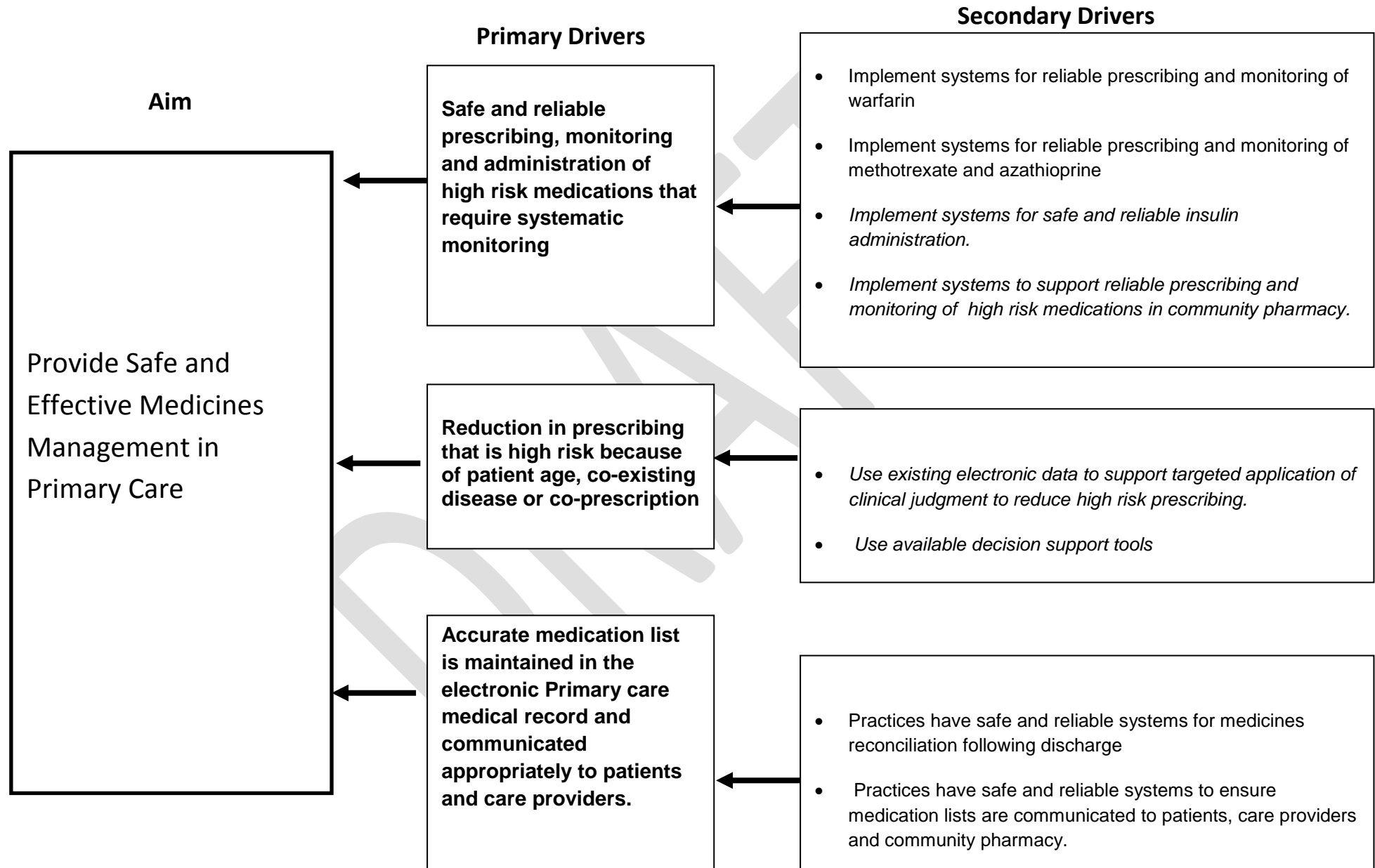


Driver Diagram and Change Package – Safer Medicines



*Italicised concepts in early testing phase for roll-out beyond 2013.

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Background

In May 2010, the Scottish Government launched the Healthcare Quality Strategy for NHSScotland, declaring its intention to put quality at the heart of all that the NHS does for the people of Scotland. The Delivering Quality in Primary Care National Action Plan set out the proposals for implementing the Quality Strategy in primary and community care and included a key commitment to develop and implement a national Patient Safety in Primary Care programme.

The Patient Safety in Primary Care programme is being developed around the following three work streams:

- **Safer medicines:** including the prescribing and monitoring of high risk medications, such as warfarin and disease-modifying anti-rheumatic drugs (DMARDs) and developing reliable systems for medication reconciliation in the community
- **Safe and effective patient care across the interface** by focussing on developing reliable systems for handling written and electronic communication and implementing measures to ensure reliable care for patients
- **Leadership and culture** using trigger tools (structured case note reviews) and safety climate surveys

Along with a comprehensive scoping exercise, a series of subject matter expert meetings were held to map other relevant work across Scotland potentially impacting on patient safety in primary care and to define the content of the programme, information was gathered on each of the themes. As a result of this the team has now developed driver diagrams and change packages for each work stream within the Programme.

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Purpose of this Change Package

Elements of this change package have been / continue to be tested in Scotland, through the work of the Safety Improvement in Primary Care projects, as well as others including the Scottish Patient Safety Programme. The change package identifies and establishes recommended interventions which have been proven to collectively bring about improvements in patient care. This package illustrates what interventions care providers should consider in order to improve a whole system of care.

There are three distinct parts to this change package; driver diagram, change concepts and idea, and measures. A driver diagram is a way of describing the elements that need to be in place to achieve an improvement aim. It helps to focus on the cause and effect relationships which can exist in complex situations. Driver diagrams identify what will help people to 'do the right thing'. The primary drivers are high level ideas, which if implemented, will achieve the improvement aim. The best way of implementing primary drivers is to identify a series of actions or projects (known as secondary drivers) which, when undertaken, will contribute to achieving the primary drivers, and in turn, the aim.

A change concept is a general notion or an approach to improving an aspect of care. A change idea is an action which is expressed as a specific example of how a particular change concept can be applied in real life.

Also included in this package is a series of different measures, including process and outcome measures. These are important as we need to know if the changes we have tested / introduced have actually led to an improvement. The data you collect needs to be just good enough to answer the question 'how will I know that the changes I am making will be an improvement?.' In order to answer this you will need a defined process (such as compliance with all elements of a care bundle) which is linked to an outcome (such a reduction in medication errors). Both process and outcome data which are linked are essential to evaluate the effectiveness of change. The data you collect over time can be used to tell an improvement story and build the case to change practices in order to improve outcomes. Remember that data collection and its interpretation does not need to be complicated. A simple check on the processes with the use of an annotated run chart over time will suffice. Data should be displayed for those involved in the improvement effort to see, and should be easy to understand.

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How to use this Change Package

Users of this change package are encouraged to review the change package to determine:

- What practices might already be in place in their care area(s) and decide if further work is needed.
- Identify and prioritise the first few changes that a team will undertake and determine if these changes lead to an improvement (remembering that improvement takes time)
- What other changes will be undertaken at a later date by the team.
- We advise that the Model for Improvement is used to guide your improvement work. This model is a simple but powerful tool for accelerating improvement.

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Secondary Drivers	Key Change Concepts and Change Idea for PDSA Testing
<p>Implement systems for reliable prescribing and monitoring of warfarin</p>	<ol style="list-style-type: none"> 1. Warfarin dose is prescribed according to local guidance? <i>Is there evidence that the last advice re warfarin dosing given to patient followed current local guidance or uses computer assisted decision making e.g Dawn or INR star software?</i> 2. INR test is planned according to local guidance. <i>Is there evidence that the last advice re frequency of blood testing given to patient followed current local Guidance or uses computer assisted decision making e.g Dawn or INR star software?</i> 3. Patient complying with dosage instructions. <i>Has patient been taking the advised dose since last blood test?</i> 4. INR is taken according to previous recommendation. <i>INR is taken within 7 days of planned repeat INR?</i> 5. Patient receives regular education. <i>Patient education recorded every 6 months.</i> 6. Have all measures been met?

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Measurement Plan

Measure Name	Compliance with warfarin bundle
Measure Type	Process / Percentage
Measure Description	% compliance with bundle
Numerator	Number of patients who received all elements of the bundle
Denominator	Number of patients sampled
Sampling Plan	To collect data on random samples of patients being prescribed the relevant high risk drug
Reporting Frequency	10 patients per month
Numeric Goal	95% compliance with warfarin bundle

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Secondary Drivers	Key Change Concepts and Change Idea for PDSA Testing
<p>Implement systems for reliable prescribing and monitoring of methotrexate and azathioprine</p>	<p>DMARDS</p> <p>Practices will randomly sample 5 patients on Methotrexate or Azathioprine per fortnight to see if they are reliably receiving the following care</p> <ol style="list-style-type: none"> 1) Appropriate tests are carried out in correct time scale Measure: Has there been a full blood count in the past 12 weeks (AZA) 8 weeks (MTX) as per local guidance 2) Appropriate action taken and documented for any abnormal results in previous - 12weeks. <i>If any abnormal results in previous 12 weeks (WBC < 4, neutrophils <2, platelets <150, ALT >x2 normal upper limit (>60).) has action been recorded in the consultation record</i> 3) Blood tests reviewed prior to prescription. <i>Is there a documented review of blood tests prior to issue of last prescription?</i> 4) Appropriate immunization. <i>Has the patient ever had pneumococcal vaccine?</i> 5) Patient asked about any side effects following last time blood was taken. 6) Have all measures been met.

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Measurement Plan

Measure Name	Compliance with DMARDS bundle
Measure Type	Process / Percentage
Measure Description	% compliance with bundle
Numerator	Number of patients who received all elements of the bundle
Denominator	Number of patients sampled
Sampling Plan	To collect data on random samples of patients being prescribed the relevant high risk drug
Reporting Frequency	10 patients per month
Numeric Goal	95% compliance with DMARDS bundle

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Secondary Drivers	Key Change Concepts and Change Idea for PDSA Testing
<p>Practices have safe reliable systems for medicines reconciliation following discharge and are communicated to patients and care providers.</p>	<p>Medicines Reconciliation is defined by the Institute for Healthcare Improvement (IHI) as: “The process of obtaining an up-to-date and accurate medication list that has been compared with the most recently available information and has documented any discrepancies, changes, deletions or additions resulting in a complete list of medication accurately communicated.”</p> <p><u>GP practices Activity</u> Collect data on the following :</p> <ol style="list-style-type: none"> 1) Has The Immediate Discharge Document (IDD) has been workflowed on the day of receipt. 2) Has Medicines reconciliation (see full definition below*) occurred within 2 working days of the IDD being workflowed to the GP/Pharmacist. 3) It is documented that any changes to the medication have been acted upon? 4) It is documented that any changes to the medication have been discussed with the patient or their representative within 7 days of receipt? 5) Have all the above measures have been met (composite).

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Optional measures relating to Secondary care Activity

Collect the following data from the discharge letter and ascertain whether:

1. Are all patient demographics (see full list in guidance) documented in the Immediate Discharge Document?
2. Is the patients primary diagnosis relating to this admission documented in the Immediate Discharge Document?
3. Is the information within the Immediate Discharge Document sufficient to make contact with a third party unnecessary?
4. Were any changes to the patients admission medication explained in the Immediate Discharge Document?
5. If present, does the information in the electronic pharmaceutical care plan add value to the information in the Immediate Discharge Document?
6. COMPOSITE - Are all the above measures met?

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Measurement Plan

Measure Name	Compliance with medicines reconciliation measures
Measure Type	Process/percentage
Measure Description	% compliance with bundle
Numerator	Number of patients who received all elements of the bundle(s)
Denominator	Number of patients sampled
Sampling Plan	To collect data on 10 consecutive Immediate Discharge Documents (IDDs) from the following sample of patients: <ul style="list-style-type: none">• All patients who have been discharged from an acute medical admission• All patients over 75 years of age who have been discharged from an inpatient stay from anywhere (eg, surgical admission, geriatric admission)
Reporting Frequency	Monthly reporting of data
Numeric Goal	95% compliance with medicines reconciliation measures