Antimicrobial Restrictions

Purpose

In Australia, up to 50% of antimicrobials used in hospitals are prescribed inappropriately both in adults and children. Inappropriate antimicrobial use increases the risk to patients of colonisation and infection with resistant organisms and subsequent transmission to other patients. The consequences of this are now well known — patients with infections due to resistant bacteria experience delayed recovery, treatment failure and even death.

The Antimicrobial Restriction procedure is a core component of the Children’s Health Queensland (CHQ) Antimicrobial stewardship program. This procedure supports a standardised approach to the appropriate use and prescribing of antimicrobial therapy at Children’s Health Queensland Hospital and Health Service (CHQHHS), as detailed in order to:

- Optimise clinical outcome
- Minimise adverse consequences of antimicrobial use (toxicity, selection of pathogenic organisms and emergence of resistant organisms)
- Support prudent management of antimicrobial associated health care costs

The purpose of this procedure is to embed the implementation of a comprehensive antimicrobial restriction policy at CHQ within the framework established by the Australian Commission on Safety and Quality in Health Care (ACSQHC).

The goal is to provide safe quality health care within the framework of the National Quality and Safety standards.

Scope

This procedure relates to all CHQ staff involved in prescribing, dispensing, preparation and administration of antimicrobials.

Each staff member, including Agency, Locum or staff on rotation, is individually responsible and accountable for ensuring safe and appropriate use of antimicrobials (Antimicrobial Stewardship) in accordance with CHQ Antimicrobial procedures, guidelines and restrictions.
Procedure

- Antimicrobials should be prescribed according to the CHQ Antibiocard which are generally based on Therapeutic Guidelines: Antibiotic and comply with the Queensland Health List of Approved Medicines (LAM).
- Some medicines listed on the LAM require the additional approval of the Infectious Diseases Physician, unless their use is already endorsed for use by Infectious Diseases and CHQ Medicines Advisory Committee (MAC) as a unit-specific protocol.
- Where approval is required, the Prescriber will contact the Infectious Diseases consultant who will consider the antimicrobial’s use. This consultation MUST be documented in the patient’s medical notes and any approvals also documented and communicated to Pharmacy, before further stock will be supplied from the pharmacy.

For a comprehensive list of antimicrobials and the level of approval required, including unit-specific exceptions, see the LCCH antimicrobial formulary spread sheet or ask your pharmacist for advice. Units are encouraged to develop protocols in consultation with the Infectious Diseases team when a restricted agent needs to be prescribed on a regular basis.

CHQ Antimicrobial formulary is divided into the following three levels of access:

- **Green: Unrestricted** Antimicrobials are “free” to use for clinically appropriate indications by all prescribers.
- **Amber: Restricted** Antimicrobials may only be prescribed for certain indications (listed) under the direction of a consultant. Approval is required for use outside of these indications.
- **Red: Approval Required** Antimicrobials may only be prescribed following authorisation by Infectious Diseases (ID) or Clinical Microbiology. The indication, name of the authorising clinician and unique ID approval number must be annotated on the medication chart.

**Clinical scenarios involving antimicrobials that require ID approval:** Hospital in the Home (HITH) Parenteral Antibiotics (excluding Cystic Fibrosis (CF) patients receiving Tobramycin, Ceftazidime or Piperacillin/Tazobactam for HITH OR non-CF bronchiectasis patients receiving Ceftriaxone - see Antimicrobial Restriction list) Antimicrobials which may require special aseptic compounding:

- Antibiotic eye drops – e.g. Ceftazidime, Vancomycin
- Antimicrobials for Intravitreal injections – e.g. Amphotericin, Voriconazole
- Antimicrobials for Intrathecal or Intraventricular administration – e.g. Vancomycin

**Note:** Please contact the CHQ Oncology Pharmacy Manager directly to discuss arrangements for aseptic compounding of these products. Wherever possible, this should be organized in advance.

Use of a restricted antimicrobial at CHQ can be authorised by a CHQ Infectious Diseases Consultant, CHQ Infectious Diseases Registrar and Clinical Microbiologist (Pathology Queensland).
Medication Approval process

Intent to prescribe

Yes

Is this medication an antimicrobial?

No

Is the medication listed on the LAM and for this indication?

Yes

Check Antimicrobial Restriction List which includes endorsed unit-specific exceptions

No

Restricted antimicrobial

R

Unrestricted antimicrobial / Matches indication on endorsed unit-specific protocols

G

A

Is this antimicrobial listed on LAM?

Yes

Fill in IPA form and send to Infectious diseases consultant

No

Infectious diseases consultation and approval required

Approval granted or Agreement on alternative antimicrobial

No approval granted and no agreement on alternative

Discussion between Treating Consultant and ID Consultant

If no resolution: Refer to MAC Chair

Prescriber/Treating team to:
- Notify the pharmacy of ID approval
- Document ID approval number in the patient’s medical notes and on the prescription (see example below)
- Forward approved IPA form to pharmacy

Pharmacist responsibilities:
- Document clearly in patient’s iPharmacy profile that ID approval has been granted (for outpatients) OR on the patient’s Medication Action Plan (for inpatients)
- Document ID approval number in Special Product’s register (iPharmacy©) for individual patient.

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Is this medication listed on MAC endorsed clinical protocol for intended indication?

Yes

No further action required.Prescribe/supply

Fill in IPA form

Is cost <$415/mth or <$5000 p/a?

Yes

Send to Service Group/Departmental Director for approval

No

Send to Divisional Director for approval

Forward approved IPA form to pharmacy

List of Acronyms:
- LAM - Queensland Health List of Approved Medicines
- MAC - Medicines Advisory Committee
- IPA - Individual patient approval
- ID - Infectious Diseases
- R – Red – Restricted Antimicrobial
- A – Amber – Restricted Antimicrobial (If used outside endorsed indications)
- G – Green – Unrestricted Antimicrobial
Antimicrobial Supply

For inpatients: Pharmacy may provide 24 hours initial supply of antibiotics to avoid unnecessary delay in treatment. Exceptions may apply.

For outpatients: ID consultation and approval required before antimicrobial supply will be dispensed.

Further supply will be dependent on receipt of ID approval. If no approval is forthcoming, this will be escalated to the primary treating Consultant, IMPS Consultant on call and the AMS Team. It is the responsibility of the prescriber to notify the pharmacy if ID approval is granted.

Documentation of Antimicrobial plan on the medication chart/prescription

Where approval is required, the Prescriber will contact the Infectious Diseases consultant who will consider the antimicrobial’s use. This consultation MUST be documented in the patient’s medical notes and any approvals also documented, before further stock will be supplied from the pharmacy.

A unique approval number will be given to the prescriber and be annotated as described below. Document the antimicrobial plan on the medication chart as per this example:

The National Inpatient Medication Chart should be annotated with the following information:

- The Indication for Antimicrobial Therapy
- The Intended Duration or Review Date for Antimicrobial Therapy
- The words “ID approved” with the unique ID Approval number provided by the Approving ID Physician or Microbiologist
- The chart should be numbered with the Days of Therapy and scheduled review date, to assist with appropriate follow-up and review of therapy
The Outpatient prescription should be annotated with the following information:

- The Indication for Antimicrobial Therapy
- The Intended Duration or Review Date for Antimicrobial Therapy
- The PBS restriction/authority number (If required)
- The unique ID Approval number provided by the Approving ID Physician or Microbiologist

Supporting documents

- Proc 01036: Antimicrobial Prescribing and Management procedure- Children's Health Queensland
- CHQ Antibiocard

Consultation

Key stakeholders who reviewed this version:

- Director, Infection Management and Prevention Services (LCCH)
- Antimicrobial Stewardship Steering Committee members (LCCH)
- Antimicrobial Stewardship Pharmacist (LCCH)
Definition of terms

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<thead>
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<th>Definition</th>
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References

1. Australian Commission on Safety and Quality in Health Care (ACSQHC)
2. National Quality and Safety standards
3. Queensland Health List of Approved Medicines (LAM)

Audit/evaluation strategy

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<tr>
<th>Level of risk</th>
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<td>Strategy</td>
<td>Regular AMS rounds, AMS prescribing mini audits (targeting specific antimicrobials), Annual Point Prevalence Audit</td>
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<td>Audit/ review tool(s) attached</td>
<td>Nil</td>
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<td>Audit/ Review date</td>
<td>Monthly reporting to Antimicrobial Stewardship Steering Committee, Quarterly reporting to Medicines Advisory Committee</td>
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<td>Review responsibility</td>
<td>Antimicrobial Stewardship Team, Infection Management and Prevention Service</td>
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Key elements / Indicators / Outcomes

100% of prescriptions for restricted antibiotics that are concordant with CHQ Antimicrobials Restrictions approved criteria.

Procedure revision and approval history

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<th>Modified by</th>
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<tr>
<td>1.0</td>
<td>IMPS Consultant</td>
<td>Antimicrobial Stewardship Steering Committee, Medicines Advisory Committee</td>
<td>General Manager Operations</td>
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<td>2.0</td>
<td>Director - Infection Management and Prevention Services and Antimicrobial Stewardship Pharmacist (LCCH)</td>
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<td>Executive Director Hospital Services</td>
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Keywords

Antimicrobials, antibiotics, restrictions, ID approval process, Antimicrobial Stewardship, AMS, Antimicrobial Prescribing and Management, 01035, appropriate use, infectious diseases approval, documentation

Accreditation references