

# PRIMARY CARE IV ROTATION LEARNING OBJECTIVES

**Primary Care IV** – Students will be placed in an outpatient and/or inpatient setting, with a family practitioner, internist, pediatrician and/or OBGYN, to obtain exposure to primary care medicine, with an emphasis on pediatrics and women’s health. This rotation’s examination will focus on Pediatrics and Women’s Health. The following pages outline the learning objectives for this clinical experience. They are designed to guide students in their clinical activities and supplemental reading. It is not the Program’s intention that students will be exposed to this complete list of objectives during the clinical experience. This section is designed to assist students in their preparation for the Primary Care IV end-of-rotation exam.

## LEARNING OBJECTIVES FOR MEDICAL KNOWLEDGE

Upon completion of this clinical experience, the student will be expected to competently *recognize and apply knowledge to compare, differentiate and evaluate* the:

- **etiology, epidemiology, risk factors and pathophysiology (if appropriate)**
- **clinical manifestations**
- **differential diagnosis**
- **assessment (including recommendation and interpretation of laboratory, diagnostic and radiological studies/findings)**
- **management (including pharmacological/ non-pharmacological, patient education, procedural and necessary referrals)**
- **prognosis, complications, prevention and patient education**

of the following diseases/disorders/symptoms:

### *Pediatric Objectives*

#### General

failure to thrive	cough
vomiting	fever, FUO
syncope	cyanosis
dehydration	chest pain
crying	abuse and neglect (to include sexual abuse)

Smiles for Life objectives:

<http://www.smilesforlifeoralhealth.org/buildcontent.aspx?tut=555&pagekey=62948&cbreceipt=0>

#### Ophthalmologic

Amblyopia	Ocular foreign body
Nasolacrimal duct obstruction	Strabismus
Conjunctivitis: allergic, viral, bacterial, chemical, neonatal	

#### Respiratory System

asthma	pertussis
bronchiolitis	pneumonia (viral, bacterial and fungal)
bronchitis	SIDS
Apnea/ALTE	laryngotracheobronchitis (croup)

## ENT and Sinuses

acute parotid swelling  
allergic rhinitis  
dental caries  
epiglottitis  
epistaxis  
foreign body in the ear & nose  
Gingivostomatitis  
indications for myringotomy/  
tympanostomy

indications for tonsillectomy and  
adenoidectomy  
oral thrush  
otitis externa  
otitis media (acute, serous, +/- effusion)  
Peritonsillar abscess  
pharyngitis (bacterial, viral)  
sinusitis  
thrush  
URI

## Cardiovascular System

Innocent murmurs  
Hypertrophic cardiomyopathy  
Acute rheumatic fever

## Gastrointestinal System

gastroesophageal reflux  
Volvulus  
intestinal obstruction  
constipation  
functional constipation  
acute gastroenteritis  
vitamin deficiencies  
jaundice in the newborn  
Hirschsprungs disease  
appendicitis  
Abdominal pain - acute & chronic/recurrent  
hernias (femoral, umbilical, direct indirect)

Meckel's diverticulum  
intussusception  
acute and chronic diarrhea  
encoparesis  
rectal itching  
malabsorption  
rectal bleeding  
pyloric stenosis  
Viral hepatitis

## Genitourinary/Renal

Balanitis  
Cryptorchidism  
Enuresis  
Epididymitis  
Hematuria  
hydrocele  
hypospadias  
labial adhesions  
Male circumcision: risks, benefits, contraindications and familial & cultural  
common congenital anomalies of the genitourinary tract

Orchitis  
Paraphimosis  
Phimosis  
Testicular torsion  
UTI and pyelonephritis  
Vaginal foreign body  
Varicocele  
Vesicourethral reflux

## Endocrine/Genetics

short stature  
obesity  
diabetes mellitus (Type 1 and 2)  
amenorrhea -primary, secondary  
gynecomastia

metabolic syndrome  
Down's syndrome  
Turner's syndrome

## Hematology/Oncology

Anemia - Fe deficiency  
megaloblastic anemias  
vitamin K deficiency  
ITP

lead poisoning  
sickle cell anemia/ trait  
von Willebrand's disease

## Neurology

seizure disorders (febrile, partial, partial complex, absence, generalized tonic/clonic)  
headaches  
meningitis

## Musculoskeletal System

Congenital dysplasia of the hip  
Sprains/Strains  
Subluxation of the radial head  
(nursemaid's elbow)  
Slipped capital femoral epiphysis  
Legg-Calve-Perthes  
Osteochondritis dissecans  
growing pains  
Osgood-Schlatter Disease  
Physiologic genu varum and valgum

Popliteal cysts  
In-toeing  
Calcaneovalgus feet  
Metatarsus adductus (metatarsus varus)  
Pes planus  
Fractures (Buckle, greenstick,  
epiphyseal)  
Transient synovitis of the hip  
the limping child  
Scoliosis

## Dermatology

Acne (including neonatal)  
Bullous Impetigo  
Candidiasis  
Cellulitis  
Dermal melanosis  
Dermatitis (atopic, seborrheic, diaper,  
perioral, contact)  
Erythema Toxicum Neonatorum  
Hemangiomas  
Impetigo  
Lice (including pubic)  
Milia  
Molluscum contagiosum

Perianal dermatitis/perianal  
streptococcal disease  
Pinworm  
Pityriasis rosea  
Port-wine stain (nevus flammeus)  
Scabies  
Tinea:  
corporis/pedis/cruris/versicolor/capiti  
s,  
Traction alopecia  
Transient macular stains (salmon  
patches)  
Transient Neonatal Pustular Melanosis

## Infectious Disease

Approach to fever by age	Gonorrhoea
Chlamydia	Trichomonas
Syphilis	Pertussis
Human papilloma virus (warts: genital and elsewhere)	
Herpangina	Roseola
Measles	Rubella
Erythema infectiosum	Varicella
Hand, foot and mouth disease	Scarlet fever
Mumps	Cat scratch disease
Coxsackie virus	Adeno virus
HSV	Mononucleosis
Viral Exanthems	Diphtheria

Psychiatry/Behavior

ADHD	substance abuse
autism spectrum disorders	eating disorders
colic	anxiety
tantrums	depression
suicidal ideation	

Adolescent Gynecology

primary dysmenorrhea  
 breast asymmetry & masses  
 physiologic leukorrhea  
 abnormal vaginal bleeding & irregular menses

Fluid, Electrolytes and Nutrition

feeding - breast, formula, bottle  
 dehydration in a child below 2 years of age

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**Students will be expected to apply knowledge of the following pediatric topics to the assessment of a child.**

**Growth and Development**

- Normal and abnormal physical exam findings from the newborn period to late adolescence. This includes accurate measurement of length, height, weight & head circumference, newborn reflexes and the determination of Tanner Staging.
- The normal progression of physical, motor (fine and gross), cognitive, language (receptive and expressive) and social/emotional growth and development of children from the newborn to late adolescence. This includes the timing and normal progression/sequence of puberty in boys and girls
- Knowledge of developmental milestones and red flags to distinguish normal from abnormal development.
- The potential implications of abnormal findings of development and when it is appropriate to refer or recommend further evaluation for a child who has not met or who has lost developmental milestones

- Accurately plot and interpret trends on pediatric growth charts

**Well Child Care**

Apply knowledge of recommended/standard well baby, child and adolescent care to the assessment of a child. Expected knowledge includes the following elements of well child care:

- recommending age appropriate immunizations for healthy and high risk children and the absolute and relative contraindications to routine pediatric immunizations screenings
- follow-up intervals for well care
- prescriptions (including fluoride & contraception)
- anticipatory guidance, education and counseling to foster optimal development (including puberty and sexuality)
- guidance regarding safety plus accident, injury and violence prevention
- Car seat guidelines(State of California and American Academy of Pediatrics)
- risk reduction of high risk behaviors
- pediatric nutrition plus promotion of healthy diets and activities
- guidance about common behavioral issues including colic and tantrums
- guidance regarding normal sleep patterns and common sleep problems
- guidance regarding common issues about school including school readiness and avoidance
- the objectives and components of the pre participation history and physical exam

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 Upon completion of this clinical experience, the student will be expected to *recognize, compare, differentiate and evaluate* the **etiology, epidemiology, risk factors, pathophysiology, clinical manifestations, and differential diagnosis** of the following diseases/disorders/symptoms. In addition, the student will be expected to **recognize strategies for prevention and the most common complications** of the following disease/disorders/ symptoms.

General/Multisystem

Fetal alcohol syndrome	Kawasaki's
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Ophthalmologic

Cataracts	Retinoblastoma
periorbital and orbital cellulitis	

ENT and Sinuses

peritonsillar abscess	cauliflower ear
retropharyngeal abscess	bacterial tracheitis

Respiratory System

cystic fibrosis	foreign body aspiration
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Cardiovascular System

congenital heart disease (Tetralogy of Fallot, VSD, PDA, ASD, Coarctation of the Aorta)  
 congestive heart failure from the neonate to late adolescent  
 HTN

Gastrointestinal System

Inflammatory bowel disease: Crohn's disease, Ulcerative colitis  
Celiac disease

### Genitourinary/Renal

Glomerulonephritis	HSP
Wilm's Tumor	Hypospadias
Testicular cancer	Vesicoureteral reflux

### Endocrine/Genetics

growth hormone deficiency	hypothyroidism
precocious puberty	Klinefelter and Turner syndrome
congenital hypothyroidism	DKA
congenital adrenal hyperplasia	delayed puberty

### Hematology/Oncology

Leukemia	Lymphoma
CNS tumors in children	thalassemia
hemophilia	osteosarcoma
anemia (microcytic, macrocytic, normocytic, aplastic)	

### Neurology

spina bifida	hydrocephalus
meningocele	meningomyelocele
muscular dystrophy	cerebral palsy

### Musculoskeletal/Rheumatologic Systems

Slipped Capital Femoral Epiphysis (SCFC)  
Osteomyelitis  
Talipes equinovarus (clubfoot)  
Juvenile rheumatoid arthritis  
Torticollis  
Pathologic genu varum  
Craniocynostosis  
Rickett's  
Avascular necrosis of the proximal femur (Legg-Calve-Perthes Disease)

### Dermatology

Café au lait macules	Congenital melaocytic nevi
Erythema multiforme	Steven's-Johnson syndrome
Toxic Epidermal Necrolysis	

### Infectious Disease

Sepsis	Reye syndrome
Meningitis	

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LEARNING OBJECTIVES FOR PHARMACOTHERAPEUTICS

Students will also be expected to discern the properties of the following drug or drug classes including mechanism of action, interactions, contraindications, and major and common side effects. Students are expected to calculate appropriate medication dosages based on an infant’s or child’s age and weight in a way that promotes compliance (for example: formulations, # doses/day). Students will also be expected to discern the appropriate patient education and necessary follow up required for the following drugs or drug classes.

- 1. Pain management - acute, chronic
2. Tylenol
3. NSAIDs
4. Asthma/ COPD medications
5. Anticonvulsants
6. ADHD
7. Antibiotics, Antiviral, Antifungal - all routes, formulations
8. Acne medications
9. Corticosteroids
10. Scabicides & pediculocides
11. Antidiarrheals
12. Antiemetics
13. Laxatives and Bowel evacuants
14. Ophthalmological anti-inflammatory/ allergy/ antibiotic/ steroid preparation

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LEARNING OBJECTIVES FOR DIAGNOSTICS

Students will be expected to identify the method of collection, appropriately recommend, interpret the findings, and recognize the indications/clinical significance of the following diagnostic studies. In addition students will be expected to discern appropriate management (including counseling and informed consent) when abnormalities are found in the following routine tests, and recognize the potential complications for each:

- 1. Lead level
2. Hemoglobin and hematocrit
3. Reticulocyte count
4. Ferritin
5. Tympanometry
6. UA and Urine Culture: how to get urine in the pediatric population

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# Women's Health Objectives

## GYNECOLOGY

### General

- Premenstrual dysphoric disorder (PMDD)
- Premenstrual disorder (PMS)
- Dyspareunia
- Polycystic ovarian syndrome (PCOS)
- Hirsutism
- Smiles for Life objectives:

<http://www.smilesforlifeoralhealth.org/buildcontent.aspx?tut=555&pagekey=62948&cbreceipt=0>

### Breast

- Paget's disease and inflammatory breast cancer
- Mastitis
- Mastalgia
- Simple cysts
- Fibroadenomas
- Fibrocystic disease
- Nipple discharge based on the following characteristics:
  - Bloody; Green or yellow; Clear or white; Brown or black; Spontaneous or expressed
- Associated skin findings or breast masses
- Mammogram (screening) - risks, benefits, indication
- Mammogram (diagnostic) - indications
- Breast Ultrasound - indications

### Adnexa

- Mass
- Tubo-ovarian abscess
- Ovarian cysts
- Ovarian torsion

### Vagina/ External Genitalia

- Bartholin cysts
- Vaginitis -candida, Trichomonas, atrophic, irritant
- Vestibulitis & vulvodynia
- Bacterial vaginosis
- Vulvar masses
- Lichen sclerosis
- Pubic lice
- Folliculitis
- Prolapse

### Uterine/Cervix

- Nabothian cysts
- mass
- leiomyoma
- Pelvic inflammatory disease



Endometriosis

Cervicitis

Indications of: hysterectomy, endometrial biopsy

### Genitourinary

Uterine prolapse (including staging)

Rectocele (including staging)

Cystocele (including staging)

Urinary incontinence (stress, urge, and overflow)

### Menstruation

Dysmenorrhea

Dysfunctional uterine bleeding

Primary and secondary amenorrhea

Abnormal vaginal bleeding

Menorrhagia, menorrhagia, menometrorrhagia, oligomenorrhea, post coital and intramenstrual

### Menopause

perimenopause and menopausal syndromes

hormone replacement therapy - with/without hysterectomy

non-hormonal treatment for menopause

post menopausal bleeding

osteoporosis

### Infertility

Male and female factors

### Contraception

Male & female surgical sterilization

Male and Female condoms

Natural family planning (Rhythm, withdrawal, calendar)

Diaphragm and cervical caps

Oral contraceptives (Pills)

Vaginal ring (Nuva Ring)

Patch (Ortho Evra)

Emergency contraception (levonorgestrel, ulipristal, copper IUD)

Progesterone only IUD and non-hormonal IUD (Mirena / Skyla & Paraguard)

Dermal implant (Nexplanon)

Spermicidal methods (Jell, foam, film, suppositories)

### Sexually Transmitted Infections

Gonorrhea

Chlamydia

Trichomonas

Syphilis

Primary and secondary herpes simplex

Warts (HPV)

Molluscum contagiosum

HIV

## GYN Oncology

Cancer - breast, cervical, uterine and ovarian  
Abnormal Pap smear results and management  
ASCUS  
LSIL  
HSIL  
ASC-H  
Repeat cytology  
High risk HPV testing  
Colposcopy  
Cervical, LEEP and cone biopsy  
Laser and cryosurgery  
Diethylstilbestrol (DES) exposure.  
Indications for the following:  
Diagnostic mammography  
Breast ultrasound  
Fine needle aspiration  
Excisional breast biopsy  
Mastectomy

## OBSTETRICS

### General

Genetics	Pregnancy options counseling
Nulliparous	Anemia in pregnancy
Parous	Estimated date of confinement (EDC)
Multiparous	Estimated date of delivery (EDD)
Gravida	

### Techniques utilized to determine estimated date of confinement or estimated date of delivery.

LMP (last menstrual period)  
Ultrasound  
Serum qualitative/quantitative  $\beta$  Hcg  
Pelvic sizing  
Fetal movement  
Fetal heart tones

### Induced Abortion

Medication abortion	Aspiration (surgical) abortion
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### Prenatal Care

Dietary requirements  
Weight change guidelines  
Physiology of pregnancy  
Multiple gestation  
Components of prenatal evaluations – (initial, follow- up, frequency)  
Timing of routinely recommended screening and diagnostic studies  
Management and counseling of low risk pregnancy

Obstetric Complications

- |   |                                    |
|---|------------------------------------|
| Hyperemesis gravidarum                                | Incompetent cervix                 |
| Urinary tract infection                               | Spontaneous abortion               |
| Pregnancy induced hypertension                        | Ectopic pregnancy                  |
| Preeclampsia/Eclampsia                                | Molar pregnancy                    |
| Placenta previa                                       | First and third trimester bleeding |
| Placenta abruption                                    | Threatened abortion                |
| Missed abortion (anembryonic pregnancy, fetal demise) |                                    |
| Gestational diabetes                                  |                                    |
| Preterm labor   |                                    |

Labor

- Stages of labor
- Rupture of membranes
- Fetal heart monitoring -methods
- Decelerations - early, late, variable
- Intralabor Medications
  - o non-pharmacological/pharmacological methods of pain management
  - o Analgesia - epidural, local, I.V.
  - o Pitocin
  - o Oxytocin
  - o Antibiotics

Delivery

- |                                    |                          |
|------------------------------------|--------------------------|
| Vaginal delivery                   |                          |
| Caesarian section                  | Prolapsed umbilical cord |
| Episiotomy                         | Meconium                 |
| Breech presentation                | Retained placenta        |
| Dystocia                           | Post-partum fever        |
| Antepartum & Postpartum hemorrhage |                          |

Postnatal care

- Perineal laceration/episiotomy care
- Normal physiology changes of puerperium
- Contraception options

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**LEARNING OBJECTIVES FOR PHARMACOTHERAPEUTICS**

Students will also be expected to *discern* the **properties of the following drug or drug classes including mechanism of action, interactions, contraindications, and major and common side effects**. Students will also be expected to *discern* the appropriate **patient education and necessary follow up** required for the following drugs or drug classes.

Contraception

- Oral contraceptives (Pills)
- Vaginal ring (Nuva Ring)
- Patch (Ortho Evra)

Emergency contraception (Plan B, IUD)  
 Progesterone only IUD and non-hormonal IUD (Mirena & Paraguard)  
 Dermal implants (Implanon)  
 Spermicidal methods (Jell, foam, film, suppositories)  
 Antibiotic--oral, intravaginal, topical  
 Antiviral--oral, intravaginal, topical  
 Antifungal--oral, intravaginal, topical  
 Clomid  
 Pain Management –during pregnancy, intralabor, postpartum

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### LEARNING OBJECTIVES FOR DIAGNOSTICS

Students will be expected to identify the **method of collection**, appropriately **recommend**, **interpret** the findings, and **recognize the indications/clinical significance** of the following diagnostic studies. In addition students will be expected to discern appropriate **management** (including counseling and informed consent) when *abnormalities* are found in the following routine tests, and recognize the **potential complications** for each:

Combined first trimester screening (PAPP-A, hCG, ultrasound)	
Alpha-fetoprotein screening	Pap smear
Glucose tolerance test	Gonorrhea and chlamydia screening
Hemoglobin and hematocrit	Herpes culture and serum studies
Urine dip (proteinuria, glucouria)	Serum Hcg (qualitative and quantitative)
Thyroid profile	Iron status
Syphilis (RPR, VDRL, FTA-ABS, TP-PA)	Rubella titer
Gestational diabetes screening	HPV typing
FSH and LH	Group B beta strep screen
Wet Mount	Maternal – Fetal Rh(D) incompatibility screening
Amine test	Chorionic villi sampling (CVS)
DHEA	Amniocentesis
HIV	Fetal Monitoring
Prenatal contraction stress & nonstress testing	

### END OF PRIMARY CARE IV LEARNING OBJECTIVES