BAHAGIAN AMALAN & PERKEMBANGAN FARMASI
KEMENTERIAN KESIHATAN MALAYSIA

TAHUN 2019

GARIS PANDUAN KAUNSELING UBAT-UBATAN EDISI KE-3

eISBN 978-967-5570-81-0

Third Edition, September 2019
Pharmaceutical Services Programme
Ministry of Health, Malaysia

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ISI KANDUNGAN

1.0 PENGENALAN

Salah satu punca utama ketidakpatuhan kepada arahan pengambilan ubat-ubatan di kalangan pesakit adalah disebabkan oleh kurang kefahaman terhadap penyakit dan rawatannya. Oleh itu, adalah menjadi tanggungjawab pegawai farmasi untuk mendidik dan memberi kaunseling ubat-ubatan kepada pesakit dan menggalakkan mereka supaya mematuhi rawatan farmakoterapi dan cara pengambilan ubat-ubatan yang diberikan.

Aktiviti kaunseling ubat-ubatan boleh dijalankan kepada semua pesakit tidak kira sama ada pesakit luar atau pesakit di dalam wad. Ia boleh dijalankan kepada pesakit secara individu atau berkumpulan, keluarga pesakit atau penjaga. Pegawai farmasi perlu melengkapkan diri dengan pengetahuan farmakoterapi dan kemahiran berkomunukasi dengan baik bagi memastikan aktiviti kaunseling ubat-ubatan ini dapat dijalankan secara efektif dan berkesan.

Aktiviti ini hendaklah dijalankan berteraskan konsep individualised kerana setiap keperluan dan tahap kefahaman pesakit adalah berbeza. Pegawai farmasi perlu berupaya untuk mengenalpasti isu atau masalah berkaitan ubat-ubatan yang dihadapi oleh pesakit dan cuba untuk membantu dalam mengatasi masalah tersebut. Ini bagi memastikan pesakit mendapat manfaat yang optima daripada rawatan yang diberikan. Kaunseling yang dijalankan juga perlu mengamal konsep *individualised* dan diubahsuai mengikut keperluan dan tahap pemahaman pesakit.

2.0 TUJUAN

Garis panduan ini bertujuan untuk memberi panduan am mengenai proses kerja dan dokumentasi yang terlibat dengan aktiviti kaunseling ubat-ubatan seperti berikut:

i) Proses kerja kaunseling ubat-ubatan secara individu, berkumpulan dan susulan
ii) Proses validasi dan *peer review*
iii) Senarai borang-borang yang digunakan
iv) Senarai semak kaunseling ubat-ubatan

3.0 SKOP PERKHIDMATAN

Garis panduan ini boleh digunapakai untuk memberikan kaunseling ubat-ubatan kepada semua kategori pesakit seperti yang ditunjukkan dalam Jadual 1.

Bil	Kategori Pesakit	Jenis Kaunseling
1	Pesakit Luar	a) Kaunseling individu b) Kaunseling berkumpulan c) Kaunseling susulan
2	Pesakit Dalam	a) Kaunseling Individu i) *Bedside* ii) Discaj b) Kaunseling berkumpulan

Jadual 1: Jadual menunjukkan kategori pesakit dan jenis kaunseling yang boleh dijalankan

4.0 DEFINISI

i) **Kaunseling individu**: Kaunseling ubat-ubatan yang dijalankan secara *one-to-one* dengan pesakit/penjaga oleh pegawai farmasi. Ini termasuk kaunseling di Farmasi Pesakit Luar, semasa *Home Medication Review* (HMR), kaunseling pesakit yang tidak direkrut ke dalam *Medication Therapy Adherence Clinic* (MTAC) dan kaunseling pesakit di wad (kaunseling *bedside* dan discaj).

ii) **Kaunseling susulan individu**: Kaunseling susulan yang dijalankan secara *one-to-one* dengan pesakit oleh pegawai farmasi dalam tempoh masa dua bulan dari tarikh sesi kaunseling yang pertama.

iii) **Kaunseling berkumpulan**: Kaunseling yang dijalankan kepada lebih dari seorang pesakit yang menghidapi penyakit yang sama atau yang menerima rawatan yang hampir sama.

iv) **Kaunseling bedside**: Kaunseling ubat-ubatan yang dijalankan semasa pesakit berada dalam wad untuk kali pertama dan susulan bagi tempoh kemasukan wad yang sama.

v) **Kaunseling discaj**: Kaunseling ubat-ubatan yang dijalankan kepada pesakit semasa discaj, sama ada di wad atau di Farmasi Pesakit Dalam atau Farmasi Satelit.

vi) **Jumlah kaunseling**: Jumlah bilangan kaunseling yang dijalankan secara individu, susulan dan berkumpulan.

vii) **Proses Validasi**: Proses penilaian pengetahuan dan kemahiran asas kaunseling bagi Pegawai Farmasi Provisional (PRP) sebelum mereka ditugaskan untuk memberi kaunseling ubat-ubatan.

viii) ***Peer Review***: Satu proses penilaian di mana kemahiran kaunseling seseorang pegawai farmasi dinilai semula oleh pegawai farmasi yang lebih berpengalaman.

5.0 KRITERIA PESAKIT

Secara umumnya, semua pesakit yang menerima rawatan farmakoterapi boleh ditawarkan perkhidmatan kaunseling ubat-ubatan sama ada dirujuk oleh pegawai perubatan atau dikenalpasti oleh pegawai farmasi. Walaupun begitu, pegawai farmasi boleh memilih pesakit untuk diberikan kaunseling ubat-ubatan berdasarkan kriteria di bawah:

a) Regimen Ubat-ubatan
   i) Ubat-ubatan penyakit kronik
   ii) Alat peranti perubatan seperti pen insulin, inhaler, nasal spray, patch, pesari
   iii) Ubat-ubatan yang memerlukan pemantauan rapi contohnya anti-epileptik, anti-parkison, anti-koagulasi
   iv) Ubat-ubatan yang memerlukan penerangan yang khusus tentang cara penggunaannya seperti ubat sapu dan ubat kutu
   v) Ubat-ubatan yang memerlukan penekanan terhadap tahap kepatuhan pengambilan ubat-ubatan seperti antibiotik, HAART, antituberkulosis dan DAAs

b) Kategori Pesakit

i) Pesakit geriatrik

ii) Pesakit pediatrik

iii) Pesakit yang mempunyai masalah tertentu (seperti tidak tahu membaca, masalah penglihatan, masalah pendengaran ,masalah administrati ubat [contoh: Ryles' tube] dan lain-lainnya)

iv) Pesakit yang mempunyai masalah kepatuhan pengambilan ubat-ubatan

v) Pesakit yang kerap mengalami kesan sampingan ubat-ubatan, contohnya *hypoglycaemia*, *postural hypotension*, GI *disturbances*

6.0 NORMA KERJA

Norma kerja kaunseling ubat-ubatan berfungsi sebagai satu panduan untuk penetapan sasaran minima bagi aktiviti kaunseling di fasiliti kesihatan di bawah Kementerian Kesihatan Malaysia (KKM). Bagi hospital, sasaran bilangan kaunseling yang ditetapkan adalah berdasarkan bilangan pegawai farmasi bagi pesakit luar dan jumlah katil bagi pesakit dalam mengikut kategori hospital masing-masing (rujuk Jadual 2). Bagi klinik kesihatan pula, sasaran yang ditetapkan adalah berdasarkan bilangan pegawai farmasi (rujuk jadual 3).

Bagi hospital:

KATEGORI HOSPITAL	SASARAN KAUNSELING SEHARI		
	PESAKIT LUAR	PESAKIT DALAM	
		BIL. KATIL	SASARAN
HKL	40-45	-	50-60
Hospital Utama Negeri	20-25	-	30-35 (HQE & HTF : 25-30)
Hospital Pakar Major	12-15	> 500	25-30
		350 - 500	20-25
		<350	15-20
Hospital Pakar Minor	8-12	>200	10-15
		100-200	5-10
Hospital Tanpa Pakar	3-6	>100	3-5
		<100	2-5
Institusi Khas	3-6	-	2-5

Jadual 2: Sasaran kaunseling sehari untuk kateogri hospital KKM

Bagi klinik kesihatan:

KLINIK KESIHATAN	
JENIS FASILITI	**SASARAN KAUNSELING SEHARI**
PF > 10 orang	10-15
PF : 5-10 orang	5-10
PF : 3-4 orang	3-5
PF : 1-2 orang	2

Jadual 3: Sasaran kaunseling sehari untuk kateogri klinik kesihatan KKM

7.0 PROSEDUR KERJA

7.1 Kaunseling Individu

i) Terima rujukan/kenalpasti pesakit yang memerlukan kaunseling ubat-ubatan.

ii) Terima preskripsi dan/atau ubat untuk proses kaunseling (jika ada).

iii) Kenalkan diri kepada pesakit dan jelaskan tujuan kaunseling.

iv) Dapatkan maklumat lanjut tentang pesakit termasuk maklumat alahan ubat, pengambilan ubat traditional dan rekodkan semua maklumat tersebut di dalam borang kaunseling .

v) Jalankan sesi kaunseling yang berkaitan dengan merujuk kepada **Borang Penilaian Kemahiran Kaunseling Pegawai Farmasi**.

vi) Nilai semula kefahaman pesakit.

vii) Sekiranya pesakit memerlukan kaunseling susulan, tetapkan tarikh temujanji baru dan rekodkan di dalam Daftar Kaunseling Susulan.

viii) Lengkapkan semua dokumen yang terlibat:

a) Borang Kaunseling Individu

b) Sistem rekod untuk rujukan preskriber, dan

c) Daftar Kaunseling Individu.

ix) Failkan mengikut nombor rujukan / susunan abjad nama pesakit

7.3 Kaunseling Berkumpulan

i) Terima rujukan kaunseling berkumpulan secara berjadual daripada unit lain atau kenalpasti pesakit yang memerlukan kaunseling ubat-ubatan secara berkumpulan.

ii) Kenalkan diri kepada pesakit dan jelaskan tujuan kaunseling.

iii) Jalankan sesi kaunseling yang berkaitan dengan merujuk kepada **Borang Penilaian Kemahiran Kaunseling Pegawai Farmasi**.

iv) Nilai semula kefahaman pesakit.

v) Lengkapkan semua dokumen yang terlibat:

a) Borang Kaunseling Berkumpulan,

b) Sistem rekod untuk rujukan preskriber, dan

c) Daftar Kaunseling Berkumpulan.

vi) Failkan mengikut nombor rujukan.

7.4 Kaunseling Susulan

i) Semak senarai Daftar Kaunseling Susulan

ii) Terima pesakit untuk Kaunseling Susulan

iii) Kenalkan diri kepada pesakit dan jelaskan tujuan kaunseling susulan.

iv) Rujuk nota/borang kaunseling pada sesi sebelumnya untuk mengenalpasti isu/perkara yang perlu disusuli .

v) Nilai semula kefahaman pesakit mengenai maklumat yang telah disampaikan pada sesi kaunseling sebelumnya.

vi) Kenalpasti isu yang sedang dihadapi oleh pesakit.

vii) Jalankan kaunseling dengan memberikan tumpuan kepada isu yang telah dikenalpasti.

viii) Lengkapkan semua dokumen yang terlibat:

a) Borang Kaunseling Individu,

b) Sistem rekod untuk rujukan preskriber, dan

c) Daftar Kaunseling Susulan.

d) Borang kaunseling Individu setelah selesai sesi kaunseling ke dalam rekod yang bersesuaian mengikut fasiliti.

ix) Sekiranya pesakit masih memerlukan kaunseling susulan, tetapkan tarikh temujanji baru.

x) Lengkapkan semua dokumen yang terlibat:

a) Borang Kaunseling Individu, dan

b) Daftar Kaunseling Susulan

xi) Kepilkan Borang Kaunseling Individu yang baru bersama borang kaunseling sebelumnya.

xii) Failkan mengikut nombor rujukan / susunan abjad nama pesakit

7.5 Mengesanbalik Pesakit Tidak Hadir Temujanji

i) Semak Daftar Kaunseling Susulan.

ii) Kenalpasti pesakit yang tidak dapat hadir pada sesi kaunseling susulan yang telah ditetapkan

iii) Hubungi pesakit (melalui telefon / SMS)

iv) Tetapkan tarikh temujanji baru.

v) Buat catatan pada Daftar Kaunseling Susulan.

8.0 CARTA ALIR

8.1 Kaunseling Individu

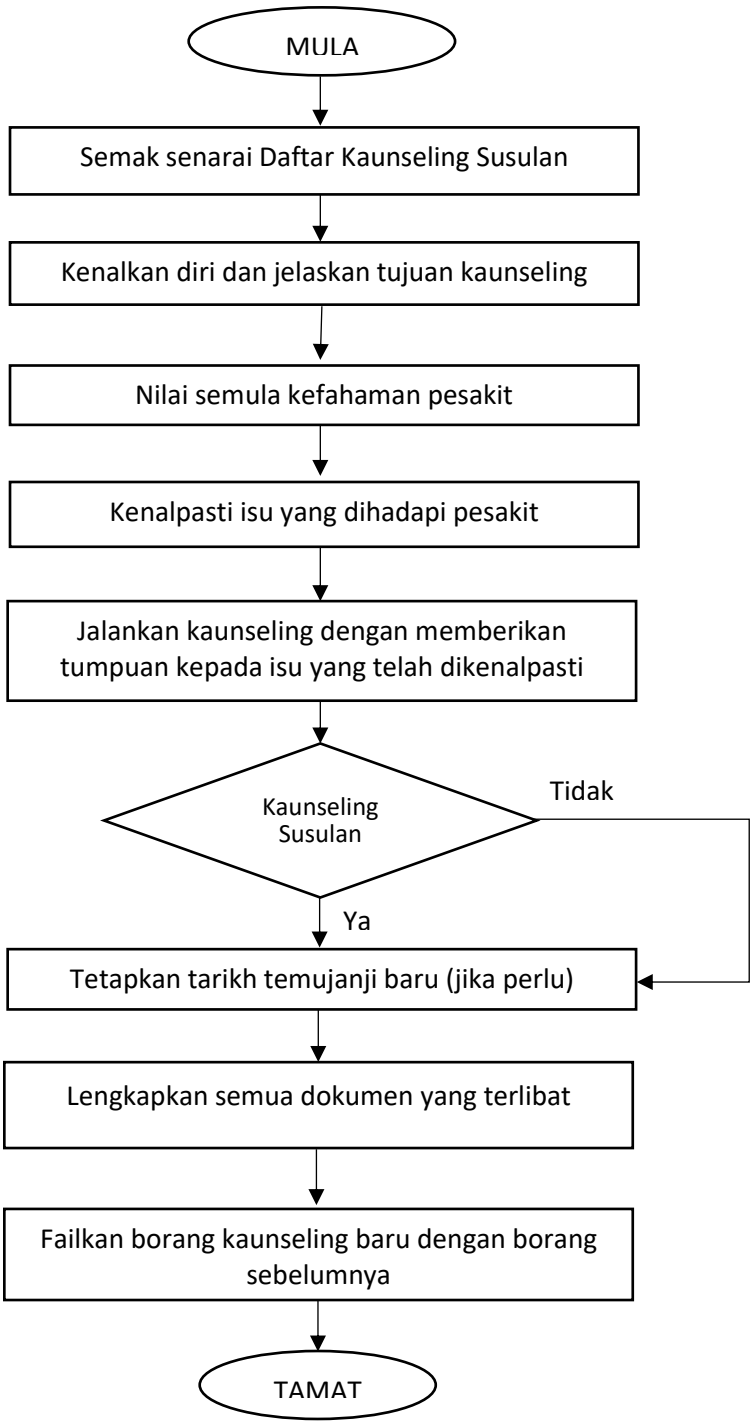
TANGGUNGJAWAB	CARTA ALIR
	MULA
Pegawai Farmasi	Terima rujukan/ Kenalpasti pesakit
Pegawai Farmasi	Kenalkan diri dan jelaskan tujuan kaunseling
Pegawai Farmasi	Dapatkan maklumat pesakit dan rekodkan di dalam borang kaunseling
Pegawai Farmasi	Jalankan sesi kaunseling dan nilai kefahaman pesakit
Pegawai Farmasi	Kaunseling Susulan Tidak Ya
Pegawai Farmasi	Tetapkan tarikh temujanji baru dan rekodkan di dalam Daftar Kaunseling Susulan
Pegawai Farmasi	Lengkapkan semua dokumen yang terlibat
Pegawai Farmasi	Failkan rekod
	TAMAT

8.2 Kaunseling Berkumpulan

TANGGUNGJAWAB	CARTA ALIR
	MULA
Pegawai Farmasi	Terima rujukan secara berjadual/ Kenalpasti kumpulan pesakit
Pegawai Farmasi	Kenalkan diri dan jelaskan tujuan kaunseling
Pegawai Farmasi	Jalankan sesi kaunseling dan nilai kefahaman pesakit
Pegawai Farmasi	Nilai kefahaman pesakit
Pegawai Farmasi	Lengkapkan semua dokumen yang terlibat
Pegawair Farmasi	Failkan rekod
	TAMAT

8.3 Kaunseling Susulan

TANGGUNGJAWAB **CARTA ALIRAN**



8.4 Mengesanbalik Pesakit Tidak Hadir Temujanji

TANGGUNGJAWAB	CARTA ALIR
	MULA
Pegawai Farmasi	Semak Daftar Pesakit Kaunseling Susulan
Pegawai Farmasi	Kenalpasti pesakit yang tidak hadir temujanji
Pegawai Farmasi	Hubungi pesakit
Pegawai Farmasi	Tetapkan temujanji baru
Pegawai Farmasi	Buat catatan pada Daftar Kaunseling Susulan
	TAMAT

9.0 DOKUMENTASI & PENGURUSAN REKOD KAUNSELING

9.1 Daftar Pesakit Kaunseling Ubat-ubatan

Daftar Pesakit Kaunseling Ubat-ubatan adalah satu rekod yang menyenaraikan semua nama pesakit yang telah menerima perkhidmatan kaunseling ubat-ubatan di fasiliti masing-masing. Daftar boleh ini boleh disediakan secara manual ataupun menggunakan sistem bergantung kepada fasiliti. Terdapat 3 jenis daftar pesakit yang perlu disediakan mengikut jenis kaunseling iaitu:

i) Daftar Pesakit Kaunseling Individu (**Lampiran A**)

i) Daftar Pesakit Kaunseling Berkumpulan (**Lampiran B**)

ii) Daftar Pesakit Kaunseling Susulan (**Lampiran C**)

9.2 Borang-Kaunseling

Setiap aktiviti kaunseling yang dijalankan hendaklah direkodkan dengan lengkap menggunakan borang kaunseling yang berkaitan. Borang-borang yang digunakan adalah seperti berikut:

i) Borang Kaunseling Individu / Susulan **(Lampiran D)**

ii) Borang Kaunseling Berkumpulan **(Lampiran E)**

9.3 Pengurusan rekod kaunseling

i) Penyimpanan rekod yang baik akan memudahkan proses mengesan semula maklumat pesakit bila perlu.

ii) Rekod boleh disimpan dalam bentuk hardcopy atau *softcopy*.

iii) Semua rekod berkaitan aktiviti kaunseling boleh disimpan secara softcopy di dalam folder khusus dan boleh dikemukakan pada bila-bila masa mengikut keperluan.

iv) Semua penyimpanan rekod berkaitan dengan kaunseling perlu disimpan di fasiliti sekurang-kurangnya dua (2) tahun.

10.0 PELAPORAN AKTIVITI KAUNSELING

i) Aktiviti perkhidmatan kaunseling yang dijalankan di hospital atau klinik kesihatan KKM perlu dipantau dan dilaporkan kepada Bahagian Amalan & Perkembangan Farmasi, KKM mengikut jadual pelaporan yang ditetapkan.

ii) Pelaporan aktiviti kaunseling boleh dijalankan melalui:

a) **Laporan PF 5.5(a)** : Aktiviti Farmasi Klinikal Ambulatori - Kaunseling (Hospital Dan Klinik Kesihatan) (Selain MTAC)

b) **Laporan PF 6.2** : Aktiviti Kaunseling Farmasi Pesakit Dalam

11.0 PROSES VALIDASI DAN *PEER REVIEW* KEMAHIRAN KAUNSELING UBAT-UBATAN PEGAWAI FARMASI

11.1 Tujuan

Proses validasi dan *peer review* adalah satu proses penilaian seseorang Pegawai Farmasi Provisional (PRP) atau pegawai farmasi untuk menilai kompetensi seseorang pegawai farmasi dalam pengetahuan dan kemahiran kaunseling ubat-ubatan bagi memastikan maklumat yang disampaikan adalah tepat, terkini dan seragam.

11.2 Kekerapan

Proses validasi: Dijalankan dalam masa dua (2) bulan selepas tarikh melapor diri Pegawai Farmasi Provisional (PRP).

[Maklumat lanjut rujuk kepada **Garis Panduan Kemahiran Asas Kaunseling Pegawai Farmasi Provisional (PRP) Tahun 2013]**

Peer Review: Dijalankan sekurang-kurangnya **sekali setahun** untuk semua pegawai farmasi di hospital atau klinik kesihatan, berdasarkan topik—topik yang ditetapkan.

11.3 Topik Proses Validasi dan *Peer Review* Kemahiran Kaunseling Ubat-Ubatan

Topik untuk proses validasi dan *peer review* dibahagikan kepada 2 kategori iaitu **topik wajid** dan **topik pilihan** seperti dalam Jadual 4. Topik wajib perlu dilaksanakan oleh semua fasiliti (sekurang-kurangnya sekali setahun), manakala topik pilihan boleh dibuat mengikut kesesuaian fasiliti masing-masing.

TOPIK PROSES VALIDASI/*PEER REVIEW* KEMAHIRAN KAUNSELING UBAT-UBATAN
Topik Wajib
Diabetes Mellitus
Respiratory
Topic Pilihan
AntiPsychotics
AntiEpileptic Medication
Biphosphonate
Bowel Cleansing Procedure
Cardiac Rehabilitation Program
Cardiac Rehabilitation Program
Cardiac – Enoxaparin
Cardiac – Fondaparinux
Cardiac – Warfarin
Chronic Kidney Disease
Ear Drop
Eye Drop
Eye Ointment
Glyceryl Trinitrate Spray
Hormone Therapy
Nasal Drop
Nasal Spray
Pessaries
Retroviral Disease Medications
Sublingual Glyceryl Trinitrate
Suppositories
Transdermal Patch
Tuberculosis
Geriatric Patients Counseling Tips
Peadiatric Counseling Tips
Pregnant Women Counseling Tips
Breastfeeding Women Counseling Tips

Jadual 4: Topik wajib dan topik pilihan untuk proses validasi & *peer review* kemahiran kaunseling ubat-ubatan

11.4 Lantikan Penyelaras dan *Reviewer*

Bagi memastikan pelaksanaan proses validasi dan *peer review* kemahiran kaunseling ubat-ubatan dijalankan dengan teratur dan sistematik, seorang penyelaras dan beberapa orang *reviewer* kaunseling ubat-ubatan boleh dilantik oleh Ketua Pegawai Farmasi mengikut kesesuaian fasiliti.

Pegawai penyelaras bertanggungjawab untuk menyelaras dan merancang proses validasi kemahiran kaunseling di kalangan semua pegawai manakala ***reviewer*** pula berperanan untuk menjalankan proses validasi dan menilai kemahiran kaunseling pegawai farmasi. Jadual 5 menunjukkan kriteria yang boleh dijadikan panduan untuk melantik pegawai penyelaras dan *reviewer*.

Kriteria	Pegawai Penyelaras	*Reviewer*
Pengalaman pegawai	Pegawai yang telah berkhidmat sekurang-kurangnya 5 tahun	Pegawai yang terlibat secara langsung dalam sesuatu bidang kepakaran, contohnya MTAC, kaunseling pesakit luar/dalam atau farmasi wad, sekurang-kurangnya 2 tahun
Tempoh Lantikan	2 tahun	2 tahun
Lain-lain		Boleh terdiri daripada pegawai penyelaras

Jadual 5: Kriteria pelantikan pegawai penyelaras dan *reviewer* untuk proses validasi dan *peer review* kemahiran kaunseling ubat-ubatan

11.5 Kaedah Pelaksanaan Proses Validasi dan *Peer Review* Kemahiran Kaunseling Ubat-Ubatan

Proses validasi dan *peer review* kemahiran kaunseling ubat-ubatan boleh dilaksanakan dalam beberapa cara. Contohnya:

i) **Sesi Individu**: Proses validasi/ peer review dijalankan secara *one-to-one* yang melibatkan seorang PF/PRP dan *reviewer* pada satu masa yang ditetapkan.

ii) **Sesi berkumpulan**: Proses validasi/ peer review dijalankan secara berkumpulan seperti bengkel, kursus, perbincangan kumpulan dan CPE yang melibatkan sekumpulan PF dan reviewer dalam satu sesi yang ditetapkan sama ada di peringkat unit, fasiliti, daerah atau negeri.

11.6 Carta Alir

TANGGUNGJAWAB	CARTA ALIR
	MULA
Ketua Pegawai Farmasi	Melantik penyelaras untuk menyelaraskan proses validasi /*peer review*
Ketua Pegawai Farmasi	Melantik *reviewer* untuk melaksanakan proses validasi /*peer review*
Penyelaras / *Reviewer*	Merancang pelaksanaan proses validasi/*peer review* kemahiran kaunseling ubat-ubatan
Reviewer	Melaksanakan proses validasi/*peer review* kemahiran kaunseling ubat-ubatan
Reviewer	Lengkapkan semua dokumen yang terlibat
Reviewer	Failkan rekod
	TAMAT

11.7 Dokumentasi dan Rekod

Setiap sesi validasi dan *peer review* yang dijalankan hendaklah direkodkan mengguna borang-borang berikut:

i) Daftar Kehadiran Sesi Validasi / *Peer Review* Kemahiran Kaunseling Pegawai Farmasi (**Lampiran F**)

ii) Borang Penilaian Kemahiran Kaunseling Pegawai Farmasi (**Lampiran G**)

Semua penyimpanan rekod berkaitan dengan proses penilaian kemahiran kaunseling perlu disimpan di fasiliti sekurang-kurangnya dua (2) tahun.

12.0 LAMPIRAN

i) Daftar Kaunseling Pesakit Individu (**Lampiran A**)

ii) Daftar Kaunseling Pesakit Berkumpulan (**Lampiran B**)

iii) Daftar Kaunseling Susulan (**Lampiran C**)

iv) Borang Kaunseling Individu **(Lampiran D)**

v) Borang Kaunseling Berkumpulan **(Lampiran E)**

vi) Daftar Kehadiran Sesi Validasi /*Peer Review* Kemahiran Kaunseling Pegawai Farmasi (**Lampiran F**)

vii) Borang Penilaian Kemahiran Kaunseling Pegawai Farmasi (**Lampiran G**)

Lampiran A

DAFTAR KAUNSELING PESAKIT INDIVIDU

Jabatan Farmasi _____

NO RUJUKAN	TARIKH	NAMA PESAKIT	RN/ NOMBOR IC	TOPIK KAUNSELING	NAMA PEGAWAI FARMASI	CATATAN

Lampiran B

DAFTAR KAUNSELING PESAKIT BERKUMPULAN

Jabatan Farmasi _____

BIL	NO. RUJUKAN BORANG	TARIKH	TOPIK KAUNSELING	BILANGAN PESAKIT DIKAUNSEL	NAMA PEGAWAI FARMASI

Lampiran C

DAFTAR KAUNSELING PESAKIT INDIVIDU SUSULAN

Jabatan Farmasi _____

NO RUJUKAN SUSULAN	TARIKH	NAMA PESAKIT	RN/ NOMBOR IC	TOPIK KAUNSELING	NO RUJUKAN BORANG LAMA	NAMA PEGAWAI FARMASI

Lampiran D

BORANG KAUNSELING PESAKIT INDIVIDU

Jabatan Farmasi _____

Individu	☐	**Bedside**	☐	**No Rujukan**	_____
Susulan	☐	**Discaj**	☐	**Tarikh**	_____

Nama _____ **IC/RN** _____

Jantina Lelaki ☐ Perempuan ☐

Bangsa Melayu ☐ Cina ☐ India ☐ Lain-lain ☐

Alamat _____

Tinggi _____ **Berat** _____ **BMI** _____

Tujuan Kaunseling:

Kaunseling Ubat-ubatan	☐	Kaunseling Alat Ubatan	☐
Kaunseling Penyakit	☐	Penilaian Komplians	☐
Lain-lain	☐		

Diagnosis _____

Sejarah Penyakit _____

Alergi ubat	Tidak	☐	Ya	☐	Nyatakan: _____
Kad Alegi	Tidak	☐	Ya	☐	No. Kad: _____
Merokok	Tidak	☐	Ya	☐	Nyatakan: _____
Alkohol	Tidak	☐	Ya	☐	Nyatakan: _____
Mengandung	Tidak	☐	Ya	☐	Trimester: _____
Menyusu	Tidak	☐	Ya	☐	
OTC	Tidak	☐	Ya	☐	Nyatakan: _____

Sejarah Pengubatan (jika ada)	**Senarai Ubat Terkini**
Nama ubat, Dos & Frekuensi	***Nama ubat, Dos & Frekuensi***
1)	1)
2)	2)
3)	3)
4)	4)
5)	5)
6)	6)
7)	7)
8)	8)
9)	9)
10)	10)

PENILAIAN TAHAP KEFAHAMAN PESAKIT

	Tahap Kefahaman		
	Baik	**Sederhana**	**Lemah**
Komplians			
Ubat-ubat/alat ubatan			

ULASAN PEGAWAI FARMASI

_____

_____

_____

_____

Kaunseling Susulan	**Tidak**	☐	**Ya**	☐	**Tarikh Temujanji** _____
MTAC	**Tidak**	☐	**Ya**	☐	**Jenis MTAC & Tarikh** _____

Tandatangan **Tarikh**

(Nama & Cop Pegawai Farmasi)

Lampiran E

No Rujukan: _____

BORANG KAUNSELING PESAKIT BERKUMPULAN

Jabatan Farmasi _____

Tajuk Kaunseling : _____

Tarikh : _____

Tempat : _____

Nama Pegawai Farmasi : _____

Bil.	Nama Pesakit	RN / Nombor IC

Ulasan Pegawai Farmasi	Tandatangan **(Nama & Cop Pegawai Farmasi)**

Lampiran F

DAFTAR KEHADIRAN SESI VALIDASI / *PEER REVIEW* KEMAHIRAN KAUNSELING PEGAWAI FARMASI

Jabatan Farmasi _____

Tarikh : _____

Tempat : _____

Nama *Reviewer* : _____

Topik : _____

BIL	NAMA PEGAWAI FARMASI	GRED	TEMPAT BERTUGAS	CATATAN

Tandatangan Penyelaras **Tarikh**
(Nama & Cop Pegawai Farmasi)

Lampiran G

CONTENTS

DIABETES MELLITUS

Name:		**Unit:**		
	• *Please tick (✓) **YES** for correct instruction or sequence.* • *Please tick (✓) **NO** for incorrect instruction or sequence.*			
	Education on pathophysiology and diabetes medicines			
A	**PREPARATION PHASE**	**Yes (1)**	**No (0)**	**Remarks**
1	Check patient's case note and medication chart for medicine(s) prescribed.			
	Check prescribed dose & frequency.			
	Check expiry date and follow the 5 Rights of administration of medication (Know Your Medicine).			
B	**EDUCATION PHASE (DIABETES MELLITUS)**	**Yes (1)**	**No (0)**	**Remarks**
1	**Introduce yourself and the purpose of counselling**			
2	**Pathophysiology of diabetes mellitus (DM)** DM is a condition in which the amount of glucose (sugar) in the blood is too high because the body cannot utilise it properly.			
	DM occurs when the pancreas produces too little or stop producing insulin, or when cells in the body are resistant to insulin.			
	Your body uses insulin to move the sugar (glucose) obtained from food, from the bloodstream into cells throughout the body, which then use the sugar for energy. The level of sugar in the bloodstream falls as the sugar passes into the cells.			
	There are 2 categories of DM: type 1 and type 2. Type 1 DM results from autoimmune destruction of the β cells of the pancreas. It usually occurs in children and adolescents but can occur at any age. Type 2 DM is characterised by insulin resistance and a relative lack of insulin secretion, with progressively lower insulin secretion over time. Most individuals with type 2 DM exhibit abdominal obesity, which itself causes insulin resistance. Type 2 DM has a strong genetic predisposition.			
	If the glucose level is high (hyperglycemia), it will cause complications such as proteinuria, gangrene/amputation, stroke, neuropathy/numbness, blindness or myocardial infarction.			
	Signs and symptoms of DM include polyuria (frequent urination), polydypsia (thirsty), fatigue, loss of weight, dry skin, blurring of vision, nausea and weakness.			
3	**Differentiate the short- and intermediate-acting insulin at first counselling session (where applicable)** **A. SHORT-ACTING INSULIN = YELLOW = COLOURLESS** Actrapid or Insugen R			
	To control the glucose level between the meals.			
	B. RAPID-ACTING INSULIN = ORANGE = COLOURLESS Novorapid - faster onset and shorter duration of action than Actrapid or Insugen R.			
	C. INTERMEDIATE-ACTING INSULIN = GREEN = CLOUDY Insulatard or Insugen N.			
	To control the glucose level during fasting/sleep time.			
	D. COMBINATION OF SHORT- AND INTERMEDIATE-ACTING INSULIN = CLOUDY Mixtard or Insugen 30/70 (BROWN).			
	Combination of short- and intermediate-acting insulin.			
	E. COMBINATION OF RAPID- AND INTERMEDIATE-ACTING INSULIN = CLOUDY Novomix (BLUE).			
	F. LONG-ACTING INSULIN = COLOURLESS Lantus - glargine (PURPLE), Levemir - detemir (GREEN).			

	Lantus and Levemir work continuously to control blood sugar for 24 hours (between meals and while you are sleeping).			
		Yes (1)	**No (0)**	**Remarks**
4	**Adherence to insulin injection** Importance of insulin injection and adherence.			
	Initially, insulin dose will be adjusted at least weekly to achieve blood glucose target.			
5	**Site of administration** Abdomen (inject at any place 3 fingers width away from the navel).			
	Arm (inject between 4 fingers width away from the shoulder and 4 fingers width away from the elbow). Not advisable to inject in the arm if the insulin injection is being self-administered.			
	Thigh (inject between 5 fingers width away from the knee and 5 fingers width away from groin).			
	Rotate the injection site between 2 fingers width away from previous site of injection.			
	Advice to rotate injection sites within the same part of body, not to change the injection part of body too frequent due to different absorption of insulin at different parts of body.			
6	**Administration time** For Mixtard/Insugen 30/70 and Actrapid/Insugen R, inject 30 minutes before meal.			
	For Novorapid, inject immediately before meals or when necessary, shortly after meals.			
	For Insulatard/Insugen N, inject before sleep (normally 1 hour before bed).			
	For Glargine, inject once daily at any time of the day but at the same time everyday.			
	For Detemir, inject with evening meal or at bedtime if patient is treated with once daily regimen. For patients who need twice daily dosing, evening dose can be administered either with evening meal or at bedtime or 12 hours after morning dose.			
	For Novomix, inject up to 10 minutes before or soon after a meal.			
7	**Storage and expiry of Insulin** Store the new (unopened) insulin cartridge in the fridge, not at the door side of fridge. Do not put inside the freezer.			
	Insulin vial will expire as on the printed expiry date if it is refrigerated and not opened. An insulin vial is considered open if its seal has been punctured. Write the date when the vial is opened. Once opened, the vial could be kept at room temperature and should be used within 28 days.			
	Insulin catridge and prefilled insulin pen will expire as on the printed expiry date if it is refrigerated and not opened. Once opened, these insulins could be kept at room temperature and should be used within 28 days.			
	Do not store non-prefilled insulin pen in the fridge. Do not remove insulin cartridge from the insulin pen while in use.			
8	**Glucose monitoring at home** Encourage patient to buy a glucometer and do home monitoring blood glucose.			
	Advice patient to omit insulin injection if glucose level below 4.0 mmol/l.			
	Remember to record each reading & type of meals in a diary and show it to the doctor/pharmacist on the next appointment.			
9	**Symptoms of hypoglycemia and its correction** Glucose level below 3.9 mmol/l.			
	It may happen if the patient did not take a meal after injection or if he/she has a sudden change in diet, alcohol consumption, excessive physical activity, excessive dose, ill-timing or wrong type of insulin.			
	Sign and symptoms: shivering, palpitation, sweating, dizziness, hungry, paraesthesia.			

	If symptoms appear, advise patient to take sugary drinks (i.e. 2 teaspoons of sugar in 1/2 glass of water), orange juice or other fruit juice or sweets.			
		Yes (1)	**No (0)**	**Remarks**
10	**Supply of insulin, pen and needle** Insulin cartridges will be supplied to the patient by the pharmacy. Pen will be given free for first time users. If the pen is damaged after the first supply, patient has to get their own replacement.			
	Change the needle after each use (using a needle more than once is at patient's own risk). Needle can be bought from retail pharmacies.			
	Dispose the needles safely (e.g. inside one container) before being discarded.			
11	**Foot care in the 'at risk' foot** Diabetes can cause nerve damage and poor circulation in your feet.			
	Nerve damage means patient has poor pain sensation and is unaware of any injury to the feet.			
	Poor circulation means the injury or ulcer may be slow to heal.			
	Check the feet everyday.			
	Check carefully between the toes, the soles and top of the feet and heels. If patient is unable to do on his/her own, ask for assisstance.			
12	**Sick day management** ALWAYS TAKE your diabetes pills unless you have vomiting.			
	ALWAYS TAKE your insulin. Your insulin dose may be decreased or increased. Seek advice from your doctor/pharmacist for insulin dose adjustment.			
	Test your blood sugar level more often. Test before and two hours after each meal. If you are not able to eat your regular meals, you should check your blood sugar levels every 2-4 hours. Record readings with date and time.			
	Try to eat the same amount of food as usual.			
	Drink plenty of fluids: drink at least every hour or take small sips every 10-15 minutes.			

Before ending this peer review session, reviewee should be informed of the step(s) that he/ she missed out in order to ensure all the counselling points for both diseases are covered.

Remarks:

Reviewed by: Name & Signature **Date:**

DIABETES MELLITUS

Name:		**Unit:**		
	• *Please tick (✓) **YES** for correct instruction or sequence.* • *Please tick (✓) **NO** for incorrect instruction or sequence.*			
Insulin pen (Non-Prefilled): Insupen/Novopen Drug: _____		**Yes (1)**	**No (0)**	**Remarks**
1	Roll insulin cartridge between palms gently to warm it (for Mixtard/Insugen 30/70 and Insugen N/Insulatard, invert the cartridge to mix the insulin until it is uniformly cloudy.			
2	Push the piston rod down using the finger until the piston rod is completely inside the pen body (Insupen/Novopen)			
3	Insert the cartridge into the cartridge holder.			
4	Screw the cartridge holder to the pen body tightly.			
5	Remove the paper tab, screw the needle to the pen and remove inner and outer cap (do not keep inner cap).			
6	Priming: For newly opened insulin cartridge, dial 2 units and hold the insulin pen with the needle upwards. Flick the cartridge holder gently. For in use insulin, dial 1 unit.			
7	Push the injection button. Look for a stream of insulin at the needle tip. A new cartridge may need to be primed several times to get a stream of insulin.			
8	Dial the appropriate dose for injection by turning the dose knob.			
9	If overdial, dial backwards.			
10	Gently pinch the skin that has been cleaned to make a fold. Hold the fold between the thumb and the forefinger of one hand during the entire injection. Hold the insulin pen firmly in your other hand using the finger grip. Insert the full length of the needle (at an angle of 90°) into the skin fold.			
11	Press the injection button until the figure in the dose window return to 0.			
12	Hold the needle for at least 10 seconds, then remove the needle from your skin.			
13	If a slight bleeding occurs after injection, gently press the injection site with the alcohol swab.			
14	Put the outer needle cap on and unscrew the needle.			
15	Replace the pen cap.			
16	The cartridge scale on the penfill cartridge holder shows the approximate number of insulin units left in the cartridge. Do not try to inject an insulin suspension (cloudy-looking insulin) if the rubber stopper is below the white line on the cartridge holder. If more insulin is needed than the amount left in the penfill cartridge, either (a) inject the insulin left in the cartridge, then inject the balance needed using new cartridge, or (b) inject the full dose with a new cartridge.			

Before ending this peer review session, reviewee should be informed of the step(s) that he/ she missed out in order to ensure all the counselling points for both diseases are covered.

Remarks:

Reviewed by: Name & Signature **Date:**

DIABETES MELLITUS

Name:	**Unit:**

- *Please tick (✓) **YES** for correct instruction or sequence.*
- *Please tick (✓) **NO** for incorrect instruction or sequence.*

	Syringe Insulin : Insulin type: _____	**Yes (1)**	**No (0)**	**Remarks**
1	Take out the insulin vial from the fridge.			
2	Roll insulin cartridge between palms gently to warm it and invert it until mixed evenly.			
3	Pull the syringe plunger to draw air according to the dose prescribed.			
4	Insert the needle into the vial and press the plunger to introduce air into the vial.			
5	Turn the vial upside down.			
6	Withdraw the insulin by pulling the plunger according to the units prescribed (extra 1 or 2 units of insuiln can be withdrawn for removing air bubbles).			
7	If air bubble is present, tap the syringe until the air bubble move to the neck of the syringe and push the plunger slowly to remove the air.			
8	Push the plunger until it reaches the required unit of insulin.			
9	Gently pinch the skin that has been cleaned to make a fold. Hold the fold between the thumb and the forefinger of one hand during the entire injection.			
10	Inject the insulin on any 1 of 3 parts of the body below: a) Arms (not advisable for self-injection, requires the help of family member to inject) b) Abdomen c) Thigh Inject the insulin at an angle of 90° into body part with more fat. If injecting into area of the body with less fat, inject at less than 45° to avoid injecting a muscle			
11	Hold the needle for 10 seconds before pulling the syringe out.			
12	If a slight bleeding occurs after injection, gently press the injection site with alcohol swab.			
13	Cap the needle carefully.			
14	Do not inject at the same site for the next injection (i.e. 2 fingers away from the previous injection site).			

Before ending this peer review session, reviewee should be informed of the step(s) that he/ she missed out in order to ensure all the counselling points for both diseases are covered.

Remarks:

Reviewed by: Name & Signature **Date:**

DIABETES MELLITUS

Name:	**Unit:**

- *Please tick (✓) **YES** for correct instruction or sequence.*
- *Please tick (✓) **NO** for incorrect instruction or sequence.*

	Prefilled Insulin Pen: Drug: _____	**Yes (1)**	**No (0)**	**Remarks**
1	Roll the prefilled insulin pen between palms gently to warm it (for cloudy insulins, invert the cartridge to mix the insulin until it is uniformly cloudy).			
2	Remove the paper tab, screw the needle to the pen and remove inner and outer cap (do not keep inner cap).			
3	Priming: For newly opened insulin cartridge, dial 2 units and hold the insulin pen with the needle upwards. Flick the cartridge holder gently. For in use insulin, dial 1 unit.			
4	Push the injection button. Look for a stream of insulin at the needle tip. A new cartridge may need to be primed several times to get a stream of insulin.			
5	Dial the appropriate dose for injection by turning the dose knob.			
6	If overdial, dial backwards.			
7	Gently pinch the skin that has been cleaned to make a fold. Hold the fold between the thumb and the forefinger of one hand during the entire injection. Hold the insulin pen firmly in your other hand using the finger grip. Insert the full length of the needle (at an angle of 90°) into the skin fold.			
8	Press the injection button until the figure in the dose window return to 0.			
9	Hold the needle for at least 10 seconds, then remove the needle from your skin.			
10	If a slight bleeding occurs after injection, gently press the injection site with the alcohol swab.			
11	Put the outer needle cap on and unscrew the needle.			
12	Replace the pen cap.			
13	The cartridge scale on the penfill cartridge holder shows the approximate number of insulin units left in the cartridge. Do not try to inject an insulin suspension (cloudy-looking insulin) if the rubber stopper is below the zero line on the cartridge holder. If more insulin is needed than the amount left in the penfill cartridge, either (a) inject the insulin left in the cartridge, then inject the balance needed using new cartridge, or (b) inject the full dose with a new cartridge.			

Before ending this peer review session, reviewee should be informed of the step(s) that he/ she missed out in order to ensure all the counselling points for both diseases are covered.

Remarks:

Reviewed by: Name & Signature **Date:**

RESPIRATORY

Name :		**Unit**:		
TASK 1	**Education On Pathophysiology (Asthma & COPD)** • *Please tick (✓) **YES** for correct instruction or sequence.* • *Please tick (✓) **NO** for incorrect instruction or sequence.*			
	Introduce yourself and the purpose of counselling			
A	**ASTHMA**	**Yes (1)**	**No (0)**	**Remarks**
1	**PATHOPHYSIOLOGY OF ASTHMA**			
	1. Chronic inflammatory diseases of the airways.			
	2. Tightening of muscles around airways (narrowed), swelling (inflamed) and thick mucus is produced and clogs up the airways (obstructed).			
	3. Hyper-responsiveness = very sensitive.			
	4. Sign and symptoms of asthma are shortness of breath, wheezing, chest tightness and cough.			
2	**TRIGGERING FACTORS**			
	1. Know the triggering factors.			
	2. Ways to avoid the known triggering factors.			
3	**MEDICATION DELIVERY DEVICES**			
	1. The inhaler device is the preferred route of delivery for asthma medication.			
	2. It allows direct and faster delivery of the medication into the airways compared to oral medication.			
	3. The likelihood of systemic side effects is also reduced.			
	4. The types of inhalers are pressurised metered-dose inhaler (pMDI), dry powdered inhaler (DPI) and soft mist inhaler (SMI).			
4	**DIFFERENTIATE THE RELIEVER AND CONTROLLER MEDICINES AT FIRST COUNSELLING SESSION**			
	A. RELIEVER			
	E.g. Inhaled Short Acting Beta Agonist (SABA)			
	1. Reverse the airway bronchoconstriction.			
	2. To relieve asthma symptoms: shortness of breath and wheezing.			
	3. To bring reliever medicine everywhere they go.			
	4. Can be used 10-15 minutes before exercise for Exercise Induced Bronchoconstriction (EIB).			
	B. CONTROLLER			
	E.g. Inhaled corticosteroid (ICS) alone or combination of ICS + long acting beta agonist (ICS + LABA).			
5	1. Reduce inflammation in the airways.			
	2. Must be used regularly as directed by doctor in order to prevent asthma attacks.			
	NOTE: If both controller and reliever inhalers are required, use the reliever inhaler **FIRST**, followed by the controller inhaler.			
6	**Adherence to inhaled corticosteroids**			
	1. Emphasize on the importance of adherence as controller inhaler.			
	2. Minimum time to observe the effect is at least 2 - 3 weeks of usage.			

7	**SIDE EFFECTS OF MEDICINES**			
	A. INHALED CORTICOSTEROIDS			
	Oral thrush and hoarseness of voice.			
	MANAGEMENT OF SIDE EFFECTS:			
	1. Gargle mouth and throat after using inhaled corticosteroids and spit it out.			
	2. For patient with persistent side effect of oral thrush, it is recommended to use spacer.			
	B. INHALED BETA2-AGONISTS			
	1. Tachycardia (rapid heart rate).			
	2. Tremor (trembling /shaking of body parts).			
	3. Headache.			
B	**CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)**	**Yes (1)**	**No (0)**	**Remarks**
1	**PATHOPHYSIOLOGY OF COPD**			
	1. Common, preventable and treatable disease. Long-term condition.			
	2. Persistent respiratory symptoms and airflow limitation due to airway and/or alveolar abnormalities which usually caused by significant exposure to noxious particles or gases.			
	3. Chronic airflow limitation is caused by a mixture of small airways disease (e.g. obstructive bronchiolitis) and parenchymal destruction (emphysema). The peripheral airway limitation traps gas during expiration, resulting in hyperinflation.			
	4. Symptoms: dyspnea, chronic cough and/or sputum production			
	5. Spirometry is required to make the diagnosis			
2	**RISK FACTORS**			
	1. Tobacco smoking, environmental exposures. e.g. biomass fuel exposures and air pollution and host factors.			
3	**PREVENTION AND MAINTENANCE THERAPY**			
	1. Smoking cessation			
	2. Pharmacological therapy to reduce COPD symptoms, reduce the frequency and severity of exacerbations, and improve health status and exercise tolerance			
	3. The types of inhalers are pressurised metered-dose inhaler (pMDI), dry powdered inhaler (DPI) and soft mist inhaler (SMI).			
	4. Assess inhaler technique			
	5. Vaccination - Influenza vaccination & Pneumococcal vaccination (PCV13 and PPSV23)			
	6. Pulmonary rehabilitation			

Before ending this peer review session, reviewee should be informed of the step(s) that he/ she missed out in order to ensure all the counselling points for both diseases are covered.

Remarks:

Reviewed by: Name & Signature **Date:**

RESPIRATORY

Name :		**Unit**:		
Task 2	**Assessment on Inhaler Technique** • *Please tick (✓) **YES** for correct instruction or sequence.* • *Please tick (✓) **NO** for incorrect instruction or sequence.*			
PRESSURISED METERED-DOSE INHALER (pMDI)		**Yes (1)**	**No (0)**	**Remarks**
Shake	1. Hold the inhaler in an upright position. Remove cap and shake pMDI for 3 - 5 shakes. (1 shake = up and down).			
	2. Priming - new pMDI or when the pMDI has not been used for sometime: Shake and give a trial actuation to ensure that visible aerosol is propelled. **NOTE:** The number of puffs and period of non-use differ from product to product, refer manufacturer's recommendations			
Exhale	3. Exhale slowly and completely through mouth, away from inhaler.			
Press	4. Hold pMDI upright, place mouthpiece between teeth without biting and tilt the head back slightly. Ensure the lips are tightly sealed to the mouthpiece.			
	5. Breathe in slowly through mouth and at the same time, press down firmly on canister. Keep breathing in slowly and deeply.			
Inhale & hold	6. Remove the inhaler (pMDI) from mouth and hold breath for 5 - 10 seconds.			
Exhale	7. Breathe out gently, away from inhaler.			
Repeat	8. If additional puff is ordered, wait for 30 seconds to 1 minute before the second puff. Repeat steps 1 to 7.			
Close	9. After using, wipe the mouthpiece with dry cloth and replace the cap on the mouthpiece.			
Gargle	10. Gargle mouth and throat after using inhaled corticosteroids.			
Hygiene	11. Clean the pMDI. **NOTE:** Please refer to the product leaflet for specific instruction, if applicable):			
	a) At least once a week or whenever necessary.			
	b) Remove the canister. Clean the plastic parts of the inhaler by rinsing it under running tap water for about 30 seconds. Do not wash or put the canister in the water. **NOTE:** Certain pMDI cannot be removed out from the canister and cannot be cleaned with water, please refer product insert.			
	c) Air-dry the plastic parts (Do not wipe).			
	d) Reassemble the inhaler. Keep in dry place and away from moisture and direct sunlight			
Dose checking	12. Check inhaler (pMDI) for remaining content:			
	a) Check the dose counter, if applicable.			
	b) Mark the date of opening on the new pMDI and count/keep track of the doses (pMDI without dose counter)			
Exercise-induced Broncho-constrict-ion (EIB)	13. Patient with exercise-induced bronchoconstriction (EIB) needs to:			
	a) Use the reliever 10 - 15 minutes before exercise.			
	b) Do warm-ups before starting strenuous activity and also cool down after exercise.			
	c) Exercise regularly as long as asthma is well controlled.			

Before ending this peer review session, reviewee should be informed of the step(s) that he/ she missed out in order to ensure all the counselling points for the device are covered.

Remarks:

Reviewed by: Name & Signature **Date:**

PRESSURISED METERED-DOSE INHALER (pMDI) WITH SPACER		Yes (1)	No (0)	Remarks
	A. TUBE			
Open	1. Remove the cap of the pMDI.			
Attach	2. Attach the large end of the tube to the mouthpiece of the pMDI.			
Shake	3. Shake the pMDI 3 - 5 times in an up-down motion. (1 shake = up and down). **NOTE:** Step 2 and 3 is interchangeable.			
Exhale	4. Exhale slowly and completely through mouth away from inhaler and tube. Do not exhale into the tube.			
Press	5. Place the mouthpiece between the lips and slightly tilt the head back. Ensure the lips are tightly sealed to the mouthpiece.			
	6. Breathe in slowly through mouth and at the same time, press down firmly on canister. Keep breathing in slowly and deeply.			
Inhale & hold	7. Remove the tube & inhaler (pMDI) from mouth and hold breath for 5 - 10 seconds.			
Repeat	8. If additional puff is ordered, wait for 30 seconds to 1 minute before the second puff. Repeat steps 3 to 7.			
Close	9. Detached the pMDI from the tube and replace the cap.			
Gargle	10. Gargle mouth and throat after using inhaled corticosteroids			
Hygiene	11. Clean up the pMDI at least once a week or whenever necessary. **NOTE:** Please refer to the product leaflet for specific instruction, if applicable.			
	12. Clean up the tube:			
	a) At least once a week or whenever necessary.			
	b) Wash with water, do not scrub.			
	c) Air-dry the plastic parts overnight (Do not wipe).			

Before ending this peer review session, reviewee should be informed of the step(s) that he/ she missed out in order to ensure all the counselling points for the device are covered.

Remarks:

Reviewed by: Name & Signature **Date:**

	B. CHAMBER WITH MOUTHPIECE	Yes (1)	No (0)	Remarks
Check	1. Visually check the chamber for foreign objects, damage or missing parts before each use.			
Open	2. Remove the cap of the pMDI.			
	3. Remove the mouthpiece cover of the chamber.			
Shake	4. Shake the pMDI 3 - 5 times immediately before use (1 shake = up and down).			
Attach	5. Insert the pMDI into the adaptor of the chamber. **NOTE:** Step 4 and 5 is interchangeable.			
Press & Inhale	6. Place the mouthpiece between lips and slightly tilt the head back. Ensure the lips are tightly sealed to the mouthpiece.			
	7. Simultaneously press the MDI once at the beginning of a slow and deep inhalation. The inspiratory flow indicator (flip) only moves if the lips are tightly sealed.			
	8. a) For **Aerochamber® :** Hold breath for 5 - 10 seconds. Alternatively, breathe in normally through the chamber for 2 - 3 times**.**			
	NOTE: Slow down inhalation if a whistle sound is heard (applies only for large size).			
	b) **For Optichamber® :** Hold breath 8 seconds and take out the mouthpiece.			
Repeat	9. If additional puff is ordered, wait for 30 seconds to 1 minute before the second puff. Repeat steps 4 to 8.			
Gargle	10. Gargle mouth and throat after using inhaled corticosteroids			
Hygiene	11. Clean up the pMDI at least once a week or whenever necessary. **NOTE:** Please refer to the product leaflet for specific instruction, if applicable.			
	12. Clean up the chamber: a) Once a week or whenever necessary.			
	b) Remove the back piece and mouthpiece cap. Detach the front piece by twisting the chamber.			
	c) Soak both parts in water with mild solution of liquid dish detergent for 15 min and agitate gently.			
Hygiene	For **Aerochamber®** : Rinse parts by submerging in clean water.			
	NOTE: Do not rinse chamber under running tap water as this may damage the valves.			
	For **Optichamber®** : Rinse each part under running tap water.			
	d) Shake out excess water and air-dry in a vertical position. Do not wipe to dry.			
Reassemble	13. When the parts are dried thoroughly, fit the front piece to the chamber, cover the mouthpiece with protective cap and centre the alignment feature on the back piece with the flow indicator.			
	14. Press firmly to attach the back piece.			

Before ending this peer review session, reviewee should be informed of the step(s) that he/ she missed out in order to ensure all the counselling points for the device are covered.

Remarks:

Reviewed by: Name & Signature **Date:**

	C. CHAMBER WITH FACE MASK	Yes (1)	No (0)	Remarks
Check	1. Visually check the chamber for foreign objects, damage or missing parts before each use.			
Open	2. Remove the cap of the pMDI.			
Shake	3. Shake the pMDI 3 - 5 times immediately before use. (1 shake = up and down).			
Attach	4. Insert the pMDI into the adaptor of the chamber.			
	For **Optichamber®:** Connect mask to chamber. **NOTE:** Step 3 and 4 is interchangeable.			
Attach	5. Apply mask to face and ensure a good seal.			
Press, Inhale & Hold	6. a) For **Aerochamber®** : Press pMDI once at the beginning of normal breath. Breathe normally between 5 - 6 breaths while holding the mask firmly to your face. **NOTE:** Slow down inhalation if a whistle sound is heard. (Applies only for large size).			
	b) For **Optichamber® :** Press pMDI once at the beginning of normal breath. Breathe normally between 3 - 6 breaths while holding the mask firmly to your face.			
Repeat	7. If additional puff is ordered, wait for 30 seconds to 1 minute before the second puff. Repeat steps 3 to 5.			
Gargle	8. Gargle mouth and throat after using inhaled corticosteroids			
Hygiene	9. Clean up the pMDI at least once a week or whenever necessary **NOTE:** Please refer to the product leaflet for specific instruction, if applicable.			
	10. Clean up the chamber: a) Once a week or whenever necessary.			
	b) Remove the back piece. Detach the front piece by twisting the chamber.			
	c) Soak both parts in water with mild solution of liquid dish detergent for 15 minutes and agitate gently.			
	For **Aerochamber®** : Rinse parts by submerging in clean water.			
	NOTE: Do not rinse chamber under running tap water as this may damage the valves.			
	For **Optichamber®** : Rinse each part under running tap water.			
	d) Shake out excess water and air-dry in a vertical position. Do not wipe to dry.			
Reassemble	11. When the parts are dried thoroughly, fit the front piece to the chamber, cover the mouthpiece with protective cap.			
	12. Centre the alignment feature on the back piece with the flow indicator and press firmly to attach the back piece.			

Before ending this peer review session, reviewee should be informed of the step(s) that he/ she missed out in order to ensure all the counselling points for the device are covered.

Remarks:

Reviewed by: Name & Signature **Date:**

	D. AEROTRACH PLUS ANTI-STATIC VALVED HOLDING CHAMBER (VHC)	Yes (1)	No (0)	Remarks
Examine	1. Prior to use, carefully examine the product. Replace immediately if any defect is noticed.			
Open	2. Remove cap from pMDI. Before use, ensure the instructions supplied with the pMDI have been read.			
Shake	3. Shake the pMDI immediately before each use as per the instructions supplied with the pMDI, and insert into the back piece of the chamber.			
Attach	4. Carefully connect the trach adapter of the VHC to the tracheostomy tube connection.			
Press	5. Press the pMDI at the beginning of a slow inhalation. Hold in place for 4 - 6 breaths.			
Repeat	6. Follow instructions supplied with the pMDI regarding the amount of time to wait before removing the pMDI and repeating instructions 4 - 5 as prescribed.			
Hygiene	7. Cleaning Instructions: a) Remove the back piece only. Do not remove the adapter assembly.			
	b) Soak both parts for 15 minutes in a mild solution of liquid dish detergent and lukewarm clean water. Agitate gently.			
	c) Rinse parts in clean water.			
	d) Shake out excess water and allow to air dry in a vertical position. Ensure parts are dry before reassembly.			
	e) To reassemble, centre the back piece on the chamber and press firmly to secure.			
Cautions	**NOTE:** a) AeroTrach Plus VHC is designed for use with 15 mm tracheostomy tubes with spontaneously breathing patients only.			
	b) This device is designed as a slip fit onto the tracheostomy tube connection. It must be held in place during administration of medication.			
	c) Do not spray more than one puff into the chamber at a time.			
	d) **Warning:** Remove device if patient shows signs of difficulty.			

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Remarks:

Reviewed by: Name & Signature **Date:**

RESPIRATORY

Name:		**Unit:**		
Task 2	**Assessment on Inhaler Technique** • *Please tick (✓) **YES** for correct instruction or sequence.* *Please tick (✓) **NO** for incorrect instruction or sequence*			
TURBUHALER		**Yes (1)**	**No (0)**	**Remarks**
Open	1. Unscrew and remove cover of Turbuhaler®.			
	2. Hold the Turbuhaler® upright.			
Prime	3. For new Turbuhaler®, turn the grip as far as it will go in one direction and then turn it back as far as it will go. A "click" sound will be heard. Perform this procedure twice for priming.			
Loading	4. To load the Turbuhaler® with a dose, turn the grip as far as it will go in one direction. Do not hold the mouthpiece when turning the grip.			
	5. Then turn it back again as far as it will go in the opposite direction until a "click" sound is heard. The Turbuhaler® is now loaded with the desired dose and is ready for use.			
	NOTE: If Turbuhaler® is accidentally dropped, a new dose should be loaded.			
Exhale	6. Breathe out fully and away from the mouthpiece.			
Inhale	7. Place the mouthpiece gently between the lips (ensure tight seal around it). Then, breathe in forcefully and deeply through the mouth. (Do not chew or bite on the mouthpiece).			
	8. Remove the Turbuhaler® from mouth and then breathe out away from the Turbuhaler®.			
Repeat	9. If additional dose is ordered, repeat steps 4 to 8.			
Close	10. Replace the cover after use.			
Gargle	11. Gargle mouth and throat after using inhaled corticosteroids and spit it out.			
Hygiene	12. Clean up the Turbuhaler®:			
	a) At least once a week or whenever necessary.			
	b) Wipe the outside of the mouthpiece, using dry cloth only.			
Dose Checking	13. For **Pulmicort®** and **Symbicort®**: When a red mark can first be seen in the indicator window, there are approximately 20 doses left. Once the red mark reach bottom of the indicator window, there is no more medicine left.			
	NOTE: The sound upon shaking the Turbuhaler® is produced by a drying agent, not the medication.			
SMART	14 For single inhaler maintenance and reliever therapy of asthma (SMART), it can be used as maintenance and reliever with total 12 doses/day.			

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Remarks:

Reviewed by: Name & Signature **Date:**

RESPIRATORY

Name :		**Unit**:		
	Assessment on Inhaler Technique • *Please tick (✓) **YES** for correct instruction or sequence.* • *Please tick (✓) **NO** for incorrect instruction or sequence*			
EASYHALER®		**Yes (1)**	**No (0)**	**Remarks**
Assemble	1. Remove the Easyhaler® from the aluminium pouch.			
	2. Insert the Easyhaler® into the protective cover. The dust cap on the mouthpiece prevents accidental actuation of the Easyhaler® when inserting it into the protective cover.			
Shake	3. Remove the dust cap.			
	4. Shake the device 3 - 5 times (1 shake = up and down) prior to each dose to allow proper powder flow and a correct dose. After shaking, hold the device in the upright position.			
Press	5. Press the device only once between the thumb and forefinger until a "click" sound is heard. Release the inhaler to return to the original position. Keep holding the device in the upright position.			
	6. If you press the device by accident, or if you have released more than once dose, tap the mouthpiece to empty the powder onto a table top or the palm of your hand. Then, repeat steps 4 – 5 again.			
Exhale	7. Breathe out fully and away from the mouthpiece.			
Inhale	8. Place the mouthpiece between lips and close tightly, then, take a strong and deep breath through the mouth. (Do not chew or bite on the mouthpiece).			
Hold & exhale	9. Remove the Easyhaler® from mouth and hold breath for 5 - 10 seconds and then breathe out away from the Easyhaler®.			
Repeat	10. If additional puff is ordered, repeat steps 4 to 9.			
Close	11. Replace the dust cap.			
Gargle	12. Gargle mouth and throat after using inhaled corticosteroids and spit it out.			
Storage	13. Easyhaler® should be kept in the protective cover.			
Hygiene	14. Clean up the Easyhaler®: a) At least once a week or whenever necessary.			
	b) Clean the mouthpiece using dry cloth only.			
Dose checking	15. Check Easyhaler® for remaining dose: a) Easyhaler® has a dose counter which indicates the number of remaining doses.			
	b) The counter turns after every five actuations.			
Dose checking	c) The counter turns red when there are 20 doses left.			
	d) A clear window on the back of the inhaler allows viewing of the powder.			
Exercise Induced Broncho-constrict-ion (EIB)	16. Patient with exercise-induced bronchoconstriction needs to: a) Use the reliever 15 - 20 minutes before exercise.			
	b) Do warm-ups before starting strenuous activity and also cool down after exercise.			
	c) Exercise regularly as long as asthma is well controlled.			

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Remarks:

Reviewed by: Name & Signature **Date:**

RESPIRATORY

Name :		**Unit**:		
	Assessment on Inhaler Technique • *Please tick (✓) **YES** for correct instruction or sequence.* • *Please tick (✓) **NO** for incorrect instruction or sequence.*			
ACCUHALER®		**Yes (1)**	**No (0)**	**Remarks**
Open	1. Hold the outer case in one hand and place thumb of the other hand on the thumb grip of Accuhaler® to slide open the cover until a "click" sound is heard.			
Slide	2. Hold the Accuhaler® horizontally (must always be in this position) and slide the lever away as far as it will go until a "click" sound is heard			
Exhale	3. Breathe out fully and away from the mouthpiece.			
Inhale	4. Close lips around the mouthpiece and ensure a good seal. Breathe in steadily and deeply through the Accuhaler®. (Do not chew or bite on the mouthpiece).			
Hold & exhale	5. Remove the Accuhaler® from mouth and hold breath for 10 seconds, then breathe out away from the Accuhaler® .			
Close	6. Close the Accuhaler® by sliding the thumb grip back to the original position until a "click" sound is heard. Always close Accuhaler® when not in use.			
Gargle	7. Gargle and rinse mouth and throat after using inhaled corticosteroids and spit it out.			
Hygiene	8. Clean up the Accuhaler®: a) At least once a week or whenever necessary.			
	b) Clean the mouthpiece using dry cloth only.			
Dose checking	9. Check Accuhaler® for remaining dose: a) There is a dose counter on the device (total 60 doses).			
	b) When left with 5 doses, the counter will show "5"(red in color), the subsequent count i.e. 4, 3, 2, 1, 0 are all red in color.			
	NOTE: Do not use the Accuhaler® if the dose counter read 0. It means the Accuhaler® is empty and should get new supply of Accuhaler®.			

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Remarks:

Reviewed by: Name & Signature **Date:**

RESPIRATORY

Name :		**Unit**:		
	Assessment on Inhaler Technique • *Please tick (✓) **YES** for correct instruction or sequence.* • *Please tick (✓) **NO** for incorrect instruction or sequence*			
BREEZHALER®		**Yes (1)**	**No (0)**	**Remarks**
Blister handling	1. Pull off the cap.			
	2. Hold the base of the inhaler firmly and tilt the mouthpiece. This opens the Breezhaler®.			
	3. **Onbrez®**: Remove one capsule from the blister.			
	Seebri® and **Ultibro®** : Separate one of the blisters from the blister card by tearing along the perforation. Take one blister and peel away the protective packing to expose the capsule. Do not push capsule through the foil.			
	4. The capsule should be removed from the blister card just before using it. Place it into the capsule chamber. Do not swallow the capsule.			
Holes	5. Close the Breezhaler® until a "click" sound is heard.			
	6. Hold the Breezhaler® upright with the mouthpiece pointing up. Pierce the capsule by firmly pressing together both side buttons at the same time until a "click" sound is heard. Do this only once. Release the side buttons fully. This will allow the medication to be delivered when inhaled.			
Exhale	7. Breathe out fully and away from the mouthpiece.			
Inhale	8. Place the mouthpiece between lips and close lips firmly around it. Breathe in rapidly, steadily and deeply through the Breezhaler®, until whirring sound is heard.			
	NOTE: If do not hear a whirring sound, the capsule may be stuck in the capsule chamber. Open the inhaler and carefully loosen the capsule by tapping the base of the inhaler. Do not press the side buttons to loosen the capsule.			
Hold	9. Hold breath for 5 - 10 seconds while taking the inhaler out from mouth, then breathe out, away from the mouthpiece.			
Repeat	10. Repeat steps 7 - 9 if needed to empty the capsule completely. Dispose of the empty capsule.			
	11. Close the mouthpiece and dust cap for storage.			
Hygiene	12. Clean up the Breezhaler®: a) Clean the mouthpiece with dry cloth daily after use.			
	b) Do not wash the Breezhaler® with water. Keep the inhaler dry.			

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Remarks:

Reviewed by: Name & Signature **Date:**

RESPIRATORY

Name :		**Unit**:		
	Assessment on Inhaler Technique • *Please tick (✓) **YES** for correct instruction or sequence.* • *Please tick (✓) **NO** for incorrect instruction or sequence*			
RESPIMAT®		**Yes (1)**	**No (0)**	**Remarks**
Prime	1. With the cap closed, press the safety catch and pull off the clear base.			
	2. Take the cartridge out of the box. Push the narrow end of the cartridge into the Respimat® until it clicks into place. The cartridge should be pushed gently against a firm surface to ensure that it has gone all the way in.			
	NOTE: Do not remove the cartridge once it has been inserted into the Respimat®.			
	3. Replace the clear base. Do not remove the clear base again.			
	4. Hold the Respimat® upright with the green cap closed.			
	5. Turn the clear base in the direction of the red arrows on the label until it "clicks" (half a turn).			
	6. Open the green cap until it snaps fully open.			
	7. Point the Respimat® towards the ground. Press the dose release button. Close the green cap.			
	8. Repeat steps 4 - 7 until a cloud is visible. Then repeat steps 4 - 7 three more times to ensure the inhaler is prepared for use.			
	NOTE: a) If Respimat® has not been used for **more than 7 days**, release one puff towards the ground.			
	b) If Respimat® has not been used for **more than 21 days**, repeat step 8.			
Open	9. Repeat steps 4 - 6 to load one dose.			
Exhale	10. Breathe out fully and away from the mouthpiece.			
Inhale	11. Close lips around the end of the mouthpiece without covering the air vent. Point Respimat® to the back of throat.			
	12. While taking a slow, deep breath through your mouth, press the dose release button and continue to breath in slowly for as long as you can.			
Hold & Exhale	13. Hold breath for 10 seconds, or as long as comfortable. While holding breath, remove inhaler from mouth. Breathe out gently (away from inhaler).			
Close	14. Close the cap of the Respimat®.			
Repeat	15. Repeat steps 9 to 14, if more than one dose is required.			
Hygiene	16. Clean up the Respimat® mouthpiece with damp cloth or tissue daily after use.			
Check	17. The dose indicator shows approximately how much medication is left. When the pointer enters the red area of the scale, there is approximately, medication for 7 days left (14 puffs).			
	18. Once the dose indicator has reached the end of the red scale, Respimat® inhaler is empty and locks automatically. The base of Respimat® can not be turned any further.			

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Remarks:

Reviewed by: Name & Signature **Date:**

RESPIRATORY

Name :		**Unit**:		
	Assessment on Inhaler Technique • *Please tick (✓) **YES** for correct instruction or sequence.* • *Please tick (✓) **NO** for incorrect instruction or sequence*			
ELLIPTA®		**Yes (1)**	**No (0)**	**Remarks**
Dose Loading	1. Hold the inhaler upright with the cover on the top. Slide the cover down until a "click" sound is heard. **DO NOT** shake the inhaler.			
Exhale	2. Breathe out fully and away from the inhaler.			
	3. Place the mouthpiece between the lips to form good seal. Make sure the air vents are facing upwards. **DO NOT** cover the air vents.			
	4. Breathe in with one long, steady and deep breath and remove the inhaler from the mouth and hold breath for 10 seconds or as long as comfortable.			
	5. Then breathe out slowly (away from inhaler).			
Close	6. Slide the cover upwards as far as it will go to cover the mouthpiece.			
Gargle	7. Gargle and rinse mouth and throat after using inhaled corticosteroids and spit it out.			
Hygiene	8. Clean the mouthpiece immediately after inhalation, before sliding back the cover.			
	NOTE: The mouthpiece can be cleaned with a dry cloth/ tissue. Never use water or liquid.			
Dose checking	9. Dose counter a) Half of the dose counter shows red when fewer than 10 doses are left.			
	b) After the last dose is loaded, half of the dose counter shows red and number 0 is displayed. Once this dose is inhaled, the inhaler is now empty.			
	c) If the cover is open after this, the dose counter will change from half red to completely red.			
Before ending this peer review session, reviewee should be informed of the step(s) that he/ she missed out in order to ensure all the counselling points for the device are covered. **Remarks:** **Reviewed by: Name & Signature** **Date:**				

RESPIRATORY

Name :		**Unit**:
	Assessment on Inhaler Technique • *Please tick (✓) **YES** for correct instruction or sequence.* • *Please tick (✓) **NO** for incorrect instruction or sequence.*	

Peak Flow Meter		**Yes (1)**	**No (0)**	**Remarks**
1	Place the mouthpiece onto the peak flow meter. The originally supplied plastic mouthpiece may be detached and replaced with a disposable mouthpiece.			
2	Move the marker on the peak flow meter to the bottom of the scale so that it reads zero or is at base level.			
3	Hold the peak flow meter in a way that the movement of scale and marker is not obstructed by the fingers of the patient.			
4	Stand in an upright position and breathe in as deep as possible, filling the lungs completely.			
5	Hold your breath while you place the device in your mouth horizontally, and close lips around the mouthpiece.			
6	Make sure the opening of the mouthpiece is not blocked by the tongue.			
7	Blow as hard and as fast as possible. Do not tilt the head forward while blowing.			
8	Record the measurement and reset the marker to its original position at the bottom of the scale.			
9	Breathe normally and repeat steps 2 - 8, two more times.			
10	Write down the date, time, and the highest PEFR value of the 3 readings. Do not average the numbers.			
11	The highest PEFR value of the 3 readings will be used to assess patient's PEFR.			

Before ending this peer review session, reviewee should be informed of the step(s) that he/ she missed out in order to ensure all the counselling points for the device are covered.

Remarks:

Reviewed by: Name & Signature **Date:**

ANTIPSYCHOTICS

Name:		**Unit:**		
	• *Please tick (✓) **YES** for correct instruction or sequence.* • *Please tick (✓) **NO** for incorrect instruction or sequence.*			
A	**PREPARATION PHASE**	**Yes (1)**	**No (0)**	**Remarks**
1.	Check patient's case note and medication chart for medicine(s) prescribed.			
	Check prescribed dose & frequency.			
	Check expiry date and follow the 5 Rights of administration of medication (Know Your Medicine).			
B	**EDUCATION PHASE (SCHIZOPHRENIA)**	**Yes (1)**	**No (0)**	**Remarks**
1.	**PATHOPHYSIOLOGY OF SCHIZOPHRENIA**			
	A major psychiatric disorder that affects an individual's perception, thought, affect and behaviour.			
	A delirious mind in which a patient would experience difficulty in telling apart between what actually happened in reality and what is imagined by a patient's mind.			
	Cause: A biological change in the brain that is caused by an imbalance of chemical substances, which is also known as neurotransmitters.			
2.	**SIGNS & SYMPTOMS**			
	Positive symptoms – symptoms that appear to reflect the presence of mental features which are not normally present: a) Hallucination – perceiving something that does not exist. b) Disorganized speech/thinking (thought disorder or loosening of associations). c) Delusional – believing something which is not true. d) A change in behaviour (grossly disorganized behaviour) – easily angered or agitated.			
	Negative symptoms – symptoms that appear to reflect a diminution or loss of normal emotional and psychological function which includes: a) Lack of motivation b) Avolition – reduction, difficulty, or inability to initiate and persist in goal-directed behaviour (eg. no longer interested in going out and meeting with friends, no longer interested in activities that the person used to show enthusiasm for, no longer interested in much of anything, sitting in the house for many hours a day doing nothing). c) Alogia/Poverty of speech – the lessening of speech fluency and productivity, thought to reflect slowing or blocked thoughts, and often manifested as short, empty replies to questions. d) Affective flattening - the reduction in the range and intensity of emotional expression: facial expression, voice tone, eye contact, and body language. * Negative symptoms are less obvious and often persist even after the resolution of positive symptoms.			
	Cognitive symptoms refer to the difficulties with concentration and memory: a) Disorganized thinking b) Slow thinking c) Difficulty understanding d) Poor concentration e) Poor memory f) Difficulty expressing thoughts g) Difficulty integrating thoughts, feelings and behaviour			

		Yes (1)	No (0)	Remarks
3.	**TREATMENT**			
	Modalities of treatment include: a) Pharmacotherapy (medications) b) Rehabilitation – to restore back normal living skills c) Counseling & support group – to provide emotional support continuously d) Therapeutic recreation – doing some recreational activities to decrease the symptoms of schizophrenia e) Education/Psychoeducation – to provide information and knowledge pertaining to the disease and other related problems. f) Electroconvulsive Therapy (ECT) – only used for certain patients and in certain situations.			
4.	**ANTIPSYCHOTICS**			
	Divided into 2 categories: a) 1st generation antipsychotics (typical): i. Oral: sulpiride, perphenazine, trifluoperazine, chlorpromazine, haloperidol and zuclopenthixol ii. Injection: Fluphenazine, flupenthixol and zuclopenthixol b) 2nd generation antipsychotics (atypical): i. Oral: risperidone, paliperidone, quetiapine, amisulpiride, aripiprazole, olanzapine, clozapine ii. Injection: paliperidone			
	Formulations: a) Depot injection that is usually administered once every 1-4 weeks (eg. fluphenazine, paliperidone) b) Tablet/capsule (eg. chlorpromazine, quetiapine) c) Liquid drops/Oral solution (eg. risperidone, zuclopenthixol) d) Orodispersible tablets (olanzapine)			
	General mode of action of antipsychotics: Neurotransmitters are responsible for signal transmission in the brain, and neurotransmitter imbalance are believed to cause psychotic signs and symptoms. Out of all the neurotransmitters, the neurotransmitter that is affected the most by this imbalance is dopamine. Antipsychotics help to balance up the neurotransmitters in the brain.			
	Pharmacotherapeutic effect: Most patients will experience improvement in their condition 4-6 weeks after initiation of antipsychotics. However, there may be some who may experience improvement in their condition earlier or later than that time frame. There may some who may only experience the full effect of pharmacotherapy months after initiation of antipsychotics.			
	Duration of treatment: Antipsychotics have to be taken for a long period of time. Patients should still continue to take their antipsychotics even though they may feel like they have recovered from their condition. Patients should be advised not to discontinue their antipsychotics without discussing with their physicians/pharmacists because discontinuation of antipsychotics may cause relapse or deterioration of the condition.			
	Pregnancy & breastfeeding mothers: There are some antipsychotics that are not appropriate for the use in pregnant and breastfeeding mothers. There are also some antipsychotics that can increase prolactin and affect fertility. Patients should inform their physicians if they plan to get pregnant, are pregnant or are breastfeeding.			

		Yes (1)	No (0)	Remarks
	Adverse drug reaction: Not every patient on antipsychotics would experience adverse drug reaction and not all antipsychotics have the same adverse drug reaction profile. Most of the adverse drug reaction from antipsychotics are temporal. The risk of adverse drug reaction can be reduced if the dose of antipsychotics are increased gradually. Patients should inform their physicians/pharmacists if they experience any adverse drug reaction(s). Physicians can help by reducing the dose of the medication, changing to another antipsychotics, or prescribing other medications to treat the adverse drug reaction. These are the common adverse drug reactions and the appropriate measures to manage these reactions: a) Extrapyramidal side effects (muscle spasm (dystonia), restlessness (akathisia), stiffness and shakiness (pseudoparkinsonism), and involuntary abnormal movements (tardive dyskinesia) – oral benzhexol and injection procyclidinecan be given to manage these side effects. b) Tachycardia (palpitation) – propranolol can be prescribed to resolve this. c) Body weight increase and metabolic syndrome – a balanced diet and adequate physical activity (at least 3 times/week) can reduce the magnitude of these adverse drug reactions. Periodical blood investigations to check blood sugar and lipid profile are also recommended. d) Postural hypotension (dizziness) – change of position should be done slowly and gradually (eg. from sitting or supine position to standing position), and any sudden change of position should be avoided. e) Restlessness (akathisia) – propranolol and benzodiazepine can be prescribed to control this reaction. f) Constipation – drinking at least 8 glasses of water a day and increasing fibre intake can manage or reduce the risk of constipation. If this reaction can't be resolved by doing these, use of laxative may resolve this problem. g) Hypersalivation – benzhexol can be prescribed to treat this reaction. h) Dry mouth – drinking water frequently, or sucking sugar-free sweets or ice may help overcome this problem. i) Nausea and vomiting – taking antipsychotics after meals may reduce the risk of this reaction. j) Drowsiness and lethargy – these reactions usually occur only during the initial stage of medication therapy, and these reactions should be reported to physicians/pharmacist if they persist, so that dose adjustment could be done to alleviate these reactions. k) Rashes and photosensitivity – most rashes that occur are usually not serious. However, if it occurs, patients should immediately consult their physician to get it checked. Some medications may cause change of skin colour. Avoiding sunlight exposure and using sunscreen if neededmay reduce the risk of photosensitivity. l) Nocturnal urination (nocturia) – minimizing fluid intake a few hours before bedtime may reduce the risk of this reaction. If this reaction persists, patients should inform their physicians/pharmacists. m) Sexual dysfunction – some patients will experience sexual dysfunction and if this occurs, patients should inform their physicians/pharmacists. n) Hyperprolactinemia – female patients may experience menstrual disturbance or excessive production of breast milk (galactorrhoea) despite not breastfeeding, whereas male patients may experience growth of breast tissue. If these reactions occur, patients should inform their physicians/pharmacists. o) Fits – if this were to occur, seek for medical advice from the nearest clinic or hospital p) Agranulocytosis (low white blood count) – seek medical advice from the nearest clinic or hospital if you experience signs of infection like sore throat, cough, pain during urination, fever or lethargy.			

Before ending this peer review session, reviewee should be informed of the step(s) that he/ she missed out in order to ensure all the counselling points for both diseases are covered.

Remarks:

Reviewed by: Name & Signature **Date:**

ANTIEPILEPTIC MEDICATION
(SODIUM VALPROATE, PHENYTOIN, CARBAMAZEPINE, PHENOBARBITONE, AND LAMOTRIGINE)

Name :		**Unit**:		
	Education On Pathophysiology • *Please tick (✓) **YES** for correct instruction or sequence.* • *Please tick (✓) **NO** for incorrect instruction or sequence.*			
		Yes (1)	**No (0)**	**Remarks**
1.	Counsel patient on dose, frequency and time of administration.			
2.	**Sodium Valproate –** **Method of administration:** Swallow whole. Do not crush or chew. **Precautions:** If you are a female patient of child-bearing age, make sure that you talk to your doctor about the risks associated with taking sodium valproate during pregnancy. **Drug interaction with estrogen-containing hormonal contraceptives:** May decreased valproate efficacy.			
3.	**Phenytoin:** **Common adverse effects**: Nausea and vomiting, rash, blood dyscrasias, headaches, vitamin K and folate deficiencies, etc **Serious side effect:** To refer to doctor if develop rash, or any of the symptoms listed below: Stevens-Johnson syndrome and Drug Reaction with Eosinophilia and Systemic Symptoms (DRESS) Broken bones (osteopenia, osteoporosis, and osteomalacia). Confusion , psychosis. overgrowth of your gums			
4.	**Carbamazepine:** **Method of administration:** Take with food. Swallow the extended-release tablet or capsule whole and do not crush, chew, or break it **Severe side effects:** may cause severe or life-threatening skin rash (aplastic anemia, agranulocytosis, thrombocytopenia, and Stevens-Johnson syndrome). **Drug interaction:** Carbamazepine can make birth control pills or implants less effective. **Lactation:** You should not breast-feed while you are using carbamazepine. **Potential dose-related adverse effects** include dizziness, diplopia, nausea, ataxia, and blurred vision.			
5.	**Phenobarbitone:** **Severe allergic reaction.** hives; difficult breathing; swelling of your face, eyes, lips, tongue, or throat.			
6.	**Lamotrigine:** **Method of administration:** Take with food to prevent nausea **Possible side effects:** rash, blurred vision, ataxia, diplopia or dizziness **Severe adverse reaction:** Stevens-Johnson syndrome			
7.	**Drug Interaction:** Oral contraceptives			
8.	**Common side effects: May cause drowsiness, dizziness or sleepiness.**			

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Remarks:

Reviewed by: Name & Signature **Date:**

BIPHOSPHONATE

Name:		Unit:		
Task	**Education on pathophysiology and Osteoporosis medicines** • *Please tick (✓) **YES** for correct instruction or sequence* • *Please tick (✓) **NO** for incorrect instruction or sequence.*			
		Yes (1)	**No (0)**	**Remarks**
1	**PATHOPHYSIOLOGY OF OSTEOPOROSIS**			
	Basic mechanisms responsible for development of osteoporosis are poor bone mass acquisition during growth and development and accelerated bone loss in the period after peak bone mass is achieved.			
	Both processes are modulated by environmental and genetic factors.			
	About two thirds of the risk for fracture in postmenopausal women is determined by premenopausal peak bone mass.			
	Peak bone mass is higher in blacks than in whites and Asians, and it is higher in men than women.			
	Approximately half of the bone mass is accumulated during pubertal development.			
	This is associated with the increase in sex hormone levels and is almost completed with closure of the end plates.			
	Bone loss, in contrast, appears to be mostly determined by environmental factors (nutritional, behavioural, and medications).			
2	**INDICATION**			
	Treatment and Prevention Of Osteoporosis In Postmenopausal Women			
3	**THE DOSAGE AND ADMINISTRATION**			
	A. Alendronate preparations: • Alendronate sodium 70mg tablet – Fosamax • Alendronate sodium 70mg + Cholecalciferol 5600 IU tablet - Fosamax Plus			
	One tablet once weekly			
	Choose the day of the week that best fits schedule.			
	Take 1 dose every week on the chosen day after getting up for the day and before taking first food, drink, or other medicine. (Works only if it is taken on an empty stomach)			
	Take while sitting or standing.			
	Swallow one tablet with a full glass of plain water (not mineral water, coffee, tea or juice). Do not chew or suck.			
	After taking, wait at least **30 minutes**: ● Before lying down. May sit, stand or walk, and do normal activities like reading. ● Before taking first food or drink except for plain water. ● Before taking other medicines, including antacids, calcium, and other supplements and vitamins.			
	Do not lie down until after the first food of the day.			
	If miss a dose, take only 1 dose on the morning after remembering. Do not take 2 doses on the same day. Continue usual schedule of 1 dose once a week on chosen day.			
	If took more than the prescribed dose, drink a full glass of milk and the doctor right away. Do not try to vomit. Do not lie down			
	B. Ibandronate 150mg - Bonviva			
	One tablet once a month.			
	Choose the day of the month that best fits schedule. Can choose either the same			

	date (such as the 1st of each month) or the same day (such as the first Sunday of each month) to take the tablet.			
	Take the tablet at least 6 hours after last had anything to eat or drink except water.			
	Take 1 tablet after getting up for the day and before having anything to eat or drink.			
	Swallow your tablet with a full glass of water.			
	Do not take the tablet with water with a high concentration of calcium, fruit juice or any other drinks. If there is a concern regarding potentially high levels of calcium in the tap water (hard water), it is advised to use bottled water with a low mineral content.			
	Swallow the tablet whole — do not chew it, crush it or let it dissolve in the mouth.			
	After taking, wait at least **60 minutes**: ● Before lying down. May sit, stand or walk, and do normal activities like reading. ● Before taking first food or drink except for plain water. ● Before taking other medicines, including antacids, calcium, and other supplements and vitamins.			
	If forgotten to take the tablet on the morning of the chosen day, do not take a tablet later in the day. Instead, consult the calendar and find out when the next scheduled dose is: **If the next scheduled dose is only 1 to 7 days away** Should wait until the next scheduled dose is due and take it as normal; then, continue taking one tablet once a month on the scheduled days marked on the calendar. **If the next scheduled dose is more than 7 day away**. Should take one tablet the next morning after the day the patient remembers; then, continue taking one tablet once a month on the scheduled days marked on the calendar. **Never take two Bonviva tablets within the same week.**			
	If took more than the prescribed dose, drink a full glass of milk and the doctor right away. Do not try to vomit. Do not lie down			
4	**SIDE EFFECTS OF MEDICATIONS**			
	May cause problems in the oesophagus including irritation, inflammation or ulcers which may sometimes bleed.			
	This may occur especially if patient do not drink a full glass of water with the medication or if lying down in less than 30 minutes or before the first food of the day.			
	Mouth sores (ulcers) may occur if the medication is chewed or dissolved in the mouth.			
	May get flu-like symptoms, typically at the start of treatment.			
	May get allergic reactions, such as hives or, in rare cases, swelling of the face, lips, tongue, or throat.			
	May cause jaw-bone problems in some people. Jaw-bone problems may include infection, and delayed healing after teeth are pulled.			
	Stop taking the medication and call the doctor right away if there are any of these signs of possible serious problems of the oesophagus: • Chest pain • New or worsening heartburn • Trouble or pain when swallowing			
	The most common side effect is stomach area (abdominal) pain. Less common side effects are nausea, vomiting, a full or bloated feeling in the stomach, constipation, diarrhoea, black or bloody stools (bowel movements), gas, eye pain, rash that may be made worse by sunlight, hair loss, headache, dizziness, a changed sense of taste, joint swelling or swelling in the hands or legs, and bone, muscle, or joint pain.			

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Remarks:

Reviewed by: Name & Signature **Date:**

BOWEL CLEANSING PROCEDURE

Name :		**Unit**:		
	Education On Pathophysiology • *Please tick (✓) **YES** for correct instruction or sequence.* • *Please tick (✓) **NO** for incorrect instruction or sequence.*			
		Yes (1)	**No (0)**	**Remarks**
	GENERAL			
1.	Check patient's case note and medication chart for medicine(s) prescribed.			
2.	Confirm the date & time for colonoscopy			
3.	Check expiry date and follow the 5 Rights of administration of medication (Know Your Medicine).			
4.	**Indication** This medicine is used as part of a bowel cleansing procedure before x-ray of the bowel or colonoscopy or before a bowel operation. It works by producing bowel motions. It usually works within 30 minutes, however, it may take as long as 6 hours to produce the effect. Expect frequent liquid stools. The patient needs to stay close to a toilet until the cleansing effect is complete.			
5.	**7 DAYS BEFORE PROCEDURE** a) Stop taking iron preparation b) Persons taking antiplatelet agents, e.g. aspirin, ticlopidine, should discontinue them upon a prior consultation with the prescribing physician c) Persons taking anticoagulants, e.g. warfarin, should contact their attending physician and change the drugs to low-molecular-weight heparin.			
6.	**2 days before procedure** Eat a low residue and low fiber diet. Avoid fruits and vegetables, particularly those with fine seeds, red meat, high fibre breads or high fibre cereals.			
7.	**1 day before procedure** a) Milk or milk products, red/purple-coloured drink or meal, alcohol and carbonated drink should not be taken. b) No solid food after lunch. c) Drink plenty of clear water before midnight. Avoid taking food and drink after midnight.			
8.	**On the day of procedure** Continue taking other medication except for anti diabetic medication.			
9.	**Clear fluid list** • Water, tea or coffee (no milk or non dairy creamer), sweeteners are acceptable. • Carbonated or non-carbonated soft drinks (not red- or purple-coloured). • Fruit flavoured cordial (not red- or purple-coloured). • Strained fruit juices without pulp. • Do not drink any alcholic beverages. • Clear soups. • Strained low-sodium chicken or beef soup without solid material.			
10.	**Special precaution** • Frequent bowel movement within 1 – 2 hours, stay within easy reach to the toilet • Some people will encounter nausea, vomiting and bloating • It is advisable to bring a responsibe adult to accompany patient before and after procedure			

		Yes (1)	No (0)	Remarks
	3 types of preparation			
1.	**FORTRANS**			
	Dilute 1 sachet (3 in total) of FORTRANS with 1 L of water (3 L in total). This should be drunk within 5-6 hours			
	To improve the flavour, the solution may be chilled or lemon juice added.			
	Dosing time: Early morning procedure: First dose taken at 4 pm, second dose at 6 pm, and third dose at 8 pm, one day before procedure.			
	Afternoon (or later) procedure: First dose taken at 6 pm, second dose at 8 pm, one day before procedure and third dose at 6 am on the day of procedure.			
2.	**PICO-SALAX**			
	Fill a mug with 150ml of cold water. Empty contents of 1 sachet in the mug. Stir until completely dissolved.			
	Following each dose, advice the patient to drink 1.5L to 2L of a variety of clear fluids over 4 hours.			
	No fluid should be taken at least 2 hours before procedure.			
	Dosing time: Early morning procedure: First dose taken at 5pm and second dose at 10pm, one day before procedure.			
	Afternoon (or later) procedure: First dose taken at 7 pm, one day before procedure and second dose at 6 am on the day of procedure.			
3.	**FLEET ENEMA**			
	How to use Lie on your left side with both knees bent and your arm are rest in front of you.			
	Remove protective shield from the enema tip while holding the bottle upright			
	Gently insert enema tip into rectum with the tip pointing towards the navel.			
	Do not force enema into the rectum as this may cause injury.			
	Squeeze bottle until nearly all liquid is gone. It is not necessary to empty the bottle completely as it has more than the amount needed.			
	Remove enema from rectum. Maintain position until urge to evacuate is strong.			
	Dosing regimen: Using more than 1 enema within 24 hours can be harmful.			
	The enema should be inserted 2 hours before procedure.			

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Remarks:

Reviewed by: Name & Signature **Date:**

CARDIAC REHABILITATION PROGRAM

Name :		Unit:		
TASK	• *Please tick (✓) **YES** for correct instruction or sequence.* • *Please tick (✓) **NO** for incorrect instruction or sequence.*			
	EDUCATION ON PATHOPHYSIOLOGY AND CARDIAC REHABILITATION MEDICINES	**Yes (1)**	**No (0)**	**Remarks**
A	**PREPARATION PHASE**			
1.	Check patient's case note and medication chart for medicine(s) prescribed.			
	Check prescribed dose & frequency.			
	Check expiry date and follow the 5 Rights of administration of medication (Know Your Medicine).			
	Prepare Streptokinase Card, give to the patient and explain the instruction on how to use it **(ONLY for patients with streptokinase).**			
B	**EDUCATION PHASE (CARDIAC REHABILITATION)**			
2.	**PATHOPHYSIOLOGY OF MYOCARDIAL INFARCTION**			
	Occurs when one of the coronary arteries is blocked by an obstruction, such as a blood clot that has formed on plaque due to atherosclerosis.			
	This will lead to an acute reduction of blood supply to a portion of the heart muscle (the myocardium)			
3.	**INDICATION OF CARDIAC REHABILITATION**			
	Acute Myocardial Infarction (AMI) or heart attack.			
4.	**SYMPTOMS OF MYOCARDIAL INFARCTION**			
	Chest pain/discomfort, usually retrosternal, central or in the left chest, may radiate to jaw or down to upper limb.			
	May be crushing, pressing or burning in nature.			
	Typical presentation: shortness of breath, nausea, vomiting.			
	Atypical presentation: unexplained fatigue, epigastric discomfort.			
5.	**THE DOSAGE AND ADMINISTRATION**			
	Drug and dosage based on prescription.			
	Must be taken at the same time every day.			
	Missed dose: take the dose as soon as the patient remembers if it is on the same day (<8 hours).			
	If missed a dose for more than 8 hours, to skip the dose and take the next dose (do not double the dose).			
6.	**MEDICATIONS**			
	ASPIRIN			
	Long-term treatment of aspirin 75mg/150mg daily.			
	Indication: Antiplatelet- platelet aggregation inhibition, prevent further cardiovascular disease event.			
	Administer after meals, or with food. If dispersible tablet, please dissolve in a small amount of water.			
	To inform healthcare professionals (dentist, surgeon, doctor, pharmacist) if the patient is planning to get a tooth extraction, or when consulting for medication review and buying supplement or herbal remedies.			
	Side effects: bronchospasm, unusual bleeding, bruising, or persistent gastrointestinal pain.			

		Yes (1)	No (0)	Remarks
	CLOPIDOGREL			
	75 mg daily.			
	Given at least for 1 month (STEMI) or 12 months (NSTEMI).			
	Indication: Prevention of myocardial infarct, stroke or established peripheral arterial disease. As second/third line treatment in patients who are sensitive to acetylsalicylic acid & intolerant to ticlopidine.			
	Inhibits platelet aggregation.			
	With or without food.			
	To inform healthcare professionals (dentist, surgeon, doctor, pharmacist) if they are planning to get a tooth extraction, or when consulting for medication review and buying supplement or herbal remedies.			
	Side effects: dyspepsia, abdominal pain, diarrhoea, bleeding disorder (GI and intracranial).			
	B-BLOCKER (AIM FOR A TARGET HEART RATE OF 50-60 BEATS PER MINUTE)			
	e.g. metoprolol, atenolol, carvedilol, bisoprolol.			
	Reduce myocardial oxygen demand, affecting cardiovascular system (decreases heart rate, decreases contractility, decreases BP).			
	Reduced short-term and long-term mortality rates.			
	Report these symptoms to physician: breathing difficulty, night cough or edema, pulse is <50 bpm, cold extremities.			
	Give drug at the same time consistently with or without meals. Food slightly enhances drug bioavailability.			
	ACE Inhibitor (anterior infarct, pulmonary congestion or LVEF<40%)			
	e.g. perindopril, ramipril, captopril, enalapril.			
	ACE inhibitors stop the conversion of angiotensin I to angiotensin II & the inactivation of bradykinin. These causes blood vessels dilatation, reduced sodium reabsorption, reduced blood volume (as a result of reduced water reabsorption) and causes potassium retention which results in reduced blood pressure.			
	In heart failure, ACE inhibitors help to reduce the amount of fluid circulating in the blood vessels. They also have some forms of protective effect on the heart and slow the progression of heart failure (by slowing the progression of myocardial remodelling).			
	Take after food except for captopril and perindopril.			
	Explain to patient that chronic cough may occur.			
	Warn patient that inadequate fluid intake, excessive perspiration, diarrhoea, or vomiting, results in reduced fluid volume, which may lead to an excessive reduction in BP, causing lightheadedness and possibly fainting.			
	ARB is an alternative if ACEi is not tolerated.			

		Yes (1)	No (0)	Remarks
	STATIN (TARGET LDL <1.8 MMOL/L)			
	e.g. simvastatin 40 mg, atorvastatin 10 mg.			
	Reducing elevated total cholesterol and LDL cholesterol level. Have pleiotropic effects (cholesterol-independent effects); will exert early and lasting cardiovascular protective effects.			
	Indication: To reduce the risk of stroke or transient ischemic attack, preventing recurrent coronary event.			
	Administer at bedtime for best results. Hepatic cholesterol production highest at night.			
	Instruct patient to report to health care provider if: any unexplained muscle pain, tenderness, or weakness, especially if accompanied by fever or malaise; yellowing of skin or eyes and dark coloured urine.			
	Avoid alcoholic beverages.			
	SUBLINGUAL GTN			
	Widen the arteries that carry blood to the heart muscle and relaxed the veins that return blood from the body to the heart (relaxation of smooth muscle).			
	Indications: For acute angina or as angina prophylaxis (take 1 tablet 5 to 10 minutes before exercise or exertion to prevent an attack).			
	Place one tablet under the tongue when needed, allow it to dissolve. Do not swallow.			
	If pain remains, remove the undissolved tablet and place a new tablet under the tongue. The dose may be repeated every 5 minutes for a maximum of 3 times. If pain persists or becomes more intense, patient should call the ambulance or go to the hospital.			
	During administration for an acute angina attack, the patient should rest, preferably in the sitting position.			
	Advise patient to discard the tablets 2 months after first opening of the bottle (mark the date on the bottle).			
	Report these symptoms to physician: Severe headache, blurred vision, dry mouth, dizziness or flushing.			
	Store at room temperature in original, brown glass container and aluminium foiled cap. If cotton is in the bottle, remove and discard the cotton after opening. Protect from moisture and direct sunlight.			
7	**Patient will be followed-up at cardiology clinic. Advice patient to bring all medications during follow-up appointment.**			

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Remarks:

Reviewed by: Name & Signature **Date:**

CARDIAC - ENOXAPARIN

Name :		**Unit**:		
TASK	• *Please tick (✓) **YES** for correct instruction or sequence.* • *Please tick (✓) **NO** for incorrect instruction or sequence.*			
		Yes (1)	**No (0)**	**Remarks**
Task 1	**EDUCATION ON PATHOPHYSIOLOGY**			
A	**PREPARATION PHASE**			
1.	Check patient's case note and medication chart for medicine(s) prescribed.			
	Check prescribed dose & frequency.			
	Check expiry date and follow the 5 Rights of administration of medication (Know Your Medicine).			
B	**EDUCATION PHASE (ENOXAPARIN)**			
2.	**PATHOPHYSIOLOGY OF BLOOD CLOTTING**			
	Blood clots occur when blood thickens and clumps together.			
	Blood clots usually form in the deep veins in the body (examples: lower leg and thigh)			
	The blood clots can break off to form emboli (i.e: loose clots).			
	The emboli will then travel trough the bloodstream and subsequently may lead to the blockage of other veins in the body.			
	This will disrupts the blood flow to the blocked area.			
	Thus, enoxaparin (LMWH) is indicated to prevent the formation of blood clots in the vein.			
3.	**INDICATION OF ENOXAPARIN**			
	Deep veen thrombosis or pulmonary embolism treatment.			
	Prophylaxis of venous thromboembolic disease, in particular, those which may be associated with orthopaedic or general surgery; prophylaxis of venous thromboembolic disease in medical patients bedridden due to acute illnesses; prevention of thrombus formation in extracorporal circulation during haemodialysis.			
	Changing from warfarin therapy for pregnant mother.			
	Unstable angina/non-ST elevation myocardial infarction.			
4.	**THE STRENGTH OF ENOXAPARIN**			
	20 mg			
	40 mg			
	60 mg			
5.	**THE DOSAGE AND ADMINISTRATION**			
	Dose, frequency & duration based on the indication.			
	Use at the same time every day.			
	If missed a dose for more than 8 hours, to skip the dose and take the next dose (do not double the dose).			
	To inform healthcare professionals (dentist, surgeon, doctor, pharmacist) if the patient is planning to get a tooth extraction, or when consulting for medication, supplement or herbal remedies.			

6.	**SIDE EFFECTS OF MEDICATION**			
	Educate patient on symptoms of bleeding such as bruises with unknown cause, blood in urine/dark coloured urine, black stools, gum bleeding or heavy menstrual bleeding.			
	Report to doctor and pharmacist if any sign or symptoms of bleeding occurs.			
7.	**INJECTION TECHNIQUE**			
	Wash hands with soap and water and dry it.			
	Sit or lie in a comfortable position where the injection area (abdominal) is clearly viewed, ideally on a lounge chair, recliner, or bed (propped up with pillows).			
	Select an area on the right or left side of the abdominal, at least 2 inches from the navel and out toward the sides. Do not inject less than 2 inches of the naval or near scars or bruises. Administration should be alternated between the left and right anterolateral and left and right posterolateral abdominal walls.			
	Clean the injection area with the alcohol swab. Allow the area to dry.			
	Carefully pull off the needle cap from the enoxaparin sodium syringe and discard cap. Bubble from the syringe should not be expelled before the injection because medicine may be lost and to reduce the risk of local bruising.			
	Fold the skin by squeezing the skin between thumb and forefinger. The total length of the needle should be introduced vertically (90◦), into the thick part of a skin fold.			
	The skin fold should be held throughout the procedure.			
	Push the plunger until all contents of the syringe has finished.			
	Hold for 10 seconds and removed the needle from the skin fold.			
	Do not rub the injection site after administration.			
	Drop the used syringe, needle first, into an empty thick plastic container such as empty liquid laundry detergent bottle, empty bleach bottle or something similar. When the container is full, cap tightly, wrap in a trash bag and throw in your household trash.			
	Caution: May develop hematoma (a localised sweling that is filled with blood).			
8.	**STORAGE**			
	Store at 25°C, do not freeze.			

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Remarks:

Reviewed by: Name & Signature **Date:**

CARDIAC - FONDAPARINUX

Name :		Unit:		
TASK	• *Please tick (✓) **YES** for correct instruction or sequence.* • *Please tick (✓) **NO** for incorrect instruction or sequence.*			
		Yes (1)	**No (0)**	**Remarks**
Task 1	**EDUCATION ON PATHOPHYSIOLOGY**			
A	**PREPARATION PHASE**			
	Check patient's case note and medication chart for medicine(s) prescribed.			
	Check prescribed dose & frequency.			
	Check expiry date and follow the 5 Rights of administration of medication (Know Your Medicine).			
B	**EDUCATION PHASE (FONDAPARINUX)**			
	PATHOPHYSIOLOGY OF BLOOD CLOTTING			
	Blood clots occur when blood thickens and clumps together.			
	Blood clots usually form in the deep vein in the body (examples: lower leg and thigh).			
	The blood clots can break off to form emboli (i.e. loose clots).			
	The emboli will then travel through the bloodstream and subsequently may lead to the blockage of other veins in the body.			
	This will disrupts the blood flow to the blocked area.			
	Thus, fondaparinux is indicated to prevent the formation of blood clots in the vein.			
	INDICATION OF FONDAPARINUX			
	Deep vein thrombosis or pulmonary embolism treatment.			
	Deep vein thrombosis or pulmonary embolism prophylaxis (bedridden or surgery).			
	Unstable angina/non-ST elevation myocardial infarction.			
	THE STRENGTH OF FONDAPARINUX			
	2.5mg, 7.5mg			
	THE DOSAGE AND ADMINISTRATION			
	Dose, frequency & duration based on the indication.			
	Use at the same time every day.			
	If missed a dose for more than 8 hours, to skip the dose and take the next dose (do not double the dose).			
	To inform healthcare professionals (dentist, surgeon, doctor, pharmacist) if the patient is planning to get a tooth extraction, or when consulting for medication, supplement or herbal remedies.			
	SIDE EFFECTS OF MEDICATION			
	Educate patient on symptoms of bleeding such as bruises with unknown cause, blood in urine/dark coloured urine, black stools, gum bleeding or heavy menstrual bleeding.			
	Report to doctor and pharmacist if any sign or symptom of bleeding occurs.			
	INJECTION TECHNIQUE			
	Wash your hands with soap and water. Dry your hands.			
	Remove the syringe from the carton and check that: (a) the expiry date has not passed (b) the solution is clear and colourless and does not contain particles (c) the syringe has not been opened or damaged.			

		Yes (1)	No (0)	Remarks
	Sit in a comfortable position so you can easily see the area of their stomach where you will be injecting. A lounge chair, recliner,or bed (propped up with pillows) is ideal.			
	Clean the area you have selected for your injection with soap and water or with alcohol swab. Allow the area to dry.			
	Select an area on the right or left side of your stomach, at least 2 inches below your navel and alternate the left and right side of the lower abdominal area at each injection. Do not inject yourself within about 2 inches of your belly button,near scars,bruises or stretch mark.			
	Hold the security sleeve firmly in one hand. Pull off the cap that protects the plunger. Discard the plunger cap.			
	Remove the needle guard by first twisting it and then pulling it in a straight line away from the body of the syringe. Discard the needle guard.			
	To prevent infection, do not touch the needle or let it come in contact with any surface before the injection. A small air bubble in the syringe is normal. To be sure that you do not lose any medicine from the syringe, do not try to remove air bubbles from the syringe before giving the injection.			
	Gently pinch the skin that has been cleaned to make a fold. Hold the fold between the thumb and the forefinger of one hand during the entire injection Hold the syringe firmly in your other hand using the finger grip. Insert the full length of the needle (at an angle of 90°) into the skin fold.			
	Inject all of the medicine in the syringe by pressing down on the plunger as far as it goes. This will activate the automatic needle protection system .			
	For syringe with automatic needle protection system: Release the plunger. The needle will withdraw automatically from the skin, and pull back (retract) into the security sleeve where it will be locked. For syringe with manual needle protection system: After the injection, hold the syringe in one hand by gripping the security sleeve. Use the other hand to hold the finger grip and pull firmly back. This unlocks the sleeve. Slide the sleeve up the body of the syringe until it locks into position over the needle.			
	Do not rub the injection site after administration.			
	Drop the used syringe, needle first, into an empty thick plastic container such as empty liquid laundry detergent bottle, empty bleach bottle or something similar. When the container is full, cap tightly, wrap in a trash bag and throw in your household trash.			
	Caution: May develop hematoma (a localised sweling that is filled with blood).			

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Remarks:

Reviewed by: Name & Signature **Date:**

CARDIAC - WARFARIN

Name :		**Unit**:		
TASK	• *Please tick (✓) **YES** for correct instruction or sequence.* • *Please tick (✓) **NO** for incorrect instruction or sequence.*			
		Yes (1)	**No (0)**	**Remarks**
Task 1	**EDUCATION ON PATHOPHYSIOLOGY**			
A	**PREPARATION PHASE**			
	Check patient's case note and medication chart for medicine(s) prescribed.			
	Check prescribed dose & frequency.			
	Check expiry date and follow the 5 Rights of administration of medication (Know Your Medicine).			
B	**EDUCATION PHASE (WARFARIN)**			
	PATHOPHYSIOLOGY OF BLOOD CLOTTING			
	Blood clots occurs when blood thickens and clumps together.			
	Blood clots usually form in the deep vein in the body (examples: lower leg and thigh).			
	The blood clots can break off to form emboli (i.e.: loose clots).			
	The emboli will then travel trough the bloodstream and subsequently may lead to the blockage in other veins in the body (e.g.: brain, lungs, lower leg and thigh).			
	This will disrupt the blood flow to the blocked area.			
	Thus, warfarin is indicated to prevent the formation of new blood clots and prevent existing blood clots from getting larger.			
	Mode of action of warfarin: Interferes with the synthesis of vitamin K-dependent clotting factors.			
3	**INDICATION OF WARFARIN**			
	Deep veen thrombosis or pulmonary embolism.			
	Atrial fibrillation.			
	Heart valve replacement.			
	Others such as cardiomyopathy, antiphospholipid syndrome, post MI etc.			
4	**THE STRENGTH AND COLOUR OF THE TABLET**			
	1 mg - Apo-Warfarin (brown), Coumadin (pink)			
	2 mg - Apo-Warfarin (lavender), Coumadin (purple)			
	3 mg - Orfarin (blue).			
	5 mg - Apo-Warfarin (peach), Coumadin (peach), Orfarin (pink).			
	Remind the patient not to remember the colour, remember the dose prescribed instead.			
5	**THE DOSAGE AND ADMINISTRATION**			
	Dose & duration based on indication and international normalised ratio (INR) target.			
	Must be taken at the same time every day.			
	If missed a dose for more than 8 hours, skip the dose and take the next dose (do not double the dose).			
	To inform healthcare professionals (dentist, surgeon, doctor, pharmacist) if patient is planning to get pregnant, tooth extraction, or when getting consultation for medication, supplement or herbal remedies.			
6	**INR**			
	To check how long it takes for your blood to clot. The higher your INR is, the longer it takes for your blood to clot.			

		Yes (1)	No (0)	Remarks
7	**TARGET INR**			
	The targeted INR is 2-3 except for stroke prophylaxis in patients with mechanical heart valves such as mitral valves (INR of 2.5-3.5).			
	Follow the scheduled blood test and the counselling appointment made to achieve targeted INR as suggested by the doctor.			
	Bring along anticoagulant booklet and all medications during the doctor/pharmacist appointment.			
8	**SIDE EFFECTS OF MEDICATION**			
	Educate patient on symptoms of bleeding such as bruises of unknown cause, blood in urine/dark-coloured urine, black stools, gum bleeding or heavy menstrual bleeding.			
	Report to doctor and pharmacist if any sign or symptom of bleeding occurs.			
9	**DRUG-DRUG/FOOD INTERACTIONS**			
	Consult doctor and pharmacist before starting, stopping or changing dose of any medication/supplement, irregardless of whether it is a prescription or over-the-counter medication including traditional medicines.			
	Monitor the intake of food which are rich in vitamin K such as green, leafy vegetables. Have consistent intake of vegetables and food with high content of high vitamin K.			
	Follow a balanced and consistent diet.			
	Review patient's lifestyle such as alcohol consumption, smoking and stress. Advice to only consume small quantity of alcohol, stop smoking and manage stress as these will affect the therapy.			
10	**PREGNANCY AND BREASTFEEDING**			
	Advise women with childbearing age that warfarin can have adverse effects on fetal development (first trimester), therefore, need to inform doctor if planning to get pregnant.			
	Very little warfarin gets into the breast milk, therefore, it is safe to be taken if the mother is breastfeeding.			
	OTHERS			
	Avoid hazardous activities that could result in serious lacerations or blunt trauma.			

Before ending this peer review session, reviewee should be informed of the step(s) that he/ she missed out in order to ensure all the counselling points for both diseases are covered.

Remarks:

Reviewed by: Name & Signature **Date:**

CHRONIC KIDNEY DISEASE

Name :		**Unit**:		
TASK	**Education On Pathophysiology** • *Please tick (✓) **YES** for correct instruction or sequence.* • *Please tick (✓) **NO** for incorrect instruction or sequence.*			
		Yes (1)	**No (0)**	**Remarks**
	PATHOPHYSIOLOGY			
1	**Function of kidney** - production of hematopoietin for red blood cell regulation - maintaining fluid and electrolyte balance - maintaining acid based balance - regulating blood pressure - removal of toxin - maintain healthy bone by production of active form vitamin D			
2	**Complications of CKD** - May progress to ESRF (dialysis or transplant) - Anaemia - Bone disease - Heart disease - Electrolyte imbalance: High potassium, low calcium, high phosphate - Fluid overload - Uncontrolled hypertension			
3.	**HYPERPHOSPHATEMIA**			
	Medications for hyperphosphataemia (phosphate binder): **Calcium carbonate** Chew/crush and eat **WITH** meals (It can be swallowed whole if it is not indicated as a phosphate binder). Separate 2 hours duration if you are also taking iron containing tablets.			
	Sevelamer Swallowed whole right before meal, in between meal or right after meal			
	Lanthanum Chew /crush and eat with meals *May adjust number of tablets according to phosphate containing diet but maintain total daily dose			
4.	**ANAEMIA**			
	Compliance to medications (oral iron, folic acid, B complex, EPO, IV iron) To maintain target haemoglobin level (ie: 10-12 g/dL) Iron tablet: take with empty stomach Symptoms of anaemia: a) Fatigue b) Pale c) Shortness of breath d) Headache			
5.	**HEALTHY LIFE STYLE**			
	a) Low salt diet (for HPT) b) Low protein diet according to stages of CKD c) Low sugar diet (for DM) d) Low fat diet (hyperlipidaemia) e) Low phosphate diet (ie: minimal intake of meat, poultry, fish, bran cereals and otmeal, dairy food, beans, lentils, nuts, colas) f) Low potassium diet g) Regular exercise h) Achieve normal BMI i) Smoking cessation			

		Yes (1)	No (0)	Remarks
6.	**OTHERS**			
	Avoid nephrotoxic drugs (eg: NSAIDS, unregistered traditional medicine or herbs, herbal drugs known to be nephrotoxic)			
	Avoid nephrotoxic food (eg: 'jering')			
	Inform healthcare providers if plan to take supplements/OTC products			

Before ending this peer review session, reviewee should be informed of the step(s) that he/ she missed out in order to ensure all the counselling points for both diseases are covered.

Remarks:

Reviewed by: Name & Signature **Date:**

EAR DROP

Name :		**Unit**:		
TASK	• *Please tick (✓) **YES** for correct instruction or sequence.* • *Please tick (✓) **NO** for incorrect instruction or sequence.*			
		Yes (1)	**No (0)**	**Remarks**
1.	**ADMINISTRATION TIME**			
	As prescribed			
2.	**SITE OF ADMINISTRATION**			
	Ear canal			
3.	**METHOD OF ADMINISTRATION**			
	Wash your hands with soap and water. Then dry them with a clean towel.			
	Read the medication label.			
	Remove the dropper cap and look closely at the tip to make sure it is not cracked or chipped. **DO NOT TOUCH THE TIP.**			
	Position the head with the affected ear facing upward. Either lie on your side or tilt the affected ear up. Pull the upper ear back and upward for adults. For children, gently pull the lower ear down and back to open the ear canal.			
	Place the correct number of drops in your ear. Gently press on the small skin flap over the ear to help the drops to run into the ear canal.			
	Keep your ear tilted up for a few minutes or insert a soft cotton plug in your ear.			
	Use a clean tissue to absorb and wipe away any drops that spill out of your ear.			
	If you are using ear drops on both ears, repeat this procedure for the other ear.			
	Replace cap on the bottle and screw it on securely.			
4.	**STORAGE**			
	• Keep in a cool and dry place. • Keep away from reach of children			
5.	**OTHER RELEVANT POINTS**			
	• Do not allow the dropper tip to touch your ears, fingers or any other surface • Do not share ear drops with anyone else • Please ask duration you can use the ear drops safely after opening the bottle. • If the ear drops have expired, discard them at once.			

Before ending this peer review session, reviewee should be informed of the step(s) that he/ she missed out in order to ensure all the counselling points for both diseases are covered.

Remarks:

Reviewed by: Name & Signature **Date:**

EYE DROP

Name :		**Unit**:		
TASK	• *Please tick (✓) **YES** for correct instruction or sequence.* • *Please tick (✓) **NO** for incorrect instruction or sequence.*			
	Introduce yourself and the purpose of counselling			
		Yes (1)	**No (0)**	**Remarks**
1.	**ADMINISTRATION TIME**			
	As prescribed			
2.	**SITE OF ADMINISTRATION**			
	Eyes – instillation into conjunctival sac			
3.	**METHOD OF ADMINISTRATION**			
	Wash your hands with soap and water. Dry them with a clean towel or tissue.			
	Remove contact lenses if you are wearing them.			
	Warm the bottle by rolling between palms if the eye drop is stored in the refrigerator.			
	Shake the bottle if this is indicated on the bottle or directed by the doctor.			
	Unscrew the cap of the bottle (for bottles with an integrated dropper, draw some liquid into the dropper). Look closely at the tip to make sure it's not cracked or otherwise damaged.			
	Do not touch the tip of dropper.			
	Lie down or tilt your head back and look up at the ceiling. Concentrate on a point at the ceiling, keeping your eyes wide open.			
	Place one or two fingers on your face about an inch below your eye and gently pull your lower eyelid down with your finger to form a pocket.			
	Hold the eye drop bottle at least 1– 2 cm above the eye with your other hand. Be careful not to let the dropper touch your eye or eyelashes, since this can introduce bacteria and other organisms into the eye drop.			
	Squeeze/drop the correct number of drops inside the lower eyelid.			
	Remove your fingers from your face. Close your eyes slowly for approximately 1 minute to allow the medication to be absorbed. Tilt your head down for a few seconds. Try not to blink, as this can force some of the drop out of your eye before it can be absorbed.			
	To keep as much of the drop on your eye as possible, gently press a finger against the inside corner of each eye next to your nose. A small duct that drains tears away from your eye into your nose is located here. By pressing at this point, you block the drainage duct and allow the drop to remain longer on the eye surface.			
	Straighten your head and use a clean tissue to wipe away any drops that spilled out.			
	If you are using eye drop on both eyes, repeat steps 7 till 13 on the other eye			
	Replace the cap of the bottle and screw it on securely			

		Yes (1)	No (0)	Remarks
4.	**STORAGE**			
	Keep in a cool and dry place. Keep away from reach of children.			
5.	**PRECAUTIONS**			
	Seek medical treatment if experience eye irritation, pain, redness or changes in vision			
	To prevent the spread of infection, one person only should use each bottle of eye drop			
	Contact lenses should not be worn for the first 20 minutes following the instillation of the drops. In certain cases, you may need to stop using your contact lenses			
6.	**OTHER RELEVANT POINTS**			
	If you are prescribed more than one eye drops at a time, wait about 5 minutes before using the next eye drop. Order of using different types of eye drops is as below: - aqueous based eye drops e.g. artificial tears - suspension based eye drop e.g. antibiotic eye drops - ointment based eye preparation If you are prescribed eye drop and eye ointment together, use eye drop first.			

Before ending this peer review session, reviewee should be informed of the step(s) that he/ she missed out in order to ensure all the counselling points for both diseases are covered.

Remarks:

Reviewed by: Name & Signature **Date:**

EYE OINTMENT

Name :		**Unit**:		
TASK	• *Please tick (✓) **YES** for correct instruction or sequence.* • *Please tick (✓) **NO** for incorrect instruction or sequence.*			
		Yes (1)	**No (0)**	**Remarks**
1.	**ADMINISTRATION TIME**			
	As prescribed			
2.	**SITE OF ADMINISTRATION**			
	Eyes – instillation into conjunctival sac or to the eye lid margin			
3.	**METHOD OF ADMINISTRATION**			
	Wash your hands with soap and water. Dry them with a clean towel or tissue.			
	Remove contact lenses if you are wearing them.			
	Unscrew the cap from tube and hold the tube as if you are holding a pen			
	Lie down or tilt your head back and look up at the ceiling. Concentrate on a point at the ceiling, keeping your eyes wide open.			
	Place one or two fingers on your face about an inch below your eye and gently pull your lower eyelid down with your finger to form a pocket			
	With a sweeping motion, squeeze the tube to apply about 0.5 – 1cm of ointment inside the lower eyelid. Be careful not to touch your eye with the tip of the tube.			
	Remove your fingers from your face then close your eye gently for 1 to 2 minutes to allow medication to absorb. Your vision can become blurry for a few minutes as the medication is quite viscous. You should remain comfortably seated until this resolved.			
	Straighten your head and use a clean tissue to wipe away any excess ointment. Do not dab at your eye directly.			
	If you are using eye drop on both eyes, repeat steps 4 till 8 on the other eye.			
	Replace the cap of the bottle and screw it on securely.			
4.	**STORAGE**			
	Keep in a cool and dry place. Keep away from reach of children			
5.	**PRECAUTIONS**			
	Seek medical treatment if experience eye irritation, pain, redness or changes in vision			
	To prevent the spread of infection, apply ointment directly from the tube. Avoid using fingers to place ointment on your eye lid			
	Contact lenses should not be worn for the first 20 minutes following the instillation of eye ointment. In certain cases, you may need to stop using your contact lenses			
6.	**OTHER RELEVANT POINTS**			
	If you are prescribed eye drop and eye ointment together, use eye drop first.			
	If you have more than one eye ointment to use together, wait about 30 minutes before using the next eye ointment.			

Before ending this peer review session, reviewee should be informed of the step(s) that he/ she missed out in order to ensure all the counselling points for both diseases are covered.

Remarks:

Reviewed by: Name & Signature **Date:**

GLYCERYL TRINITRATE SPRAY

Name :		**Unit**:		
TASK	**Education On Pathophysiology** • *Please tick (✓) **YES** for correct instruction or sequence.* • *Please tick (✓) **NO** for incorrect instruction or sequence.*			
		Yes (1)	**No (0)**	**Remarks**
1	Function: Widen the arteries that carry blood to the heart muscle and relaxed the veins that return blood from the body to the heart (relaxation of smooth muscle).			
2	Indication: Prophylaxis and treatment of angina and left ventricular failure.			
3	**Dose: At the onset of an attack, one or two metered sprays should be administered under the tongue and close your mouth immediately after use.**			
4	**Priming:** Before using GTN spray for the first time, check that the spray is working by pressing the spray button a **few times until it produces a fine mist of liquid.**			
5	If chest pain persists after a **total of 3 sprays,** prompt medical attention is recommended.			
6	During application the patient should rest, ideally in the sitting position. Advise patient to **hold breath prior spray**.			
7	The canister should be held vertically with the valve head uppermost and the spray orifice as close to the mouth as possible. **Press down the button firmly.**			
8	**The spray should not be inhaled.**			
9	Patients should be instructed to familiarise themselves with the position of the spray orifice, which can be identified by the finger rest on top of the valve, in order to facilitate orientation, for administration at night.			
10	Do not store above 25°C. Do not refrigerate or freeze. **Do not use GTN Spray if you are near a naked flame, e.g. a cigarette.**			
11	Report these symptoms to physician: Severe headache, blurred vision, dry mouth, dizziness or flushing.			
12	Continuous use may result in a tolerance to GTN Spray, reducing its effectiveness.			

Before ending this peer review session, reviewee should be informed of the step(s) that he/ she missed out in order to ensure all the counselling points are covered.

Remarks:

Reviewed by: Name & Signature **Date:**

HORMONE THERAPY

Name :		Unit:		
TASK	**Education On Pathophysiology** • *Please tick (✓) **YES** for correct instruction or sequence.* • *Please tick (✓) **NO** for incorrect instruction or sequence.*			
		Yes (1)	**No (0)**	**Remarks**
1.	**HORMONE REPLACEMENT THERAPY**			
	Types: pills, patches, topical use, vaginal use			
	Symptoms of oestrogens deficiency: hot flashes, vaginal symptoms (itching, burning, and dryness) and difficulty with urination, osteoporosis			
	Common side effects: breast tenderness, swelling, vaginal bleeding, headaches, nausea, vomiting			
	Oestrogen side effects: bloating, nausea, leg cramps, indigestion			
	Progesterone side effects: mood swings, acne, depression, back pain			
	Indication vaginal use: vaginal dryness, itchiness, and burning or pain during intercourse			
	Severe adverse reactions: sudden, severe headache; sudden, severe vomiting; sudden partial or complete loss of vision; speech problems; dizziness or faintness; weakness or numbness of an arm or a leg; crushing chest pain or chest heaviness; coughing up blood; sudden shortness of breath; or calf pain.			
2.	**ENDOMETRIOSIS**			
	The presence of tissue that normally grows inside the uterus in an abnormal anatomical location and may lead to painful menstruation.			
	Hormone therapy was aimed to relieve pain and infertility.			
	Hormone therapy will stop the ovary from producing hormone including oestrogen usually to prevent ovulation and thus helps slow the growth and local activity of both the endometrium and the endometrial lesion. Treatment prevent the growth of new areas and scars.			
3.	**ORAL CONTRACEPTIVE PILLS (OCP)** Will make the period lighter, more regular and shorter.			
	Dose regimen: • 21 days cycle and 7 days free pill period (per cycle) • Continuous taking OCP for certain period of time depends on prescribed medication, commonly for 3 months • For women with cardiovascular disease or high risk of blood clot will be given progestin-only pills			
	When the treatment stopped, the symptom of endometriosis will return and also the ability to get pregnant.			
	The treatment is indefinite. Some will experience no pain for several years after stopping treatment.			
	Side effects: Weight gain Feel depressed Bloating Bleeding between period (irregular vaginal bleeding)			
4.	**Progesterone and progestin** To improve symptoms by reducing woman period or stopping it completely.			
	Dosing: **Dydrogesterone 10mg tablet** 10mg bd to tds from day 5 to 25 of menstrual cycle or continuously.			
	Side effects: Menstrual irregular Headache Migraine Nausea Breast tenderness Bloating Weight gain			

		Yes (1)	No (0)	Remarks
5.	**Gonadotropin-releasing hormone (GnRH) agonist** Will stop the production of certain hormone to prevent ovulation, menstruation and the growth of endometriosis			
	Dosing regimen (**Leuprolide acetate Injection**): 3.75mg monthly for 3-6 months 11.25mg every 3 months			
	When the treatment stopped, the symptom of endometriosis will return and also the ability to get pregnant.			
	Side effect: Hot flashes Tiredness Sleeping problem Headache Feel depressed Joint and muscle stiffness Vaginal dryness Bone loss (prolonged treatment)			
6.	**Danazol** Stops the release of hormones that are involved in the menstrual cycle**.**			
	Dosing: 200 – 800mg for maximum of 9 months			
	Side effects: Oily skin Pimples or acne Weight gain Muscle cramp Tiredness Sore and smaller breast Headache and dizziness Hirsutism Hot flashes Mood changes Deepening of the voice			
	Pregnancy must be prevented while on this medication. Hormonal birth control method is not recommended for prevention.			
7.	**INFERTILITY TREATMENT**			
	Clomiphene citrate Oestrogen-blocking drug that cause hypothalamus and pituitary gland to release GnRH, FSH and LH to trigger ovaries to produce ovum. It can increase chance to have multiple pregnancy.			
	Dosing: 50 – 150mg for 5 days starting on 2nd or 3rd day of menstrual period. Maximum for 6 months.			
	Side effects: Hot flashes Blurred vision Nausea Bloating Headache			

Before ending this peer review session, reviewee should be informed of the step(s) that he/ she missed out in order to ensure all the counselling points are covered.

Remarks:

Reviewed by: Name & Signature **Date:**

NASAL DROP

Name :		**Unit**:		
TASK	• *Please tick (✓) **YES** for correct instruction or sequence.* • *Please tick (✓) **NO** for incorrect instruction or sequence.*			
		Yes (1)	**No (0)**	**Remarks**
1.	**INDICATION**			
	To relieve nasal congestion due to colds. It works by narrowing the blood vessels in the nose, hence reducing blood flow into the lining of nose. This reduces swelling and the feeling of congestion.			
	METHOD OF ADMINISTRATION			
2.	**PRIMING**			
	Prime the nasal drops before using it for the first time. Check the dropper tip to make sure that it is not chipped or cracked.			
	Squeeze the bottle until a few drops appear from the dropper tip.			
3.	**ADMINISTRATION**			
	Blow your nose gently.			
	Wash hands thoroughly with soap and water.			
	Remove cap of the bottle (for bottles with integrated dropper, draw some liquid into the dropper)			
	Tilt your head as far as possible or lie down on your back on a flat surface and hang your head over the edge.			
	Hold the bottle or dropper above your nostrils and gently squeeze the correct number of drops into the nostrils. (Do not touch the nose with the tip of the bottle or dropper)			
	Keep your head tilted back for a few minutes to allow the drops to drain into the back of the nose.			
	Repeat steps 5 till 6 for the other nostril			
	Wipe dropper tip with dry cloth			
	Replace cap on bottle right away.			
4.	**STORAGE**			
	Store in a cool, dry and dark place. Keep away from reach of children			
5.	**POSSIBLE SIDE EFFECTS**			
	Dryness or irritation of nose/throat Nose bleeds			
6.	**OTHER RELEVANT POINTS**			
	Some nasal drops can give unpleasant taste as they drain into the back of the throat. Drink water or other liquid to clear the taste.			
	Do not use your nasal drops more often or for longer that you have been told. Some nose drops must only be used for a short period of time and will become ineffective if it is used for too long. For example: Decongestant nasal drop			
	Throw leftover nasal drops when you have finished the course of treatment			

Before ending this peer review session, reviewee should be informed of the step(s) that he/ she missed out in order to ensure all the counselling points for both diseases are covered.

Remarks

Reviewed by: Name & Signature **Date:**

NASAL SPRAY

Name :		**Unit**:		
TASK	• *Please tick (✓) **YES** for correct instruction or sequence.* • *Please tick (✓) **NO** for incorrect instruction or sequence.*			
		Yes (1)	**No (0)**	**Remarks**
1.	**INDICATION**			
	Prevent the nasal spray and treat seasonal and year-round allergy symptoms (such as stuffy/runny nose, itching and sneezing) It is also used to treat certain growths in the nose (nasal polyps)			
	METHOD OF ADMINISTRATION			
2.	**PRIMING**			
	Prime the nasal spray before using a nasal spray for the first time. Shake well and remove cap			
	Pump the bottle until a uniform mist appears			
3.	**ADMINISTRATION**			
	Blow nose gently before spraying (if blocked)			
	Shake nasal spray gently			
	Remove cap.			
	Hold nasal spray upright, thumb beneath bottle and fingers on either side of nozzle			
	Close one nostril with finger. Tilt your head forward slightly and, keeping the bottle upright, carefully insert the nozzle into the other nostril.			
	Point the nozzle away from centre ridge of your nose (septum), towards the outside corner of your eye on the same side.			
	Breathe in gently through your nose and press the applicator/pump firmly			
	Remove nozzle from nostril and breathe out gently through mouth.			
	Repeat steps 5 till 8 for the other nostril			
	If patient requires more than 1 spray in each nostril, repeat steps 1 till 8 for each nostril.			
	Wipe the nasal applicator with a clean tissue and replace the plastic cap.			
4.	**STORAGE**			
	Keep away from sunlight or heat and moisture Keep away from reach of children Store between 20-25°C			
5.	**POSSIBLE SIDE EFFECTS**			
	Dryness or irritation of nose and throat Blood-tinged mucus or phlegm Nose bleeds			
6.	**OTHER RELEVANT POINTS**			
	Patient may find it easier if they hold the nasal spray in the hand opposite of the nostril they intend to spray, i.e. left hand with right nostril and vice versa If spray used correctly, the spray should not drip from patient's nose or down the back of throat If that happens it could be due to the following reasons; - Wrong head position - Sniffing after spraying - Blowing nose hard after spraying			

Before ending this peer review session, reviewee should be informed of the step(s) that he/ she missed out in order to ensure all the counselling points for both diseases are covered.

Remarks:

Reviewed by: Name & Signature **Date:**

PESSARIES (VAGINAL TABLETS AND CREAM)

Name :		**Unit**:		
TASK	**Education On Pathophysiology** ● *Please tick (✓)* ***YES****for correct instruction or sequence.* ● *Please tick (✓)* ***NO*** *for incorrect instruction or sequence.*			
		Yes (1)	**No (0)**	**Remarks**
1.	Explain the indication of the medication to the patient.			
2.	Read the product insert before counselling. Each product will have specific instruction for use.			
3.	Wash hands with soap and water and dry it.			
4.	Wash vagina area with mild soap and water. Dry thoroughly.			
5.	**Vagina tablet** Remove the wrapper and place the medication into the end of the applicator. For pregnant ladies, do not use the applicator, use your finger instead. **Vagina Cream** Attached firmly the applicator to the opening of the tube. Squeeze the cream into the applicator until it reaches the level of the indicator of your dose. Twist and remove the applicator.			
6.	Lie on your back with your knees band and legs apart.			
7.	Insert the applicator gently into your vagina as far as it comfortably go. Push the plunger of the applicator until it stops. Remove the applicator from the vagina.			
8.	Remain lying down for about 15 - 30 minutes to ensure the medication is fully absorbed.			
9.	Wash your hands thoroughly. If the applicator is reusable, clean it.			
10.	The recommended time of administration is just before your bedtime.			
11.	If you encounter any remaining medication that is not absorbed on the next coming morning, do not reinsert the remaining medication and wash your vagina area. You may use sanitary pad / panty liner to prevent staining.			
12.	Some pessaries may contain ingredient that can damage latex condom. Use other method of contraception if needed.			

Before ending this peer review session, reviewee should be informed of the step(s) that he/ she missed out in order to ensure all the counselling points for both diseases are covered.

Remarks:

Reviewed by: Name & Signature **Date:**

RETROVIRAL DISEASE MEDICATIONS

Name :		**Unit**:		
	Education On Pathophysiology and Retroviral Medicines ● *Please tick (✓) **YES** for correct instruction or sequence.* ● *Please tick (✓) **NO** for incorrect instruction or sequence.*			
A	**PREPARATION PHASE**	**Yes (1)**	**No (0)**	**Remarks**
1	**PATHOPHYSIOLOGY OF HIV**			
	HIV/ AIDS HIV (Human Immunodeficiency Virus) attacks the body's immune system, specifically the CD4 cells (T cells), which help the immune system fight off infections.			
	HIV is the virus that can lead to AIDS (Acquired Immunodeficiency Syndrome) at the final stage, if it is not treated.			
	CD4 cells White blood cells that fight infection and play an important role in your immune system. HIV infection causes destruction and reduction of CD4 count. (Normal CD4 count is 500-1000 cells/microL).			
	Viral Load Viral Load is a measure of the number of HIV in the bloodstream.			
	Over time (if untreated), the increase in viral load causes the reduction of CD4 count, which leads to a higher risk of developing opportunistic infections.			
	Mode of Transmission HIV can be transmitted through blood, semen, pre-seminal fluid, vaginal fluids, rectal fluids and breast milk. Most people acquire the disease through having sex or sharing injection equipment/ needles with someone who has HIV. HIV can also spread from a woman infected with the virus to her child during pregnancy, labour or breastfeeding.			
	HAART HAART stands for Highly Active Antiretroviral Therapy, and consists of a combination of three or more antivirals. **Objectives of starting HAART** • Maximally and durably suppress plasma HIV RNA (target VL < 20 copies/ml); • Restore and preserve immunologic function (ie. Increase CD4 counts); • Reduce HIV-associated morbidity (ie. Reduce risks of opportunistic infections) and prolong the duration and quality of survival; and • Prevent HIV transmission. Response to therapy is evaluated 4-6 months after initiation of HAART			
2	**MEDICATION**			
	Upon starting HAART to consider underlying opportunistic infections and risk of Immune Reconstitution Inflammatory Syndrome (IRIS) Opportunistic infection: Infections that occur when CD4 is low. Treatment and prevention for opportunistic infections should be considered in starting HAART. IRIS is a spectrum of clinical signs and symptoms resulting from the restored ability to mount an inflammatory response associated with immune recovery.[1]			
	a) Nucleoside Reverse Transcriptase Inhibitors (NRTI): e.g.: Lamivudine, Zidovudine, Tenofovir, Abacavir. Common side effect: Anaemia (Zidovudine), bone osteoporosis & renal toxicity (Tenofovir), hypersensitivity reaction (Abacavir).			

		Yes (1)	No (0)	Remarks
	b) Non-Nucleoside Reverse Transcriptase Inhibitors (NNRTI): e.g.: Efavirenz, Nevirapine Common side effect: Raised liver enzymes, hepatitis, hepatotoxicity. CNS effects such as dizziness, headache, depression, vivid dreams & suicidal thoughts (Efavirenz); Severe/life-threatening skin reactions ie. Stevens-Johnson syndrome, toxic epidermal necrolysis (NVP>EFV)			
	c) Protease Inhibitors (PI) e.g. Atazanavir, Darunavir, Lopinavir, Ritonavir Common side effect: Hypertriglyceridemia, GI disturbance, hyperglycemia			
	d) Integrase Inhibitors e.g.: Raltegravir, Dolutegravir Common side effect: GI disturbance, rashes, abnormal dreams, headache, dizziness.			
3	**DRUG-DRUG/ FOOD INTERACTION**			
	Consult doctor and pharmacist before starting, stopping or changing dose of any medication/ supplement, regardless of whether it is a prescription or over-the-counter medication including traditional medicines			
4	**ADHERENCE**			
	HAART is a lifelong commitment. To ensure readiness before starting treatment.			
	Stress the importance of proper timing and adherence due to the possible development of drug resistance.			
	Important to adhere to HAART as • Limited options available • HIV is highly susceptible to mutation that leads to resistance • Cost will be incurred for alternative treatment			
	Provide medication administration schedule/ timetable guide and suggest adherence tools to increase adherence (pill box, alarm clock or hand phone alarm and calendar)			
	Adherence issue during fasting month. Not to fast until CD4 is high enough and viral load undetectable.			
	Intervene when the patient states or indicates that he or she cannot or will not adhere to treatment.			
	In case of missed dose, skip the dose if its near to the next dose. Do not double the dose.			

Before ending this peer review session, reviewee should be informed of the step(s) that he/ she missed out in order to ensure all the counselling points are covered.

Remarks:

Reviewed by: Name & Signature **Date:**

SUBLINGUAL GLYCERYL TRINITRATE

Name :		**Unit**:		
TASK	**Education On Pathophysiology** • *Please tick (✓) **YES** for correct instruction or sequence.* • *Please tick (✓) **NO** for incorrect instruction or sequence.*			
		Yes (1)	**No (0)**	**Remarks**
1	Function: Widen the arteries that carry blood to the heart muscle and relaxed the veins that return blood from the body to the heart (relaxation of smooth muscle).			
	Indication: For acute angina or as angina prophylaxis (take 1 tablet 5 to 10 minutes before exercise or exertion to prevent an attack).			
	Dose: Place one tablet under the tongue when needed, allow it to dissolve. Do not swallow.			
	If pain remains, remove the undissolved tablet and place a new tablet under the tongue. **The dose may be repeated every 5 minutes for a maximum of 3 times.** If pain persists or becomes more intense, patient should call the ambulance or go to the hospital.			
2	During administration for an acute angina attack, the patient should rest, preferably in the **sitting position.**			
3	**Advise patient to discard the tablets 2 months after first opening of the bottle (mark the date on the bottle).**			
4	Report these symptoms to physician: Severe headache, blurred vision, dry mouth, dizziness or flushing.			
5	Store at room temperature in original, container. Protect from moisture and direct sunlight.			

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Remarks:

Reviewed by: Name & Signature **Date:**

SUPPOSITORIES

Name :		**Unit**:		
TASK	**Education On Pathophysiology** ● *Please tick (✓)* ***YES****for correct instruction or sequence.* ● *Please tick (✓)* ***NO*** *for incorrect instruction or sequence.*			
		Yes (1)	**No (0)**	**Remarks**
1.	Explain the indication of the medication to the patient			
2.	Read the product insert before counselling. Each product will have specific instruction for use.			
3.	Wash hands with soap and water and dry it.			
4.	Take out the suppositories from the fridge.			
5.	Remove the wrapper.			
6.	Do not cut the suppositories unless instructed otherwise. If you need to cut into half, cut it length wise with a clean single edge razor blade.			
7.	Lubricate the tip of the suppositories with water.			
8.	Lie down on your side with your upper leg bent forward toward your stomach while your lower leg straightened out.			
9.	Insert the suppository, pointed end first with your finger about 1 inch (adult) and 1/2 inch (infant) depth.			
10.	Straightened both legs together and hold buttocks together for about few seconds.			
11.	Remain lying down for about 5 minutes to ensure the suppository is fully absorbed.			
12.	Discard the wrapper and wash your hand thoroughly.			

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Remarks:

Reviewed by: Name & Signature **Date:**

TRANSDERMAL PATCH

Name :		**Unit**:		
TASK	**Education On Pathophysiology** • *Please tick (✓) **YES**for correct instruction or sequence.* • *Please tick (✓) **NO** for incorrect instruction or sequence.*			
		Yes (1)	**No (0)**	**Remarks**
1.	Explain the Indication of the transdermal patch			
2.	Read the product insert before counselling. Each product will have specific instruction for use.			
3.	Wash hands with soap and water and dry it.			
4.	Application site of patch			
	Select an area of skin to apply the patch: • upper arm • upper chest • lower back* • upper back* Make sure the skin area is clean, hairless and free from dirt, lotions, oils and powder Avoid applying at open wound, rashes and irritation area. Rotate the location where you apply your patch to prevent irritation but still located within those areas. **not suitable for bedridden patient*			
6.	Do not overlap patches if more than one patch needed at a time.			
7.	Carefully open the packaging. Never use a patch that has been cut or damaged in any way			
8.	Remove the protective liner. Do not touch the adhesive side of the patch.			
9.	Press down on the patch to make sure the patch is firmly attached to your skin			
10.	Press along the edges with your finger. The patch shall be smooth with no bumps or folds.			
11	To remove previous patch, use your finger to peel off slowly. Fold the patch into half and press firmly to seal it shut. Discard the patch properly.			
12.	Avoid prolonged exposure to water to prevent patch detachment from the skin heat to prevent alteration rate of absorption.			

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Remarks:

Reviewed by: Name & Signature **Date:**

TUBERCULOSIS

Name :		Unit:		
TASK 1	**Education On Pathophysiology and tuberculosis medicines**			
		Yes (1)	**No (0)**	**Remarks**
A	**PREPERATION PHASE**			
1	Check patient's case note and medication chart for medicine(s) prescribed			
	Check prescribed dose and frequency			
	Check expiry date and follow the 5 Rights of administration of medication (Know Your Medicine)			
B	**EDUCATION PHASE (TUBERCULOSIS)**			
2	**PATHOPHYSIOLOGY OF TUBERCULOSIS**			
	Disease caused by Mycobacterium Tuberculosis spread through air droplets (cough, sneeze, communication)			
	SIGNS AND SYMPTOMS OF TUBERCULOSIS			
	Cough with blood, prolonged fever, night sweat, loss of weight, loss of appetite			
	TYPES OF TUBERCULOSIS			
	Pulmonary / Extrapulmonary			
3.	**LENGTH OF TREATMENT**			
	- Intensive (2 months), - Maintenance (4 months) * Treatment duration may vary depending on patient condition * Treatment will be restarted if discontinued before completion of treatment			
4.	**COMPLIANCE**			
	- Importance of adherence to anti-TB therapy: • To ensure cure of TB, control the spread of the infection and minimize the development of drug resistance • Mycobacterium tuberculosis is slow-growing bacteria. It takes long time to completely kill all the TB bacteria • Do not stop taking the medication even if you feel much better after a few weeks on treatment. The entire course must be completed • To increase compliance, "Intensive phase" is COMPULSORY to be taken on DOTs regime			
5.	**ADVISE**			
	- Wear a 3-ply mask at all times - Stop smoking and avoid drinking alcohol (alcohol can interact with anti-TB drugs) - Cover nose and mouth with tissue paper during sneezing and coughing to prevent spread of the bacteria - Do not spit in public areas. Sputum should be wrapped up in tissue before flushed or dispose in covered dust-bins. Upon initiation of treatment, risk of spreading infection is reduced. Thus, isolation of patient / avoid close contact is necessary at the beginning of treatment (approximately 2 weeks after confirmation from doctor)			

	SIDE EFFECT & PRECAUTION OF MEDICATION			
6.	Report to doctor and pharmacist if experience any as below: Ethambutol • Educate patient on the symptoms of optic neuritis such as decreased visual activity Isoniazid • Skin rash / Itchiness • Epigastric discomfort, abdominal pain, nausea/vomiting • Jaundice, Hepatitis • Peripheral neuropathy or tingling sensation of the fingers or toes (to supplement with pyridoxine) • Interaction with HAART treatment Rifampicin • Skin rash / Itchiness • Anorexia, abdominal pain, nausea / vomiting • Jaundice, Hepatitis • Reddish orange discolouration of body fluids (eg. Urine, saliva, tears or sweat) • Flu-like symptoms, prolonged fever or lethargy • Interaction with OCP and birth control method Pyrazinamide • Skin rash / Itchiness • Anorexia, abdominal pain, nausea / vomiting • Jaundice, Hepatitis • Joint pain Streptomycin • Skin rash / Itchiness • Ototoxicity (hearing changes/ringing in ears) • Neurotoxicity (dizziness, vertigo, nystagmus) • Nephrotoxicity (decreased urine output) • Avoid in pregnant and lactating mother			

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GERIATRIC PATIENTS COUNSELLLING TIPS

Older adults or better known as geriatric patients especially those with disabilities and caregivers may encounter challenges in terms of medication administration. Resolving these problems may result in better pharmacotherapeutic outcome of the medications prescribed.

- First and foremost, if possible, get a complete health and medication history, including non-prescription medications including herbal supplements and traditional remedies. Identify drug related problem ie. polypharmacy, drug interactions
- Find out if patient has any history of drug allergy or adverse drug reaction
- Assess patient's physical and mental (cognitive) ability; if deemed unfit for counselling, please refer to the patient's care-giver or family member
- Educate and involve care-givers about patient's medication regime and relevant devices
- Counselling content –
    - Adherence to medication
    - Assess medication-taking ability and factors that may contribute to non-adherence
    - Provide information on side effects
    - Use a variety of counselling methods
    - Provide information in several sessions
- Common challenges encountered –
    - Impaired vision or vision loss → difficulty reading labels on prescription labels and handling devices
        - Provide prescription labels in large print
        - Avoid administering medications in dark or dimmed place
        - Caregivers or family members may assist patient in taking the medication or using devices for drug delivery
        - Magnifying glasses may also be helpful for patient with vision impairment
    - Memory and mental deterioration
        - Can advise to invest in a special pill boxes (simple containers with compartments labeled for meals and bedtime) or any other aids that remind them to take medications
        - May even use alarm clock or set reminders in hand phones
        - For those with severe memory impairments, caregivers are key to the proper administration of all medicines.
    - Impaired hearing → difficulty hearing instructions from health care professionals.
        - Try to speak louder and speak on side of good ear
        - Supplement verbal information with printed materials, charts or diagrams
        - Write down important information relevant to the safe use of medications

        - Care-givers can also be “the ears” for geriatrics with hearing impairments

    - Swallowing → difficulty swallowing tablets or capsules.
        - Suggest alternative dosage forms such as a liquid, suspension, skin patch or suppository, which can greatly reduce difficulties associated with swallowing.
        - For patient with nasogastric tube (NG tube), check whether the medications can be crushed and inserted via NG tube.
    - Dexterity → difficulty opening bottles, inability to break tablets, problems handling medicines such as eye drops, inhalers for asthma and insulin injections.
        - May provide large, easy-open bottle tops for medication storage
        - Can suggest using pill cutter if tablet to be divided before administration
        - Caregivers can assist with the administration of eye drops, inhaled medications, injections and other dosage forms that require fine motor skills.
    - Multiple medications → scheduling many different medications throughout the day
        - Assist in devising a plan for medication administration that best suits patient’s daily schedule.

Side effects of medications should be discussed with patient or care-giver for new and continuing medications, as they can occur at any time. However, it is important that they be presented in a way that is not frightening and easily understood. Patients should be encouraged to report anything unusual to pharmacist or health care professionals.

Any information delivered to geriatric patient should be kept as simple as possible and delivered in a clear manner. To avoid overwhelming the patient, it may be necessary to schedule several sessions to cover information on many medications. A variety of counselling methods (e.g. verbal, print, audio visual) may relieve the volume of material.

In conclusion, pharmacists can conduct regular home-care visits to assist patient and care-giver in medication reconciliation and administration.

References:

a) Tips for Helping Seniors with Their Medications, Pharmacy Times online
b) https://www.pharmacytimes.com
c) Tip Pemberian Ubat Kepada Warga Emas, Bahagian Perkhidmatan Farmasi,KKM
d) Bantulah Warga Emas Mengambil Ubat-ubatan, http://www.knowyourmedicine.gov.my

PAEDIATRIC COUNSELLING TIPS

Paediatric population is a group of patients that need special attention to ensure compliance and also to avoid medication error. The Paediatric Services Operational Policy stated that paediatric population includes from birth to 18 years old. The World Health Organization (WHO) classification of the paediatric population is as follows:

- preterm newborn infants
- term newborn infants (0 to 28 days)
- infants and toddlers (>28days to 23 months)
- children (2 to 11 years)
- adolescents (12 to 18 years, depending on the region)

GENERAL MEDICATION COUNSELLING TIPS

1) Screen the prescription in order to check the appropriateness of medications.
2) Clarify patient's weight.
3) Check dose in paediatric prescription. Is it the dose written on the prescription is acceptable?
4) Explain the purpose of medications and highlight the common side effects and expiry date once open.
5) Explain to parents to give medications, according to the label or instructions as instructed by the pharmacist.
6) Reinforce parents and patient to complete the medication course, even the child feels better.
7) Explain to parents what to do if missed dose.
8) Use measuring devices such as a medication cup or syringe to ensure dose accuracy.
9) Inform the parents to keep medications in a proper way (avoid sunlight).
10) Advise parents do not share medications among family members/friends.
11) Advise parents to adjust dosing time (school days).
12) Counsel parents and patient on drug allergic reaction - allergic symptoms :rashes, swelling.
13) To seek advice from a doctor or pharmacist on any doubts of medications taken.

TIPS GIVING MEDICATION USING ORAL SYRINGE

1) Position: to hold the baby the same way you want to nurse or feed him / to make sure the child is sitting upright.
2) Put the syringe into the mouth with the tip is near the inside of the cheek, may help to reduce unacceptable taste.
3) Gently squirt a small amount of medication to help swallow easily. Do not squirt medication in one go, the child may choke.
4) Allow the child to swallow before continuing squirt the medication.

REFERENCE:

a) Pamplet Ubat Dan Kanak-Kanak, Bahagian Perkhidmatan Farmasi,KKM
b) Pediatric Services Operational Policy, Medical Development Division, MOH, Jan 2012
c) Promoting Safety Of Medicines For Children, WHO, 2007

PREGNANT WOMEN COUNSELLING TIPS

It is very important to avoid prescription drugs/ over the counter medications use during pregnancy which might have direct impact on the fetus and increases the chance of birth defects, premature babies, underweight babies and stillborn births or death.
Below are some counselling tips for pregnant patient.

1) Clarify with patient whether inform doctor regarding her pregnancy status / stages
2) Check patient's medication pregnancy category
3) Check with patient whether taking any supplements/Over the counter /traditional medicine/any chronic medication eg: antihypertensive, antihyperglycemia
4) Check pregnancy safety if patient is taking supplements/Over the counter /traditional medicine/any chronic medication
5) Counsel patient on sign and symptoms of drug allergic. eg: rashes, swelling and seek for treatment
6) Counsel patient to seek advice from doctor /pharmacist if has any doubts on medication taken.
7) Counsel patient the importance of compliance and do not double the dose of medication if near to the next dosing time.

Ferrous supplements counselling tips

- Indications
- Administration – empty stomach (depends on different brands of ferrous) , take in morning
- Increase intake of "enhancer" food eg orange, lemon, watermelon etc
- Avoid "inhibitor food" eg : Caffeine drink, dairy food, legumes and grains food, fibers (oat) etc
- Drug interaction
  - Ascorbic acid : enhance absorption of ferrous,
  - Antacid, Cholestyramin : inhibit absorption of ferrous,
  - Oral Quinolones : take 2-3hrs apart.
  - L-Thyroxine : take 2-3hrs apart.
- Common adverse reactions : Discoloured faeces/urine, constipation, nausea, dyspepsia
- Storage : Away from direct sunlight

BREASTFEEDING WOMEN COUNSELING TIPS

Most commonly used drugs are relatively safe for breastfed babies. The dose received via milk is generally small and unlikely to cause an adverse effect on the babies. However, it is important to be aware of how drugs transfer into breast milk since there are few drugs contraindicated in breastfeeding women such as amiodarone, antineoplastics, gold salts, Iodine, Lithium, radiopharmaceuticals and retinoids (oral).

Below are some counselling tips for breastfeeding patient.

1) Check patient's medication for appropriate dose, contraindicated category
2) Avoid oral medication if there is alternative with topical treatment
3) Breastfeeding baby/ extracting breast milk first before taking any oral medication
4) If oral medication is unavoidable and the medication is contraindicated in breastfeeding, pump out breast milk and discard it.
5) It is safe to continue breastfeeding after vaccination / Xray / CT scan

References :

a) www.ncbi.nlm.gov.
b) www.knowyourmedicine.gov
c) www.mayoclinic.gov./drugs-supplements/iron-supplement