Medicine Safety in Care Homes

National Report

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Executive Summary

Medication errors are a common issue within the care home sector, impacting on the health and wellbeing of residents as well as adding additional challenges for care home staff and managers to overcome.

Through intense engagement with a representative sample of care homes and stakeholders involving an electronic survey, workshops and conversations, Patient Safety Collaboratives across England have sought to understand the reasons for medication errors and how these could be avoided in the future.

Key findings of this engagement include; problems with three-way communication between care home, prescriber and dispensing pharmacy; training of care home staff, leadership; and the need to create a safety culture. Problematic care processes, including record keeping and ordering medication were also highlighted.

Care homes are not "small-hospitals" but are places of residence and business, therefore interventions and innovations to improve safety must be grounded in the context of the care homes.

The engagement found that the care home sector would benefit from support from PSCs, including through QI work in tangible actions, such as learning from errors and handling interruptions when administering medication. Care homes would also benefit from work on safety culture through Safety Champions and shared learning. Investment in digitisation of the care home could also support improvements within medicines administration, however further research is needed.

Contents

Introduction

Evidence and experience tell us that medication administration errors are common in the care home setting, with one study suggesting as many as 70% of residents experience an error at some point. These errors are multi-faceted, often unrecognised and grossly under-reported. The Academic Health Science Networks (AHSNs) via the Patient Safety Collaboratives (PSC) were tasked as part of the National Medicine Safety Improvement Programme to assess the extent of the problem in care homes in England, ascertain the capability of the system to improve and identify promising interventions to improve safety which could be implemented at scale.

The findings and recommendations reported here are the summary of the diagnostic phase of the programme and are as result of co-ordinated efforts across England to gather intelligence on a sensitive issue.

The diagnostic phase took place from November 2019 to January 2020, a traditionally busy time of year, and took the form of a two-phased approach to engage with the system. The first stage, an electronic survey, was implemented to attempt to gauge the size and scale of the problem of medication errors, attitudes to error reporting and common problems in the medication administration process. These topics were then explored in more depth through a series of structured conversations with a smaller number of care homes. The findings across the country have been consistent and are presented in detail in this report.

Engagement

Each of the 15 PSC teams reported that they used a combination of highly intuitive ways of engaging with their care home system which evolved over the course of the scoping programme.

Teams have optimised engagement by several means. All explored a range of people, groups and stakeholders, and used the workstream group to follow best practice outside their own area. Teams used all channels and used the best practice of others wherever possible within resources and access available to them. Engagement included:
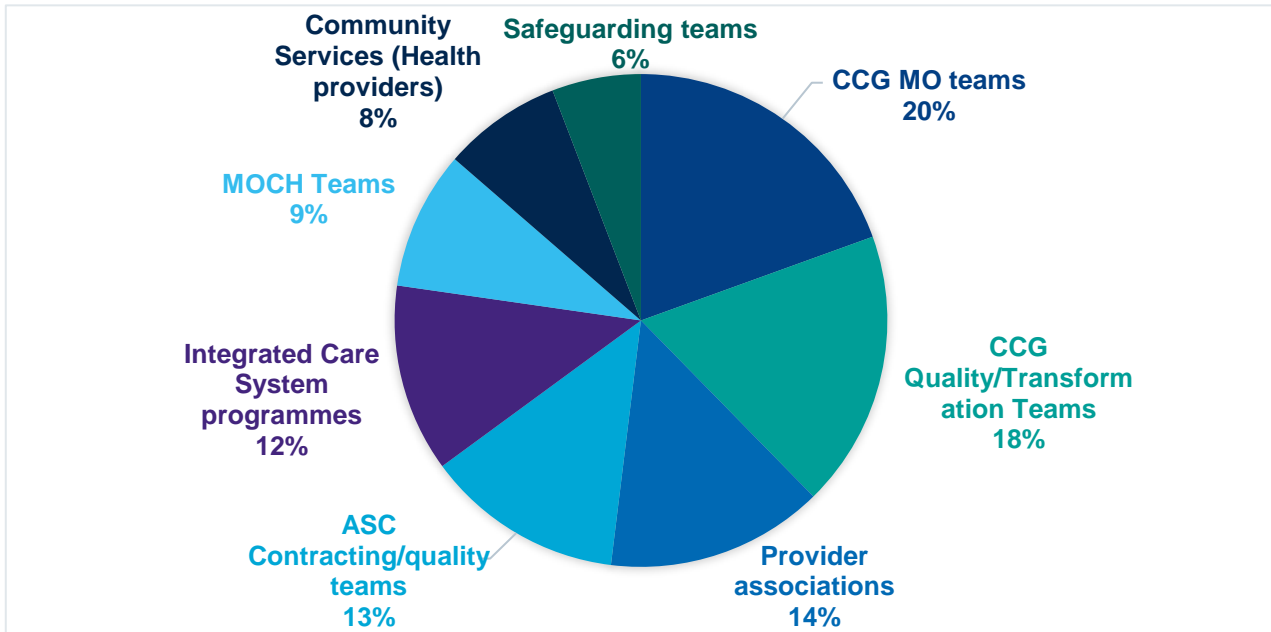
- Use of internal PSC and AHSN teams such as those working on deterioration, frailty, care home programmes or medicine optimisation to share the load of information and insight gathering and engagement through new or existing channels.
- Use of external teams such as local locality and regional medicine optimisation teams, SPRS, MOCH, care home boards, adult and social care and voluntary sectors involved in care home working.
- The E-survey was distributed via the above channels and in some cases directly to all or chosen care homes.
- The E-survey was then used to set up other engagement approaches to deliver structured conversations.
- Some teams then used engagement channels to provide feedback on the e-survey findings to key stakeholders and groups.

Stakeholders and influencers

Intelligence was drawn from a wide range of stakeholders however there was variation across the England on how influential each of the stakeholders were in the information included in this report. The most influential stakeholders are included the pie chart. Where forums existed for care homes to share and learn together they were found to be highly influential but were only identified by a minority of PSCs.

Figure 1: Influencing Stakeholders

Care Home Demographics

CARE HOME TYPE

Other homes 19%

Nursing homes 29%

Residential homes 52%

CARE HOME SIZE

>100 beds 1%

51-100 beds 24%

0-50 beds 75%
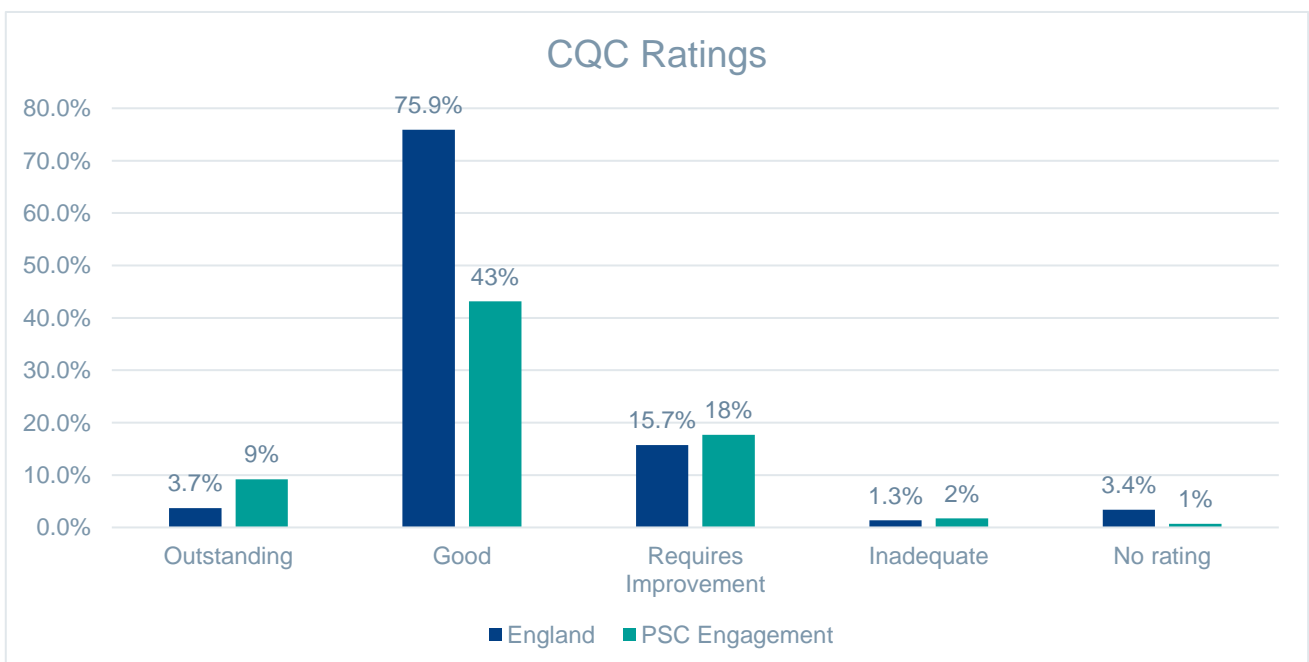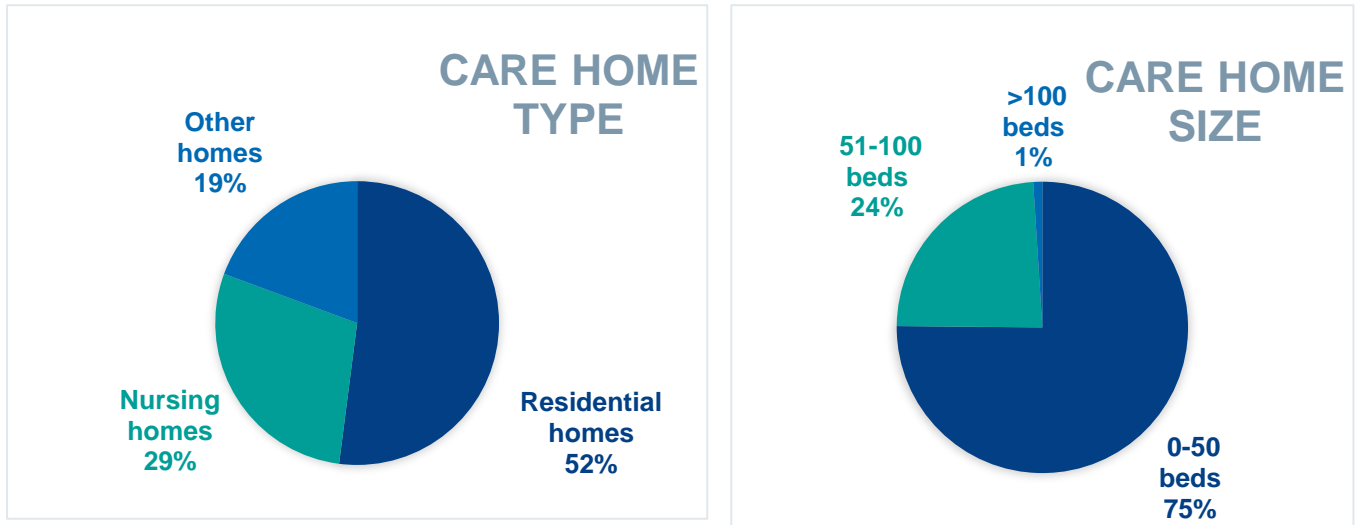
Results

National Datasets

Greater Manchester and Eastern Cheshire (GMEC) PSC commissioned a review of datasets available to adult social care to identify any pre-existing intelligence on the safety of administering medicines in care homes. The review did not find any data that was directly attributable to the administration of medicines in care homes. Care homes are not able to report patient safety incidents to the National Reporting and Learning System. Care homes report medication incidents to the Care Quality Commission (CQC), however, the CQC do not compile these reports into a dataset that can provide intelligence.

Adult Social Care Data

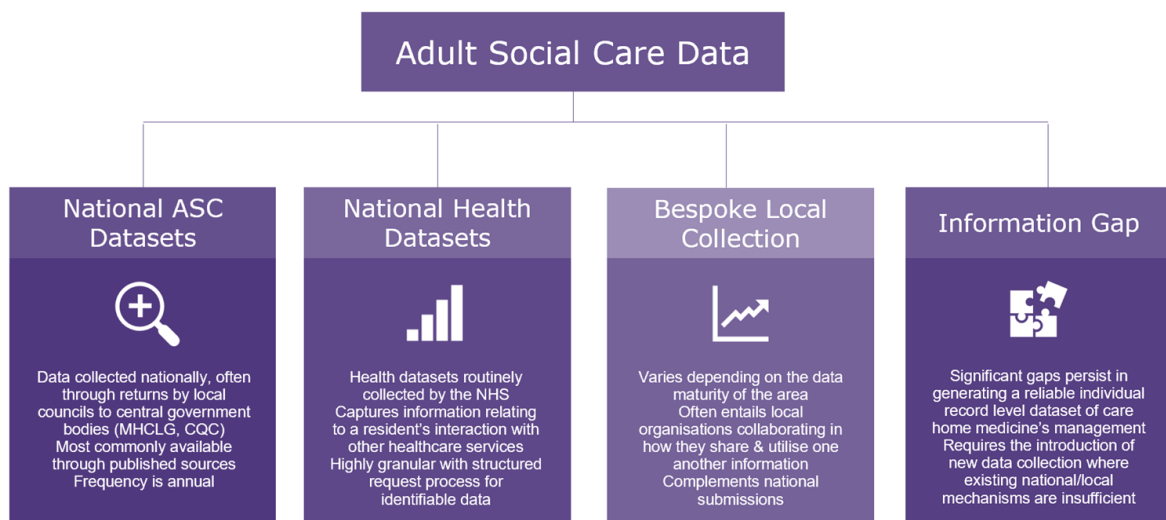| National ASC Datasets	National Health Datasets	Bespoke Local Collection	Information Gap
Data collected nationally, often through returns by local councils to central government bodies (MHCLG, CQC) Most commonly available through published sources Frequency is annual	Health datasets routinely collected by the NHS Captures information relating to a resident's interaction with other healthcare services Highly granular with structured request process for identifiable data	Varies depending on the data maturity of the area Often entails local organisations collaborating in how they share & utilise one another information Complements national submissions	Significant gaps persist in generating a reliable individual record level dataset of care home medicine's management Requires the introduction of new data collection where existing national/local mechanisms are insufficient

Figure 2: Adult social care datasets

Support being received by Care Homes

Most care homes have access to support to improve medicines safety. 13% of the care homes that returned the e-survey did not identify a source of support. The most frequently cited provider of support to care homes was General Practice (GP). Care homes welcome the support that was on offer, regardless of the source or contractual arrangements that funded the support. The support was variable in both its availability and its sustainability and this reflects the local nature of healthcare commissioning and non-recurrent funding of support to care homes.
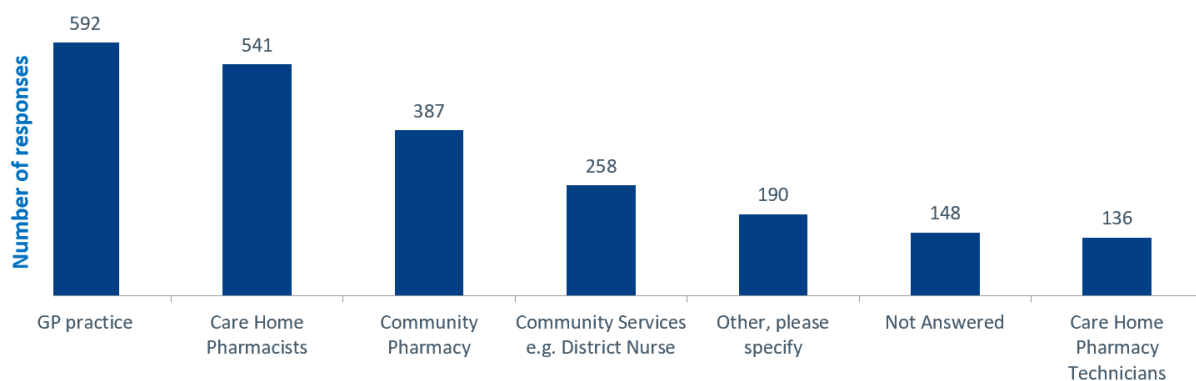

Figure 3: Sources of support for medicines safety

QI Capability

Of the 1,102 care homes that responded to the e-survey, 42% said that their staff had experience of Quality Improvement projects. This level of QI experience could not be corroborated by the structured conversations. In discussion with homes there was minimal recognition of any QI methodology other than a few exceptions.

Quotes:

> Homes perceive any action which ultimately improves quality…as a quality improvement project. Some care homes completed a Leadership for Safety Course supported by the AHSN, AQUA, NHS England and local Authorities.
> *North West Coast*

> The PROSPER programme in Essex included training in QI methods, an implementation toolkit, tools to help monitor changes, sharing opportunities and support visits from facilitators. 164 homes are now using the model.
> *UCLPartners*

> 35 Care Homes… participated in the Safer Provision and Caring Excellence (SPACE) programme led by West Midlands PSC…this equipped staff with QI training and tools to strengthen safety culture and reduce the incidence of adverse safety events.
>
> *West Midlands*

Time to undertake quality improvement activity is limited. Financial and workforce pressures in the sector are reported widely. Care homes welcome additional in-reach support which minimises the amount of time staff spend off-site.

83% of the e-survey respondents agreed that their care home would benefit from working with PSCs to improve safety. Care homes reported a willingness to engage in QI activity, particularly where it has a defined purpose or is solving a recognised problem. Learning on the job is preferred to training in purist QI methodology. Care homes recognised that change is difficult and felt that the regulatory process did not allow for failure.

Quotes:

> [Employment] of low or unskilled workers…is high and covering staff for training is difficult.
> *Yorkshire & Humber*

> Some homes report being terrified of changing their systems despite wanting to improve.
> *Greater Manchester and Eastern Cheshire*

> A small number of care homes have engaged with regional research networks
> *North East & North Cumbria*

> There is motivation to improve residents' quality of life with staff in care homes being caring and compassionate people.
> *West of England*

Insights into Medicines use in Care Homes

Care homes from across England revealed to the PSCs their insights into the causes of error and risks to their residents. Analysis of the 15 PSC baseline reports ranked these insights into how frequently they were referred to in the reports and how widespread they were, by how many PSCs identified them as a high priority for homes. Some of these insights were also considered to **problematic care processes** and are discussed within this section of the report.

Insight Theme	Mentions	PSCs (no)
Insights of greater significance:		
Three-way communication	16	12
Training/Knowledge	13	11
Transfers of care/ Discharge from acute (**Problematic Process**)	12	12
Supply and Ordering	11	8
Record Keeping/ MARs (**Problematic Process**)	11	10
Interruptions	11	11
Alignment/ mid cycle/ Acute (**Problematic Process**)	10	9
Safety Culture/ Error Reporting / learning from errors	9	8
Standardised Guidance	7	7
PRNs, Complicated/ variable doses (**Problematic Process**)	6	6
Insights of less significance:		
Staff recruitment/retention/ agency	5	5
Original Packs	4	4
Computer Literacy	4	4
WiFi Connectivity	4	4
Handovers/ Scheduling/ days vs nights	3	3
Anticipatory Medicines	3	3
Human Errors	3	3
Time critical medicines (**Problematic Process**)	3	3

In addition, there were two insights gained from discussions with partner organisations; Leadership and Teamworking. Both these insights were considered highly significant.

Patient & family views

The West Midlands PSC included the voice of residents and their relatives by devising a very brief questionnaire which was piloted in three care homes. Responses were received quickly and without any prompting. It was an easy exercise to gain some useful insights and one which could be replicated. West Midlands PSC had Identified the potential to involve residents and their relatives to

support the improvement of medicines administration and the associated practices within care homes.

Q: Tell me what is most important to you in terms of you/your loved one's medication?

AM: I don't know what I have them for.
MR: So I don't have the fits.
MH: Because it stops me from having fits and for my blood pressure.
MC: That I get them on time. I get them in the morning, occasionally I get some at night. I don't know what they are, I only know they help me.

Q: What is good about medicine practice in this care home?

AM: It is always there for you.
MR: I have my medicine and that's the main thing for me, it comes first.
MH: The staff are good, she's good.
MC: I think it's good, they don't mess around. If you need it. they give it you in the morning and if you need it they give it you at night as well.

Q: What could be done to improve you/your loved one's experience of medicines in this care home?

AM: I don't know what have it for.
MR: Everything is okay. I get my medicines and that's the main thing.
MH: I could have my bed time pills earlier. I used to have them between 9 and 10, but there is such a lot of people here.
MC: Nothing, they are very good, they make sure you are alright while you are taking it, you know you will be alright.

Q: Do you have any ideas or suggestions about how medicine practices could be better for you/your loved on?

AM: No I think it's quite alright.
MR: Nothing. I think everything is under control.
MH: No, as long as I get them its okay.
MC: No as far as I'm concerned it's alright.

Figure 4: Example views of residents

Three-Way Communication (Care home, prescriber and dispensing pharmacy)

The issue that the majority of care homes have told their PSCs is of high significance to medicines administration errors and that they would like to address is inadequate communication between the home, the prescriber and the dispensing pharmacy. This view was echoed by other stakeholders. There were a minority of homes where this was perceived to be much less of an issue. In these instances, homes described clear communication mechanisms and a feeling that this was because the external organisations were responsive to, and understanding of, the challenges they faced in managing their residents' medicines.

Care homes require an organised and responsive system to successfully manage the medicines for all the residents they care for and effective communication and/or teamwork between the organisations responsible for managing medicines is essential. However, our engagement indicates that this does not happen for the majority of homes on a regular basis. As a result, significant home staff time is spent

working to resolve the issues, which takes time away from caring for their residents. When issues are not resolved in time the result can be occurrence of errors and residents are exposed to potential harm.

Quotes:

A focus on improving care home communication… is required as most homes visited stated that they have significant issues with either their local GP practice, acute provider or (in fewer cases) with their community pharmacy." **East Midlands**	…the general feeling is that (care homes) are a separate care system, disengaged from health and social care with regards…effective methods for communication with health care services. **West of England**

Training and knowledge of care home staff

Provision of training, most frequently by third party providers, in the practical aspects of administering medicines in the care home was commonplace. We observed that there was variation in methods of delivery, standards and quality. Many care homes rated training and knowledge of staff as of high significance to medicines administration errors. Training that would help staff learn from errors and design safer systems of working was rare.

Many homes would value national standardisation so that they can have confidence that the staff they employ, including from agencies, meet a national minimum standard. National Standardisation of training in the practical aspects of administering medicines would reduce the need for homes to spend time and money re-training new members of staff.

When errors occur, we observed that many homes undertake to re-train the staff member involved and re-assess their competence. Whilst this might sometimes be valid and necessary, we know that often harm from errors is caused by inadequate systems rather than inadequate people. Therefore, training and knowledge in patient safety is also essential in order that homes can move away from a blame culture towards a safety culture that learns from errors. Without basic knowledge of safety culture and quality improvement, care homes will continue to struggle to improve their systems and minimise harm to their residents from their medication.

Quotes:

A desire for a consistent nationally recognised training scheme was expressed several times **Oxford**	Care homes' priority for support is around helping them better train their staff to prevent errors. **North West London**
Learning how to do audit: A number of homes reported carrying out frequent audits, but these were often "checks" as opposed to detailed audits. Standardisation would be beneficial. eLearning was not favoured. **Kent Surrey Sussex**	"Not enough variety of training methods. Mainly eLearning but face to face would be welcomed (see PROSPER trial). Quality Improvement training has not been made available." **UCLPartners**

Medicines ordering and supply processes

Many homes have told their PSCs that they would like to address the medicines ordering and supply processes. Care homes told the PSCs they spend a considerable amount of time chasing prescriptions on the phone to the GP practice and communicating prescription status with the dispensing pharmacy. They tell us medicines often don't arrive in time and correct for the beginning of the monthly cycle. Then more time is spent chasing both the pharmacy and the GP Practice. Dispensing pharmacies tell us that they have organised processes for managing the monthly repeat medicines that allows for slack in the system when GPs query scripts and/or the scripts are sent through to the pharmacy gradually over time. Despite this, pharmacies often find they are still chasing the home to chase the GP practice for prescriptions right up to the very last minute, and sometimes have to send only the prescriptions they have received.

Care homes require an organised and responsive system to successfully manage the medicines for all the residents they care for. Our engagement indicates that currently these systems fall short on a regular basis. These "upstream" issues affect the ability of the home to achieve the 7Rs[1] exposing residents to risk of harm. We observed that the regularity and recurring nature of "ordering issues" caused teams such as MOCH and CCG MO to spend considerable time working to resolve this only to see it keep recurring.

Quotes:

Issues with having correct medications delivered and on time…being provided with too much stock, despite repeated notifications. ***West of England***	Time taken to receive medicines: From prescriptions to be written, dispensed and sent to the care home. ***Wessex***

Due to care home being rural, often they are the last to receive their orders and this can sometimes be 8pm when medication was due in the morning" ***Yorkshire and Humber***

Interruption of the carer or nurse whilst giving medicines

Many homes told their PSC that they had tried various ways to reduce interruptions/ distractions of the person undertaking the medicines round but that they had not been effective. Despite this being an issue for the majority of homes, as reported by the majority of PSCs and the highest response in the national e-survey, we observed that in homes where the medication round is recognised by all staff as a safety critical activity, the ability to reduce interruptions with interventions was (self) observed to be greater.

Interruptions to the giving of medicines, sometimes referred to as the "packet to patient" part of the medication pathway, can cause an error in any one of the 7Rs,

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[1] 7Rs- Right record made of the Right dose of the Right medicine, given via the Right route to the Right person at the Right time with the Right of the person to refuse.

exposing residents to risk of harm. In the minority of homes that reported some success in reducing interruptions there was acknowledgement that without the underpinning change in culture of the whole team the interventions they had put in place would have had a limited effect.

Quotes:

> Disruptions occur even when strategies are in place to warn other staff i.e. tabard, signs.
> *West of England*

> While management of interruptions was identified as the highest priority, there was a general consensus that use of tabards etc. was not an effective solution and this was more an issue of culture and discipline in the home in recognising the importance of the medicines round.
> *North East and North Cumbria*

> Interruptions…was the commonest answer given in our e-survey…it is likely interruptions have direct influence on administration errors, i.e. the 7Rs.
> *Greater Manchester and Eastern Cheshire*

Safety Culture

Culture of reporting
Recognising and reporting errors was recognised as an area for concern across England. In the e-survey, care homes were asked how often they thought medication errors occurred in their home. 6% said they didn't know whilst 47% thought that it was at least annually. This is in contrast to research from the Policy Research Unit in the Economic Evaluation of Health and Care Interventions (EEPRU), which modelled that there are 92million administration errors per year across the 15,500 care homes in England; an average rate of over 100 errors per week.

93% of the respondents to the e-survey stated that they recorded and reported the errors they identified. Some care homes, part of larger chains such as HC-One, had access to Datix for recording incidents. Otherwise, the most frequently identified agencies who received error reports were commissioners, safeguarding teams and CQC. Care homes reported that they thought it was a mark of good quality to report less errors to CQC rather than more.

Being Open
Care homes indicated that when an error was identified that they reported it to the resident and/or their family or next-of-kin.

Just Culture
With just one exception, the management of error represented poor cultures of fair blame. There were numerous examples of 'person-centred' approaches to error, focussing on 'who' made the error rather than why the error occurred. Many care homes had a defined link between error reports and competency requirements or disciplinary procedures.

Culture of Learning
HC-One demonstrated effective review of the errors reported on Datix which led to group-wide dissemination of advice and guidance intended to prevent recurrence.

The Promising Practices workshop, held by Health Innovation Network, explored incident reporting and identified the shift that was considered desirable, by care home staff, to an open reporting culture. This position was reflected by East Midlands PSC within the 'bow-tie' barriers analysis workshop highlighting that there were no forums for blame-free learning from incidents.

Quotes:

> Care Homes primarily adopt a Safety-I culture, a reactive approach to dealing with incidents.
> *East Midlands*

> Staff were unable to articulate what was an error.
> *Eastern*

> [Care homes] flagged that most of the problems…are down to human error.
> *Kent Surrey and Sussex*

> MOCH teams thought the medicine errors submitted to CCGs was not a true reflection of practice and didn't include near-misses…influenced by fear of being inspected.
> *Wessex*

> Blame culture was evident in several homes, with little insight into how to analyse incidents, take contributory factors into account and make improvements to prevent recurrences. Consequently, staff felt frightened to report errors.
> *Oxford*

> Care Homes with better leadership had managers who cultivated an atmosphere of psychological safety and learning.
> *North West London*

Standardised Guidance

Just under half of the PSCs reported that care homes would value having standardised guidance and/or policies. We heard how the perception within the care home sector was that they are heavily regulated in terms of service delivery and legislative responsibility. Care homes and other stakeholders told us about conflicting advice given by CQC across an area relating to medicines processes, training and competence assessment.

Care homes are (mostly) small to medium sized organisations that provide holistic care for residents, which is far broader than just managing their medicines. Medicines are however the largest intervention in healthcare and managing them requires an organised and responsive system. Care homes feel that having clear standardised guidance on how to achieve this would be of benefit.

Quotes:

> We recommend that no policies are created or supplied by the care home company but that generic policy is provided by NHSE and tailored by the care home clinical lead/pharmacist.
> *UCLPartners*

> Contradicting CQC advice/approaches to determining appropriate medicines approaches.
> *Wessex*

> There appears to be no stipulation for managers overseeing.
> *South West*

Leadership within the care home

We observed that homes had diverse leaders and leadership. Leadership was identified by many of the PSCs during face-to-face conversations with care homes as being crucial for improving quality of care. This is reflected by the seven PSCs who made leadership part of their key recommendations, as well as the large number of "interventions" observed across the PSCs that were potentially having a positive impact on medicines administration. However, only one PSC reported that their homes believed this to be of significance. A potential explanation for not being reported by many homes as high significance during our engagement is that at many of the care homes we engaged directly with the care home manager who might not be aware of their own leadership shortcomings.

Cultivating a Safety Culture involves recognition that individuals alone cannot improve safety - it relies on the team to work in partnership with one another and with residents and their families. If the "leaders" within care homes can develop an understanding of key factors contributing to a Safety Culture and combine this with the soft skills needed to affect changes in staff behaviours, then a Safety Culture could begin to develop that then underpins the ability of the team to make changes to their systems and processes that improve outcomes around medicines administration.

Quotes:

> The care homes that had effective leadership were performing better in all areas…and fewer errors with medicines administration. We suggest that the introduction of any discreet improvement interventions should be accompanied by a programme of leadership and culture development.
> *UCLPartners*

> The care homes with better leadership had managers who had cultivated an atmosphere of psychological safety and learning, had regular debriefs and review sessions with all staff when errors happened, and most importantly, drove action to improve medication safety.
> *North West London*

> Our view is that any change ideas or interventions driven in this programme are unlikely to make significant system wide benefits and better care without widespread cultural changes and support for the leadership.
> *West of England*

Internal Communication and Team working

An issue identified by a number of PSCs during face to face conversations with homes was issues with internal communication and teamworking. However, only two PSCs reported that their homes believed this to be of significance and both instances were in the context of differences between night shift and day shift error rates.

It is important that any information of significance for resident care is effectively communicated from one shift to the next to ensure continuity of care within the care home. Additionally, effective communication is important for effective team working,

both of which underpin a Safety Culture. During our engagement activities, proactive Daily Huddles were identified in only a small minority of homes. Of concern is that deaths have occurred nationally due to urgent medicines not being given to deteriorating patients on time. At least one such incident occurred within the timescales of our engagement within a care home that a PSC were made aware of during engagement with stakeholders. A learning point identified was inadequate information handover within the care home likely contributed to a prescription for urgent medicines going unactioned for significant periods of time.

Quotes:

CQC had identified a recurring theme of missed early morning medication by night staff. *Eastern*	Night staff vs day staff; errors more likely to happen when tired, more likely to be agency. *North West London*

Problematic care processes

Analysis of the baseline reports from the 15 PSC identified that a small number of care processes causes the greatest concern for care homes. These were:

- PRNs (when required medications) and variable doses
- Dose timing critical medications (e.g. medicines for epilepsy or Parkinson's, insulin, anticoagulants)
- Record keeping and MARs
- Ordering acute meds and changes to medications mid-way through the month and alignment to the 28-day medicines cycle
- Medicines reconciliation on discharge/transfer from other care providers

PRN (as required) medicines

Medicines prescribed as *prn* should be given only when and if a resident needs the medication for a certain condition. Medication prescribed prn are often in response to pain, nausea, anxiety, insomnia or constipation.

As required medications were distinctly mentioned as a problem by six of the PSCs. Problems are further compounded by poorly-labelled medicines without frequency or maximum dose. Ambiguous directions result in the over or underuse of medications. Care homes who have successfully tackled this issue described well-articulated care plans (often linked with eMAR), and assessment tools to support assessment and administration of *prn* doses.

Quotes:

…often provided at the discretion of the staff….is reliant on (staff) understanding of when a resident requires PRN medication….creates disempowerment of the resident in relation to their medication. *West of England*	Prescriptions that stated "up to three" were reported to be unhelpful as staff felt it to be a subjective decision which they were not always confident to make. *Oxford*
	….waste lots of time chasing the GP for clarity which they don't always receive. *Greater Manchester and Eastern Cheshire*

Time critical, complicated and variable dose medications

Errors in the administration of time critical medications can have a more significant effect on a resident's wellbeing. These types of medications were mentioned frequently during our structured conversations with reasons for this kind of error include staff complacency, lack of knowledge and rigid medication round timings.

Strategies to improve practice in this area have included the use of alarms, medication specific handovers, the use of alerts/alarms within eMAR systems and the use of separate MAR charts for time critical medicines. Few of the homes we interviewed had care planning in place to deal with the omission of a critical medicine. In residential homes, insulin administration is delivered by the district nursing team, where these teams are delayed this can have a direct impact on resident wellbeing.

Quotes:

Dose Critical Medicines – managing residents that take these medicines can be challenging; home staff may not have the appropriate training or care plan in place to guide them. ***Greater Manchester and Eastern Cheshire***	Staff not understanding the importance of giving medication at a specific time…District nurses coming late for insulins /CDs. ***North West London***

Record Keeping: Medicines Administration Records (MARs)

Inadequate MAR chart design and poor record keeping using the MAR is something many homes have told their PSCs that they would like to address. Care homes tell us that errors in record keeping i.e. filling out the MAR chart correctly and promptly are commonplace. This was also reflected in the number of PSCs who reported examples of care homes implementing systems for checking for MAR errors regularly, ranging from after every round, to shift or daily/weekly. This contrasts with the National e-survey self-reporting of frequency of errors. Many homes who are using paper MARs told their PSCs that they would value advice and guidance around the different types of eMAR systems to help them choose the best one for their needs.

Poor recording keeping using the MAR can result in errors of duplication, a misrepresentation of someone's PRN usage, refusals and compliance (which can affect decisions about resident care) and stock control issues which can lead to missed doses and residents receiving medicines that they are no longer prescribed. Many care homes recognise the advantages of moving to eMAR but find the prospect of deciding which system to go with, the pricing and worries about the disruption during the transition, barriers to adoption.

Quotes:

Duplications of medicines on MAR due to imperfect pharmacy processes or the GP starting/changing medication and not crossing of the stopped medication ***Eastern AHSN***	98.8% of our homes utilise paper-based MAR charts. ***Yorkshire and Humber*** District Nurses…don't record on care home MAR Chart. ***North West London***
	Problems (with MAR charts): Poor design… Lack of co-design or feedback from users was common ***Oxford***

Obtaining Acute medicines/medicines outside the 28-day cycle

Inadequate systems for obtaining medicines outside of the 28-day cycle is something many homes have told their PSCs that they would like to address. This covers medicines needed urgently for acute conditions through to replacement of dropped or spoiled medicines, to new residents arriving that need a supply of medicines.

Care homes require an organised and responsive system to successfully manage the medicines however our engagement indicates that currently these systems fall short on a regular basis. These issues affect the ability of the home to achieve the 7Rs exposing residents to risk of harm. We observed that the regularity and recurring nature of these issues causes not only the care home staff but also teams such as MOCH and CCG MO to spend considerable time working to resolve this only to see it keep recurring.

Quotes:

Problems not receiving the correct quantity of interim medication to bring in line with the care home 28 day medication cycle was reported by every care home interviewed.
Eastern

Acute Urgent meds – ePrescribing causes issues when prescriber does not communicate to the dispensing pharmacy the urgent nature of a script.
Greater Manchester and Eastern Cheshire

…on average a full day a week is spent by a member of the care home chasing acute meds. 90% of the time this results in missed medications
South West

Transfers of care and discharge from hospital

Transfers of care from hospital settings was also a leading issue care homes stated they wished to address. Many homes told the PSCs they had implemented the Red Bag Scheme to improve the transfer of information into and out of hospital but that this has not been effective. Pharmacies tell us that changes to medication made in hospital are not communicated to them and that additionally, they often they do not know a resident has been admitted to hospital and supplies of medicines can be made that are not required, leading to wastage. Care homes tell us they spend a lot of time chasing the hospital over the phone for information so that they can give the right care to their residents, but that they often cannot get the information they need.

Quotes:

Major problems with communication relating to residents that have been in hospital and then discharged back to care home – med information and what they have been treated for is usually missing.
South West

Residents can be discharged without a discharge summary…with medicines that are not on care homes MAR Chart, When care home send residents to hospital with a "red bag" homes report that this is rarely returned.
Wessex

Discharge letters/ MAR charts provided from secondary care can be confusing/unclear
UCLPartners

Residents retuning to their usual place of residence with medicines they did not need…and poor documentation around medication – the red bag scheme is in operation within both ICSs, however it does not appear to be working.
North West Coast

Analysis

Expert Panel

The Medicines Safety Improvement Programme held a workshop to review the 220 safety interventions that had been identified by the PSCs across England. The workshop pulled together experts from across the country who provided a consensus opinion on ways to improve the safety of medicines administration in care homes.

The workshop concluded that interruptions are a big issue and the benefits of huddles in hospital are clear so it would be beneficial to have the same in care homes. Medicine Champions are also well rehearsed. The group identified that the work to be undertaken to improve safety fell into 'concepts' which could be arranged as primary and secondary drivers towards the aim of reducing medication errors. See Appendix 2. The concepts that were identified were:

- Training/knowledge & skills
- Operations and infrastructure (a 'how to' bundle of operational interventions)
- Safety Guidance
- Self-Administration
- Digital & Technology
- Safety culture & leadership
- Data & measurement of safety
- Learning from errors
- Reducing interruptions

PSC discussion

A final workshop was held for all the PSC medicines safety teams across England to review what had been learned in the diagnostic phase of the Medicines Safety Improvement Programme.

The context of the care sector was important, and these points were agreed as being highly influential:

- Care homes are not hospitals. They are a place of residence, people's homes. This was typified by Thunder the cat, a resident of a care home.
- Staff in care homes are predominantly caring, compassionate people who are badged as low-skilled or unskilled and working in a high-pressure, emotionally volatile environment with little psychological safety.
- Care homes operate in a commercial environment, often with very small financial margins. This results in reduced levels of resilience requiring staff to go beyond their contracted time and duties.

Figure 5: Thunder doesn't want me to sign in

The workshop went on to consider the 'concepts' identified by the expert panel. These were prioritised for further exploration by the Patient Safety Collaboratives.
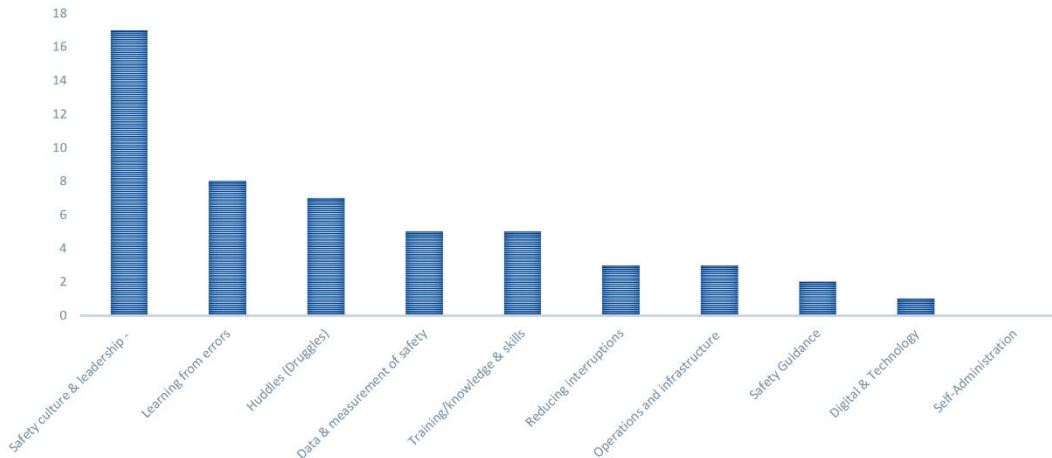
Figure 6: Prioritised Concepts for PSC exploration

Safety Culture and leadership were then reviewed using Edward De Bono's Six Thinking Hats. The strongest emerging idea was Safety Champions who could develop within action learning sets and focus on learning from incidents using techniques such as premortems (reviewing incidents from elsewhere before they can occur in your home).

Consolidation of knowledge

Drawing from the e-survey, the baseline reports, the workshops and the expert panel there can be found a great deal of commonality. A strong theme is that culture drives safety and that changes to processes can only be effective, and sustained, where that culture is generative, and underpinned by continuous improvement.
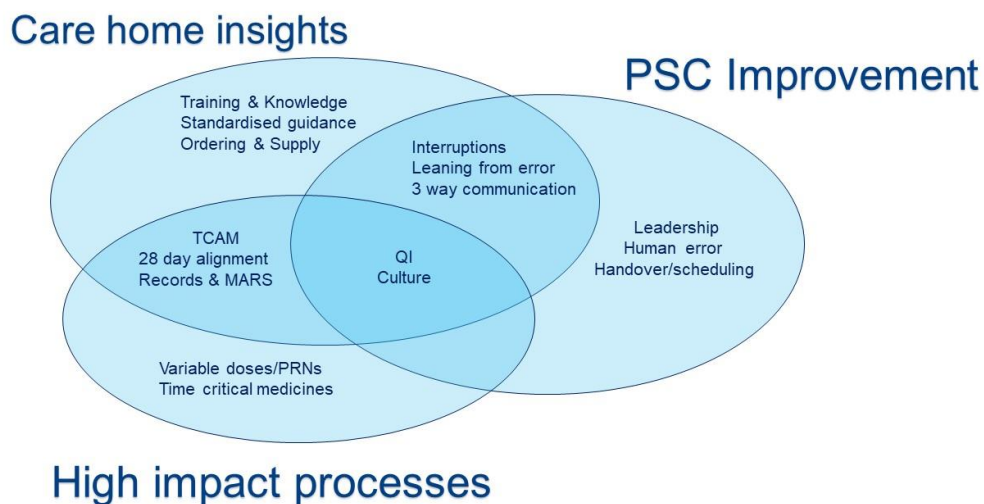
Figure 7: Interplay between process, insights and improvements

Consideration should be given as to which organisation is best placed to have the greatest influence on the issues faced by care homes striving to keep their residents safe.

Conclusion

Care Homes are not like hospitals. The NHS has been on a long journey towards safer care since the publication of 'Organisation with a Memory' at the turn of the century. The care sector has not had the benefit of the same insights nor the same investment. This had led to a divergence in safety culture which is typified by the approaches to managing the safety of medicines.

The care home sector also differs from the NHS in other ways. The buildings are people's homes, the staff are mostly carers recruited from the general population, the funding has not received the protection afforded the NHS and the market is dominated by independent private providers.

Insight

This report provides insight to be considered along with:

- The results of the eSurvey,
- The literature review conducted by Oxford PSC and UCLP PSC,
- The 220+ promising interventions identified by the 15 PSCs.

There is a need for greater insight into how safely medicines are administered. A national dataset is needed. This may be achieved by extending the replacement of NRLS/StEIS into the care sector.

The Care Home sector needs to be better able to learn from errors. Starting with error recognition, improved analysis and into shared learning for improvement. This could be the basis of a national improvement programme.

Involvement

Patient safety education and training along with standardised guidance that covers the most problematic processes is necessary. Leadership, in the form of safety champions or medicines champions, could be the initial recipients of these educational interventions becoming Patient Safety Specialists. This will start the move from Safety I to Safety II.

Improvement

Patient Safety Collaboratives across England are well placed to lead quality improvement programmes in Medicines Safety, having developed a delivery infrastructure and high levels of engagement.

Care homes require a focus for QI work preferring tangible actions over theoretical knowledge transfer. Interruptions, learning from error, three-way communication and huddles are suitable change ideas to provide this focus.

However, the prevalent cultures in many care homes will reduce the impact and sustainability of QI interventions. As such any QI intervention to improve medicines safety should be under-pinned by work on safety culture through Champions, Safety Improvement Networks, shared learning & Patient Safety Partners.

Digital and technology solutions are required to the problems of seamless ordering and supply of medicines. The sector had made a start with the introduction of electronic MARs and care plans. Investment in the digitisation of the care sector would likely reduce errors and ensure the Health & Care System is designed around the patient. Further research into the impact of digitisation on the Care Home Sector is needed.

Driver Diagram

One possible depiction of the interventions that could improve the safety of administration of medicines in care homes in line with the National Patient Safety Strategy is depicted below. The green boxes indicate the interventions which might be tested by the National Patient Safety Collaboratives hosted by The AHSN Network.
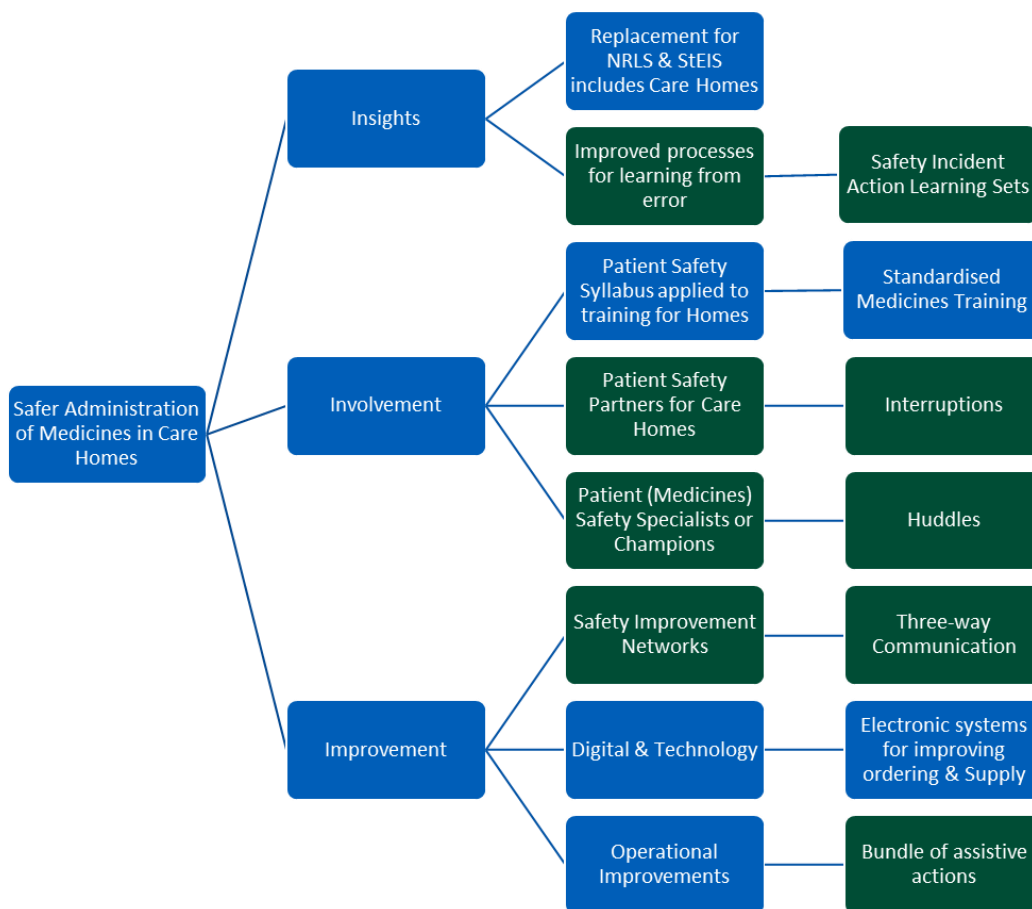
Figure 8: Driver Diagram (PSCs are able to deliver green boxes)

Appendix

Appendix1: East Midlands PSC led a workshop for care home staff and local stakeholders to analyse the risks within the medicines management procedures in Care Homes and the effectiveness of the barriers that are in place to reduce the risk. The risk models were produced by HU-Tech using BowTie XP software from CGE Risk. The analysis demonstrated how care homes have evolved to manage risk and that the commonly used barriers are subject to degradation over time.

Figure 9: Bow-Tie barriers analysis
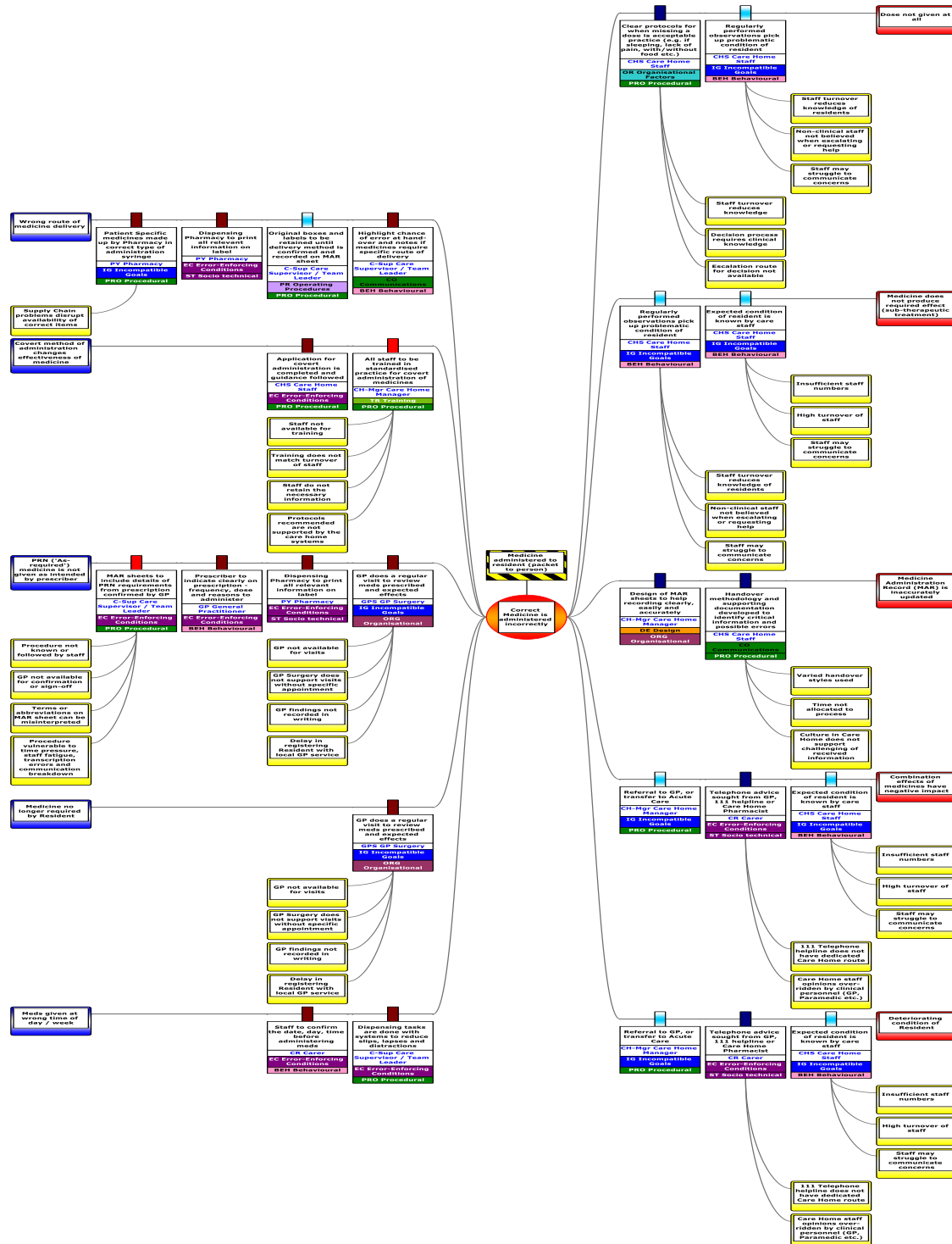
Appendix2: Expert Panel primary and secondary drivers towards the aim of reducing medication errors.

Safer medicines administration in care home setting

Improve safety culture around medicines
- Leadership promote safer practice
  - Incentives for safe practice
  - Promoting peer review
  - Leadership visibility & involvement in action learning sets
  - Introduce 'what good looks like' stories with focus on promoting behavioural change
  - Patient safety star rating scheme
  - Patient safety charter
- Influencing contractual and regulatory relationships
  - CQC /NHSE/I standards for care homes re. medicine safety
  - Work closely with commissioners & regulators around safety
- Learning from errors
  - Where possible, accountability for learning held at company level rather than just individual level with specific group in place for this
  - Look at incidents reported regionally & nationally to learn & avoid future similar errors

Measurement & data underpins safety approach
- Develop real time quantitative & qualitative systems to enable analysis of medicines errors
  - Establish operational definitions for medicines incidents
  - Establish measurement system with baseline data
  - Encourage peer review of data & benchmarking
  - Develop simple national reporting learning system for care homes in England

Operations & Infrastructure supports safer administration
- Safer processes
  - SBAR safety huddles
  - Highlighter pens to mark high risk drugs on MAR
  - Medicines check at regular intervals throughout day
  - Self administration
  - Processes to reduce interruptions whilst administering medicines
  - Clear SOPs and guidelines in place to support processes
  - Safe use processes in place around electronic medicines systems
- Staff roles
  - Medicines safety group members
  - Medicines safety champion
- Infrastructure
  - POD lockers
  - Electronic systems

Training of staff (and patients) around medicines safety
- New staff onboarding
  - All staff receive medicines safety induction
- Specific roles in relation to Medicines Safety
  - Deeper training for medicines safety champions or medicines safety group members. To include QI principles