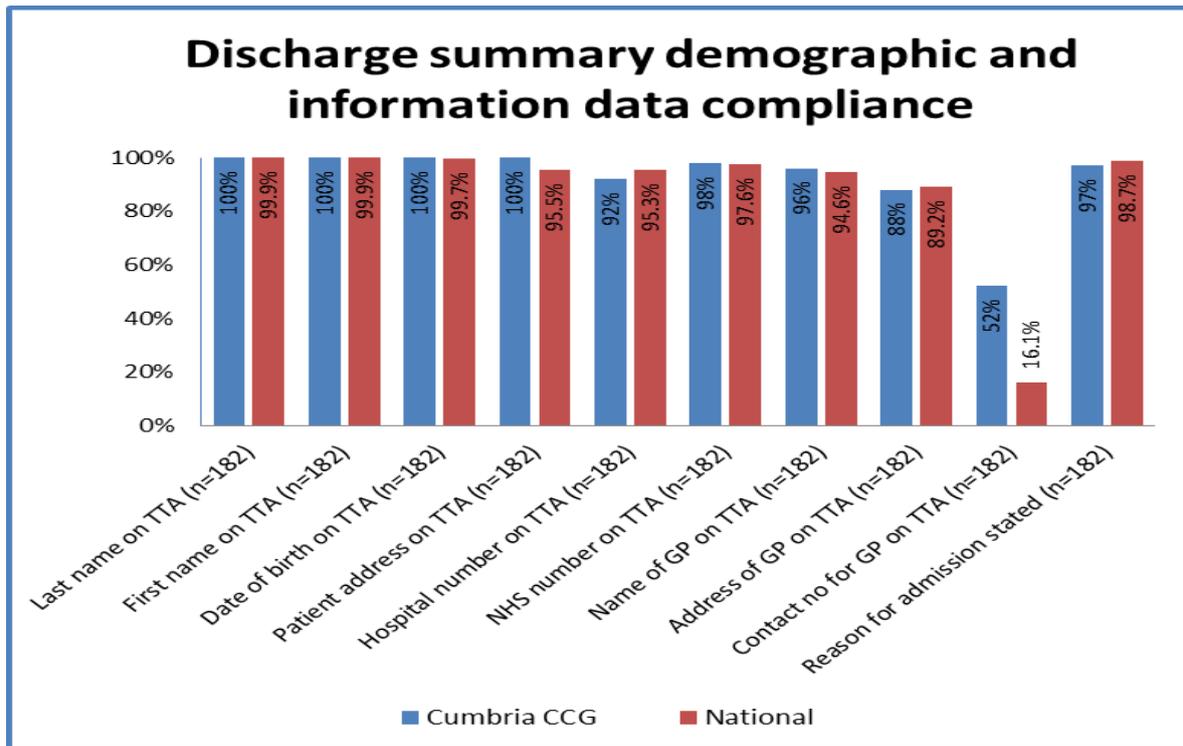
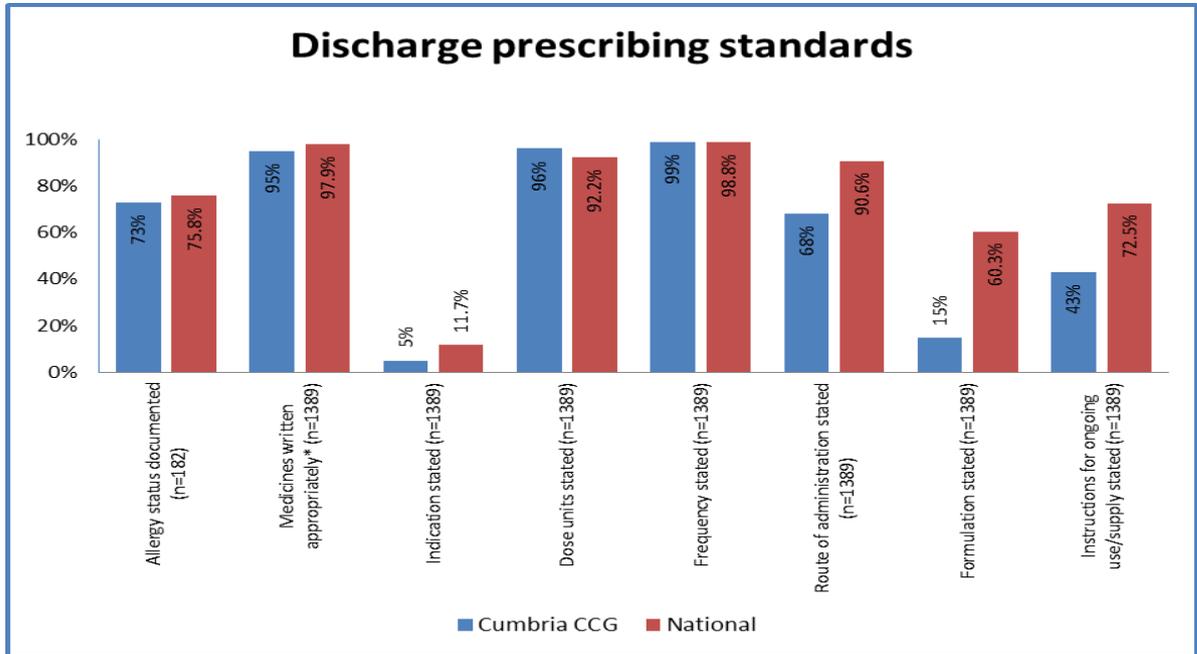


Figure 4-1 displays the compliance of key demographic data contained on discharge summaries/TTA. Compliance rates were generally above the 90<sup>th</sup> percentile and most above 95%, the exception being the contact telephone number of the GP practice which was only documented in 52% of discharge summaries/TTA (16.1% nationally). These results would partly be expected as the hospital patient administration system (PAS) should automatically populate the electronic discharge summary/TTA with such demographic details. Approximately 45% of the discharge summaries/TTAs audited were electronically generated which supports the accurate population of demographic data. This is half the national figure of 89%. However the higher percentage with a contact telephone number in Cumbria suggests that if a data field is not automatically populated because it is not contained on the PAS then there may be advantage to accessing and documenting the information manually. Similarly later in the report we see documentation of contact details of personnel more frequently recorded in Cumbria so perhaps this field is not easily captured electronically.

Figure 4-2: Discharge TTA prescription standards compliance



\*Medicines were considered to be written appropriately if written by generic name or if branded prescribing was warranted for example due to bioavailability issues or inhaler preparations where brand specificity is important.

Fig 4-2 displays whether medicines prescribed on the discharge summary/TTA were done so according to the standards set out in the RPS - Keeping patients safe when they transfer between care providers –getting the medicines right: Final Report<sup>11</sup>. A key factor that would influence these results is the discharge summary/TTA template. In view of standards clearly being available an opportunity to develop a template (particular when electronic) exists to ensure compliance to the standards set out by the RPS. Therefore the variability observed in Fig 4-2 is somewhat surprising particularly around formulation and instructions for ongoing use. The low compliance rate of the indication being stated suggests that templates are not set up to record the indication for each drug. There may be several reasons for this firstly the same medicine can be used for several indications, secondly secondary care staff may not always know the indication the medicine is being used for particularly if it has no bearing on their admission and thirdly adding an indication for each drug may lead to increased confusion for the GP if it is not what they prescribed the medication for. The results show that medicines were generally prescribed appropriately i.e. using their generic name or where appropriate branded. The much lower percentage for formulation stated 15% (60.3% nationally) is likely to be the result of the higher percentage of handwritten discharge with no prompt on the form to include this detail. This will automatically populate for electronic discharges.

Table 4-2: Medication changes and communication at discharge for newly started medicines

	Cumbria CCG	National Audit Results
Percentage of patients audited who had at least one new	86% (155 patients)	79% (1146 patients)

<b>medicine started whilst an inpatient (n=182)</b>		
<b>Total no of medicines started across patients audited (n=182)</b>	393 Mean of 2.5 medicines started per patient audited	3164 Mean of 2.18 medicines started per patient audited
<b>Of the newly started medicines (n=393) what proportion had a reason documented?</b>	41%	49%
<b>For each patient were the newly started medicines incorporated / actioned on the GP prescribing system? (n=155)</b>	Yes = 64% No = 15% No action required* = 21% *for example where antibiotics, laxatives, analgesics may have been prescribed as a short course of therapy	Yes = 53% No = 13% No action required* = 34% *for example where antibiotics, laxatives, analgesics may have been prescribed as a short course of therapy
<b>For each patient were any of the recommendations around newly started medicines intentionally disregarded? (n=155)</b>	Yes = 18% No = 81% Data unavailable = 1%	Yes = 16% No = 78.6% Data unavailable = 5.7%
<b>For each patient were any recommendations around starting medicines actioned incorrectly? (n=155)</b>	Yes = 7% No = 89% Data unavailable = 4%	Yes = 5.7% No = 93.2% Data unavailable = 1.1%

Table 4-2 displays information regarding patients within the audit sample who had new medicines commenced during their inpatient hospital stay. The data shows that 155 patients (86%) of the study sample had at least one medicine started whilst an inpatient, 19 patients (10.4%) had 5 or more new medicines started and one patient had 13 new medicines started during their inpatient admission. In total there were 393 new medicines started across the study sample, of these medicines only 41% (49% nationally) had reason documented of why the medicine was being commenced. The lack of documentation regarding why the medicines have been started is of a significant concern, the CQC<sup>18</sup> in 2009 highlighted in a report that acute trusts need to improve the information they provide on changes to medication and made a recommendation as follows “*Ensure that contracts with acute trusts set out the requirements and quality markers for both the timeliness and content of discharge summaries. Information on diagnosis, changes to medication and the reason for them must be included. They should put in place contract variations to set this in place at the earliest opportunity, including incentives through the commissioning for higher quality and innovation (CQUIN) system and penalties for poor contract performance*”. Similarly qualitative research undertaken within the landmark Practice study<sup>1</sup> discussed some of the difficulties that GPs face when dealing with hospital discharge medications, in particular GPs highlighted the need for the wording of hospital correspondence to be clear and accurate with any medication changes clearly highlighted. One possible explanation for the low results observed in the audit regarding the rationale for drug commencement being documented could be that the medicines commenced were for short courses and did not require the GP to continue the medicines e.g. painkillers, laxatives, short antibiotic courses etc. For example in 21% of patients that had medicines commenced the GP was not required to incorporate the started medicines into the GP prescribing system for continuation.

**Table 4-3: Medication changes and communication at discharge for medicines that have been stopped**

	Cumbria CCG	National Audit Results
<b>Percentage of patients audited who had at least one medicine intentionally stopped whilst an inpatient (n=182)</b>	30% (54 patients)	27% (388 patients)
<b>Total no of medicines intentionally stopped across patients audited (n=182)</b>	97 Mean of 1.8 medicine intentionally stopped per patient audited	738 Mean of 0.51 medicines intentionally stopped per patient audited
<b>Percentage of patients who had at least one medicine omitted on their discharge summary/TTA (i.e. medicines they normally took prior to admission but which were unlikely to have been stopped) (n=182)</b>	22%	33%
<b>Total no of medicines omitted across patients audited (n=182)</b>	85 Mean of 2.1 medicines omitted per patient audited	1565 Mean of 1.1 medicines omitted per patient audited
<b>Of the medicines intentionally stopped (n=97) what proportion had a reason documented?</b>	47%	57%
<b>For each patient were the medicines that were intentionally stopped incorporated / actioned on the GP prescribing system? (n=54)</b>	Yes = 80% No = 20%	Yes = 74.5% No = 21.7% Data unavailable = 3.6%
<b>For each patient were any of the recommendations around stopping medicines intentionally disregarded? (n=54)</b>	Yes = 9% No = 91%	Yes = 12.6% No = 83.8% Data unavailable = 3.6%
<b>For each patient were any recommendations around stopping medicines actioned incorrectly? (n=54)</b>	Yes = 6% No = 94%	Yes = 6.7% No = 89.7% Data unavailable = 3.6%

Table 4-3 displays information regarding patients within the audit sample that had medicines stopped during their inpatient hospital stay. The data shows that 54 patients (30%) of the study sample had at least one medicine stopped whilst an inpatient, 11 patients (6%) had 3 or more medicines stopped and one patient had 8 medicines stopped during their inpatient admission. In total there were 97 medicines stopped across the study sample, of these medicines only 47% had reason documented of why the medicine was being stopped. The lack of documentation regarding why medicines have been stopped is concerning as described above.

Over the past few years many western health systems across the world have realised that there are many evidence-based guidelines to help clinicians initiate medicines and the use of multiple medicines (polypharmacy) has therefore increased significantly. In older people polypharmacy is associated with an increased risk of impaired physical and cognitive function, institutionalisation, hospitalisation and death<sup>19</sup>. The term de-prescribing is now being commonly used and is described as the process of tapering, stopping, discontinuing, or withdrawing drugs, with the goal of managing polypharmacy and improving outcomes. Although somewhat difficult to identify from this collaborative audit the effect of the de-prescribing agenda could be a contributory factor in the 30% of patients within this study sample that had their medicines stopped.

One of the questions in this collaborative audit focused on identifying medicines that were omitted on the discharge summary/TTA but existed on the pre admission medication list on the GP prescribing system and which were unlikely to have been stopped by the hospital medical staff. Within the study sample a total of 85 medicines were omitted on the discharge summary/TTA but were on the GP prescribing system and were unlikely to have been stopped by the hospital medical staff. This could be indicative of possibly a poor or lack of medicines reconciliation being undertaken at admission to hospital. The 85 medicines omitted in the study

sample equates to a mean of 2.1 medicines omitted per discharge summary/TTA (1.1 nationally), a study conducted by Dodds<sup>20</sup> displayed a similar finding to the national figure of 0.97 medicine omission rate per patient when observing the quality of medicines reconciliation at hospital admission. This double mean figure in Cumbria may represent cause for concerns about medicines reconciliation processes.

**Table 4-4: Medication changes and communication at discharge for medicines with dose changes**

	Cumbria CCG	National Audit Results
<b>Percentage of patients audited who had the dose of at least one of their medicines changed whilst an inpatient (n=182)</b>	27% (50 patients)	23% (336 patients)
<b>Total no of medicines that had a dose change across patients audited (n=182)</b>	76 Mean of 1.5 medicines that had a dose change per patient audited	477 Mean of 0.32 medicines that had a dose change per patient audited
<b>Of the medicines with dose changes what proportion had a reason documented</b>	82%	39%
<b>Were the medicines that had dose changes incorporated / actioned on the GP prescribing system? (n=50)</b>	Yes = 76% No = 24%	Yes = 64.9% No = 34.5% Data unavailable = 0.6%
<b>Were any of the recommendations around dose changes intentionally disregarded? (n=50)</b>	Yes = 24% No = 76%	Yes = 22.9% No = 76.5% Data unavailable = 0.6%
<b>Were any recommendations around dose changes actioned incorrectly? (n=50)</b>	Yes = 12% No = 88%	Yes = 8.6% No = 89.9% Data unavailable = 1.5%

Table 4-4 displays information regarding patients within the audit sample that had medicine doses changed during their inpatient hospital stay. The data shows that 50 patients (27%) of the study sample had the dose of at least one of their medicines changed. 7 patients (3.8%) had 3 or more of their medicines changed with respect to its dose. In total there were 76 medicines that had their doses changed across the study sample, of these medicines 82% compared to 39% nationally had reason documented of why the dose had changed. For 12% patients recommendations around dose changes were actioned incorrectly (8.6% nationally). The lack of documentation regarding why medicines have been stopped is concerning as described previously.

**Table 4-5: Contact details and format of discharge summary/TTA**

	Cumbria CCG	National Audit Results
<b>Was there any evidence that the discharge summary/TTA had been clinically reviewed (screened) by the Pharmacist? (n=182)</b>	Yes – 20% No - 80%	Yes – 49% No - 51%
<b>Was there a contact name of the screening Pharmacist? (n=36)</b>	Yes - 22% No - 78%	Yes - 88% No - 12%
<b>Was there a contact number of the screening Pharmacist? (n=36)</b>	Yes - 6% No - 94%	Yes - 4% No - 95% Data unavailable- 1%
<b>Was the name of the consultant/discharging Dr documented on discharge summary/TTA? (n=182)</b>	Yes – 95% No – 5%	Yes – 96% No - 4%
<b>Was the contact details of the consultant/discharging Dr documented on discharge summary/TTA? (n=182)</b>	Yes - 75% No - 25%	Yes – 57% No - 43%
<b>Was the discharge summary/TTA electronically or hand written? (n=181)</b>	Electronic - 45% Handwritten - 55%	Electronic - 89% Handwritten - 11%
<b>How did the GP receive the discharge summary/TTA? (n=179)</b>	Electronically - 50% Posted - 30%	Electronically - 72% Posted - 12%

	Unable to identify - 20%	Unable to identify - 16%
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Table 4.5 shows the frequency with which the contact details of the Pharmacist and Drs was documented on the discharge summary/TTA. The results showed that in 20% of the discharge summaries/TTAs audited there was clear evidence that the discharge summary/TTA had been clinically reviewed (screened) by the secondary care Pharmacist (49% nationally). Within these discharge summaries the minority (22%) contained the name of the reviewing Pharmacist, however only 6% of the discharge summaries/TTAs contained the contact details of the reviewing Pharmacist. A possible explanation of this is that many Pharmacists are rotational and therefore do not have a designated telephone contact or bleep number. In the 80% of discharge summaries classified as not having been clinically reviewed (screened) there is a possibility that they may have been clinically reviewed (screened) but the way in which the discharge summary/TTA template is designed there is no way of ascertaining that it has been clinically reviewed (screened) by the Pharmacist. With regards to the consultant and/or discharging Dr's contact details 95% of discharge summaries/TTAs audited contained their name and 75% contained their contact details (57% nationally). As previously commented contact details may be a more difficult field to populate electronically.

Table 4.5 also shows the format in which the discharge summary/TTA was written and delivered to the GP. Less than half (45%) of discharge summaries/TTAs audited within the sample were generated and delivered electronically. Anecdotal experience suggests that the majority of acute hospitals generate electronically discharge summaries/TTAs, community hospitals and mental health trusts are perhaps more likely to generate hand written discharge summaries/TTAs. Cumbria Partnership Foundation Trust has both mental health and community hospitals so this is perhaps impacting the proportion of electronically generated discharge summaries. However other local Trusts e.g. North Cumbria University Hospitals Trust have still not adopted electronic discharge prescriptions with respect to medicines containing information. This figure of 45% is almost half the national figure. One of the key priorities for action within the NICE Medicines Optimisation Guidance<sup>21</sup> is to improve medicines related communication systems when patients move from one care setting to another, a key enabler to meet this standard would be to have electronic discharge communication.

**Table 4-6: Medication reconciliation in primary care:**

	Cumbria CCG	National Audit Results
<b>For medicines that were Started/Stopped or Doses Changed during the hospital inpatient stay, were the changes actioned by the GP within 7 days of the discharge being received? (n=179)</b>	Yes = 72% No = 8% No action required = 20%	Yes = 45.5% No = 12.5% No action required = 42%

<p><b>Who carried out the medicines reconciliation within the GP surgery for the discharge summaries received? (n=181)</b></p>	<p>GP = 65%</p> <p>CCG/Practice Pharmacist = 2%</p> <p>No requirement to undertake Medicines Reconciliation* = 2%</p> <p>Practice Receptionist = 4%</p> <p>Unable to identify = 4%</p> <p>Other = 23%</p> <p>* in these datasets it was difficult to ascertain why these options had been chosen and to draw conclusions</p>	<p>GP = 51.49%</p> <p>No requirement to undertake Medicines Reconciliation* = 15.1%</p> <p>Unable to identify = 7%</p> <p>CCG/Practice Pharmacist = 6.59%</p> <p>Not undertaken* = 5.69%</p> <p>Practice Receptionist = 5.55%</p> <p>Practice Nurse = 0.49%</p> <p>Practice Manager = 0.07%</p> <p>Other = 8.05%</p> <p>* in these datasets it was difficult to ascertain why these options had been chosen and to draw conclusions</p>
<p><b>Was the medicines reconciliation process READ coded? (n=174)</b></p>	<p>Yes =21%</p> <p>No = 79%</p>	<p>Yes =17%</p> <p>No = 83%</p>
<p><b>Was there any evidence that the patient was involved in the medicines reconciliation by the GP surgery? (n=178)</b></p>	<p>Yes =23%</p> <p>No = 77%</p>	<p>Yes =16.5%</p> <p>No = 83.5%</p>

One of the key standards in the NICE Medicines Optimisation Guidance<sup>21</sup> is that medicines reconciliation should be carried out for all people who have been discharged from hospital or another care setting and should happen as soon as is practically possible, before a prescription or new supply of medicines is issued and within 1 week of the GP practice receiving the information. This collaborative audit aimed to establish what the current practice was and whether this standard was being met. The results demonstrated that in approximately 72% of patients of the study sample medicines reconciliation did occur within 7 days of the GP receiving the discharge summary (45% nationally, however a larger proportion in national figures recorded no action required). This was verified in the audit by checking those patients that had changes in their medicines (started, stopped or doses changed) and whether their medicine changes were actioned on the GP prescribing system within 7 days of the GP receiving the discharge summary. In 20% of the patients audited, no actions regarding medicines were required to be taken by the GP following discharge, although medicines reconciliation should/must have occurred to identify that no actions were indeed required one of the limitations of the audit methodology is that it was not have been possible to identify if this reconciliation actually took place as there were no documented and dated medication changes on the GP prescribing system to check for. In 8% of the patients audited it was clear that medicines reconciliation did not occur within 7 days of the GP receiving the discharge summary (12.5% nationally). In the majority (79%) of patients audited the medicines reconciliation process was not READ coded. Although one of the limitations of the audit methodology was the

ability to identify whether the patient was involved in any medicines reconciliation by the GP, in 23% of patients audited there was clear documentation that the patient had been involved in the medicines reconciliation in primary care which is pleasing (higher than the national figure of 16%. However this may be a reflection of having to contact the patient in more instances in order to reconcile the medicines.

One of the key aims of the audit was to identify which member of the GP practice team carried out the medicines reconciliation following a patient discharge from hospital. The results interestingly show that in 65% of the patients audited the GP was clearly involved in reconciling the patient's medication following discharge from hospital. This was higher than the national figure of 51.49%. However in the remainder of the patients there an array of team members from within the GP surgery that were involved in reconciling the patients medication ranging from the practice or CCG pharmacist to the practice receptionist. The higher proportion of other 23% in Cumbria compared to 8.5% national is likely to be due to practices having dedicated Medicines Managers involved in supporting processes involving medicines.

As part of the national data collection Pharmacists were asked to identify "*whether during the data collection was there a need at any point to contact anybody to clarify or resolve any issues for this particular patient with respect to their medicines*". In 25 (13.7%), (11.6% nationally) of the discharge summaries/TTA audited the Pharmacist reported "yes", of these 25 occasions where they were required to contact somebody, the GP was the person most frequently (44%) contacted, other professionals such as the Consultant, Community Pharmacist, Anticoagulant pharmacist were also contacted but particularly in Cumbria patients, carers and Medicines managers (28%). NB in some cases more than one person was contacted e.g. Medicines Manger and GP. During the data analysis it was difficult to know whether the audit question had been misinterpreted, the intention of the question was to find out whether the Pharmacist during the data collection had come across a potential patient safety incident and therefore needed to contact somebody to ensure that the patient's medication regimen was safe, however it was felt the question may have been misinterpreted and the Pharmacist's collecting the data have answered "yes" in response to needing to contact somebody to complete the data collection tool rather than ensuring a safe medication regimen. Despite this possible misinterpretation several of the Pharmacist collecting the data provided qualitative information of why they contacted the health professional (these are quoted verbatim below), this small amount of qualitative feedback clearly indicate that an intervention took place during the data collection to prevent possible patient harm.

*"GP to clarify new drugs which were not added to current PAM"*

*"Had to contact carer to re-iterate if atorvastatin had been stopped by hosp as not listed on TTA"*

*"At the time of discharge the dose of azithromycin had to be clarified CICwith as the wrong dose (1 om) was on the discharge instead of the usual PAM of 1 3x wkly."*

*"Checked with patient if they have enough supply for newly started anticoagulant drug until further sec care clinic"*

*"GP to follow up dose that was not changed"*

*"GP - Dose of mouthwash altered from formulary default to that recommended by specialist unit Practice manager re dose change"*

*"Potential for significant incident - SIRMS report filed"*

*"Illegible - had to phone eye clinic to check"*

*"GP to clarify new drugs which were not added to current medication list"*

## 5.0 Conclusions and Recommendations

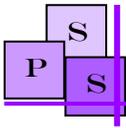
This is a high level report, further analysis will take place and further reports will follow. The result of this collaborative audit which we believe to be the largest of its kind concludes that:

- Communication around medication changes when patients transfer from secondary care to primary care requires significant improvement. *In Cumbria information about reason for stopped medications was lower than nationally whereas information on why dose changes was twice as likely to have been documented than nationally.*
- Secondary care providers to consider including the details of the reviewing/screening Pharmacist with their contact details so that primary care clinicians can contact them to clarify any issues
- Secondary care providers to utilise Summary Care Records (SCR) to ensure that medicines reconciliation at admission is robust as this will affect the quality of medicines related information contained in the discharge summary/TTA. *In Cumbria the mean number of medicines omitted per patient audited was double the national figure which may be a reflection on the quality of medicines reconciliation processes.*
- CCGs and secondary care providers should collaborate to review the local hospital discharge template to ensure that it meets the needs of all involved, is in line with the standards set by the RPS and Academy of Royal Colleges and supports transfer of medication related information
- GP practices should have clear processes in place on how information provided on discharge summaries/TTAs is managed once received. Consideration should be given to whose responsibility is to review medicines on the discharge summaries and who should action on the GP prescribing system. Consideration should be given to the role of clinical Pharmacist's in GP practices reconciling medicines post discharge from secondary care. *In Cumbria primary care had a higher than national proportion of GPs involved in the reconciliation process and less (8% compared to 12.5%) had not actioned the changes within 7 days. However accuracy following recommendations around dose changes was actioned incorrectly in 12% compared to 8.6% nationally. The benefits of adopting a consensus READ code locally for reconciling medicines at discharge should be considered and implemented.*
- CCGs to consider developing CQUINs to drive improving the quality of discharge communication by secondary care as previously recommended by the CQC.

## 6.0 Participating CCGs

Medicines Use and Safety, NHS Specialist Pharmacy Services would like to sincerely thank the CCGs that participated in this collaborative audit for their time, expertise, feedback and willingness to support.

<ul style="list-style-type: none"> <li>▪ Barnet</li> <li>▪ Brent</li> <li>▪ Central Manchester</li> <li>▪ City and Hackney</li> <li>▪ Coastal West Sussex</li> <li>▪ Cumbria</li> <li>▪ Doncaster</li> <li>▪ Ealing</li> <li>▪ East Sussex</li> <li>▪ Eastbourne</li> <li>▪ Fylde and Wyre</li> <li>▪ Harrow</li> <li>▪ Hartlepool and Stockton</li> </ul>	<ul style="list-style-type: none"> <li>▪ Merton</li> <li>▪ Mid Essex</li> <li>▪ Newcastle and Gateshead</li> <li>▪ North Tyneside</li> <li>▪ North West Surrey</li> <li>▪ Oxfordshire</li> <li>▪ Portsmouth</li> <li>▪ Salford</li> <li>▪ Sheffield</li> <li>▪ Slough</li> <li>▪ South Gloucestershire</li> <li>▪ South Reading</li> <li>▪ South Tees</li> </ul>
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<ul style="list-style-type: none"><li>▪ Hastings and Rother</li><li>▪ Herefordshire</li><li>▪ Hillingdon</li><li>▪ Inner North West London</li><li>▪ Isle of Wight</li><li>▪ Islington</li><li>▪ Kingston</li><li>▪ Leeds South and East</li></ul>	<ul style="list-style-type: none"><li>▪ Surrey Downs</li><li>▪ Surrey Health</li><li>▪ Waltham Forest</li><li>▪ West Essex</li><li>▪ Wigan</li><li>▪ Windsor, Ascot and Maidenhead</li><li>▪ Wokingham</li></ul>
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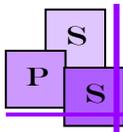
## 7.0 Acknowledgements

The members of the steering group that helped develop, pilot and validate this audit are detailed below. MUS would like to sincerely thank them for their time, support and expertise.

- Gwen Hopkins - Inner NW London CCGs
- Brian Mackenna - Islington CCG
- Helen Marlowe - Surrey Downs CCG
- Louisa Griffiths - Oxfordshire CCG
- Theodora Michael - Brent CCG
- Michelle Liddy - National Institute of Clinical and Healthcare Excellence
- Dr Bryony Dean Franklin - Centre for Medication Safety and Service Quality, Imperial College Healthcare NHS Trust
- Dr Zoe Aslanpour – Department of Pharmacy, University of Hertfordshire
- Dr Sara Garfield - Centre for Medication Safety and Service Quality, Imperial College Healthcare NHS Trust
- Louise Maunick - Medway NHS Foundation Trust
- Dr Carina Livingstone – Medicines Use and Safety, NHS Specialist Pharmacy Service
- Julia Wright – Medicines Use and Safety, NHS Specialist Pharmacy Service
- Samantha Xavier-James – Medicines Use and Safety, NHS Specialist Pharmacy Service

## 8.0 References

1. Avery T, Barber N, Ghaleb M et al. Investigating the prevalence and causes of prescribing errors in general practice: The PRACtICE Study. Nottingham: General Medical Council 2011.
2. Grimes TC, Duggan CA, Delaney TP et al. Medication details documented on hospital discharge: cross sectional observational study of factors associated with medication non-reconciliation. *British Journal of Clinical Pharmacology* 2011. Vol 71 (3); 449-457
3. Barber ND, Aldred, DP, Raynor DK et al. Care homes' use of medicines study: prevalence, causes and potential harm of medication errors in care homes for older people. *Quality and Safety of Healthcare* 18:341-346.
4. Collins DJ, Nickless GD, Green CF. Medication histories; does anyone know what medicines a patient should be taking? *Int J Pharmacy Practice* 2004, 12:173-178.
5. Hippisley-Cox JH, Pringle M, Cater R et al. The electronic patient record in primary care- regression or progression? A cross sectional study. *Br Med J* 2003;236:1439-1443.
6. Dodds LJ. Unintended discrepancies between pre-admission and admission prescriptions identified by pharmacy-led medicines reconciliation: results of a collaborative service evaluation across East and SE England. *IJPP* 18 (Supp 2) September 201 pp9-10
7. National Institute for Health and Clinical Excellence. Medicines adherence. Involving patients in decisions about prescribed medicines and supporting adherence. NICE Clinical Guideline 76. 2009. [www.nice.org.uk/CG76](http://www.nice.org.uk/CG76)
8. Academy of Medical Royal Colleges. A Clinician's Guide to Record Standards – Part 1: Why standardise the structure and content of medical records? 2008. [www.rcoa.ac.uk/docs/Clinicians-Guide-Part-1-Context.pdf](http://www.rcoa.ac.uk/docs/Clinicians-Guide-Part-1-Context.pdf)
9. Hammad E, Wright D, Walton C et al. Adherence to UK national guidance for discharge information: an audit in primary care. *British Journal of Clinical Pharmacology* 2014. Vol 78 (6); 1453-1464
10. National Prescribing Centre. Medicines reconciliation: a guide to implementation. 2008. Available at [http://www.npc.nhs.uk/improving\\_safety/medicines\\_reconciliation/implementation.php](http://www.npc.nhs.uk/improving_safety/medicines_reconciliation/implementation.php) (last accessed 3 August 2014).
11. Royal Pharmaceutical Society. Keeping patients safe when they transfer between care providers –getting the medicines right. Final Report 2012.
12. HSCIC Standards for the clinical structure and content of patient records, Royal College of Physicians 2013.
13. Department of Health .The discharge Summary Tool Kit, Department of Health, 2011.
14. National Institute for Health and Clinical Excellence (NICE). Medicines optimisation: the safe and effective use of medicines to enable the best possible outcomes. March 2015, available at: <https://www.nice.org.uk/guidance/ng5> (Accessed 28th March 2015)
15. NHS England. Review of National Reporting and Learning System (NRLS) incident data relating to discharge from acute and mental health trusts – August 2014.
16. Gallagher P, Lang PO, Cherubini A et al (2011). 'Prevalence of potentially inappropriate prescribing in an acutely ill population of older patients admitted to six European hospitals'. *European Journal of Clinical Pharmacology*, vol 67, pp 1175–88.
17. National Institute for Health and Clinical Excellence (NICE). Clinical Guideline 183: Drug allergy: diagnosis and management. Sept 2014. Available at <https://www.nice.org.uk/guidance/cg183> (Accessed 28th October 2015)
18. Care Quality Commission (CQC). Managing patients' medicines after discharge from hospital. October 2009. Accessed on 13<sup>th</sup> April 2016 via [http://webarchive.nationalarchives.gov.uk/20101201001009/http://www.cqc.org.uk/db/documents/Managing\\_patients\\_medicines\\_after\\_discharge\\_from\\_hospital.pdf](http://webarchive.nationalarchives.gov.uk/20101201001009/http://www.cqc.org.uk/db/documents/Managing_patients_medicines_after_discharge_from_hospital.pdf)
19. Hilmer SN, Gnjdic D. The effects of polypharmacy in older adults. *Clin Pharmacol Ther* 2009;85:86-8.
20. Dodds L. Medicines Use and Safety. Results of a Collaborative Audit of Pharmacy-led Medicines Reconciliation (MR) in 56 trusts across E & SE England. May 2010. Accessed 13<sup>th</sup> April 2016 via <http://www.medicinesresources.nhs.uk/en/Communities/NHS/SPS-E-and-SE-England/Meds-use-and-safety/Service-deliv-and-devel/Meds-reconciliation/Report--Collaborative-Audit-of-Medicines-Reconciliation--May-2010/>
21. National Institute for Health and Clinical Excellence (NICE). Medicines optimisation: the safe and effective use of medicines to enable the best possible outcomes. March 2015, available at: <https://www.nice.org.uk/guidance/ng5> (Accessed 28th March 2015)



Appendix 1: Invitation letter

Medicines Use and Safety  
Northwick Park Hospital  
Harrow  
HA1 3UJ

1<sup>st</sup> Nov 2015

**To: All CCG Pharmacy Leads/Heads of Medicines Management**  
**CC: All Secondary Care Chief Pharmacists**

Dear CCG Colleague,

**Re: Collaborative audit across England on the quality of medication related information provided when transferring patients from secondary care to primary care and the subsequent medicines reconciliation in primary care**

We would like to invite you to participate in a collaborative audit that we are undertaking across England on the quality of medication related information provided when transferring patients from secondary care to primary care and the subsequent medicines reconciliation in primary care. Evidence currently suggests that the transfer of medicines related information from secondary care to primary care and the subsequent follow up of information in primary care is not optimal<sup>1,2,3,4,5</sup>.

The audit methodology and tools have been developed by a steering group who have also piloted and validated the approach across five CCGs. The pilot indicates that each patient discharge audited will take approximately 20-30 min. The audit requires the data collection to be undertaken in the GP surgery by a primary care (Practice/CCG/CSU) Pharmacist. Each CCG is encouraged to audit as many patient discharges as they can (minimum of 1 patient discharge audit per 50,000 population within CCG is required to participate). The data collection for the audit can take place anytime between **Monday 4<sup>th</sup> January and Friday 29<sup>th</sup> January 2016**. All data must be submitted to the Medicines Use and Safety Division by no later than **31<sup>st</sup> January 2016**.

Each CCG will be provided an analysis of their data submitted along with the country-wide dataset which can be used for local purposes. In addition secondary care NHS trusts will be provided with data identified about discharges from their organisation for their own local use. No patient identifiable data will be collected, and for the purposes of any publications and reports all data will be anonymised.

If you would like to participate in this collaborative audit please kindly let me know via the email address below. Upon this you will be provided with all the necessary information to undertake the audit.

If you require any further information please contact me directly on [chetanshah@nhs.net](mailto:chetanshah@nhs.net).

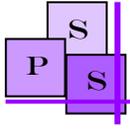
**Yours Sincerely**

**Chetan Shah**  
**Associate Director – Medicines Reconciliation Lead**

**References**

1. Avery T, Barber N, Ghaleb M et al. Investigating the prevalence and causes of prescribing errors in general practice: The PRACTICE Study. Nottingham: General Medical Council 2011.
2. Grimes TC, Duggan CA, Delaney TP et al. Medication details documented on hospital discharge: cross sectional observational study of factors associated with medication non-reconciliation.
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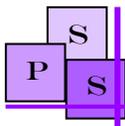
**Winner: Dressings, PrescQIPP Innovation awards 2013; Winner: RPS Pharmaceutical Care Award 2013**  
**Finalist: HSJ Patient safety in primary care award 2013; Winner: UKCPA/Guild Conference Best Poster award 2013**



Appendix 3: Audit Protocol

# Audit Protocol

**Collaborative audit across England on the quality of medication related information provided when transferring patients from secondary care to primary care and the subsequent medicines reconciliation in primary care**



## Background

Evidence suggests that the transfer of information regarding medicines from secondary care to primary care is far from optimal<sup>1,2,3,4,5</sup>. Often the information provided to general practitioners (GPs) following discharge can be inadequate, inaccurate or not timely. Similarly there is evidence that GPs do not always act upon the information provided in the discharge summary. Many agencies have made recommendations and developed toolkits to support transfer of information<sup>6,7,8</sup> between secondary and primary care. Despite this between October 2012 and September 2013 there were around 10,000 reports NRLS of patient safety incidents related to discharge with communication at handover being identified as a particular area of risk and accounting for approximately 33% of the incidents<sup>9</sup>. In August 2015 NHS England issued a Patient safety Alert on the risks arising from breakdown and failure to act on communication during handover at the time of discharge from secondary care.

## Aims of the audit

- To assess the quality of information regarding medicines within discharge summaries provided by secondary care (Acute, Mental Health and Community Services)
- To determine whether GPs have correctly acted upon the information provided regarding medicines in the discharge summaries within 7 days of receiving the discharge information (NICE Medicines Optimisation Standard)

## Audit Methodology

### Preparation

<b>Step 1</b>	Identify a Pharmacist(s) to conduct the audit. The audit must be conducted by a Pharmacist as the data collection requires the interpretation of clinical information and use of clinical judgement. The data collection for the audit can take place anytime between <b>Monday 4<sup>th</sup> January and Friday 29<sup>th</sup> January 2016</b> . All data must be submitted to the Medicines Use and Safety Division by no later than <b>31<sup>st</sup> January 2016</b> .
<b>Step 2</b>	Nominated Pharmacist to review the Audit Protocol, Data Collection Form and Hints and Tips Document.
<b>Step 3</b>	Decide on the number of discharge summaries to be audited. CCGs are encouraged to audit as many discharges as possible (minimum 1 per 50,000 population per CCG) as this will provide more meaningful data for local use.
<b>Step 4</b>	Identify which GP surgeries are to be utilised to complete the audit. It is recommended that a selection of GP surgeries are used as audit sites to remove any potential bias, however it is acknowledged that this may not be possible due to lack of resources. Methodology to randomise which GPs surgeries are utilised to complete the audit has not been provided, using your own links/networks to identify sites is considered to be more effective.
<b>Step 5</b>	The nominated Pharmacist must become familiar with the data collection form. Word and Excel versions of the data collection form have

	been provided. Data can either be entered directly onto the Excel spreadsheet or the Word copy can be printed off and be used as a hardcopy to capture the data which will then need to be transferred to the Excel spreadsheet. If using the Word copy ensure that enough copies are printed off to complete the audit (one data collection form per discharge summary/TTA being audited. All data must be sent via email on the Excel spreadsheet.
<b>At the GP surgery identifying patient discharges to be audited</b>	
<b>Step 6</b>	Speak to the practice manager (or other appropriate person) and obtain a list of patients discharged from an NHS secondary care trust (acute, mental health or community health) following an inpatient stay. Ideally the patient should have been discharged over the past 3 months (October, November and December 2015). It may be possible to do this yourself via the GP information system.
<b>Step 7</b>	Number each patient on the list starting from 1. Use consecutive sampling methodology and identify patients to be audited by choosing every 2 <sup>nd</sup> patient until your required sample size is reached. <i>If consecutive sampling is not practical i.e if sufficient patients are not identified then you can choose patients in a sequential order starting from the first patient.</i>
<b>At the GP surgery completing the data collection form</b>	
<b>Step 8</b>	From the GP Information system obtain the discharge summary/TTA that the GP surgery received for the patient following inpatient stay. The discharge summary can be from any secondary care NHS trust (Acute, Mental Health, Community Health, and Intermediate Care), it can be for children as well as adults etc.
<b>Step 9</b>	From the GP information system decipher and document the medication list that the patient was taking prior to their hospital admission, this list will now be referred to as the Pre Admission Medication (PAM) list. <i>In essence conduct a retrospective medicines reconciliation using the information available on the GP system, it is suggested that a list of all medications issued (in addition add any medications that are issued by other providers if that information is available) in the 3 months prior to admission to hospital is made. This part of the audit may take some time and may need clinical judgement.</i>
<b>Step 10</b>	Use the discharge summary TTA and the PAM list to complete the Audit Data Collection Form
<b>Step 11</b>	For questions 20-23 other aspects of the GP information system will need to be used
<b>Step 12</b>	If the Word version of the data collection form has been used transfer the data onto the Excel spreadsheet

<b>Step 13</b>	Check the data inputted onto the Excel spreadsheet for accuracy
<b>Step 14</b>	Save excel spreadsheet as your name and CCG name e.g. <i>chetanshahlondonccg</i>
<b>Step 15</b>	Send Excel Spreadsheet as an attachment to <a href="mailto:chetanshah@nhs.net">chetanshah@nhs.net</a> by 31 <sup>st</sup> January 2016. Please state “ <i>Data - Collaborative audit across England on the quality of medication related information provided when transferring patients from secondary care to primary care and the subsequent medicines reconciliation in primary care</i> ” as the subject title

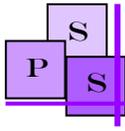
### Acknowledgements

The members of the steering group that helped develop, pilot and validate this audit are detailed below. MUS would like to sincerely thank them for their time, support and expertise

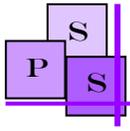
<b>Gwen Hopkins</b>	Inner NW London CCGs
<b>Brian Mackenna</b>	Islington CCG
<b>Helen Marlowe</b>	Surrey Downs CCG
<b>Louisa Griffiths</b>	Oxfordshire CCG
<b>Theodora Michael</b>	Brent CCG
<b>Michelle Liddy</b>	National Institute of Clinical and Healthcare Excellence
<b>Dr Bryony Dean franklin</b>	Centre for Medication Safety and Service Quality, Imperial College Healthcare NHS Trust
<b>Dr Zoe Aslanpour</b>	University of Hertfordshire
<b>Dr Sara Garfield</b>	Centre for Medication Safety and Service Quality, Imperial College Healthcare NHS Trust
<b>Louise Maunick</b>	Medway NHS Foundation Trust
<b>Jane Hough</b>	Medicines Use and safety, NHS Specialist Pharmacy Service
<b>Dr carina Livingstone</b>	Medicines Use and safety, NHS Specialist Pharmacy Service
<b>Julia Wright</b>	Medicines Use and safety, NHS Specialist Pharmacy Service
<b>Samantha Xavier-James</b>	Medicines Use and safety, NHS Specialist Pharmacy Service

### References

1. Avery T, Barber N, Ghaleb M et al. Investigating the prevalence and causes of prescribing errors in general practice: The PRACTiCe Study. Nottingham: General Medical Council 2011.
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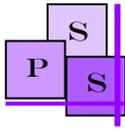
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7. HSCIC Standards for the clinical structure and content of patient records, Royal College of Physicians 2013.
8. National Institute for Health and Clinical Excellence (NICE). Medicines optimisation: the safe and effective use of medicines to enable the best possible outcomes. March 2015, available at: <https://www.nice.org.uk/guidance/ng5> (Accessed 28th March 2015)
9. NHS England. Review of National Reporting and Learning System (NRLS) incident data relating to discharge from acute and mental health trusts – August 2014.



Appendix 4: Audit Data Collection Form

# **Audit Data Collection Form**

**Collaborative audit across England on the quality of medication related information provided when transferring patients from secondary care to primary care and the subsequent medicines reconciliation in primary care**



**Audit Instructions:**

- Please ensure you have read the **Audit Protocol** and **Hints and Tips Document** before undertaking the data collection
- Please ensure that you have the calendar provided ready to hand when conducting the data collection
- Complete only one data collection form per discharge summary/TTA being audited
- Complete details in the table below prior to data collection

Anonymised Patient Identifier:	
Name of CCG:	
Email contact details for audit coordinator:	

**Data Collection Form:**

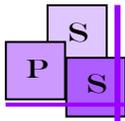
Question Number	Audit Standard	Data Collection																					
<b>Demographics</b>																							
1	Which of the patient's details are documented on the discharge summary/TTA?	Please tick all identifiers that are present: <table style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th style="text-align: center;">Yes</th> <th style="text-align: center;">No</th> </tr> </thead> <tbody> <tr> <td>Last name</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>First name</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Date of birth</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Patient address</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Hospital number</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>NHS number</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </tbody> </table>		Yes	No	Last name	<input type="checkbox"/>	<input type="checkbox"/>	First name	<input type="checkbox"/>	<input type="checkbox"/>	Date of birth	<input type="checkbox"/>	<input type="checkbox"/>	Patient address	<input type="checkbox"/>	<input type="checkbox"/>	Hospital number	<input type="checkbox"/>	<input type="checkbox"/>	NHS number	<input type="checkbox"/>	<input type="checkbox"/>
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Patient address	<input type="checkbox"/>	<input type="checkbox"/>																					
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NHS number	<input type="checkbox"/>	<input type="checkbox"/>																					
2	Complete the requested pieces of data using the information contained in the discharge summary/TTA?	- Age:            ___ yrs - Gender:        M <input type="checkbox"/> F <input type="checkbox"/> - Date of Admission: ___/___/___ - Date of Discharge: ___/___/___																					

		<p>- Day of Discharge (please circle) M T W T F S S</p> <p>- Length of stay (date of discharge – date of admission) _____ days (Excel will calculate this)</p> <p>- Date discharge summary/TTA received by surgery _____</p> <p>- Time delay in GP receiving discharge summary/TTA (Date discharge summary/TTA received by surgery – Date of Discharge) _____ days (Excel will calculate this)</p> <p>- Was the admission: Planned <input type="checkbox"/> Unplanned <input type="checkbox"/> Not known <input type="checkbox"/></p>												
3	Which of the patient's General Practitioners details are documented on the discharge summary/TTA?	<p>Please tick all identifiers that are present:</p> <table border="0"> <thead> <tr> <th></th> <th style="text-align: center;">Yes</th> <th style="text-align: center;">No</th> </tr> </thead> <tbody> <tr> <td>GP/Surgery Name</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Address</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Contact Tel No</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </tbody> </table>		Yes	No	GP/Surgery Name	<input type="checkbox"/>	<input type="checkbox"/>	Address	<input type="checkbox"/>	<input type="checkbox"/>	Contact Tel No	<input type="checkbox"/>	<input type="checkbox"/>
	Yes	No												
GP/Surgery Name	<input type="checkbox"/>	<input type="checkbox"/>												
Address	<input type="checkbox"/>	<input type="checkbox"/>												
Contact Tel No	<input type="checkbox"/>	<input type="checkbox"/>												
4	Is the reason(s) for admission documented on the discharge summary/TTA?	Yes / No / Unclear (please circle)												
5	Which speciality (broadly) was the patient discharged from?	Medical <input type="checkbox"/> Surgical <input type="checkbox"/> Paediatrics <input type="checkbox"/> Maternity <input type="checkbox"/> Not Known <input type="checkbox"/>												
6	State the name of the discharging hospital and the NHS Trust	<p>Discharging hospital _____</p> <p>NHS trust _____</p>												
<b>Discharge Summary Quality</b>														
7	Is the allergy status fully (any newly identified allergies plus known allergies from GP system) documented on the discharge summary/TTA?	Yes / No (please circle) <b>Note: If NKDA is documented, please circle YES)</b>												
8	If yes to question 7, <b>for every sensitizing agent</b> is a brief description of the allergy reaction documented on the discharge summary/TTA?	Yes / No (please circle)												
9	How many medicines are prescribed on the discharge summary/TTA? (Exclude wound care, nutritional supplements, medical devices etc.)	_____ (this will remain the denominator for questions 10-16)												

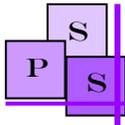
10	How many medicines are written appropriately with their generic name (consider branded prescribing as appropriate if applicable for example due to bioavailability issues or inhaler preparations where brand specificity is required)?	_____
11	How many medicines have their indication documented for its use? e.g. Oxybutynin 5mg M/R Tablets PO OD for <b>Urinary Incontinence</b>	_____
12	How many medicines have their dose units documented? e.g Oxybutynin <b>5mg</b> M/R Tablets PO OD for Urinary Incontinence	_____
13	How many medicines have their frequency documented? e.g Oxybutynin 5mg M/R Tablets <b>PO OD</b> for Urinary Incontinence	_____
14	How many medicines have their route of administration documented? e.g Oxybutynin 5mg M/R Tablets <b>PO</b> OD for Urinary Incontinence	_____
15	How many medicines have their formulation documented? e.g Oxybutynin 5mg <b>M/R Tablets</b> PO OD for Urinary Incontinence	_____
16	How many medicines have instructions for their ongoing use e.g whether it is to be continued, reviewed (with instructions), titrated or stopped? (use clinical judgement)	_____
<b>Communication of Medication Changes at Discharge and Reconciliation in Primary care</b>		
17	When comparing the Pre Admission Medication (PAM) list against the discharge summary/TTA review whether any medicines <b>have been started</b> during the inpatient stay:	<p>(a) The total no of medicines that have been started (i.e where the medicines exists on the discharge summary/TTA but not on the PAM list) _____</p> <p><b>If NO new medicines have been started go to question 18</b></p> <p>(b) How many of the medicines that have been started have a reason documented for starting the medicine on the discharge summary/TTA _____</p> <p>(c) Have the newly started medicines been incorporated /</p>

		<p>actioned on the GP prescribing system? <b>Yes/ No/ No Action Required</b> (please circle)</p> <p>(d) Were any of the recommendations around starting medicines intentionally disregarded <b>Yes or No</b> (please circle)</p> <p>(e) Were any recommendations around starting medicines actioned incorrectly <b>Yes or No</b> (please circle)</p>
18	<p>When comparing the Pre Admission Medication (PAM) list against the discharge summary/TTA review whether any medicines <b>have been stopped</b> during the inpatient stay:</p>	<p>(a) The total no of medicines that have been intentionally stopped i.e where the medicines exists on the PAM list but not on the discharge summary/TTA _____ (Note: Use clinical judgement as to whether medicines have been stopped or just been omitted off the discharge summary/TTA due to possibly a poor or lack of Med Rec at admission to hospital)</p> <p>(b) The total no of medicines that have been omitted on the discharge summary/TTA but exists on the PAM list and which are unlikely to have been stopped _____ (Note: Use clinical judgement as to whether medicines have been stopped or just been omitted off the discharge summary/TTA due to possibly a poor or lack of Med Rec at admission to hospital)</p> <p><b>If NO medicines have been stopped go to question 19</b></p> <p>(c) How many of the medicines that have been intentionally stopped have a reason documented for stopping the medicine on the discharge summary/TTA _____</p> <p>(d) Have the medicines that have been intentionally stopped been actioned on the GP prescribing system? <b>Yes/ No</b> (please circle)</p> <p>(e) Were any of the recommendations around stopping medicines intentionally disregarded <b>Yes or No</b> (please circle)</p> <p>(f) Were any recommendations around stopping medicines actioned incorrectly <b>Yes or No</b> (please circle)</p>

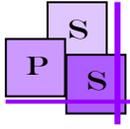
19	When comparing the Pre Admission Medication (PAM) list against the discharge summary/TTA review whether any medication <b>dose changes</b> have occurred during the inpatient stay:	<p>(a) The total no of medicines that have had dose changes or possible changes (i.e where the dose on the PAM list differs to that on the discharge summary/TTA) _____</p> <p><b>If NO medicines have had dose changes go to question 20</b></p> <p>(b) How many of the dose changes have a reason documented for the change in dose on the discharge summary/TTA _____</p> <p>(c) Have the medicines requiring a change in dose been incorporated/actioned on the GP prescribing system? <b>Yes/ No (please circle)</b></p> <p>(d) Were any of the recommendations around medication dose changes intentionally disregarded <b>Yes or No (please circle)</b></p> <p>(e) Were any recommendations around medication dose changes actioned incorrectly <b>Yes or No (please circle)</b></p>
20	If any actions were required as a result of medicines being Started/Stopped or Doses Changed during the hospital inpatient stay, were these actions carried out within 7 days of the discharge being received?	<b>Yes / No / No Actions Required (please circle)</b>
21	From reviewing information within the GP system who carried out the medicines reconciliation within the GP surgery for this particular discharge summary/TTA?	GP <input type="checkbox"/> CCG/Practice Pharmacist <input type="checkbox"/> Practice Nurse <input type="checkbox"/> Practice Manager <input type="checkbox"/> Practice Receptionist <input type="checkbox"/> Unable to Identify <input type="checkbox"/> Other _____ Medicines Reconciliation Not Undertaken <input type="checkbox"/>
22	If medicines were reconciled following receipt of the discharge summary/TTA was the medicines reconciliation process READ coded?	Yes / No
23	From reviewing information within the GP system, is there any evidence that the patient was	Yes / No



	involved in the medicines reconciliation by the GP surgery?										
<b>Contact Details</b>											
24	Is there any evidence that the discharge summary/TTA was clinically reviewed (screened) by the secondary care Pharmacist?	<p>Yes / No (<b>please circle</b>) If Yes, please tick which details are present:</p> <table style="width: 100%; border: none;"> <thead> <tr> <th style="width: 80%;"></th> <th style="text-align: center;">Yes</th> <th style="text-align: center;">No</th> </tr> </thead> <tbody> <tr> <td>Name of Pharmacist</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Contact details (e.g tel or blp)</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </tbody> </table>		Yes	No	Name of Pharmacist	<input type="checkbox"/>	<input type="checkbox"/>	Contact details (e.g tel or blp)	<input type="checkbox"/>	<input type="checkbox"/>
	Yes	No									
Name of Pharmacist	<input type="checkbox"/>	<input type="checkbox"/>									
Contact details (e.g tel or blp)	<input type="checkbox"/>	<input type="checkbox"/>									
25	Is there documentation of the contact details of the discharging Dr or Consultant on the discharge summary/TTA?	<p>Yes / No (<b>please circle</b>) If Yes, please tick which details are present:</p> <table style="width: 100%; border: none;"> <thead> <tr> <th style="width: 80%;"></th> <th style="text-align: center;">Yes</th> <th style="text-align: center;">No</th> </tr> </thead> <tbody> <tr> <td>Name of Dr/Consultant</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Contact details (e.g tel or blp)</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </tbody> </table>		Yes	No	Name of Dr/Consultant	<input type="checkbox"/>	<input type="checkbox"/>	Contact details (e.g tel or blp)	<input type="checkbox"/>	<input type="checkbox"/>
	Yes	No									
Name of Dr/Consultant	<input type="checkbox"/>	<input type="checkbox"/>									
Contact details (e.g tel or blp)	<input type="checkbox"/>	<input type="checkbox"/>									
26	Was the discharge summary/TTA Electronic (computer generated) or Hand written?	Electronic / Hand Written ( <b>please circle</b> )									
27	Was the discharge summary/TTA received electronically (via email) or posted to the GP surgery?	Electronically / Posted / Unable to identify ( <b>please circle</b> )									
<b>Patient Safety Issues</b>											



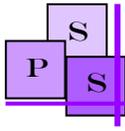
28	During the data collection was there a need at any point to contact anybody to clarify or resolve any issues for this particular patient with respect to their medicines?	Yes / No (please circle) If yes who was contacted _____
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**Appendix 5: Hints and Tips Document**

# **Hints and Tips Document**

**Collaborative audit across England on the quality of medication related information provided when transferring patients from secondary care to primary care and the subsequent medicines reconciliation in primary care**



## Background

This document aims to provide the Pharmacist(s) with some hints and tips when conducting the audit. Much of the information provided within this document is as a result of the feedback provided when the audit was piloted across a number of CCGs.

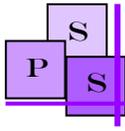
## Hints and Tips

### Prior to the audit:

- Read the Audit Protocol and Audit Data Collection Form
- Confirm which GP practices will be utilised for the purposes of the audit. If utilising several GP practices as audit sites, consider: (1) Using a variety of practice sizes (e.g small, medium and large practices, (2) Varying GP practice sites according to which secondary care NHS trust in the main serves the patients of that GP practice so that a range of secondary care trust discharge summary/TTAs are audited
- Having reviewed the Audit Protocol, Audit Data Collection Form and the Hints and Tips document if you have any queries please contact [chetan.shah@nhs.net](mailto:chetan.shah@nhs.net)

### When conducting the audit:

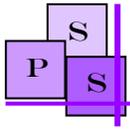
- Equipment required for completing the audit:
  - (a) Paper copies of audit forms (one per patient to be audited) or laptop if entering directly onto spreadsheet
  - (b) Paper copy of the 2015 calendar
  - (c) Copy of the audit protocol
  - (d) Copy of the hints and tips document
  - (e) Some scrap paper to note down the Pre Admission Medication (PAM) list.
- If inputting the data directly onto the Excel Spreadsheet, it is recommended that you work off a laptop rather than the computer in the GP surgery. This will prevent the person conducting the audit having to switch between different programmes/pages/screens.
- **Questions 1-4:** These should be relatively easy to answer from the discharge summary. For identifying the day of discharge it would be worthwhile having a hard copy of the 2015 calendar supplied. The excel spreadsheet is preformatted to calculate the length of stay if the date of admission and date of discharge is inputted in the correct format.
- **Question 5:** Use your judgement to categorise the speciality that the patient was discharged from; it may require you to read the clinical notes in the discharge summary and come to a decision regarding the speciality. Do not add any additional categories.



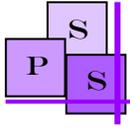
- **Question 6:** Insert both the discharging hospital and the overarching NHS trust. It is now commonplace for an NHS trust to run several hospitals therefore it is important to identify both sets of data.
- **Question 7:** This question requires you to review the allergy status on the GP system and the discharge summary/TTA and interpret whether the allergy status on the discharge summary/TTA is fully accurate (within the limitations of the information that you have) or whether information is missing
- **Question 8:** In order to answer YES to this question **every sensitizing agent** on the discharge summary/TTA must have a brief description of the allergy reaction documented. For example if only 2 of the 3 allergies documented on the discharge summary/TTA have the description of the allergy reaction documented then the answer to the audit question must be NO.
- **Questions 9 to 16:** These are relatively self-explanatory. For question 16 you need to use your clinical judgement as to whether it is obvious to the GP practice what actions need to be taken with each medication e.g whether it is to be continued or stopped after a period of time?
- **Questions 17 to 19:** These questions form the crux of the audit as they measure the quality of medication related information provided when transferring patients from secondary care to primary care. It is vital that the Pre Admission Medication (PAM) List is developed accurately as possible before embarking on answering these questions (*In essence conduct a retrospective medicines reconciliation using the information available on the GP system, it is suggested that a list of all medications issued (in addition add any medications that are issued by other providers if that information is available) in the 3 months prior to admission to hospital is made. This part of the audit may take some time and may need clinical judgement*).The questions themselves are relatively self-explanatory.
- **Question 20:** This is also a key question as it one of the key recommendations with the NICE Medicines Optimisation Guidance. An effort must be made to try and identify when changes (if any) were made to the GP information system based on the information provided in the discharge summary/TTA.
- **Questions 21 to 23:** These are relatively self-explanatory. Question 22 is regarding whether the actual medicines reconciliation in primary care was READ coded. It is NOT asking if other processes such as receiving in the discharge summary were READ coded.
- **Questions 24 to 27:** These are relatively self-explanatory
- **Question 28:** The purpose of this question is to identify whether at any point during the audit did YOU as the person conducting the audit have to intervene in order to ensure that the patient's medication regime is accurate and safe. If YOU did who did you contact?

Sending the audit results to the Medicines Use and Safety team:

- Check the data inputted onto the Excel spreadsheet for accuracy
- Save excel spreadsheet as your name and CCG name e.g. *chetanshahlondonccg*



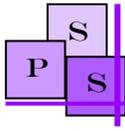
- Send Excel Spreadsheet as an attachment to chetanshah@nhs.net by 31st January 2016. Please state *“Data - Collaborative audit across England on the quality of medication related information provided when transferring patients from secondary care to primary care and the subsequent medicines reconciliation in primary care”* as the subject title



**Appendix 6: Frequently Asked Questions (FAQs)**

# **Frequently Asked Questions (FAQs)**

**Collaborative audit across England on the quality of medication related information provided when transferring patients from secondary care to primary care and the subsequent medicines reconciliation in primary care**



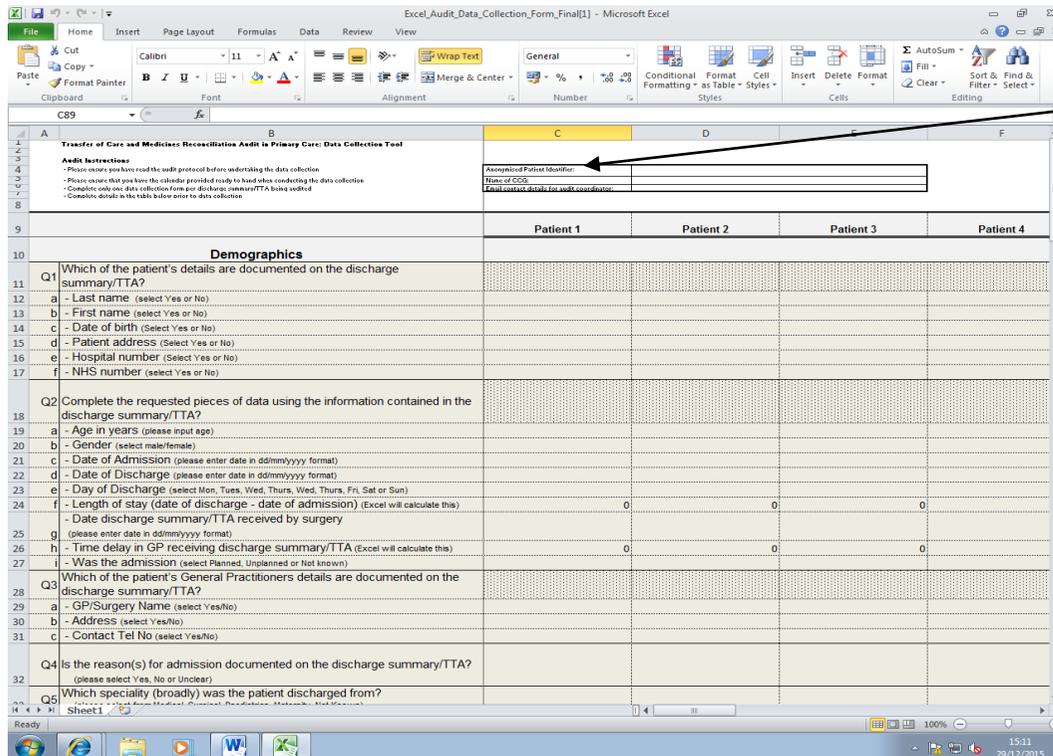
This document has been created to record all the queries received in relation to the Collaborative audit across England on the quality of medication related information provided when transferring patients from secondary care to primary care and the subsequent medicines reconciliation in primary care. It will be kept as a live document to record all the queries received during the audit.

**1. Can Pharmacy technicians be used to carry out the audit?**

Answer: No, the steering group that have designed the audit considered the use of Pharmacy technicians, however it was felt that due to a number of questions requiring a significant element of clinical judgement it was felt that a Pharmacist need to carry out the audit. We appreciate that many pharmacy technicians could possibly conduct the audit, however for the purposes of quality assurance and the audit being national a qualified Pharmacist conducting the audit was required.

**2. Do I need to record any patient identifiers?**

Answer: No, there is an error on the final spread sheet where it asks for patient ID, please ignore this we do not need any patient identifiers. Please just fill out the spreadsheet vertically for each patient you review (e.g. Patient 1,2,3,4,5 etc.). You can add more patient's beyond patient 20 if you are auditing more.



Ignore this request for Anonymised Patient Identifier:

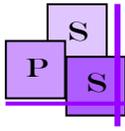
**3. For question 17c, 18d and 19c – what if only some of the changes outlined in the discharge summary have been actioned / incorporated by the GP on their prescribing system, what do you write?**

Answer: We came across this issue in the pilot and had a mechanism to record such discrepancies but it led to misinterpretation and confusion therefore took a view that if only some of the actions have been incorporated / actioned then please circle **NO** as the medicines have **NOT** been fully reconciled. Within the pilot we seldom found an occasion where medicines were only partially reconciled. It would be worth checking if the GP has intentionally disregarded the information in the discharge summary.

**4. Do we need to obtain authorisation from anybody to conduct the audit?**

Answer: We suggest that you utilise your local processes to gain consent to carry out the audit if required. No patient identifiable or sensitive data is being collected by us.

**5. If I cover more than one CCG how do I send the data?**



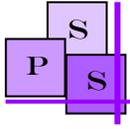
Answer: Please send MUS one spreadsheet per CCG. If you have several Pharmacist's collecting data across multiple GPs we still want all the data on one spread sheet per CCG.

**6. For questions 11 to 16 what if the information is documented but it is actually incorrect for example in question for an Insulin prescription the route of administration is written as intramuscular?**

Answer: In these circumstances please consider the information to be NOT documented, for in the example above if there were a total of 10 drugs written in the TTA (i.e. question 9 answer) and all other routes of administration were correct the for question 14 you would enter the figure 9.

**7. For a discharge summary to be included is there a minimum number of days that the patient must have been admitted for? There have been patients admitted and discharged on the same day.**

Answer: No there is no minimum length of stay, we appreciate that patients can be admitted and discharged on the same day.



# Final Report End