Acuity, Medical Complexity, and Procedural Complexity

The tables below define low, medium, and high acuity, medical complexity and procedural complexity that need to be taken into consideration when determining whether quality paediatric care can be safely provided.

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Acuity and Medical Complexity

	ACUITY (Presenting Complaint)	MEDICAL COMPLEXITY (Underlying Condition)
LOW	• Presenting problem(s) is non-urgent. • May be part of a chronic problem. • No history suggestive of potential for immediate deterioration. • Investigations and interventions could be delayed or referred to other Health Care Providers. • Typically managed in a non-inpatient setting.	• If chronic condition present, condition is stable. • Systemic impact of disease is mild to minimal or no functional limitations. • Condition can be managed using standard lab and diagnostic investigations and treatment protocols. • Condition is relatively common or, if less common, a diagnosis and treatment plan has been previously established. • Typically managed in non-inpatient settings.
MEDIUM	• Presenting problem(s) could potentially progress to a serious problem requiring extensive intervention. • May be associated with significant discomfort or inability to function. • Some will require inpatient stays. • The need for intensive care would be an unexpected event.	• Chronic condition present (diagnosed or suspected). • Often with signs of mild exacerbation, progression or side effects from treatment. • Systematic impact of disease is severe - definite functional limitations. • Condition can be managed using standard lab and diagnostic investigations and treatment protocols. • Condition is relatively common or, if less common, a diagnosis and treatment plan has been previously established. • Typically managed in non-inpatient settings with periodic inpatient stays.
HIGH	• Presenting problem(s) is a potential or real threat to life, limb or function and requires immediate and potentially aggressive intervention(s). • Typically requires an inpatient stay up to, and including, intensive care.	• Chronic condition(s) present (diagnosed or suspected) often with signs of significant exacerbation, progression or side effects from treatment. • Systematic impact of condition(s) is severe (multiple organs affected) - a constant threat to life. • Significant functional limitations present, often requiring dependence on technology. • Condition(s) requires an extended and innovative range of interventions. • Conditions may be rarely seen in children and while not necessarily complex, would benefit from access to and consultation with other specialists/ subspecialists to establish a diagnosis and treatment plan for ongoing management. • Typically managed in non-inpatient settings with frequent inpatient stays.

PROCEDURAL COMPLEXITY

LOW	• Procedure is commonly performed on children (most low complexity procedures are also commonly performed on adults); AND • Typical time in the operating room is less than 2 hours; AND • Routine OR equipment requirements; AND • Post-operative care requires RNs with general paediatric knowledge and skills, with access to an interdisciplinary team on a case-by-case basis; AND • Post-operative admission to an NICU, PICU or high acuity/close observation bed is not expected; AND • Transfusion of blood products intra-operatively is unlikely; AND • Risk of a significant intra- or post-operative complication is low.
MEDIUM	• Procedure or technique is unique to children but is performed relatively frequently; OR • Requires equipment or devices not routinely stocked by operating rooms; OR • Risk of intraoperative blood product transfusion(s) is not negligible; OR • Risk of intra- or post-operative complication(s) is not negligible; OR • Post-operative care requires RNs and an interdisciplinary team with medical/surgical knowledge and skills that works exclusively or primarily with children; AND • Post-operative admission to PICU is not expected (post-operative admission to NICU may be expected); AND • Involves a single perioperative surgical specialty; AND • Does not require pre- and post-operative multi-specialty coordination (e.g., oncology, GI medicine and interventional radiology).
HIGH	• Procedure or technique is unique to children and is performed infrequently; OR • Post-operative care requires RNs and an interdisciplinary team with subspecialty surgical knowledge and skills that works exclusively or primarily with children; OR • Post-operative admission to a PICU is expected; OR • Involves multi-specialty perioperative participation (e.g., general and ENT surgeon); OR • Requires pre- and post-operative multi-specialty coordination (e.g., oncology, GI medicine and interventional radiology).
LIFE OR LIMB	• Procedure performed on an unplanned/emergency basis that would not normally be within the capacity of a given site but which, if resources are available (trained personnel, equipment, etc.), is performed because the risk of transport is greater than the risk of performing the procedure locally. • Most likely to occur in rural and remote settings.