PAEDIATRIC MEDICINE

National Referral Guidelines

SPECIFIC PAEDIATRIC MEDICINE REFERRAL LETTER GUIDELINES

Please note: Referrals are accepted from registered Medical Practitioners; Lead Maternity Care (LMC) providers in respect to perinatal (up to six weeks of age) medical care.

Referrals may also be accepted from other health professionals and/or community/iwi social workers but this should preferrably occur via the patient's General Practitioner (GP).

The referral should include:

- The patient's full name (and aliases) and, if appropriate, the name of the parent or caregiver.
- The patient's address.
- The patient's telephone number (home and alternative).
- The patient's date of birth.
- Hospital number (NHI) (if known).
- Past History including details of previous treatment, investigations including X-rays/ultrasounds, etc (photocopied results and films where appropriate). Antenatal ultrasound reports in cases of post natal follow-up.
- Patients being re-referred to the OPD with the same problem should have a letter containing the relevant information directed to the original consultant who will arrange an appropriate follow-up appointment at a routine clinic.
- Presenting symptoms and their duration.
- Physical findings.
- Details of any previous treatment including medications given to the patient for the condition.
- Details of any associated medical conditions which may affect the conditions, or its treatment (eg, diabetes).
- Details of current medications and any drug allergies.
- GP diagnosis and categorisation.
- Referrals from LMCs should be copied to the Child's GP.

Note: Details of facility where films were taken, including data. If private, patient to bring films to outpatient clinic attendance.

The urgency of the referral must rely on the clinical assessment of the GP. Conditions requiring urgent management should be referred immediately. Immediate and Urgent cases must be discussed with the Specialist or Registrar in order to get appropriate prioritisation and then a referral letter sent with the patient, faxed or e-mailed.

Access sub-speciality paediatric services will vary regionally to and whilst referral should usually be through the local Paediatric Service this will depend on local service arrangements.

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Category Definitions : These are recommended timeframes in which patients should be seen in a specialist clinic.

1. Urgent - *within 1 week*
2. Semi-urgent - *within 4 weeks*
3. Routine - *within 8 weeks*

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Diagnosis	Evaluation	Management Options	Referral Guidelines
Paediatric Medicine is considered under the following sub headings:	Thorough history and physical examination is required to determine the specific diagnosis (see below).	Specific treatments depend on the specific diagnosis identified, as listed below.	Circumstances for referral are indicated below with reference to the appropriate specialty/specialties and degree of urgency (Category).
	Child Health and Development Record. *This should be requested at each visit to a health professional and a note made regarding the reason for the visit in the appropriate section.*		Cross-reference should be made to both treatment criteria and criteria for specialist assesment. In situations of acute referral, note especially the Category 1 clinical priority access criteria (CPAC) and *treatment required prior to the referral*. Copies of relevant diagnostic results should be sent, with any referral.

Note: *These national referral guidelines have been prepared to provide guidelines for referral to specialist Paediatric Services. They should be regarded as examples or guidelines for referring health professionals and are not an exhaustive list. They are not intended to preclude a referral where the diagnosis is unclear or a second opinion for management options is requested.*

They contain some management options to assist the GP. It should be noted it is a consensus document produced in the absence of hard evidence based guidelines.

The referring health professional should ensure that in using these national referral recommendations generally accepted clinical practice should be properly taken into account. If there is a conflict between the national referral recommendations and generally accepted clinical practice, then generally accepted practice should prevail.

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Diagnosis	**Evaluation**	**Management Options**	**Referral Guidelines**
BEHAVIOURAL	History + examination. Current social and family circumstances. School performance and school difficulties. Previous abuse or Child. Youth, Family (CYF) involvement. Any previous formal assessments made. Reports of any current interventions. Risk of suicide or self harm. Evidence of major home or school disruption.	Pre-school - consider behavioural modification via other agencies.	If primary educational problem in a school age child – refer to Special Education Service (SES). Category 2. If significant safety issue refer to Paediatric Service / Child Protection Service (see Child Protection). Category 1. If suspected ADHD problem refer to Paediatrician / Child Psychiatry – Category 3. If primary psychiatric problem in adolescent, consider psychiatric referral. Category 2. **Immediate** referral if life threatening, or situation in crisis, to Paediatrician Service / Child Psychiatry. Category 1.
CARDIAC Murmurs Symptoms of syncope Arrhythmias See Appendix 1	History and examination. Family history and past rheumatic fever. Whether causing symptoms or functional disability. Teach parents how to measure heart rate (ear to chest / taking pulse) for arrhythmias. Investigations: Consider FBC (anaemia as cause of murmur) ECG and CXR if referral is not immediate.	For murmurs consider SBE prophylaxis while awaiting assessment. (*See Appendix 1 for treatment guidelines*). Reassure if simple vasovagal – consider seizure activity.	Refer all murmurs in patients under six months of age and other patients where the GP thinks it is pathological or uncertain. Category 1 if symptomatic Category 2 if asymptomatic Refer suspected arrhythmias as routine – Category 3.
Rheumatic Fever See Appendix 2	Standard history and examination as per Jones criteria. See Appendix 1 – Antibiotic Prophylaxis. *(Note: Can present as chorea.)*		Refer all cases to the Paediatric Service for acute assessment – Category 1.

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Diagnosis	Evaluation	Management Options	Referral Guidelines
CHILD PROTECTION			
General See Appendix 3.	History and examination as appropriate. Use local Recommendations.	Liaise with other agencies as appropriate (CYF, Education, PHN, Paediatric Service/Child Health Service).	*(Note: Many referrals will come from other agencies/health professionals).*
Child Abuse (General) The harming (whether physically, emotionally, or sexually), ill treatment, abuse, neglect or deprivation of any child or young person. [Children Young Persons and their Families Amendment Act 1994 Section 2]	• Careful history and physical examination, as appropriate • Document fully (you may be called to court as an expert witness) • Consider whether the child is safe Proper evaluation will usually require referral for a multi-disciplinary assessment.	If you suspect abuse or neglect, **always refer (see next column)**. If you are unsure, consult with the CYF, health based Child Abuse Team or the Police. Standard treatment of injuries.	If the child is unsafe, refer at once to CYF or Police. Use *Breaking the Cycle: An Interagency Guide to Child Abuse* CYF 1997; and the specific guidelines in *Breaking the Cycle: Interagency Protocols for Child Abuse Management*, CYF 1996. Recommended referral process for General Practitioners *Suspected Child Abuse and Neglect*. www.moh.govt.nz.nsf If the child requires further treatment or investigation, refer to the nearest health based Child Abuse Team. The urgency of this referral is determined by the severity of the injuries and the safety of the child.
Physical Abuse Any act or acts that result in inflicted injury to a child or young person.	See general principles above. In the case of bruising, a bruising or bleeding disorder should always be considered (family and personal history, FBC, INR/APTT). If you suspect abuse always refer on, these investigations are best left to the Child Abuse Team.	See general principles above.	See general principles above. Refer the child to a health based Child Abuse Team for a comprehensive history examination, investigations and photographs. In particular, any child under the age of two years with a history and/or findings of physical abuse should be referred. Such children may require skeletal survey, neuro-radiology, and ophthalmologic examination.

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Diagnosis	Evaluation	Management Options	Referral Guidelines
Emotional Abuse Emotional abuse is any act or omission that results in impaired psychological, social, intellectual and/or emotional functioning and development of a child or young person. It may include, but is not restricted to: • Rejection, isolation or oppression • Deprivation of affection or cognitive stimulation • Inappropriate and continued criticism, threats, humiliation, accusations, expectations • Exposure to family violence • Corruption of the child or young person through exposure to illegal or anti-social activities • The negative impact of the mental or emotional condition of the parent or caregiver • The negative impact of substance abuse by anyone living in the same residence	See general principles above.	See general principles above. Liaise with other agencies as appropriate (School, Public Health Nurse or Plunket Nurse, Child Health Social Workers, Child Development Team, other GPs). Consider a home visit.	See general principles above. Although emotional abuse does not usually pose the same issues of acute safety, the long term prognosis is often worse than for other forms of child abuse. All cases of emotional abuse should be referred to CYF. Refer to a hospital Child Abuse Team if the diagnosis is uncertain, or the health consequences of the abuse require further investigation or treatment. If the threat to the child's health is acute, refer urgently.
Sexual Abuse An act or acts that result in the sexual exploitation of a child or young person, whether consensual or not. It may include, but is not restricted to: • Non-contact abuse (exhibitionism, voyeurism, suggestive behaviours or comments, exposure to pornographic material) • Contact abuse (touching breasts, genital / anal fondling, masturbation, oral sex, object or finger penetration of the anus or vagina, penile penetration of the anus or vagina, encouraging a child or young person to perform such acts on a perpetrator) • Involvement of the child or young person in activities for the purposes of pornography or prostitution	See general principles above, except • Do not examine child in detail • Take the briefest history needed to establish that the concern relates to sexual abuse, and the approximate time of the most recent episode • If you suspect abuse, do not attempt genital swabs or forensic samples	See general principles above. Note that: • Treatment of genital injuries should be left to the Child Abuse Team (unless there is a medical emergency) • If the child has not washed or changed clothing since the last episode of contact abuse, they should not do so until formally examined	See general principles above. Indications for **immediate** medical referral include: • Acute ano-genital symptoms (pain, discharge, bleeding) • Acute ano-genital injuries • Acute abdominal pain • Sexual assault within the last 72 hours (or, in rape in adolescents, within the last 7 days) • Pregnancy • Sexual transmitted disease All those children who have been sexually abused but have no acute genital symptoms should be discussed urgently with Paediatric Service/Child Protection Team and offered referral for a non-urgent medical examination.

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Diagnosis	**Evaluation**	**Management Options**	**Referral Guidelines**
Neglect Any act or omission that results in impaired physical functioning, injury and/or development of a child or young person. It may include, but is not restricted to: • Physical neglect – failure to provide the necessities to sustain life or health • Neglectful supervision – failure to provide developmentally appropriate or legally required supervision, leading to increased risk or harm • Medical neglect – failure to seek, obtain or follow through with medical care resulting in impaired functioning and/or development • Abandonment – leaving a child or young person in any situation without arranging necessary care for them and with no intention of returning • Refusal to assume parental responsibility, unwillingness or inability to care or control	See general principles above. If possible, observe: • Current measurements - height, weight,- head circumference in infants • Growth and development record • Hygiene • Clothing • Immunisation history • Medical presentations • Compliance with medical therapy • Family interaction • Behaviour	See general principles above. Liaise with other agencies as appropriate (School, Public Health Nurse or Plunket Nurse, Child Health Social Workers, Child Development Team, other GPs). Consider a home visit.	See general principles above. Although neglect does not usually pose the same issues of acute safety, the long term prognosis is often worse than for other forms of child abuse. All cases of neglect should be referred to CYF. Refer to a hospital Child Abuse Team if the diagnosis is uncertain (for example, failure to thrive), or the health consequences of the neglect require further investigation or treatment. If the threat to the child's health is acute, refer urgently. Category 1.

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Diagnosis	**Evaluation**	**Management Options**	**Referral Guidelines**
DERMATOLOGICAL	Refer to Dermatology referral Guidelines		Refer to Dermatology/Paediatric Medicine Service depending on local availability.
DEVELOPMENTAL DELAY	History and examination especially: • Family History • Seizures • Height, weight, head circumference • Birthmarks • ? Loss of previously acquired skills (regression) • Perinatal history • Behaviour - school performance Refer to Denver II screening tool for developmental milestones.	School failure - encourage parents/guardian to contact SES.	Refer Paediatric Service if objectively established. Category 2 – if regression evident. Category 3 – otherwise.
Speech/Language Delay	History and examination. Check ears? Otitis media / externa. Any other developmental delays. Child Health and Development Record.	Treat OM/E if present.	Referral to Paediatric Medical Service – Category 3. If hearing the main problem refer ENT and Audiology Reference to Speech/ Language Therapist to follow Paediatric assessment. See 'developmental delay protocol'.
Multi-handicap	Standard history and examination including: • Family history • Pregnancy history • Perinatal history • Subsequent history of severe illness/injury • Child Health and Development Record Information on previous services involved (can prevent unnecessary repeat investigations).	Ensure that appropriate community support in place (e.g. IHC, CCS, or SES involvement).	Refer Category 3, to local Paediatric Department, or Children's Needs Assessment Service as appropriate. This service will coordinate assessment /management (including vision,hearing/ communication, orthopaedic, nutrition, psychological and family and social assessments).

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GASTROENTEROLOGY			
Gastro-intestinal tract haemorrhage	**ACUTE:** (haemodynamically unstable)	Resuscitation and ambulance transfer.	Refer Paediatric Gastro/ Endoscopy Category 1.
	SUB-ACUTE: (haemodynamically stable) Check FBC – consider taking extra tube for possible cross match.		If associated symptoms of irritability, pain, pallor. Category 1.
	CHRONIC (Iron deficiency anaemia). GI or non GI causes. Age. Significant gastro- oesphageal reflux. Check for liver disease. Family history for peptic ulcer.		If associated with relatively small infrequent amounts. Category 2 for outpatient assessment.
Gastro-intestinal tract/ Failure to thrive – gastro-intestinal causes	• Standard history and examination • Age and gender • Vomiting - age of onset, pattern • Bowel function – diarrhoea/ constipation • Feeding history/diet • Drugs • ? Thriving: height and weight on percentile chart, serial measurements required • Anaemia -? melaena -? Iron studies and ferritin *(Note: FOBs have limited sensitivity for occult GI bleeding.)* • Dehydration ? • Abdominal pain		Refer Paediatric Service Infants < 3 months Category 1. Others – Category 2.
Gastro-oesphageal reflux	• Standard history and examination • Vomiting – age of onset • Feeding history • Respiratory symptoms (including apnoea). • Unexplained irritability • Thriving, height and weight • Anaemia • Exclude UTI	• If baby well and thriving try simple measures, e.g. adjusting feed volumes, thickeners, Gaviscon and positioning, with reassurance that most will settle when on solids • Irritability +/- Discuss with paediatrican *(Note: Use Gaviscon with caution in infants less than 4 weeks old)*	Refer for paediatric assessment babies who are failing to thrive, anaemic, irritable or have other significant symptoms – Category 1. May require endoscopy and/or pH studies.
Pyloric stenosis	Onset of projectile vomiting typically at 3-4 weeks but consider in children under 3 months old. Failure to thrive.		**Immediate** referral for paediatric assessment. Category 1.
Vomiting & Nausea (>2 weeks duration)	- Consider both GI and non-GI causes eg neurological - Age and gender - Associated symptoms. - Drugs Investigations: • FBC & ESR • Creatinine. • U&E's • LFT's • Fasting glucose • Dipstix urinalysis	Symptomatic management small frequent oral fluids Stop potential emetogenic drug(s) if appropriate. *NB standard anti-emetics are contraindicated in infants and young children except in special circumstances. eg. with chemotherapy.*	Refer to Paediatrician when symptoms persistent and have failed to respond to simple therapies. Category 2.

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Abdominal Pain - Acute	Standard history and examination. Consider appendicitis, UTI, lower lobe pneumonia. Under 3 years of age, consider intussusception. If localised peritoneal irritation (guarding), needs surgical assessment.		Refer immediately if serious pathology suspected. Immediate – Category 1.
Recurring abdominal pain	Standard history and examination. Often not associated with any recognisable pathology. Pain typically flat handed, poorly localised, periumbilical. Exclude urinary tract infection (c.f. UTI referral recommendation) and constipation (c.f. constipation referral recommendation). Enquire about possible emotional upset (e.g. separation/bereavement, bullying or sexual abuse). Investigations: MSU, stool cultures x 3 / ELISA for Giardia etc, consider abdominal x-ray. Rule out inflammatory bowel disease (Crohn's), coeliac disease, peptic disease. Check • FBC • ESR • Serum Albumin • occult bloods	Reassurance if evaluation does not suggest significant pathology.	Referral refer to paediatrician if significant disability, e.g. missing a lot of schooling. Category 2. Cross refer to Paediatric Surgery Referral Recommendations if surgical condition suspected. Category 2 or 3.

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Diagnosis	**Evaluation**	**Management Options**	**Referral Guidelines**
Jaundice	Clinical: • Acute vs chronic • Age of onset/prolonged neonatal • Drug history (pharmacological and recreational) • Associated symptoms (pruritis, steatorrhoea, bruising, dark urine, etc) • Possible hepatitis contacts. • Family history liver disease, metabolic or blood disorders • Perinatal history, developmental history • Feeding – weight gain • Stool colour and consistency, urine colour Investigations: • Liver function tests - hepatocellular (elevated transaminases) – EB virus, CMV, HepA, HepB, HepC virus testing, Toxoplasma, Rubella - Cholestatic – (elevated ALP and GGT) • FBC, platelets and, if isolated elevated bilirubin, a haemolysis screen. • Prothrombin ratio	Hepatocellular jaundice (viral or drug hepatitis). • Rest • Good diet • Stop potential hepatotoxic drugs • Regular laboratory and clinical review Cholestatic jaundice. • Stop potential cholestatic drugs • Vitamin K if prolonged prothrombin time • Dilated ducts on ultrasound – refer • Undilated ducts on ultrasound – IgM, for Hepatitis ABC	Refer to Paediatric service if: • Suspected acute, severe or fulminant hepatic failure Category 1 • Severe clinical or biochemical hepatocellular jaundice. Category 1 • Obstructive jaundice – Category 1 • Unexplained non-obstructive cholestatic jaundice – Category 1-2 • Infants who have a conjugated hyper-bilirubinaemia and jaundice persisting beyond two weeks of age – URGENT referral to Paediatric Sevice – Category 1. If unconjugated, Category 2.

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Diagnosis	**Evaluation**	**Management Options**	**Referral Guidelines**
Abnormal liver function tests.	**ACUTE** (short recent onset) vs **CHRONIC** (insidious onset > 1 month) • History as for jaundice • History of auto-immune disease • Signs of chronic liver disease Investigations: • As for jaundice • ANF, smooth muscle antibody, copper, caeruloplasmin, liver kidney microsomal antibody (lkm) • Auto-antibody screen • Ferritin and iron studies • Blood glucose		Refer to Paediatric Service / Paediatic Gastroenterology if: • Cause undetermined after previous investigation negative Category 2 • Clinical concern that there is significant chronic liver disease Category 2 • Probable requirement for liver biopsy Category 2
Cows' milk intolerance	Standard history and examination including other signs and symptoms of allergic disorders and family history of allergy. Exclude other reasons for vomiting and irritability, including UTI. Avoid over diagnosis. *(Note: Cows milk intolerance may manifest itself in a variety of ways, e.g. vomiting, diarrhoea, eczema, urticaria, wheezing and irritability.)*	A trial withdrawal for 2-7 days, then re-challenge with cows' milk for at least two days. *Note: warn parents to read small print on food packaging carefully as many products contain cows milk.*	Paediatric referral for subsidy for milk substitute or if condition not improving. Category 2.
Malabsorption Examples: - Coeliac disease - Cystic fibrosis (see respiratory)	• Standard history and examination including timing of introduction of 'gluten' (wheat and rye) into diet. • Failure to thrive • Unexplained iron or folate deficiency (height and weight on centile charts) • Respiratory symptoms • Abnormal stools	Blood for antigliadin. Tissue transglutaminase. Antiendomysial antibodies. *(Note: Small bowel biopsy is essential for diagnosis. Avoid starting gluten free diet before biopsy if possible – warn parents that challenge with gluten containing foods may be required before diagnosis confirmed).*	Refer to Paediatric Service. Category 2.
Diarrhoea **Acute**	Standard history and examination. Consider infective gastroenteritis. Fresh stool microscopy and culture x3 if associated with colic or blood in stool. Intussusception especially where stools are infrequent.	If acute gastroenteritis is suspected, trial of oral rehydration solutions (avoid flat lemonade/undiluted fruit juice).	Children with significant dehydration or suspected serious pathology. Refer immediately. Category 1.

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Diagnosis	**Evaluation**	**Management Options**	**Referral Guidelines**
Diarrhoea **Chronic**	Standard history and examination. Consider: • Toddler diarrhoea • Constipation with overflow • Malabsorption:	Reassure. See next section.	
	1. Coeliac disease	Antigliadin antibodies. Antiendomysial antibodies. Tissue transglutaminase.	Referral Category 1-2.
	2. Cystic fibrosis	See respiratory section.	Referral Category 2.
	3. Pancreatic insufficiency		Referral Category 2.
	• Food allergy	See immunology section.	Referral Category 1-2.
	• Inflammatory bowel disease	Check FBC, ESR, serum albumin, faecal occult bloods.	Referral if symptoms present Category 2.
	• Parasitic infestation	Fresh stools for culture And parasites x3 Occult bloods x3 Trial treatment of gardia.	Referral if symptoms present Category 2.
Constipation	Standard history and examination especially: • Age of onset • Stool frequency • Vomiting or abdominal distension • Consider neurological problems • Soiling - psychosocial problem • Investigations: • Consider abdominal film, thyroid function and calcium levels	Dietary advice, laxatives and bowel retraining. *(Note: Repeated enemas in children should be avoided because of possible pyschological damage).*	Refer chronic constipation if symptoms more than 3 months and not responding to first line measures- Category 3.
Rectal Bleeding	• Nature – fresh or dark • Quantity • Painful vs painless • Mixed or non-mixed with stools • Age and gender • Tenesmus • Abdominal distension/masses • Family history polyps/inflammatory bowel disease • Constipation	If clinical anal fissure and constipation use laxatives especially faecal softeners etc and local pain relief.	**Acute:** If large amount of bleeding **immediate referral.** If associated with abdominal distension, pallor, abdominal pain , shock, vomiting – **immediate referral.** Subacute / unexplained or recurrent bleeding should be referred to Paediatric Service for outpatient assessment Category 2.

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Diagnosis	**Evaluation**	**Management Options**	**Referral Guidelines**
GENETIC DISEASE			
Note: Most metabolic diseases are genetically determined.	History and examination. Family history is important. Consider if: • Presence of dysmorphic features (facies, skeletal, malformation) • Significant developmental delay • Parental consanguinity		Refer Paediatrician/Child Development Service for evaluation/investigation. Category 3.
Request for genetic counselling.			Refer to Genetic Service or experienced Paediatrician. Category 3. *Note: currently genetic services based at Auckland & Wellington Hospitals.*
ENDOCRINE			
Precocious Puberty	Standard history and examination: • Boys < 9 years early testicular enlargement • Girls < 8 years early breast development Family history of puberty development. *(Note: Growth chart)*		Refer to Paediatric Service. Category 3.
Delayed Puberty	Standard history and examination: • Boys > 14 years • Girls > 13 years • Family history of puberty development • Percentile charts		Refer to Paediatric Services. Category 3.
Amenorrhoea	Standard history and examination. • Girls > 15 years Cross refer Gynaecology Referral Protocols. Primary amenorrhoea consider genetic causes (e.g. Turners Syndrome) anorexia, excessive exercise. Secondary amenorrhoea pregnancy, auto immune symptoms, polycystic ovarian syndrome, endocrine dysfunction.		Refer to Paediatric Services. Category 3. Refer to Paediarician, Paediatric/Endocrine Service. Category 3.
Diabetes	Standard history and examination. • Polydypsia • Polyuria • Weight loss • Evaluation of blood sugar		Refer to Paediatrician Medical Service. Category 1. Phone and discuss with Paediatrician.

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GROWTH			All should be referred for initial assessment/evaluation by Paediatric Service. Category 3.
(Height/weight discrepancy)	Standard history and examination. • Growth chart • Height/weight discrepancy Note other additional features: • Growth velocity • height/weight centile less than 3rd centile or >97% centile or crossing centile lines • Height of parents. • Consider genetic causes - Turners Syndrome: Chromosomal studies may be arranged in consultation with specialist service. • Consider skeletal dysplasia		
Overgrowth			
Tall Stature	Standard history and examination. • Exceptionally tall • Note parents stature • > 97% percentile - any age Crossing height percentile		Refer for initial assessment/evaluation by Paediatric Service. Category 3.
Obesity	Standard history and examination. • Pyschological factors • Consider concealed eating	Dietary advice. Exercise programmes.	Refer Category 3. • Short and body mass index 25+ • Parental concern • Disabling obesity • To exclude endocrine disorders
Thyroid Disease	Standard history and examination. • *(Note: Central / tertiary hypothyroidism will not be picked up by screening test.)*	• Positive screening (neonate)	Refer to Paediatric Medical Services. Category 1.
	• Clinical signs of hypo thyroidism or hyper thyroidism in infant. – Older child	Thyroid function tests	Refer. Category 1.
	Diffuse euthyroid goitre. • Abnormal TFTs • Nodular Goitre: - TFTs - Thyroid Antibodies	Reassure. Consider Ultrasound.	Refer patients where there is functional change. Category 1-2.

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Diagnosis	**Evaluation**	**Management Options**	**Referral Guidelines**
Adrenal	Standard history and examination. • Cushingoid *(Note: history of exogenous steroid exposure)* • Ambiguous genitalia		Refer to Paediatric Medical Services Category 2. In neonate – Category 1. Older child – Category 2.
IMMUNOLOGY			
Recurrent Infections	Standard history and examination, including family history of consanguinity, early neonatal death, immune deficiency. Screening investigations may include FBC and immunoglobulin levels *(Note: It is essential to use age appropriate normal ranges).*	Specific investigations and treatment depend on the specific disorder identified.	Urgent referral should be made to Paediatric Sevice/ Immunology for infants with a positive family history or strong clinical suspicion of underlying immune deficiency. Category 1-2. Other referrals should be made to General Paediatrics or Paediatric Immunology depending on the age of the child and the results of screening investigations. Category 2-3
Allergic disorders **Allergic rhinitis**	Standard history and examination, plus history of allergies including triggers and previous therapies.	Optimal medical therapy, including avoidance of triggers, will control symptoms in most patients. Desensitisation is an option for patients with ongoing uncontrolled troublesome symptoms.	Children with allergic rhinoconjunctivitis whose symptoms are not controlled on standard therapy (antihistamines and corticosteroid nasal sprays) may be referred for evaluation of specific allergies, avoidance strategies, and alternative therapies. Referral to Paediatric Service/Immunology. Category 3.
Venom allergy	Standard history and examination, plus history of allergic reaction.	Children with systemic reactions with more than just cutaneous involvement should be considered for adrenaline for self administration (e.g. Epipen, Anakit). Consider referral for testing and desensitisation.	Category 3.

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Food allergy (+/- eczema)	Standard history and examination, plus history of allergic reaction.	Children with a history of anaphylaxis or immediate hypersensitivity reactions should be referred for confirmation of diagnosis. Consider providing 'action plan', adrenaline for self administration (eg Epipen, Anakit), dietician's review and planned follow-up with food challenge, if appropriate. Children with multiple food intolerances,which may or may not be allergic in nature, should be referred for evaluation and possible food challenges. If food allergy is confirmed consider referral for supplementary benefit for food alternatives.	Refer to Paediatric Service/ Paediatric Immunology. Category 2-3.
Antibiotic allergy	Standard history and examination, plus history of allergic reaction.	In general terms, antibiotic skin testing for antibiotic sensitivity is unreliable with both false positive and false negative results. It is also potentially dangerous. Testing should be reserved for patients with a history suggesting penicillin allergy in whom penicillin is the only appropriate antibiotic and carried out by an expert team with full resources for resuscitation, in case of a severe reaction. In this instance if acute illness is being treated, the referral should be seen urgently (or semi-urgently in the case of rheumatic fever patients). In other situations alternate antibiotics should be used.	Refer to Paediatric Service/Immunology. Category 1-2.
Chronic urticaria	Standard history and examination.	In the majority of cases a cause is not identified and there is little role for allergy evaluation. Symptom control can usually be obtained with regular non-sedating antihistamines.	Referral to Paediatric Service if symptoms cannot be controlled or if there is suspicion of an underlying cause. Category 3.

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Diagnosis	**Evaluation**	**Management Options**	**Referral Guidelines**
INFECTIOUS DISEASE			
• **Recurrent/resistant/ persistent Infections**	History and examination.	Refer Immunology Sections.	Category 2. (or Category 1 if deterioration).
• **Hepatitis (exclusive of chronic hepatitis)**	See gastroenterology section.		Refer to Paediatric Service/ Paediatric Infectious Diseases. Category 1-2.
• **Tropical infections**			Category 1.
• **HIV – confirmed/suspected/ perinatal**			Category 2.
• **Vaccine problems**			Category 2 - 3.
Meningitis	See Appendix 5.		Urgent admission - Paediatric Service Category 1.
Tuberculosis Atypical mycobacterial infection/BCG reactions	History and examination. Family/Contact history. Travel history. Mantoux.		Symptomatic – Category 1. Non-symptomatic – Category 2. Refer to Paediatric Service/Infectious Diseases.
Rheumatic Fever see cardiac			Refer all cases to the Paediatric Service for acute assessment – Category 1.
METABOLIC DISEASE			
Newborn Screening Positive			**Immediate** consultation with paediatrician.
Metabolic diseases are individually uncommon but should be considered in any child with unusual or unexplained symptoms. Refer Diabetes	History and examination. Family history of similar symptoms, still births or unexplained deaths in childhood. Symptoms may be episodic. May be precipitated by: • Infection • Activity • Some foods • Fasting Consider if unexplained: • Change in level of consciousness • Neurological signs/symptoms • Hypoglycaemia (stick test) • Acidosis (respiration)		Refer for evaluation and investigation Category 1. Category 2 if symptoms subacute.

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Diagnosis	**Evaluation**	**Management Options**	**Referral Guidelines**
NEONATAL			
Jaundice	First two weeks: Check total bilirubin and monitor appropriately. If Jaundice still evident at 2 weeks of age should have a direct SBR.	Consider phototherapy after consultation with Paediatrician. Refer first day jaundice. Refer if SBR > than 300. Refer if child sick.	Immediate Category 1.
Prolonged jaundice (> two weeks)	Caution: Biliary atresia **must** be diagnosed and surgically addressed within 6 weeks.	*(Note: There are other significant causes of jaundice.)*	Immediate referral if raised direct (conjugated) bilirubin. Category 1.
Feeding Difficulty	Assess weight progress, appropriateness of milk, nipple injury. Babies should all have recovered birthweight by 10 days of age.	Lactation consultants are helpful. Metoclopramide for lactation enhancement only to be used as adjunct to good breast-feeding techniques.	Refer if: 1. Weight progress poor – Category 1 2. Breast-feeding at risk – Category 1 3. Family in crisis – Category 1.
Maternal Hepatitis B Antigen Positive		Follow maternal Hepatits B Recommendation – (HepB immunoglobulin + immunisation).	See Appendix 4.
Any Other Concern About Infant Less Than 6 Weeks of Age	History and examination preferrably by GP. • Perinatal history • Antenatal scan results	For non GP carers discuss with GP in first instance.	Phone Paediatrician if concerned.
NEUROLOGICAL			
Meningitis **Acute encephalopathy/encephalitis**	See Appendix 5.	See Appendix 5.	**Immediate** transfer (Category 1) for suspected meningitis and/or unexplained/alteration of level of consciousness.

NATIONAL REFERRAL GUIDELINES : PAEDIATRIC MEDICINE			
Diagnosis	**Evaluation**	**Management Options**	**Referral Guidelines**
HEADACHE **ACUTE:** Sudden onset/ thunderclap or severe occurring after exercise.	Look for neck stiffness, signs of meningism.	Intracranial haemorrhage suspected. Requires urgent admission.	**Immediate** referral.
CHRONIC:	Consider: • Sinus headaches • Hypertension • Tension headache: Dull non disabling, pressure or tightness type sensation without nausea, photophobia (school refusal syndrome) • Migraine • Space occupying lesion / tumour • Benign raised intracranial hypertension - review drug therapy	• Management of headaches with paracetamol or ibuprofen • *Note: Salicylates should be avoided in children except for rheumatic fever and chronic arthritis conditions* • Consider ergonomic, postural, stress related problems • Avoid excessive use of analgesics (salicylate overuse withdrawal headaches) chocolate and caffeine containing beverages • Avoid locking the patient into treatment of assumed neck problems and multiple consultations • If focal, then consider sinus disease, temporomandibular joint dysfunction, dental disease, visual accommodation problems, glaucoma, dietary advice	If symptoms do not resolve immediate referral Paediatric Services / Neurosurgery. Refer Category 2.
Migraine:	Paroxysmal or intermittent headache with association of nausea, photophobia, phonophobia, and some disability. Duration of 4-72 hours. Commonly migraine occurs in children without unilateral symptoms or headache but with nausea/vomiting. **BEWARE** of headaches if: • Under 3 years of age • Short stature or slowing linear growth • Morning vomiting • Intensity change with postural change • Changes in personality, cognition, learning • Onset of chronic headache after trauma • Always on the same side • Focal becoming more frequent, severe or intractable to therapy • Focal seizures or signs • Signs lasting over 24 hours after headache stopped	Consider prophylaxis in selected cases (spontaneous remission rate is high in children so tail off prophylaxis if effective after 6 months). Propranolol contraindicated with asthma. Before using sumatripan refer paediatrican.	If diagnosis in doubt, there are management problems, or school absenteeism refer to Paediatric Service. Category 3. Refer Category 1-2.

NATIONAL REFERRAL GUIDELINES : PAEDIATRIC MEDICINE			
Diagnosis	**Evaluation**	**Management Options**	**Referral Guidelines**
STROKE / cerebrovascular accident ***Note:*** *Stroke may be the result of thromboembolism, haemorrhage or a metabolic disorder. Acute loss of function with persisting defect.*	Emergency assessment or admission important to establish whether the patient has a haemorrhage or not.	Suspected haemorrhage requires urgent admission.	Suspected haemorrhage requires CT scan and/or lumbar puncture. All childhood strokes require urgent admission/assessment. Category 1.
Convulsions/Fits	• Consider finger prick for glucose in child with persistent fitting • Febrile convulsions	For prolonged fitting (greater than 5 minutes) consider rectal diazepam.	In most circumstances the first febrile fit should be referred to the Paediatric Service. Category 1.
	• Focal features/finding or suspicion of underlying neurological disease	Urgent referral.	These patients need urgent referral for comprehensive investigation. Category 1.
	• Unstable epilepsy	Consider drug compliance, interactions.	Refer Category 2.
	• Ongoing seizures : Patients with chronic, poor or deteriorating seizure control	Check compliance Optimise dose Blood levels if queries of compliance or toxicity (routine level monitoring is not appropriate) *Note: Optimisation means increasing the dose to achieve seizure control or until problematic side effects occur* Discuss with Paediatrician if concerned.	Category 2.
	• Single seizure in child or adolescent: establish presence of family history, risk factors for epilepsy, triggers (e.g. flashing TV screens, photosensitivity), eye witness account of seizure	Anticonvulsants usually not indicated for first ever seizure unless significant event. Sodium Valproate or Carbamazepine may be commenced after the second seizure prior to referral for specialist assessment (preferably after EEG obtained – use rectal Diazepam prn while awaiting EEG.)	All patients should be referred for specialist assessment after the first seizure. Category 3.
	• Stable epilepsy - this may include less than perfect control	Discuss with paediatrician if concerned.	Once a patient has been stabilised, continuing care should be provided by the GP with access to specialist review on an 'as required' basis. Refer if complicating factors. Category 3.
	• Important to define the difference between syncope, breath holding and seizure, based on the history	Syncope; elimination of potential triggers (most patients do not need referral.) If breathholding, explanation and reassurance. Observation. EEG.	Referral if uncertainty or parental concern.

NATIONAL REFERRAL GUIDELINES : PAEDIATRIC MEDICINE			
Diagnosis	**Evaluation**	**Management Options**	**Referral Guidelines**
Acute paralysis	Determine immunisation & contact history. Acute/progressive paraparesis may be a spinal cord neurosurgical emergency.		**Immediate** referral Paediatric Service.
Muscle weakness or flaccidity / delayed motor functions	Family history. Rash. Gower's sign in infants. Creatine kinase in boys under 5 years. ESR.		If acute onset, especially with respiratory or swallowing difficulties **immediate** referral paediatric services for admission / assessment. Otherwise referral with result of CK, ESR. Category 3.
Progressive loss of neurological function	Family History. Cognitive disturbance. Disturbance of swallowing and speech. Balance problems. Loss of sensation. Neuropathy. Gait disorder.		Refer to Paediatric Service. Category 2. If acute/subacute refer. Category 1.
Vertigo, unaccompanied by other neurological symptoms	ENT / neurological examination.		Refer Paediatric Service / ENT. Category 2.
Visual disturbance	Hemianopia. Visual failure. Diplopia.		Refer Paediatric Service / Opthamology. Category 1
Suspected or Definite Papilloedema without other neurological symptoms/signs	Nil further by GP.	Depends on diagnosis.	All patients should be referred to ophthalmologists in the first instance. Telephone consult would be appropriate with Ophthalmology and/or Paediatric Service. Category 1-2.
Back and Neck pain			Referral should be directed primarily to rheumatologist or paediatric service. Category 2.

NATIONAL REFERRAL GUIDELINES : PAEDIATRIC MEDICINE			
Diagnosis	**Evaluation**	**Management Options**	**Referral Guidelines**
Spinal syndromes	• Consider if sensory/motor leg and/or sphincter disturbances • Examine the back for markers • ? progressive/acute onset • AP and lateral x-ray views of the whole of the spine	Urgent Ultrasound, if available of the spinal cord if younger than 3 months and dysraphism suspected – Don't delay referral.	Acute onset may be a neurosurgical emergency – **immediate** referral. Consider spinal dysraphism in child younger than 3 months refer Category 1 Others – referral Category 1 if a neonate otherwise Category 2 with results of evaluation.
Large Head / Hydrocephalus	Family history of large heads suggests diagnosis of autosomal dominant macrocephaly (benign). Measure and plot both parents' head circumferences as well as the child's. Fontanelle tension. Head circumference crossing the percentiles.	If familial large head present with normal development observe with serial head circumference percentiles.	Rapid increase refer Category 1. Otherwise refer Category 2.
Tremor	Family history. Consider chorea (examine heart, ESR, streptococcal titres although these can be unreliable in Sydenham's chorea).		If chorea present refer to Paediatric Service. Category 1. Otherwise Category 3.
Cerebral palsy & movement disorders including persistent toe walking	Family history. Perinatal history. Assessment of chorea, dystonia or other involuntary movements. Exclude drug side effects e.g. phenothiazine.		Refer to Paediatric service for assessment. Possible Needs Assessment Service. Onset of movement disorder – refer Category 2 or 3 unless acute Category 1.
ONCOLOGICAL / HAEMATOLOGICAL			
?Leukaemia (abnormal white blood cells)	History and examination especially: • Lymphadenopathy • Intercurrent illness • Splenomegaly		Phone immediately and discuss with Paediatrician. Category 1.
Low Platelet Count < 100,000	History and examination especially: • Lymphadenopathy • Splenomegaly • Intercurrent illness • Bruising		Phone immediately and discuss with Paediatrician who will discuss with regional Haematologist /Oncologist – Category 1.

NATIONAL REFERRAL GUIDELINES : PAEDIATRIC MEDICINE			
Diagnosis	**Evaluation**	**Management Options**	**Referral Guidelines**
Bruising/Bleeding	History and examination. Family history of bleeding disorders. Consider child abuse. Investigations: • FBC • Clotting screen	Discuss with Paediatric Services by phone.	Refer to Paediatric Service: a. If lab tests abnormal. Category 1. b. Child abuse (phone call). Category 1. c. Refer to ENT for recurrent epistaxis. Category 2-3. *Note: ENT Referral Guidelines*
Anaemia	History and examination. Nutritional assessment. Check for other FBC abnormality. Consider iron studies particularly in localities of high thalassaemia prevalence, e.g. Gisborne.	Microcytic anaemia warrants treatment with oral iron supplementation, recheck FBC and reticulocytes in two weeks.	Refer if: 1. Symptomatic – Category 1 2. Not microcytic anaemia – Category 2. 3. Microcytic anaemia does not respond to iron supplementation – Category 2. 4. Other FBC abnormality present – Category 1 Discuss via phone call.
Abnormal Mass	See Paediatric Surgical Recommendation.		Refer to Paediatric Medical / Surgical Service – Category 1.
RESPIRATORY	Standard history and examination, particularly family incidence of TB, asthma, previous treatment, Investigations: Consider CXR.	Standard treatments for respiratory conditions.	• Respiratory distress in children less than one month of age. Immediate referral. Category 1 for assessment • Babies with apnoea attacks. Immediate referral Category 1 for assessment • Obstructive sleep apnoea should be referred to Paediatrics. Routine referral Category 2 • Recurrent upper airway infections refer Paediatrican/ENT. Routine referral Category 3 • Immunosuppression suspected refer to Paediatricians. Routine referral Category 2 • Diagnostic uncertainty, uncontrolled symptoms (acute or chronic), GP or parental anxiety. Routine referral Category 3

NATIONAL REFERRAL GUIDELINES : PAEDIATRIC MEDICINE			
Diagnosis	**Evaluation**	**Management Options**	**Referral Guidelines**
Chronic / recurrent Cough Recurrent RTI's	• Post viral dry cough (up to 8 weeks dry cough following viral respiratory infection)	• Obtain Chest X-ray if cough persists >8 weeks or is purulent or there is clubbing	Refer: • Chronically purulent sputum • Fingernail clubbing • Reflux symptoms • Poor weight gain • Haemoptysis • > 10 significant respiratory infections per year • Infections at multiple sites (eg middle ear, skin, diarrhoea) • History of choking on food or foreign body • Chest x-ray changes – Category 2 or 3
Whooping cough Syndrome	• Cough occurs in paroxysms, and is followed by red face, vomiting, or apnea sometimes whoop. Entirely normal in between coughing bouts	• Microbiology is usually negative after the first 10 days of illness • Explanation of the long duration of the cough, and possible recrudescence with subsequent URTIs • Reassurance and simple analgesia	Referral only young children especially under 3 months of age with severe breathing difficulty and hypoxia during spells. Category 1.
Cough variant asthma	• This is rare if there is no wheeze at any time. Consider only if there is strong parental or sibling history of asthma or child has eczema and typical asthma triggers (cold air, allergens, exercise)	• Skin tests for inhaled allergens to confirm or deny the child is atopic • Cough is a mild, if annoying symptom in asthma. Inhaled steroids are usually unhelpful in the absence of wheeze • Reassurance • If atopic, consider trial of cromoglycate or nedocromil	Refer only if control difficult and lifestyle impaired. Category 3.
Psychogenic Cough	• Typically absent in sleep but present during stress situations e.g. classroom, sports activities	• Explore possible reasons for coughing, and simple strategies to help control	Consider referring to Paediatric Service. Category 3.

NATIONAL REFERRAL GUIDELINES : PAEDIATRIC MEDICINE			
Diagnosis	**Evaluation**	**Management Options**	**Referral Guidelines**
Asthma	• Wheeze • Breathlessness • Recognition of severity and extent of interference with lifestyle • Symptom diary • Number of acute attacks in previous 12 months • Severity of worst previous attack • Medication history • Environment history • Passive cigarette smoke exposure • Peak flow is no more than a supplementary guide to management in children over 7 years • Skin testing re: animal exposure • Initial chest Xray if chronic or unusual	See asthma clinical pathway – asthma Appendix 6 • Bronchodilators should only be used as required not regularly • Preventers (cromoglycate, nedocromil or inhaled steroids) should be given for children with frequent attacks (>1/month) or disruptive interval symptoms • Correct inhaler device, technique and compliance should be checked before considering increasing steroid dose • Advice about effects of smoking	Refer if symptoms severe. Category 1. For outpatient assessment paediatrics: - diagnostic difficulty eg in infants - lifestyle disruption from interval symptoms not controlled on >800mcg/day Beclomethasone or budesomide or >400mcg/day fluticasone - life threatening attacks - other difficulties with management. Category 2 or 3
Chronic lung disease - Bronchiectasis - Ciliary dyskinesia - Obliterative bronchiolitis - Interstitial pneumonitis	Important clues are: • Chronic productive cough • Chronic tachypnea (excluding acyanotic heart disease) • Clubbing of fingernails (excluding cyanotic heart diseases) • Chronic chest deformity / hyperexpansion • Chronically low oxygen saturation • Poor growth • Persistently abnormal chest Xray	• Annual influenza vaccine • lower threshold than normal for antibiotic treatment of intercurrent chest infections	• Paediatrician should always be involved. Category 3 • Refer for evaluation of acute deteriorations. Category 1
Cystic Fibrosis	• Guthrie card at 5 days screened for Immunoreactive tryspin (IRT) level and, if IRT raised, the four most common CF mutations may be present. If any mutations are found, the midwife/GP plus regional CF paediatrician are notified • Rarely children escape detection through Guthries card and are picked up with chronic symptoms/signs as under 'Chronic Lung Disease'	• Explain to parents that child may either have cystic fibrosis, or may be a carrier of CF mutation and needs further testing **If diagnosis confirmed:** • annual influenza vaccine • lower threshold than normal for antibiotic treatment of intercurrent chest infections	• Refer to regional CF paediatrician for sweat test, genetic screen, and growth / absorption assessment. Category 2 **If diagnosis confirmed:** • Refer for evaluation of acute deteriorations. Category 1 • Refer family if necessary for genetic counselling. Category 1

NATIONAL REFERRAL GUIDELINES : PAEDIATRIC MEDICINE			
Diagnosis	**Evaluation**	**Management Options**	**Referral Guidelines**
Pneumonia / Bronchiolitis	Standard history and examination with particular emphasis on • General condition and toxicity • Respiratory effort and distress • Oxygenation • Wheeze and crackles • Feeding • Social circumstances • Passive smoking experience • Asymmetrial chest signs	• Manage at home / community unless there is respiratory distress, difficulty feeding, toxicity or hypoxia • Watch fluid intake / urine output • Reassess progress regularly	• Refer if there is respiratory distress, difficulty feeding, toxicity or hypoxia (severe pneumonia). Category 1 • Refer if infant less that 3 months. Category 1 • Refer if there is a history of underlying conditions that predispose to severe infection (congenital heart disease, chronic lung disease, immunodeficiency). Category 1 • Refer if there is failure to resolve satisfactorily in community. Category 1
Acute laryngo tracheobronchitis (viral coup)	• Standard history of coryza, cough, stridor and difficulty breathing **Examination** • Assess degree of respiratory effort and air entry • Assess oxygenation	Symptomatic treatment in mild cases: - Reassurance and calming - Analgesia - Avoid invasive procedures - Oxygen for transport if moderate to severe	• **Immediate** referral if respiratory distress / unable to drink / cyanosis • Refer if recurrent – Category 3
Epiglottitis (this is rare since HiB vaccination)	Clinical Diagnostic features: • Rapid onset of high fever, malaise and respiratory distress • Sore throat • Difficulty in swallowing • Drooling • Low pitched snoring noise • Wide open mouth • Very pale	• Keep sitting up • Oxygen by mask • Reassure and settle • Avoid looking in the mouth • Avoid invasive procedures • Doctor present at all times • Ceftriaxone IV/IM, if available, if child showing severe toxicity and retrieval delayed. Injection should be attempted carefully to avoid precipitating obstruction (Alternative I.V. Augmentum)	• **Immediate telephone call to Paediatrics and/or ICU for rapid retrieval by skilled intubation expert** • If complete obstruction occurs unexpectedly do not attempt intubation. Continue high flow oxygen by mask and attempt cannulation through midline of cricothyroid gap with 3 x 14 gauge IV catheters
Sleep Disordered Breathing	Standard history and examination. Particular emphasis on • Arousals • Daytime sleepiness • Weight • Facial / palate deformity • Airway problems • CNS disorders		• Refer all persistent or undiagnosed problems to Paediatric service – Category 3 • Consider referral to Paediatric / ENT for tonsillectomy and adenoidectomy

NATIONAL REFERRAL GUIDELINES : PAEDIATRIC MEDICINE

Diagnosis	Evaluation	Management Options	Referral Guidelines
RHEUMATOLOGY			
Single joint Acute – septic Reactive	History. Red, hot, swollen joints. Pyrexia, anorexia. Other focus infection.	• Pain relief • Blood culture if taking blood	If sepsis suspected aspiration mandatory. **Immediate** referral paediatrics / orthopaedics.
Irritable hip		• Pain relief • Blood culture	Irritable hip – refer to orthopaedics. Category 1-2.
Chronic (Longer 6 weeks) Pauciarticular JCA Psoriatic arthritis A.S. reactive Perthes disease	Bloods FBC/ESR, ANA. Xrays. Xrays.		Refer to paediatrics/ rheumatology. Category 2-3. See rheumatology guidelines. Refer to orthopaedics Category 1.
Multiple Joints Polyarticular JCA Juvenile rheumatoid Reactive arthritis Enteropathic arthritis Rheumatic fever see cardiology	History. Examination - rashes. Bloods FBC, ESR, rheumatoid factor ANA, HLA studies. History. Fever, rash, nodules, strep A/B Blood count, ESR.	Pain relief / salicylates.	Refer to paediatrics/ rheumatology. Category 2-3. Refer Paediatric Sevice. Category 1-2.
Multisystem Disease SLE Dermatomyositis Scleroderma Vasculitis Henoch-Schonlein Purpura	History. Examination – rash. Raynaud's, muscle power. FBC/ESR, CRP, ANA, RF, CPK, MSU, CXray.		Refer to Paediatric Service/Rheumatology. Category 2. Refer to General Paediatrics. Category 1-2.
Recurrent limb pains 'Growing pains'	History. FBC/ESR.	Refer to Paediatrician.	Category 2-3 depending on lab results.
SOCIO-ECONOMIC ISSUES			
e.g. – disabled parents – unsupported mothers	History and examination. Assess family: • Structure and circumstances	Liaise with/involve other agencies as appropriate, e.g. Education, Plunket, CYF, Barnardo's.	*Note: Many referrals will come from other agencies or health professionals. Self referral should be accepted.* Refer ? Admit to avert a crisis or allow time to resolve resource issues. Category 1 or 2. *Note: GPs should ensure that they continue to be included in the information network.*

NATIONAL REFERRAL GUIDELINES : PAEDIATRIC MEDICINE			
Diagnosis	**Evaluation**	**Management Options**	**Referral Guidelines**
UROLOGY/RENAL			
Urinary Tract Infection	The diagnosis of UTI requires great care and skill. Clear evidence of UTI is essential. *(Note: Guidelines: Diagnosis of UTI in Children Appendix 7.)* Investigation: refer for renal ultrasound and MCU for first episode in children under 3 years, blood pressure.	See Appendix 7. Treat constipation, toileting hygiene. Urine results must be provided with the referral.	Refer for assessment, patients with abnormal imaging results or if requiring investigations. Routine Category 3. Refer recurrent urinary tract infections. Routine Category 3.
Antenatally Diagnosed Hydronephrosis	Applies to hydronephrosis at any gestation. Post natal examination for abdominal mass. Ultrasound after 5 days of age. LMC has responsibility to ensure GP is informed.		Consult with Paediatric Service if dilatation is present Category 1-2 depending on severity. *Note: Majority of urinary abnormalities present as either UTI or as hydronephrosis following antenatal Ultrasound. Require referral to a Paediatric Centre for evaluation.*
Enuresis	• Distinguish between diurnal and nocturnal • Frequency of wetting • Consider diabetes or infection • Distinguish between primary and secondary • Consider social/emotional factors • Consider constipation • Consider neurological disorder	Consider enuresis programmes, specialist nurses. Consider drug management in discussion with Paediatrician for children over seven years of age.	Children, under the age of seven, should not be referred to the Paediatrician unless complicating factors exist. Refer problematic diurnal enuresis in children 4 years of age or more. Category 3. Refer secondary enuresis (enuresis after a dry period of six months) – Category 3.
Haematuria	History, duration and severity of haematuria, physical examination, BP, creatinine, electrolytes streptococcal serology if indicated.		Refer to Paediatric Service. Persistent haematuria Category 2. If associated proteinuria Category 2. With hypertension or impaired renal function Category 1.
Proteinuria	History, physical examination, BP, creatinine, serum albumin, electrolytes, urinalysis.		Category 1-2. Refer to Paediatric Service. Persistent mild proteinuria Category 3. If associated with haematuria, hypertension or impaired renal function Category 1.

Appendix 1

ANTBIOTIC PROPHYLAXIS OF ENDOCARDITIS

Who should be given prophylaxis?

Prophylaxis is recommended for all patients whose endocardium is damaged or rendered defective by acquired or congenital disease. Some patients are at high risk and some procedures are high risk.

High risk patients include those with a prosthetic valve or a past history of infective endocarditis undergoing dental procedures, oral surgery or upper respiratory tract surgery.

Low risk patients who are undergoing **high risk procedures** – gastrointestinal or genito-urinary procedures – should be treated as high risk.

Children's recommended doses are given in mg/kg. Give the adult dose if the calculated total dose for a child exceeds that recommended for adults.

High risk patient or high risk procedure

Hypersensitive to penicillin or prescribed penicillin more than once in previous month?

NO → Amoxycillin or Ampicillin 1 g + Gentamicin 1.5 mg/kg i.v. just before procedure commences or i.m. 30 minutes before procedure. Followed by 500 mg Amoxycillin 6 hours later.

Child
Amoxycillin or Ampicillin 50 mg/kg + Gentamicin 2.5 mg/kg (up to 80 mg maximum). Followed by 2.5 mg/kg Amoxycillin 6 hours later.

YES ↓

Vancomycin 1 g by slow i.v. infusion

Over 1 hour to end just prior to procedure. Followed by Gentamicin 1.5 mg/kg i.v. just before procedure commences

Child
Vancomycin 20 mg/kg i.v. Gentamicin 2.5 mg/kg i.v. (up to 80 mg maximum)

Low risk patient and procedure

Hypersensitive to Penicillin or prescribed Penicillin more than once in previous month?

NO → General anaesthetic?

NO ↓

Amoxycillin 3 g orally under adult supervision 1 hour before procedure.

Child
Amoxycillin 50 mg/kg

YES ↓

Amoxycillin or Ampicillin 1 g i.v. just before procedure commences or i.m. 30 minutes before procedure. Followed by 500 mg orally, i.v. or i.m. 6 hours later.

Child
Amoxycillin or Ampicillin 50 mg/kg i.v. or i.m. Followed by 25 mg/kg 6 hours later.

YES ↓

Clindamycin 600 mg orally 1 hour before procedure. Followed by 300 mg 6 hours later.

Child
Clindamycin 10 mg/kg. Followed by 5 mg/kg 6 hours later.

OR

Vancomycin 1 g i.v. infused over 1 hour, to end just prior to procedure.

Child
Vancomycin 20 mg/kg

Appendix 2

RHEUMATIC FEVER DIAGNOSTIC CRITERIA

Table II.
The Jones Criteria

Major manifestations

- Carditis
- Polyarthritis
- Chorea
- Erythema marginatum
- Subcutaneous nodules

Minor manifestations

Clinical

- Previous rheumatic fever or rheumatic heart disease
- Arthralgia
- Fever

Laboratory

- Acute phase reactions
- Erythocyte sedimentation rate
- C-reactive protein, leucocytosis
- Prolonged P-R interval

Plus

Supporting evidence of preceding streptococcal infection (increased ASO or other streptococcal antibodies; positive throat culture for group A streptococcus; recent scarlet fever).

The presence of 2 major criteria, or of 1 major and 2 minor criteria, indicates a high probability of the presence of rheumatic fever if supported by evidence of a preceding streptococcal infection. The absence of the latter should make the diagnosis doubtful, except in situation in which rheumatic fever is first discovered after a long latent period from the antecedent infection (e.g. Sydenham's chorea or low-grade carditis).

Appendix 3 - Protocol

CHILDREN'S MEDICAL EMERGENCIES : GUARDIANSHIP APPLICATIONS TO THE FAMILY COURT

(Issued 18 December 1996)

This Protocol has been established by the Principal Family Court Judge, after consultation with the Children, Young Persons and their Families Service, the Ministry of Health, the Police and the Department for Courts. The aim of the protocol is to assist those who are concerned with the care and protection of children and who may wish to obtain an appropriate order from a Court in any emergency situation which might pose a threat to the life or well-being of any child.

1. It needs to be made clear at the outset that the Family Court does not have jurisdiction to order that a child be made a Ward of Court for the particular purpose of authorising the performance of any medical procedure or treatment (such as a blood transfusion). That jurisdiction is vested in the High Court.
2. Legislation is currently being prepared, which if passed, will vest full wardship jurisdiction in the Family Court.
3. In the meantime, there may be occasions when it is not possible (for whatever reason) for an application to be made to the High Court. If that situation arises, the Family Court can assist by appointing a guardian (as a sole or an additional guardian) for the particular purpose of authorising the performance of any medical procedure or treatment. The guardian appointed by the Court will usually be the Director-General of the Department of Social Welfare. If an additional guardian is appointed by the Family Court and there is then a dispute between guardians, the Family Court has the jurisdiction to decide that dispute. In effect, this means that the Family Court may authorise the procedure or treatment being sought by the court-appointed guardian.
4. Where the Family Court is approached on the basis outlined above, the following protocol should apply:

a. *Grounds for application* - where a child's life or well-being is in serious jeopardy and it is believed on good grounds that the guardian or guardians of the child will not consent to the administration of such reasonable medical or therapeutic treatment as is considered to be required, an application should be made to the Family Court.
The Rules provide for the filing of the application in the Court nearest to where the applicant or the parent(s)/guardian(s) live. Preferably the application is to be filed in the Court nearest to the hospital in which the child is a patient, or, if the child is not in hospital, in the Court nearest to where the child is residing. In most cases, that Court is also likely to be the nearest to where the applicant or parent(s)/guardian(s) reside.

b. *Applicant* - The authority seeking to administer what is considered the appropriate treatment (usually a HHS) should contact the Department of Social Welfare at the nearest office of the Children, Young Persons & Their Families Service (CYPS) as soon as it appears likely that the assistance of the Court will be required. The CYPS will then make the guardianship application to the Family Court as described in Clause C. Alternatively, where the circumstances so require, the authority seeking to administer what is considered the appropriate treatment may instruct its own solicitors to make the guardianship application to the Family Court.

c. *Orders sought* - The applicant should seek an order appointing an additional guardian (usually the Director-General of Social Welfare) and an order authorising such medical and surgical procedures as may be required to safeguard the welfare and well-being of the child.
The Guardianship Act 1968 s 8(1) states "Subject to the provisions of this section, the Court may at any time, on application made for the purpose or on the making of an order under section 10 of this Act, appoint a guardian of a child either as sole guardian or in addition to any other guardian, and either generally or for any particular purpose, and either until the child attains the age of [20] years or sooner marries, or for any shorter period."

d. If a situation such as is contemplated in paragraph "A" arises during the working week there should be no difficulty in obtaining a hearing before a Judge. If there is no resident Judge available, the Registrar will forward the papers to a Judge as soon as it is filed by way of facsimile and a hearing by way of telephone link-up will be arranged. The Court will ensure that the application is given the appropriate urgency.

e. If the emergency arises at the weekend or during any holiday period, the HHS, CYPS and the Registrar will need to know what course to follow to obtain access to a Judge at that time. These procedures are to apply -

i The HHS should contact the duty social worker at the nearest office of the CYPS as soon as it appears likely that the assistance of the Court will be required.

ii Immediately the social worker is contacted by the HHS, he or she will advise the Court that an application is about to be made. (The Registrar will already have advised CYPS of the name and telephone number of the member or members of the Court staff to contact outside working hours.)

iii Upon receipt of that advice, the Court will alert a Judge that an application is about to be made. (The Registrar will have the after hours telephone numbers of the Judges who preside in his or her Court.)

iv Arrangements will be made by the Court to place the application before a Judge as soon as it is ready. The Registrar is to ensure that the application is referred to a Family Court Judge and only if one is unavailable is the reference to be to a District Court Judge.

v Thereafter, consideration of the application and the procedure to be followed will be in the hands of the Judge.

vi Although it is anticipated that an application, together with any affidavit(s) in support, will normally be in writing it is acknowledged that in some circumstance oral applications and evidence will have to be accepted.

5. Copies of this Protocol are to be made to the Medical Association, the Police, the Children, Young Persons and Their Families Service, the Ministry of Health (and through the Ministry to the CHEs) and the Department for Courts. Each of these agencies will be responsible for ensuring it is disseminated to the appropriate staff in their agency.

Appendix 4

Hepatitis B

Three doses of hepatitis B vaccine are recommended at the ages of six weeks, three and five months. Children born of carrier mothers require HBIG and an extra dose of vaccine at birth at double the dose.

The Department of Health immunisation programme started in September 1985, when hepatitis B vaccine was offered to newborn babies of HBsAg positive mothers. In March 1987 the programme was extended to newborns of mothers with HBsAg and children born in certain high risk districts (Northland, Takapuna, Auckland, South Auckland, Rotorua, Napier and Gisborne). The demonstration of the effective-ness of low dose immunisation and health professional advocacy enabled the exten-sion of hepatitis B immunisation to everyone born after 29 February 1988. From this date four doses of 2 μg of plasma derived vaccine were given at birth, six weeks, three months, and 15 months. Previously three 10 μg doses had been used. There was a catch-up campaign for all preschoolers. Free immunisation was made available to household and sexual contacts of women who had been identified with HBsAg during antenatal screening.

As from 1 December 1989 the plasma derived vaccine (H-B-Vax) was replaced by a genetically engineered recombinant vaccine (Engerix-B). This was given at the manu-facturer's recommended dose at six weeks, three months and 15 months. Babies of carrier mothers also received a dose of vaccine plus HBIG at birth. From February 1990 free hepatitis B immunisation was extended to all children under 16 years of age.

The summary outlines the manufacturer's recommended dosage for the vaccine in current use (HB-Vax II, MSD). The vaccine used may change each time there is a new tender, about once every 12 to 18 months. The decision to change vaccines is made predominantly on the ground of cost. A change of vaccine may lead to a change in the dosage administered.

If a course of vaccine is interrupted, it may be resumed without repeating prior doses.

The reasons for changing in February 1996 the timing of the third dose (fourth for infants born to carrier mothers) of hepatitis B vaccine from 15 months to five months are:

- Compliance. In general, compliance with first year immunisations is better than with those administered in the second year.
- Simplification of schedule. This is one of the steps which permits the reduction of the current schedule from eight to five visits with each visit in the first year being identical.
- Risk of carriage. The risk of becoming a carrier is much higher if infection occurs in infancy. Infants at highest risk should be protected as early in life as possible.

The reduced time between the second and third dose (third and fourth dose for children of carrier mothers) may reduce the initial level of antibody, but will not reduce seroconversion rates and hence long term protection.

There have been concerns previously raised about the interference between hepatitis B and measles vaccines. Further studies have found these concerns not to be warranted, and hepatitis B may be given at the same time as MMR and all other vaccines on the schedule.

Administration

The injection must be given intramuscularly. The buttock is not recommended because vaccine given into fatty tissue is less effective.

It is wise to have both vaccines drawn up at the outset because two injections are given at each scheduled visit. This reduces the distress for the child and the caregiver. It is recommended that the same limb is used for hepatitis B vaccine eg, the left, and the other for DTPH, so that the cause of any local reaction can be ascertained. Each practice should determine a protocol for injection sites.

Hepatitis B immunisation is recommended and publicly funded for the following groups:

(a) Infants born to carrier mothers (ie, HBsAg-positive women). A double dose of hepatitis B vaccine plus HBIG 100 IU are offered at birth, each given by separate injections in different limbs. These infants are offered hepatitis B vaccine at 6 weeks and 3 months (again at double dose of vaccine), and at 5 months at the normal dose. HBIG should be administered as soon as possible after birth, preferably within 12 hours. If administration is inadvertently delayed, giving HBIG up to seven days after birth is still of value. The hepatitis B vaccine schedule should be commenced within the first week of life, but is normally given at the same time as HBIG (separate syringe and site).

All women should be tested for their HBsAg status during the antenatal period. If their status is unknown, the infant should be given IG at the time of delivery while the result of an urgent HBsAg test on the mother is awaited. If she is found to be HBsAg-positive, the infant should then be immunised forthwith using the double dose of vaccine.

(b) Infants and children: birth through to 10 years of age. The usual New Zealand schedule involves immunisation at six weeks, three months and five months. Older children can be given three doses at monthly intervals to maximise compliance. Separating the second and third dose by at least two months is preferable.

(c) Eleven to 16-year-olds. The vaccine is available to all others up to the age of 16 years in three doses of 0.5 ml of adult formulation given at not less than monthly intervals, but more usually one and six months after the first dose.

Preterm infants

Some studies indicate a reduced response to hepatitis B vaccine in infants less than 37 weeks gestation or less that 2,000 grams. In infants of non-carrier mothers the first dose is normally given at six weeks of age. It is recommended that, in the case of babies who were born at less than 31 weeks gestation, this should be postponed until just before discharge from hospital. In infants of carrier mothers, early protection is vital and these infants must receive HBIG within 12 hours of birth. The vaccine should also be given at birth, with subsequent doses at the recommended chronolog-ical ages. One small study 11 suggests that in very premature infants born to carrier mothers, adequate protection is maintained for up to 59 days by giving HBIG within 12 hours of birth. A decision as to whether to immunise at that stage or give a further dose of HBIG will be made according to the clinical condition of the infant, but the same study indicated that an immune response to hepatitis B vaccine can be mounted by infants with birthweights as low as 1,000g.

Pregnancy

Hepatitis B infection in pregnant women may result in severe disease for the mother and active infection of the newborn. Immunisation should not be withheld from a pregnant woman in a group at increased risk of acquiring hepatitis B (e.g., sexual partners of injecting drug users, partners of infectious males).

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Appendix 5

MENINGITIS

Patients will fall into three broad groups:

1. Fulminating Illness

These patients are obviously ill and getting worse quickly, with delirium, coma and a macula papular rash, particularly haemorrhagic (does not blanch on pressure). They may not have neck stiffness. There will be an assumption that these patients have meningitis and septicaemia. Urgent transportation to hospital should be arranged.

Prior to transfer, Penicillin or Amoxycillin should be administered as, in fulminating disease, every minute counts.

Dosage: Adults - Benzyl penicillin 1200 mg IV (or IM)
Children - Benzyl penicillin 25-50 mg per kg IV (or IM)

Adults - Amoxycillin IG-2G IV (or IM)
Children - Amoxycillin 50-100 mg/kg IV (or IM)

2. Some clinical features and known meningococcal meningitis contact

These patients will have a flu-like illness with some of the clinical features of meningitis (e.g. fever, headache, nausea, vomiting). If there is a history of contact with meningococcal meningitis or septicaemia then these patients should be assessed at hospital. If the time taken for the patient to reach hospital is likely to be greater than 30 minutes, then consideration should be given to administering penicillin or amoxycillin, as outlined about.

3. Some clinical features and no known meningococcal contact

These patients will be similar in presentation to group 2 above but will not have been in contact with a known case. If the index of clinical suspicion of meningitis is high (e.g. rapidly progressive illness with neck stiffness) then they should be assessed in hospital. If the time taken for the patient to reach hospital is likely to be greater than 30 minutes, then consideration should be given to administering penicillin as outlined above.

Appendix 6

CRITERIA FOR REFERRAL OF CHILDHOOD ASTHMA TO PAEDIATRIC SPECIALIST

Diagnosis in doubt

- Chronic productive cough or clubbing
- Asymmetrical chest signs
- Other chronic distressing disorder with no wheeze

Persistant wheeze and breathlessness

- Interfering with exercise, sleep, schooling or growth
- AND in spite of treatment via spacer with ≥ 800 µg / day inhaled budesonide / beclomethasone OR ≥ 400 µg / day fluticasone
- AND in spite of good technique, and good compliance

Recurrent severe attacks of asthma leading to hospitalisation

Note: *Chronic or recurrent cough without wheeze is rarely due to asthma. Common causes are self-limiting, if distressing, eg. post-viral cough (6-8 weeks duration), and whooping cough syndrome (typical paroxysmal cough leading to choking, red face or vomiting without microbiological confirmation – 2-3 months duration).*

Passive smoke exposure and psychogenic cough need consideration. Rarely cough alone may be a presenting feature of asthma. This is suggested by strong history of asthma in parents or siblings, history of flexural atopic eczema in child, and typical asthma triggers - allergens, cold air, exercise.

Appendix 7

GUIDELINES – DIAGNOSIS OF URINARY TRACT INFECTION (UTI) IN CHILDREN

Paediatric Urinary Collection is often imperfect and contamination is likely. An incorrect diagnosis will subject the patient to unnecessary and invasive investigations.

Laboratory reports - True UTI is UNLIKELY without all of the following findings:

1. White cells in urine > 10 x 106/L
2. Single organism
3. Colony count > 10^5/ml
   > 10^8/litre

Failure to meet all of these criteria means that there is doubt about the diagnosis. Further attempts should be made to obtain a "clean catch" specimen or the child referred to a colleague experienced in bladder stabs or catheterisation of young children.

Confirmation of a UTI is essential in a child under the age of 3 years as a positive finding must lead to further investigation. If a UTI is suspected a urine specimen should be obtained by bladder stab in an infant less than 2 years, or by catheter in those up to the age of 3 years.

UTI in children in the first year of life should be seen in the paediatric service and acute admission considered.

Methods of collection, in ranked order of reliability:

1	Bladder Stab – usually hospital based.	Suitable only up to 2 years of age, and requires competence in the procedure.
2	Catheter Urine – usually hospital based.	Requires competence in the procedure.
3	Clean Catch – recommended method for general practice.	Somewhat prone to contamination from foreskin or labia. Should collect directly into sterile collection container, rather than non-sterile container (potty). Cleanse perineum/foreskin with warm water in cotton ball/gauze.
4	Bag Urine – only if other methods cannot be safely performed in general practice.	Contamination is very likely. Cleanse perineum/foreskin with warm water in cotton ball/gauze. At least 2 urine collections by this method with consistent results are needed, prior to starting antibiotics.