October 2017

Medicine Safety Activity in Salford

A summary of projects and opportunities for wide-scale improvement in Salford relating to medicines safety.
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**Introduction**

Safer Medicines focuses on delivering key projects and sharing learning across the health system to improve medicines safety for Salford patients. Medicines safety considers all aspects of medicine usage, including unwanted effects, interactions, safe processes and systems, effective communication between professionals and educating and empowering patients to get the best from their medicines.

As part of this work stream a number of medicines safety initiatives have been identified in Salford. Activity spans across primary, secondary and mental health care and includes specific interventions addressing an identified problem using change ideas as well as the implementation of standards and policies.

Information on safer medicine activity was collated through desktop research and discussions with the Medicines Optimisation Lead in the CCG and Chief Pharmacist at SRFT. Where possible key contacts were also identified and contacted regarding specific interventions. This process initially identified 21 safety initiatives underway across Salford, including innovation and/or improvement projects, strategies and audits.

**This review seeks to highlight initiatives which require further investigation and development to spread successful medicines safety improvements and standardise service across Salford.** Information gathered has been summarised under nine headings with recommendations to consider for taking this work forward, and where possible links to further information. This review does not seek to provide a comprehensive list of all medicines safety work underway in Salford – of which there is considerable activity across sectors.
Safer Medicine Initiatives

1. Practices Improving the Safety of Medicines in Salford (PrISMS)

The PrISMS collaborative was designed to improve medication safety in eight Salford GP practices. The collaborative was commissioned by Salford CCG and delivered jointly by the CCG and Haelo over a 12 month period from September 2015. The collaborative focused on improving the prescribing, monitoring and reconciliation of a discrete group of high risk medications, including non-steroidal anti-inflammatory drugs (NSAIDS), Methotrexate and Amiodarone.

The PINCER\(^1\) audit tool was used to develop seven outcome measures and an additional self-reported measure for QI capability was also included. By the end of the collaborative all seven measures showed a statistical change demonstrating that 6.1% more patients across the eight practices had received optimised medicines care by the end of the collaborative.

An example of one of the outcomes is illustrated in the chart below which shows a 15.5% increase in the proportion of patients receiving appropriate medications relating to oral non-steroidal anti-inflammatory drugs (NSAID).

\[^1\) PINCER audit tool [https://www.nottingham.ac.uk/primis/tools-audits/tools-audits/pincer/pincer.aspx]
The self-reported QI measure showed an increase in QI skills scores for all participants as illustrated in the chart below. This demonstrates an additional benefit of the collaborative in building capacity to support further improvement efforts:

![Comparative Survey Scores](image)

The collaborative found that simple changes to GP practice systems can result in significant improvements in medicines safety and contribute to optimising care. Change ideas included the introduction of protective time for GP’s to review discharge summaries, raising staff awareness in using vision Pop-Up reminders and using EMIS templates to accurately monitor patients on methotrexate. Changes were transferred from practice to practice indicating that the positive outcomes demonstrated can be potentially transferred to all GP practices in Salford to improve medicine safety and optimise the care received by patients.

In addition an intervention bundle was developed that contains refined change ideas – seven tools designed to improve the quality of prescribing high risk medicines and reduce potential risks from their use. These tools can also be tested across all practices to share good practice and improve medicines safety.

For further details on the collaborative please see [http://www.haelo.org.uk/case-studies/reducing-harm-patients-taking-high-risk-drugs-salford/](http://www.haelo.org.uk/case-studies/reducing-harm-patients-taking-high-risk-drugs-salford/). Information on who was involved in the collaborative, aims and outcomes including data, as well as links to relevant medicine safety documents are all accessible here.

**Points to consider:** How do we most effectively use the intervention bundle to transfer learning and roll out the change ideas across all GP practices in Salford? What is required to make this happen?

How should we utilise increased capacity for QI projects within the eight participating practices? What opportunity does this approach lend for engagement with other practices?
2. SMASH

Salford Medication Safety dashboard (SMASH) is a new electronic medication safety dashboard developed by the University of Manchester, used in all GP practices in Salford\(^2\). The dashboard interrogates electronic health records using a set of 17 medication safety indicators developed by the universities of Nottingham and Manchester. The dashboard allows primary care professionals to identify instances of unsafe medication prescribing and unsafe medication monitoring in their practice, provide a leading measure for harm as a result of adverse medicines events. The dashboard identifies patients that are at increased risk of medication-related adverse events, and updates daily.

Each GP practice and their practice pharmacist can access data through the dashboard. The dashboard uses prescribing data and health information to identify patients ‘at risk’ of potential medication errors and creates a flag against such patients. The pharmacist checks the data periodically to check if any new patients have been flagged. This then allows GP’s and pharmacists to address the issue and take steps to reduce the risk to each patient and consider how they can prevent the situation from occurring again.\(^3\) The system allows general practices to avoid potentially unsafe situations by delivering carefully targeted information to health professionals.

Pharmacists in Salford have been trained to use the dashboard and engage GP practices to take part. Preliminary data analysis undertaken by Manchester University has shown a decrease in ‘at risk’ patients in participating practices and that these benefits are transferrable to all practices.

Data provided by the CCG has also shown a reduction in ‘at risk’ groups for the seven specific measures that relate to the PriSMS collaborative; demonstrating an increase in patients receiving appropriate drug combinations to support medicine safety and prevention of adverse reactions. The proportion of patients receiving risk reducing medications for the seven measures increased from between 0.5% to 27.2%. Please see appendix 1 for more details on dashboard measures.

The benefits seen in participating practices are transferrable to all practices in Salford and it would be useful to track and monitor how the dashboard is being used.

**Points to consider:** How are practices continuing to use the dashboard? Are regular processes to monitor the data in place, including analysis of patients identified as ‘at risk’ to identify any trends in prescribing or individuals ‘at risk’? What impact/outcomes are being seen as a result of the use of the dashboard? Is there any evidence of alert fatigue from the “flagging” of patients?

Are all practices fully engaged and regularly reviewing the dashboard? Is any further support required?

\(^2\) As part of the Salford Standard, see s.7 below

\(^3\) http://research.bmh.manchester.ac.uk/primary-care-patient-safety/research/interface-and-informatics/
3. Medicines Safety CQUIN

The Commissioning for Quality and Innovation (CQUINs) payments framework encourages care providers to share and continually improve how care is delivered and to achieve transparency and overall improvement in healthcare. Within Salford the CCG used this framework to have a medicine safety CQUIN focusing on better understanding medicines related admissions data collected by SRFT and reviewed by the Medicines Safety Group (data is also submitted to the CCG as part of the CQUIN process). An initial process in the delivery of this CQUIN is work undertaken at Salford Royal to increase the use of standardised coding for admissions which may be medicines-related.

131 medicines related admissions were recorded during Sept 16-Jan 17; approximately 30% of these admissions were caused by analgesic, diuretic and anti-hypertensive drugs alone. If we take into account combinations of drugs that include Analgesic, Diuretic and Anti-hypertensive drugs this figure increased to almost 60% of all medicines related admissions.

Further analysis showed that of the 30% admissions due to Analgesic, Diuretic and Anti-hypertensive drugs, 60% are considered to be preventable. It would be useful to explore these preventable admissions and understand prescribing patterns to help address adverse reactions leading to admissions. Please see appendix 2 for further charts and analysis.

Data collected is reviewed by the Medicines Safety Group; there is an opportunity to support more in-depth analysis of admissions to consider which drugs or drug combinations are contributing to admissions and better understand the prescribing pathway. This information can be used to develop further guidance or change ideas to support safer prescribing practices.
Points to consider: Is further analysis required to ensure the data is providing information that can identify any patterns and trends in prescribing practice and medications which result in admissions?

What sustainability plans have been put in place once the CQUIN funding has ended? Are other support mechanisms required to develop this project further?
4. Insulin – Phase Gate Review

It is recognised that medicine errors pose considerable risk to patients with diabetes. Nearly one in three patients with diabetes are affected by medicine errors which can result in dangerously high or low blood glucose levels. A review of the insulin journey for diabetes patients was led by the SRFT diabetes team and undertaken by the pharmaceutical company (Eli Lilly) in 2015. The review aimed to identify insulin prescribing errors and address the following aims:

1. Decrease the number of insulin prescribing errors
2. Decrease the amount of insulin wastage
3. Decrease number of adverse incident reports

The review was conducted over a 3 week period and identified 35 prescribing errors. A number of change ideas were put into place to address the errors for example the identification of patients on insulin in the nurse huddle and medicines reconciliation to include the name of insulin administrator.

The following improvements were recorded:

- 70% reduction in prescribing errors
- 78% reduction in administration errors
- 41% reduction in insulin wastage

Table 1 below shows the number and types of errors that occurred before and after the review.

<table>
<thead>
<tr>
<th>Error Type</th>
<th>Number of errors baseline</th>
<th>Number of errors after improvements</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insulin omitted</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Insulin not prescribed</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Insulin given at the wrong time</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Wrong dose given</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Wrong insulin prescribed</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Variable rate insulin policy not followed</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>L6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insulin omitted</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Insulin not prescribed</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Wrong dose given</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Wrong insulin given</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Wrong insulin prescribed</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Variable rate insulin policy not followed</td>
<td>5</td>
<td>0</td>
</tr>
</tbody>
</table>

As a result of the review the following changes have been proposed:

- Type1 diabetes alert on EPR system
- Identification of patients on insulin in ward nurse huddles
- Prioritisation of insulin in high risk category

**Points to consider:** Have the proposed changes been implemented? Is there data to show that improvements have been sustained over time? Where there other variables affecting the outcome data which need to be taken into consideration?

What can we learn about this review process to replicate for other conditions which are managed with medication? How can we transfer this learning and outcomes to other clinical areas? Who could support that would and what resources would be required?
5. Medicines quality strategies

The Salford Royal Quality Strategy for 2015-18\(^7\) identifies a number of areas for improvement specifically relating to Safer Medicines, among a range of organisation-wide improvement priorities (for example, QI capability building, person-centred care). Priorities identified include developing new medication error harm measures using SPC analysis and potential community-based projects focusing on high-risk medications.

The CCG’s medicines optimisation quality strategy identifies 11 priority areas of focus for 2017/18. These are drawn from a variety of sources, such as local data audits (further information enclosed below) and national drivers (new guidance or alerts). Areas of focus include: antimicrobial stewardship, polypharmacy and the elderly and right care reviews.

Audits are a part of the CCG’s medicines optimisation quality programme. Audit findings should influence future strategic commissioning decisions or be used to provide assurance of good practice of national standards. We have identified a number of audits which are currently ongoing or completed. These are shown in Table 2 below.

**Table 2: Completed audits**

<table>
<thead>
<tr>
<th>Type</th>
<th>Topic</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Safety Audits and Reviews</td>
<td>• High dose steroids in children audit</td>
<td>On going</td>
</tr>
<tr>
<td></td>
<td>• LABA no steroid audit</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• AKI sick day rules reviews (NICE guidance – in Salford Standard)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• AF treatment reviews (NICE guidance – in Salford Standard)</td>
<td></td>
</tr>
<tr>
<td>One-off Safety Audits</td>
<td>• Antidepressants in under 18’s(^8)</td>
<td>Completed</td>
</tr>
<tr>
<td></td>
<td>• Laxative reviews</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• NSAID reviews</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• TIA reviews</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Sodium valproate alert response</td>
<td></td>
</tr>
</tbody>
</table>

**Questions to consider:** Have any new areas for improvement been identified? Are there sufficient resources in the system to support quality improvement? How can we best prioritise improvements? How are priorities shared across the system? Could our resources be maximised if we developed a Salford-wide shared medicines strategy?

What have the audit findings shown, and how is this data shared across partners in Salford? Is any further data analysis required and is there sufficient resource to carry out this additional exercise?

\(^7\) Available online at: [http://www.srft.nhs.uk/about-us/quality/](http://www.srft.nhs.uk/about-us/quality/)

\(^8\) Further audits will take place in 17/18 as part of the quality strategy, linked to wider GM-wide focus
6. Neighbourhood Integrated Practice Pharmacists (NIPPS)

NIPPS is a commissioned service that aims to ensure that all GP practices in Salford have access to a pharmacist for a minimum of 3 sessions a week for smaller practices and 5 a week for larger practices. Pharmacists are employed through SRFT and Salford Health Matters. To date 22 pharmacists have been appointed and with 100% coverage of GP practices. However, it is acknowledged that there is variation in the amount of time/sessions provided across practices.

The pharmacist role covers post-discharge needs, polypharmacy, high risk drugs monitoring and compliance with the Salford Standard. Those practices who already have a pharmacist on site may require more specific input related to their patients and prescribing needs. Training sessions have been provided by GMMH for practice pharmacists focused on mental health and wellbeing awareness, depression and anxiety, including shared care protocols (see below at 7). It is recognised that further work is required with GP practices to consider the role of practice pharmacists and how they can better serve GP practice needs.

The pharmacists are using SMASH dashboard measures to monitor outcomes. Data being collected is not currently analysed to assess what is happening within those practices that have pharmacist sessions and demonstrate the impact this initiative is having on safer medicine practice within Salford.

Points to consider: How can we ensure safety requirements of Salford are incorporated into the role of practice pharmacists? Would other “cross-sector” training sessions be useful, building on learning from the mental health training? How can we minimise the variation between the amount of time / sessions provided across practices? Can resource be better prioritised according to a needs assessment?

What data is being collected to demonstrate that practice pharmacists are reaching their target patients and delivering a safer service? Is further data analysis required and what measures can be used to demonstrate this, for example, reduction in number of adverse medicines events?
7. Audit of shared care protocols in mental health

Atypical antipsychotics (AAP) can cause a number of potentially serious metabolic and cardiogenic side effects, including weight gain, dyslipidaemia and glucose tolerance. To ensure a smooth transfer of care between settings, GMMH and Salford CCG have developed a Shared Care Protocol (SCP) for patients started on an AAP, incorporating information from NICE and Maudsley guidelines.

GMMH sought to address the lack of audits looking at adherence to 6 week monitoring requirements set out in the SCP in the Salford adult in-patient setting (GMMH) and whether 12 week monitoring is performed within primary care, in December 2016 and April 2017 respectively.

For both audits, data collection was done retrospectively (so that 12-weeks data could be collected within the timeframe of the audit) from a set date until 30 suitable patients were identified. Information was collected via a data collection tool shared for practice pharmacists to complete, a review of discharge prescriptions and sections of the PARIS system.

Data from the audits identified higher compliance with monitoring requirements within GMMH than in primary care, however this may be attributable to poor communication of medication changes in discharge summaries. Results showed high compliance in GMMH with baseline monitoring, however poor compliance to subsequent monitoring shows that monitoring is completed routinely as part of an admission process, rather than being specifically linked to starting AAP medication.

![Graph 1: Compliance with weight, height, and waist circumference monitoring](image)

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Compliance with 12 week monitoring in primary care after initiating an AAP was found to be very poor, 45% of patients had no checks completed and only 1 patient had all the checks completed. An audit of handover information found that GPs were consistently informed that an AAP had been started, but were not generally informed of the start date.

Seamless transfer of care requires clear communication of the start date of AAP to the GP at the point of discharge, and a link to the SCP, so that 12-week physical health checks can be conducted at the correct time. However whether this information was supplied to GPs didn’t appear to have a subsequent rebound effect on physical health monitoring compliance (only 10% of patients with full discharge information received physical health monitoring). This suggests that even when physical health checks are completed at the GP surgery it may not have been as part of the AAP SCP process and may be for another physical health reason.

The audits are written up for the GMMH medicines management group to consider a series of recommendations, covering dissemination, awareness, input required from pharmacy, liaison with primary care and proposals for future audits.

**Points to consider:** what actions can be undertaken to improve the quality of information document on transfer of care documentation? How can Shared Care Protocols be more effectively communicated across the system? How are mental health medicines priorities shared and developed with partners across the system?

Audits are a useful tool to review performance against specific indicators, and provide a deeper dive into a single issue, are there measures that can be collected and reviewed more regularly as an indicator of change over time?
8. Salford Standard

The Salford Standard was launched in April 2016 and describes the level of care patients should receive when they access a GP practice in Salford. The standard aims to reduce variation in care and ensure that everyone in Salford receives the same level of service and care regardless of which practice they access. Other localities have replicated the “standard” approach, however Salford is leading the way integrating quality and safety in to the standard, for example, in Bolton the drive to standardise relates solely to financial impacts and budget management.

The Salford Standard covers ten areas as illustrated in the diagram below. The medicines optimisation theme includes two standards. There are also medicines related elements in the long term conditions section and the vulnerable groups sections:

Medicines Safety: The practice applies the principles of the PINCER intervention to reduce the number of medicines-related patient safety incidents.

Drugs monitoring: Monitor the side effects of certain medications first prescribed while a patient is in hospital, but continue to be prescribed once the patient leaves hospital.

Practices are provided with a summary of the change package to implement and offered support from the CCG to implement the required changes.12

All 45 GP practices in Salford have signed up to the standard and are monitored via the informatica system and the Salford Standard dashboard. The data provides assurance that patients on high risk drugs requiring monitoring are being monitored appropriately in primary care. It also ensures NICE standards and evidenced based sue of medicines within Salford.

The Salford Standard presents an opportunity to scale up successful and tested improvements by making ‘new’ improvements part of the normal operating procedure for GP practices in Salford.

Points to consider: What is the data in the Salford Standard dashboard telling us? Does it highlight areas which require further investigation? Are practices offered sufficient support to implement the required safety standards? What additional resources could be produced to more effectively communicate the actions required to be compliant? What opportunities are there for sharing learning form the implementation of the Standard between GP practices?

How are successful improvements identified to be rolled out as part of the Salford Standard? Does this sufficiently take into account the burden on GP practices to be compliant?

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12 For further details on the standards see: [www.salfordccg.nhs.uk/med-op-standards](http://www.salfordccg.nhs.uk/med-op-standards)
9. Safer Clinical Systems: Safety Case

The safety case project was undertaken by SRFT during 2014 - 2015 and brought together information on the levels of safety for the SRFT emergency admission prescribing pathway. The project aimed to ensure that 95% of patients admitted to the Emergency Assessment Unit (EAU) from A&E would have a 100% accurate prescription at 24 hours by Dec 2015. A&E staff were expected to undertake a medication review with patients during admission.

Although the 95% target was not reached; a notable shift in the proportion of patients receiving accurate prescriptions at 24hrs was achieved at the end of the 2015. 81% of patients were now receiving accurate prescriptions compared to the 69% baseline in 2014.

In addition:

- 83% of patients received medicine reconciliation on EAU within 24 hours (against the original baseline of 55%)
- 99.3% of patients received a pharmacy review within 72 hours

The project also identified other hazards in the prescribing pathway and a summary of risk and outcomes is provided in the table overleaf:
### Table 3: Safety Case Outcomes

<table>
<thead>
<tr>
<th>Route to Harm</th>
<th>Safety Criteria</th>
<th>Original Risk</th>
<th>Current Risk</th>
<th>Current Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key information lost through pharmacist communication</td>
<td>Reduce to lower risk hazard</td>
<td>High Risk</td>
<td>Low Risk</td>
<td>Safer: Feedback from staff has indicated improved communication and working on EAU</td>
</tr>
<tr>
<td>Key information lost through MDT communication</td>
<td>Reduce to lower risk hazard</td>
<td>High Risk</td>
<td>High Risk</td>
<td>Hazard remains high risk: There is a general consensus that MDT communication has improved on EAU but a sustainable solution is needed through EPR</td>
</tr>
<tr>
<td>Inaccurate prescribing of preadmission medications</td>
<td>95% of patients have 100% accurate pre-admission medications at 24 hours</td>
<td>High Risk</td>
<td>Low/ Medium Risk</td>
<td>Safer: Improved from a baseline of 71% to 84%. Although aim to get to 95%</td>
</tr>
<tr>
<td>Inaccurate prescribing of new medications</td>
<td>95% of patients have 100% accurate preadmission medications at 24 hours</td>
<td>High Risk</td>
<td>Low Risk</td>
<td>Safer: 98% of patients have accurate new medicine prescription at 24 hours</td>
</tr>
<tr>
<td>Inaccurate prescribing early in the pathway</td>
<td>95% of patients have 100% accurate new medications at 24 hours</td>
<td>High Risk</td>
<td>Medium Risk</td>
<td>Safer: Time to medicine reconciliation and time to prescribing accuracy has improved</td>
</tr>
<tr>
<td>Hazard 1-6 exacerbated at weekend</td>
<td>95% of patients have 100% accurate prescription at 24 hours</td>
<td>High Risk</td>
<td>High Risk</td>
<td>Hazard remains high risk: 2016 improvement work focus</td>
</tr>
</tbody>
</table>


**Points to consider:** What contributed to success and barriers? What learning is transferrable and what settings / wards could this be relevant to? Have actions from the Safer Handover programme been integrated into this programme – are there links to resources and support which can be exploited?

What is the current data telling us and is information for 2016 available? Have the results been sustained? What further work is required to meet the 95% target?
**Safer Intelligence**

Haelo has undertaken a review of medicines safety data currently collected and used in primary care, mental health, social care and secondary care under the Safer Intelligence project\(^{13}\).

It is evident that there is a considerable amount of existing data that is being collected regularly across Salford. However this is not necessarily fully interrogated and analysed (e.g. using Statistical Process Control charts to show change over time and identify common / special cause variation), systematically brought together and shared across all relevant professionals, groups and organisations.

The review identified a number of forums which provide an opportunity to review data at a system-wide level to identify outliers and priorities for improvement, as well as providing a forum to co-ordinate initiatives and share data. A Salford Medicines Safety Group is established to bring together medicines leads from primary and secondary care; however this group does not currently include regular representation from social care or mental health. Additionally, SRFT and the CCG are represented at a Greater Manchester Medicines Group.

In 2013 Professor Charles Vincent *et al*, proposed the Measurement and Monitoring of Safety Framework\(^{14}\) (“the MMS framework”) as a way to think differently about safety in healthcare, taking learning from high risk industries. The MMS framework highlights five dimensions which should be included in any safety monitoring approach to give a comprehensive and rounded picture of safety\(^{15}\), which seeks to address the imbalance between leading and lagging indicators.

Past harm data related to medicines currently collected across the health and social care system include the Medicines Safety Thermometer, Mental Health Safety Thermometer, adverse incidents and safeguarding reports.

In discussion at a Safer Intelligence medicines expert group, the following measures were identified as not routinely collected, which could contribute to better understanding of leading causes of medicines errors or harms:

- Understanding of polypharmacy rates\(^{16}\)
- Medicines reconciliation on admission *and* discharge (with a particular focus on understanding reliability of discharge on weekends and evenings)
- What drugs and drug combinations are resulting in admissions?
- Quality of information provided to patients on discharge from secondary care, linked to patient compliance / adherence with medications\(^{17}\)

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\(^{13}\) For more information, visit: [http://safersalford.org/programme/safer-intelligence/](http://safersalford.org/programme/safer-intelligence/)


\(^{16}\) Included as a programme of work in the CCG’s Quality Strategy 2017/18 using the ePACT database to produce a dashboard to identify areas of polypharmacy (by practice), with an initial focus on the elderly and anticholinergic burden

\(^{17}\) Noting that to measure adherence is particularly challenging as is reliant upon collecting and collating patient reported data
Following consultation with the medicines expert group, a medicines indicator has been developed and included in the Safer Intelligence dashboard. This links medicines-related leading and lagging indicators to broader measures around safety, including flow, staffing and organisational behaviours and culture.

**Points to consider:** Are we getting best value from the investment in data collection? Do we have sufficient capability to review and analyse our data? Can we develop new leading measures which help us predict and prevent harm from medication errors? What use can we make of the Safer Intelligence dashboard?

How can data collected at an organisation level be better reported within organisations, and shared across partners in Salford? Can we better utilise existing forums to share data and develop system-wide priorities? Are the right people and organisations present?
Summary

The information presented in this report provides an insight into the current work in Salford to promote Safer Medicines. The initiatives outlined here highlight the proactive commitment from partners to ensure safer prescribing practices and reduce harm from medications. Many of improvements have already been developed and implemented across primary and secondary care. These initiatives have demonstrated positive changes to practice and it is important that the learning from these initiatives is captured and shared, both locally, regionally and nationally to maximise the benefits. In addition, there is significant evidence that information collected both locally and regionally is being used to shape future strategic priorities for improvement,

A number of themes have emerged from this initial attempt to gather and collate information of safer medicine practice in Salford.

- Partners in Salford have laid strong foundations to support future Safer Medicines initiatives, with a track record of delivering improvements, collecting data and collaborative working. Safer Medicines presents an opportunity to capitalise on this and further improve safety for patients and residents in Salford.
- The established Medicines Safety Group provides an opportunity to share good practice and learning between settings. It would be useful to consider whether the format and structure of this group can be extended, for example to include regular representation from mental health and social care providers.
- Whilst some mechanisms to support scale up and spread of successful improvements are in place, for example the Salford Standard, further resources could be developed to support and accelerate uptake of new initiatives.
- With the development of a new accountable care system, there is a huge opportunity to create an integrated Safer Medicines strategy for Salford (involving all key health and social care partners) to maximise use of resources and take a patient centred approach to care across the whole health economy.
- Considerable amounts of data relating to medicines safety are currently collected across settings, however this data could be better utilised to support improvement through a robust analytic approach and established mechanisms for viewing and sharing data. We recommend the Safer Intelligence dashboard be used as a test to review how we can bring together and share understanding about medicines safety issues across a whole system, using principles of the Measurement and Monitoring of Safety Framework.
- Further investment in building QI capability throughout the system will enable further development of new improvements and innovations, and accelerate the pace of adoption of previously tested changes.
APPENDICES
Appendix 1 – Overall SMASH Dashboard Measures

1. Proportion of patients aged 65 or over who are prescribed an oral NSAID with co-prescription of an ulcer-healing drug.

2. Proportion of patients with a history of peptic ulceration who are prescribed an oral NSAID with co-prescription of an ulcer-healing drug.

3. Proportion of patients with chronic renal failure with an eGFR <45 who have not been prescribed an oral NSAID.

4. Proportion of patients with heart failure who have not been prescribed an oral NSAID.

5. Proportion of patients with chronic kidney disease stage 3B, 4 or 5 (eGFR <45) already prescribed an ACE inhibitor/ARB and loop diuretic who do not have prescription of an oral NSAID (the 'Triple Whammy').

6. Proportion of patients receiving methotrexate for at least three months who have had a recorded full blood count and/or liver function test within the previous three months.

7. Proportion of patients receiving amiodarone for at least six months who have had a thyroid function test within the previous six months.

* The arrows indicate which direction is positive for each chart.
Appendix 2: Medicine Safety CQUIN – medicine related hospital admissions charts

Medication Admissions by Drug Category

Proportion of Medicines Related Admissions by Drug Category

Proportion of Total Medicines Related Admissions Involving Anaglesic, Diuretic or Anti-Hypertensive