



**Scottish Patient Safety Paediatric Programme
Medicines Management Workstream
Driver Diagram and Change Package**



Scottish Patient Safety Paediatric Programme

A driver diagram is used to conceptualise an issue and to determine its system components which will then create a pathway to achieve the goal.

Outcome	Primary Drivers (Primary Drivers are system components which will contribute to moving the primary outcome)	Secondary Drivers (Secondary drivers are elements of the associated primary driver. They contain change concepts that can be used to create projects that will affect the primary driver)
<p>Improve medicines management processes and decrease harm from medicines</p> <p>(Reduce dosage errors, adverse drug events and improve medicines reconciliation)</p>	<p>Appropriate, timely and reliable evidence-based medicines management processes.</p>	<p>FMEA reviews.</p> <p>Reduce harm from high alert medications.</p> <p>Accuracy of medicines at interface.</p> <p>Standard drug algorithms, dosages, concentrations, prescribing protocols, recovery protocols and monitoring parameters.</p>
	<p>Child and family centred-care</p>	<p>Child/family involvement in medicines reconciliation, at admission, transfer and discharge.</p> <p>Open communication between team and family.</p>
	<p>Collaborative multi-disciplinary teams; organisational culture of safety.</p>	<p>Reliable care planning, communication and collaboration of a multidisciplinary team.</p>
	<p>Infrastructure promoting safety and quality.</p>	<p>Infrastructure and leadership to deliver consistent and reliable, evidence based care.</p> <p>Timely, regular feedback to clinicians of quality and safety performance measures.</p> <p>Staff with improvement skills.</p>

Secondary Drivers	Change concepts and change ideas for PDSA testing
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	Bolded items are required elements of SPSP
FMEA reviews	Identify high risk areas using Failure Modes and Effects Analysis (FMEA).
Reduce harm from high risk antibiotics	High risk medicines management service. Lab results available on ward within 2 hours, or monitor at bedside. Connect prescriptions to lab results. Lab results reported to clinician overseeing care. Use gentamicin flow sheets.
Standard drug algorithms, dosages, concentrations, prescribing protocols, recovery protocols and monitoring parameters	Reduce drug algorithm variation. Certain drugs used by protocol only. Reduce recovery protocol variation. All prescription elements in place before processing: dose, strength, units (metric), route, frequency and rate. Automated dose reduction plan. Pre-printed dosage calculation sheets. Review administration time(s) of high risk medicines. High risk medicines management service. Lab results available on ward within 2 hours, or monitor at bedside. Connect prescriptions to lab results. Lab results reported to clinician overseeing care.
Child/family involvement in medicines reconciliation, at admission, transfer and discharge	Home medication lists Parent/carer copy of medicines administration record. Medicines card. Pharmacists participate in discharge counselling.
Open communication between team and family	Parental medicines management counselling. Educate young people/parents: changes to medicines, monitor medication regimes, side effects. Educational materials suitable for children and young people. Self-management protocols.
Reliable care planning, communication and collaboration of a multidisciplinary team	Communication process for discharges/transfers to another ward, hospital or community and primary care. High risk medicines management services for children and young people with long-term conditions. Communication processes with community and primary care services. “One stop” delivery systems Pharmacists participate in multi-disciplinary rounds. Pharmacists participate in safety briefings. Reliable in-hospital handoffs. Staff with improvement skills: <ul style="list-style-type: none"> • SPSP workstream huddles.



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	<ul style="list-style-type: none"> • Use measures to view outcomes over time. • Publish timely feedback on progress towards critical care aims.
Accuracy of medicines at interface	<p>Reconcile medications on admission, transfer and discharge (begin with high-risk segment)</p> <p>Prescription charts detailing herbal, vitamin and other supplements.</p> <p>Standard home medication record.</p> <p>Communication tool, indicating initial home medicines, and medicines continued, changed or discontinued during hospital admission; documenting reasons for omitting medicines.</p> <p>Reconcile pre-operative and post-operative prescriptions.</p> <p>Transfer form documenting medicines ordered since admission.</p> <p>Discontinue inappropriate medicines on discharge from paediatric intensive or high dependency care.</p> <p>Attach pre-admission medicines list to discharge orders form.</p> <p>Medicines transferred with child between tertiary and secondary care.</p> <p>Past-year medication lists, recording adverse drug reaction, intolerances and allergy information.</p> <p>Educational material and sessions with parents and young people.</p> <p>Educate about changed medicines.</p> <p>Separate products that look alike.</p> <p>Pharmacy consultation service.</p> <p>Prepare ready-to-use doses, in pharmacy.</p> <p>Identify patients at risk with high-alert medications.</p> <p>Weight based dosing in kilograms.</p>
Infrastructure and leadership to deliver consistent and reliable, evidence based care	<p>Monitor dosage errors</p> <p>Leadership for medicines management workstream</p> <p>Timely, regular feedback to clinicians of quality and safety performance measures:</p> <ul style="list-style-type: none"> • medicines management feedback/learning from paediatric mortality & trigger tool reviews.
Timely, regular feedback to clinicians of quality and safety performance measures.	<p>Feedback from adverse drug events trigger tool</p> <p>Feedback from paediatric trigger tool</p> <p>Feedback from mortality reviews</p>
Staff with improvement skills	<p>SPSPP workstream huddles</p> <p>Measurement for improvement</p> <p>Publish timely feedback on progress toward medicines management aims.</p>

