



Peri-operative Management Driver Diagram and Change Package

The Institute for Healthcare Improvement



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. Primary drivers are system components which will contribute to moving the primary outcome. 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.

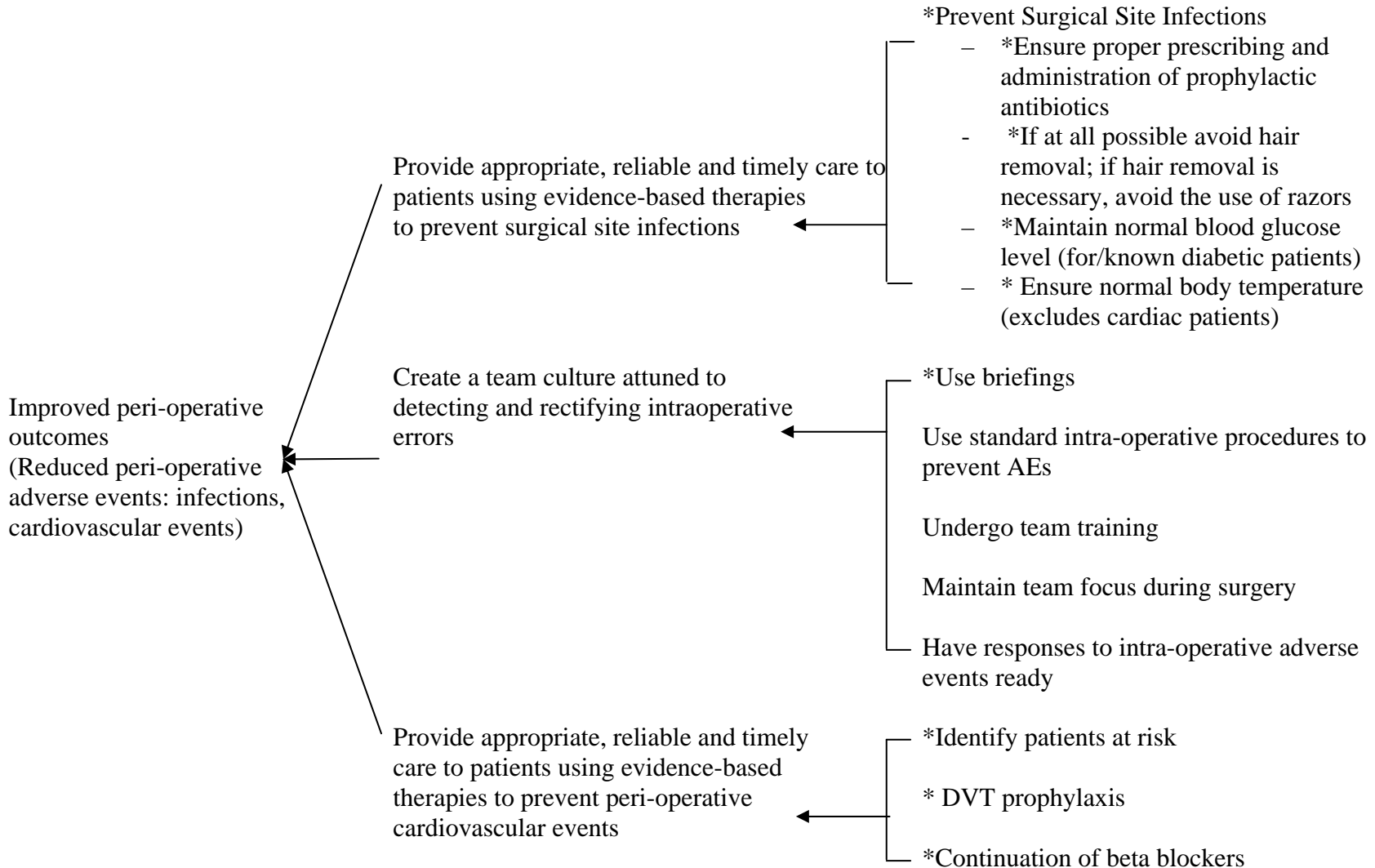
Scottish Patient Safety Programme

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Outcomes

Primary Drivers

Secondary Drivers



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Secondary Drivers	Change Concepts and Change Ideas for PDSA Testing
	*Bolded items are required elements of the SPSP

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<p>Prevent Surgical Site Infections</p> <p>*Ensure proper prescribing and administration of prophylactic antibiotics</p>	<p>*Ensure <i>prophylactic antibiotic was prescribed as per local antibiotic policy/SIGN guideline, for the specific operation category and</i></p> <p>*Ensure the antibiotic has been <i>administered within 60 minutes prior to the operation.</i></p> <ul style="list-style-type: none"> ○ Designate responsibility/accountability for preoperative prophylactic antibiotic administration (i.e. preop nurse, anaesthesia), connect to key point in process ○ Standardise prophylactic antibiotic administration process to occur with commonly performed activity within 60 minutes prior to incision ○ Standardise delivery process to ensure timely delivery of preop antibiotics to the pre -theatre induction room ○ Systematically document antibiotic administration on every patient record ○ Place a standing order on computer-generated operating room schedules for patients identified via decision support software. (Gaynes, CID 2001:33) ○ Use a visible reminder or checklist to give antibiotics on each case (i.e. brightly colored sticker) ○ Create protocol to deliver antibiotic to theatre with patient ○ Educate theatre staff regarding importance and reasoning of antibiotic timing ○ Provide feedback on prophylaxis compliance and infection rate data monthly ○ Involve pharmacy staff to ensure timing, selection, and duration maintained ○ Institute a computerised physician order entry system with procedure-specific fields for antibiotic selection, timing, and duration ○ Re-dose for longer surgeries (e.g., after 3 hours for short half-life cephalosporin) ○ Consider weight-based antibiotic dosing (higher dose for larger patients). As this may be cumbersome, may want to increase cephalosporins from 1 to 2 grams for all patients since minor issues around toxicity. ○ Improve screening for allergies to beta lactam antibiotics to eliminate false positives
<p>*Ensure, if hair removal was required, operation site is clipped (shaving is not recommended).</p>	<p>* If at all possible avoid hair removal; if hair removal is necessary, avoid the use of razors</p> <ul style="list-style-type: none"> ○ Remove all razors from operating room ○ Establish protocol for when/how to remove hair in affected areas

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Continuation of beta blockers	<ul style="list-style-type: none">○ Consider insertion of inferior vena cava (IVC) filters in high risk trauma patients○ Continue prophylactic treatment post-discharge where appropriate <p>*Continue beta blockade for patients on beta blockers</p> <ul style="list-style-type: none">○ Use protocol to ensure continued administration of beta blockers to known beta blockade population
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