



**KEMENTERIAN KESIHATAN MALAYSIA**

**TOOLKIT**  
**MALAYSIA HEALTH INFORMATION**  
**EXCHANGE (MyHIX)**  
**Versi 2.0**

**DISEMBER 2017**

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## 1. PRA KATA

Teknologi Maklumat dan Komunikasi (ICT) merupakan salah satu strategi penting dalam merealisasikan aspirasi kesihatan Malaysia bagi meningkatkan kualiti perkhidmatan kesihatan kepada rakyat. Antara perkhidmatan ICT yang telah diperkenalkan oleh Kementerian Kesihatan Malaysia (KKM) adalah Malaysia Health Information Exchange (MyHIX). MyHIX merupakan platform perkongsian maklumat kesihatan yang membolehkan seseorang pengamal perubatan mendapatkan maklumat sejarah perawatan pesakit walaupun pesakit tersebut telah mendapatkan rawatan di fasiliti yang lain.

Kerja-kerja pelaksanaan MyHIX telah dimulakan sejak tahun 2009 di fasiliti-fasiliti kesihatan KKM terpilih. Oleh kerana MyHIX melibatkan integrasi antara sistem-sistem di hospital dan klinik kesihatan yang berbeza, maka sejak tahun 2011 Toolkit Malaysia Health Information Exchange (MyHIX) edisi pertama telah dihasilkan oleh Bahagian Telekesihatan (yang kini dikenali Seksyen Perancangan eHealth, Bahagian Perancangan) sebagai panduan dan rujukan kepada warga KKM dalam pelaksanaannya. Toolkit ini menggariskan beberapa aspek yang perlu diambil tindakan, antaranya dari segi polisi, teknikal, pengurusan perubahan dan pengurusan penyelenggaraan.

Pada tahun 2014, KKM telah memulakan kerja-kerja menaiktaraf sistem ini yang dinamakan sebagai MyHIX 2.0. Terdapat beberapa fungsi yang telah ditambah baik dalam MyHIX 2.0 dan pendekatan pelaksanaan MyHIX juga telah dikemaskini. Sehubungan itu, Toolkit MyHIX Versi 2.0 ini telah dihasilkan berdasarkan pandangan beberapa pihak yang telah terlibat dan *'real-life experience'*, sama ada di peringkat Ibu pejabat KKM atau di hospital dan klinik kesihatan. Ia bertujuan untuk memberi panduan yang lebih jelas dan sistematik kepada Pasukan Projek dan warga KKM di fasiliti supaya pelaksanaan MyHIX 2.0 dapat dilakukan dengan lebih lancar.

Adalah diharapkan Toolkit MyHIX Versi 2.0 dapat dimanfaatkan oleh warga KKM dalam pelaksanaan MyHIX 2.0 ini dan semoga MyHIX 2.0 dapat digunakan secara efektif oleh warga KKM di fasiliti yang terlibat demi meningkatkan kualiti penjagaan kesihatan kepada rakyat. Kepada semua pihak yang terlibat, saya bagi pihak KKM merakamkan setinggi-tinggi penghargaan dan ucapan terima kasih.

Sekian.

“BERKHIDMAT UNTUK NEGARA”

**(DATUK DR. HJ. ROHAIZAT BIN HJ. YON)**

Pengarah

Bahagian Perancangan

Kementerian Kesihatan Malaysia

05 Disember 2017



## 2. GLOSARI DAN SINGKATAN

<b>CDA</b>	<i>The HL7 Clinical Document Architecture (CDA) is an XML-based markup standard intended to specify the encoding, structure and semantics of clinical documents for exchange. CDA is an ANSI-certified standard from Health Level Seven International (HL7.org).</i>
<b>Clinic Information System</b>	<i>Integrated computer-assisted system designed to store, manipulate and retrieve information concerned with the administrative and clinical aspects of providing services within the clinic.</i>
<b>Electronic Medical Data (EMD)</b>	<i>Electronic Medical Records that are created as part of medical consultation. Examples: clerking notes, Discharge Summary (DS), Encounter Summary (ES) &amp; e-Referral.</i>
<b>e-Referral</b>	<i>The process of documenting referral of a patient to another Healthcare Facility for continuity of care through MyHIX. The referral process is from the referring Healthcare Facility and the Healthcare Provider to the referred Healthcare Facility and the Healthcare Provider. The referred Healthcare Provider is encouraged to send a 'reply note' after seeing the referred patient</i>
<b>DS ( Discharge Summary)</b>	<i>Discharge summary is a record created after a patient (inpatient) is discharged from hospital</i>
<b>ES (Encounter Summary)</b>	<i>Encounter summary is a record created after an outpatient service / consultation (patient who is not admitted)</i>
<b>Global ID</b>	<i>Patient Global ID is a computer generated Identification which is a combination of Universal Unique Identifier (UUID) and Object Identifier (OID). UUID is a 128-bit value number that forms a component of an OID.</i>
<b>Hospital Information System (HIS)</b>	<i>Integrated computer-assisted system designed to store, manipulate and retrieve information, which is concerned with the administrative and clinical aspects of providing services within the hospital.</i>
<b>ICD-10</b>	<i>ICD-10 is the 10th revision of the International Statistical Classification of Diseases and Related Health Problems (ICD), a medical classification list by the World Health Organization (WHO). It contains codes for diseases,</i>

	<i>signs and symptoms, abnormal findings, complaints, social circumstances, and external causes of injury or diseases.</i>
<b>Inpatient</b>	<i>A patient who is admitted to the hospital ward for treatment.  *Patient who is admitted to the Observation Ward in the Emergency Department is not considered as an admission.</i>
<b>MyHIX</b>	<i>Malaysia Health Information Exchange, a system provided by the Ministry of Health (MOH), which allows the electronic sharing of patient health information between the healthcare facilities.</i>
<b>Model of Change Management</b>	<i>There are 2 models of change: 3. ADKAR ➤ Also known as Prosci's model of individual change. ADKAR stands for Awareness, Desire, Knowledge, Ability, and Reinforcement. ➤ Please refer: <a href="https://www.prosci.com/adkar/adkar-model">https://www.prosci.com/adkar/adkar-model</a> 4. KECA ➤ This model was specifically designed for MyHIX. ➤ K stands for Keep (business as usual when MyHIX implemented), E stands for End (task expected to stop when MyHIX implemented), C stands for Change (change expected), A stands for Add (additional tasks needed when MyHIX implemented). ➤ It is the plan for areas of change expected by the doctors for current and future needs .</i>
<b>Object Identification Domain (OID)</b>	<i>Object Identifiers or OID is an identifier used to name an object.</i>
<b>PER P.D.302</b>	<i>Discharge Summary Form which is used by MOH (refer to "Garis Panduan Pengendalian dan Pengurusan Rekod Perubatan")</i>
<b>Integration Profile</b>	<i>Integration Profile provides standards that address specific needs, eliminating ambiguities and ensuring a higher level of practical interoperability.</i>
<b>User Access Control Policy and Guidelines (UACP)</b>	<i>A policy for Patient Information Access Control for HIS/CIS users.</i>

**ADKAR – Awareness, Desire, Knowledge, Ability, and Reinforcement**

**CDA - Clinical Document Architecture**

**CIS – Clinic Information System**

**CM - Change Management**

**CVS - Clinical Visit Summary**

**DKICT – Dasar Keselamatan ICT**

**DS - Discharge Summary**

**ES - Encounter Summary**

**ICT – Information & Communication Technology**

**ID – Identity**

**HIS – Hospital Information System**

**JKK - Jawatankuasa Kecil**

**KECA –Keep, End, Change and Add**

**OID - Object Identification Domain**

**SOP – Standard Operating Procedure**

**UACP - User Access Control Policy**

## 4. PANDUAN PENGGUNAAN

### 1.1 Pengenalan

Toolkit MyHIX Versi 2.0 ini disediakan sebagai panduan kepada pasukan projek dan pihak fasiliti dalam melaksanakan kerja-kerja integrasi sistem MyHIX di fasiliti penjagaan kesihatan khususnya di Kementerian Kesihatan Malaysia.

### 1.2 Penambahbaikan MyHIX Toolkit Versi 2.0

Dalam versi ini, dokumen Toolkit telah disesuaikan mengikut sistem MyHIX Versi 2.0 di mana naiktaraf sistem telah dilakukan dari segi penambahan modul e-Referral, addendum *Discharge Summary* (DS) / *Encounter Summary* (ES) dan *reply note*.

### 1.3 Susun atur dokumen dan senarai semak

Bagi memudahkan pelaksanaan MyHIX, pelaksanaan bagi setiap fasa disediakan dalam bentuk **senarai semak** seperti berikut:

- A: Senarai Semak Kesediaan Pelaksanaan MyHIX untuk Ibu Pejabat
- B: Senarai Semak Kesediaan Pelaksanaan MyHIX untuk Fasiliti

Susun atur dokumen ini juga telah dikemaskini mengikut tiga (3) fasa pelaksanaan kerja-kerja integrasi MyHIX, bergantung kepada lokasi, iaitu sama ada di Ibu pejabat atau di fasiliti seperti berikut:-

- a) Fasa 1 - Pra Pelaksanaan
- b) Fasa 2 - Pelaksanaan
- c) Fasa 3 – Pemantauan

Sila rujuk gambar rajah berikut untuk penerangan berkenaan ketiga-tiga fasa tersebut.



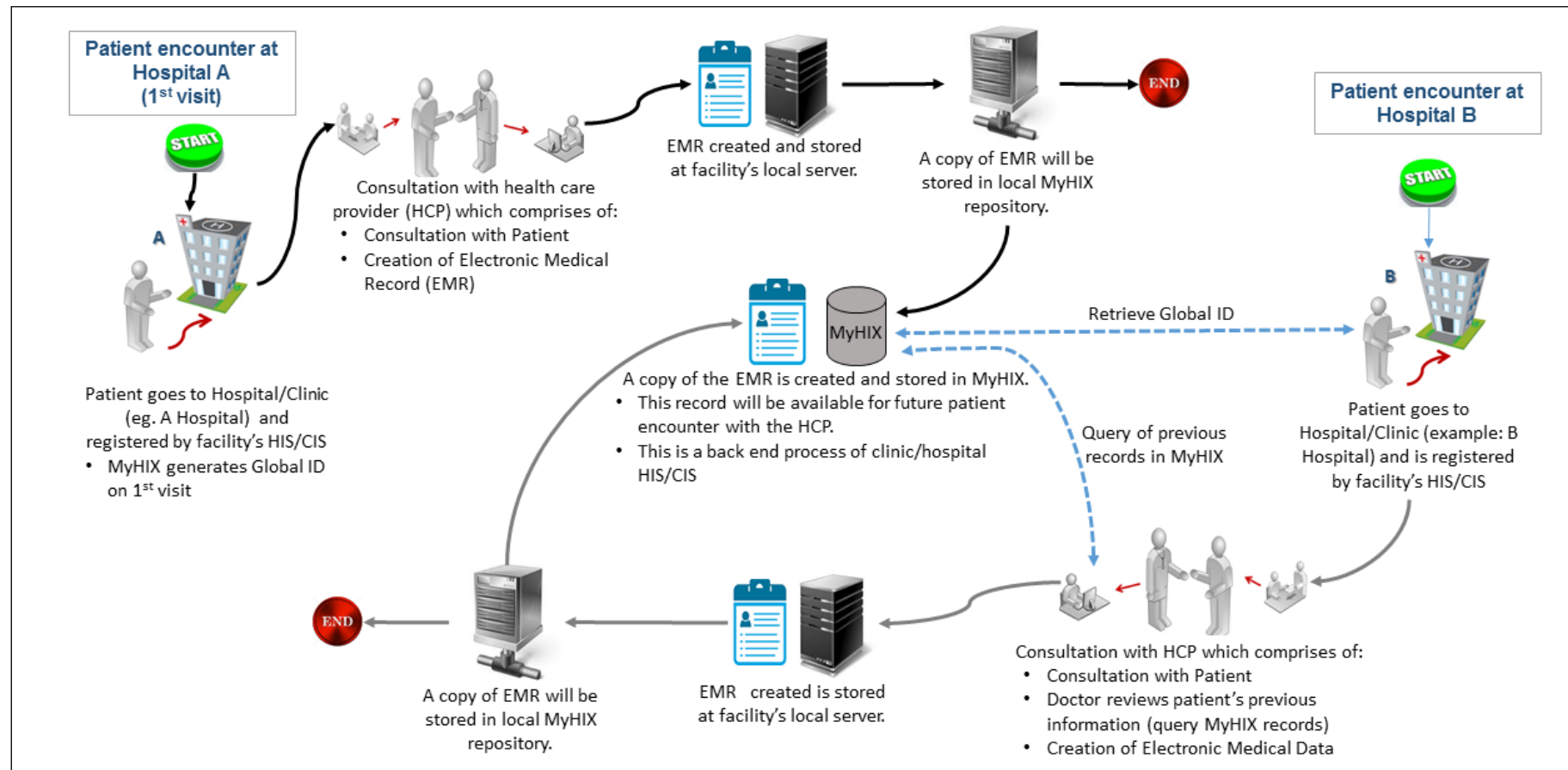
Adalah disyorkan supaya pasukan pelaksana MyHIX di Ibu pejabat dan di fasiliti menggunakan Toolkit MyHIX Versi 2.0 ini dalam melaksanakan kerja-kerja integrasi sistem MyHIX di fasiliti.

Bagi fasiliti yang menggunakan sistem TPC-OCHIS, penggunaan toolkit MyHIX hendaklah disesuaikan mengikut sistem *set-up* and arkitektur sistem TPC-OCHIS.

#### 1.4 Senarai lampiran

Lampiran-lampiran di dalam MyHIX Toolkit Versi 2.0 ini hendaklah dirujuk bersama dengan senarai semak sebagai panduan dalam kerja-kerja integrasi MyHIX.

## 5. CARTA ALIR PROSES MyHIX (MyHIX *PROCESS FLOW*)



\*A copy of EMR will be stored in local MyHIX repository - EMR refers to DS, ES & E-referral that are created after consultation.

## 6. A. SENARAI SEMAK KESEDIAAN PELAKSANAAN MYHIX UNTUK IBU PEJABAT

- Tujuan** : Senarai semak ini digunakan untuk memastikan perkara yang perlu dilakukan semasa fasa pra pelaksanaan, fasa pelaksanaan dan fasa pemantauan MyHIX di fasiliti kesihatan.
- Skop** : Digunakan oleh Pasukan Projek Ibu Pejabat KKM dalam melaksanakan MyHIX.
- Objektif** : Memastikan setiap pasukan/unit yang terlibat dalam projek MyHIX membuat persediaan yang secukupnya untuk melaksanakan tanggungjawab yang ditetapkan.
- Rujukan bersama** : Lampiran 1: *MyHIX Policy*  
Lampiran 2: *MyHIX Standard Operating Procedure (SOP)*
- Appendix 1a: *Opt Out form* (versi Bahasa Malaysia)
  - Appendix 1b: *Opt Out form* (versi Bahasa English)
- Lampiran 3: Senarai Semak Kesediaan untuk Pusat Data
- Lampiran 4: Borang *Stress Test* MyHIX
- Lampiran 5: Borang Pengesahan Pengujian MyHIX
- Lampiran 6: MyHIX Model ADKAR / KECA/CM *Checklist* /MyHIX CM *Plan Template*
- Lampiran 7: Garis panduan Khidmat Bantuan MyHIX
- Lampiran 8: Soalan Lazim MyHIX
- Lampiran 9: Keperluan Teknikal untuk Integrasi MyHIX dengan HIS
- Lampiran 10: Senarai Semak Kesediaan Teknikal dan Proses di Fasiliti
- Lampiran 11: Bahan promosi MyHIX

## FASA 1: PRA PELAKSANAAN DI IBU PEJABAT

Bil	Perkara / Aktiviti	Ya	Tidak	Pegawai Bertanggungjawab
1.	Mengeluarkan arahan bertulis kepada fasiliti terlibat untuk melaksanakan MyHIX			Pengarah Projek
2.	<p>Mengeluarkan arahan bertulis pelaksanaan MyHIX kepada fasiliti:</p> <p>a) Arahan dan terma rujukan kepada fasiliti untuk membentuk struktur organisasi pelaksanaan MyHIX peringkat fasiliti</p> <p>b) Serahkan bahan-bahan rujukan berikut:</p> <ul style="list-style-type: none"> <li>• Toolkit MyHIX</li> <li>• Dokumen Profil integrasi</li> <li>• Keperluan minimum ketersediaan untuk integrasi (perkakasan dan perisian)</li> <li>• Garis panduan <i>User Access Control Policy (UACP)</i></li> </ul>			Pasukan Projek MyHIX Ibu Pejabat / Pengarah Projek
3.	<p>Mendapatkan dan membuat analisa terhadap dokumen berikut dari fasiliti:</p> <p>a) Polisi Keselamatan Maklumat Fasiliti (<i>Facility Information Security Policy</i>)</p> <p>b) SOP fasiliti untuk <i>Discharge Summary</i> (DS) / Encounter Summary (ES) dan e-Referral</p> <p>c) <i>Print screen interface</i> HIS untuk DS/ES dan e-Referral</p>			Pasukan Projek MyHIX Ibu Pejabat
4.	Membantu fasiliti membangunkan SOP atau mengatasi kelemahan yang ditemui (jika ada) dari:			Pasukan Projek MyHIX Ibu Pejabat



Bil	Perkara / Aktiviti	Ya	Tidak	Pegawai Bertanggungjawab
	a) Laporan naziran keselamatan Information & Communication Technology (ICT) b) Polisi Keselamatan Maklumat Fasiliti c) <i>Standard Operating Procedure</i> (SOP) fasiliti untuk DS/ES dan e-Referral d) <i>Print screen interface</i> HIS / CIS untuk DS/ES dan e-Referral			
5.	Memastikan fasiliti menyediakan DS/ES untuk setiap pesakit mengikut keperluan MyHIX Policy ( <a href="#">Lampiran 1</a> )			Pasukan Projek MyHIX Ibu Pejabat
6.	Menjalankan audit pematuhan pelaksanaan UACP fasiliti setelah mendapat persetujuan fasiliti			Pasukan Projek MyHIX Ibu Pejabat
7.	Memaklum fasiliti tentang penemuan audit pematuhan pelaksanaan UACP dan membantu mengatasi kelemahan			Pasukan Projek MyHIX Ibu Pejabat
8.	Mewujudkan kod-kod berikut dalam sistem MyHIX ( <i>MyHIX monitoring tools</i> ) a) <i>Object Identification Domain</i> (OID) untuk Hospital/Klinik b) Kod Fasiliti (Klinik/Hospital) c) Kod Aplikasi HIS/CIS (Kontraktor Aplikasi) d) Security Identity (ID);  dan seterusnya memaklumkan kepada kontraktor dan pasukan IT fasiliti mengenai kod-kod di atas.			Pasukan Projek MyHIX Ibu Pejabat

Bil	Perkara / Aktiviti	Ya	Tidak	Pegawai Bertanggungjawab
9.	Memberi khidmat nasihat kepada fasiliti berkaitan proses pemetaan data DS/ES HIS/CIS kepada DS/ES MyHIX mengikut format <i>Clinical Document Architechture</i> (CDA) pengubahsuaian ( <i>customization</i> ) sistem HIS/CIS.			Pasukan Projek MyHIX Ibu Pejabat
10.	Memastikan perkakasan, perisian dan rangkaian di Pusat Data berkeadaan baik dan bersedia untuk pelaksanaan MyHIX (mengikut keperluan)  *Sila rujuk <a href="#">Lampiran 3</a> : Senarai Semak Kesediaan MyHIX Di Pusat Data			Pasukan Projek MyHIX Ibu Pejabat
11.	Melaksanakan <i>Stress Test</i> menggunakan <u>Borang <i>Stress Test</i></u> ( <a href="#">Lampiran 4</a> ) di pusat data KKM dan fasiliti (mengikut keperluan)			Pasukan Projek MyHIX Ibu Pejabat
12.	Membantu fasiliti menjalankan pengujian kesediaan pelaksanaan MyHIX dari segi teknikal			Pasukan Projek MyHIX Ibu Pejabat
13.	Menentukan proses pengujian integrasi antara fasiliti dan pusat data KKM sebelum MyHIX dilaksanakan ( <i>Go Live</i> ) di fasiliti menggunakan Borang Pengesahan Pengujian ( <a href="#">Lampiran 5</a> )			Pasukan Projek MyHIX Ibu Pejabat, Pasukan Pelaksana MyHIX fasiliti
14.	Penyediaan strategi Pengurusan Perubahan kepada warga fasiliti: a) Carta Gantt b) Aktiviti-aktiviti pra bengkel (rujuk <a href="#">Lampiran 6</a> : MyHIX Model ADKAR / KECA /CM Checklist / MyHIX CM <i>Plan Template</i> )			Pasukan Projek MyHIX Ibu Pejabat

Bil	Perkara / Aktiviti	Ya	Tidak	Pegawai Bertanggungjawab
	c) Pelantikan Change Agent d) Menetapkan cadangan <i>Business Case</i> dengan Pengarah/Ketua Jabatan e) Bahan-bahan promosi (rujuk <a href="#">Lampiran 11</a> : Bahan promosi MyHIX) f) Slaid persembahan yang standard untuk taklimat kesedaran			
15.	Mengedarkan bahan promosi kepada fasiliti mengikut kesesuaian bahan dan peruntukan yang diberikan			Pasukan Projek MyHIX Ibu Pejabat
16.	Memberikan maklumat/penerangan mengenai meja bantuan MyHIX kepada pegawai IT dan vendor sistem di fasiliti  (Rujuk <a href="#">Lampiran 7</a> : Garis-panduan Khidmat Bantuan MyHIX dan <a href="#">Lampiran 8</a> : Soalan Lazim MyHIX)			Pasukan Projek MyHIX Ibu Pejabat

## FASA 2: PELAKSANAAN DI IBU PEJABAT

Bil	Perkara / Aktiviti	Ya	Tidak	Pegawai Bertanggungjawab
1.	Memastikan infrastruktur dan aplikasi MyHIX di Pusat Data KKM berfungsi dengan baik			Pasukan Projek MyHIX Ibu Pejabat
2.	Mengedarkan bahan promosi MyHIX ( <a href="#">Lampiran 11</a> ) kepada fasiliti mengikut kesesuaian bahan dan peruntukan yang diberikan			Pasukan Projek MyHIX Ibu Pejabat
3.	Memberikan maklumat/penerangan mengenai meja bantuan MyHIX kepada pegawai IT dan vendor sistem di fasiliti (Rujuk <a href="#">Lampiran 7</a> : Garis panduan khidmat bantuan MyHIX dan <a href="#">Lampiran 8</a> : Soalan Lazim)			Pasukan Projek MyHIX Ibu Pejabat
4.	<p>Menjalankan aktiviti pengurusan perubahan bersama <i>Change Agent</i> yang dilantik:</p> <ul style="list-style-type: none"> <li>a) Taklimat kesedaran</li> <li>b) Latihan</li> <li>c) Promosi</li> </ul> <p>(Rujuk <a href="#">Lampiran 6</a>: MyHIX Model ADKAR / KECA /CM <i>Checklist</i> / MyHIX CM <i>Plan Template</i> dan <a href="#">Lampiran 11</a>: Bahan promosi MyHIX)</p>			Pasukan Projek MyHIX Ibu Pejabat

**FASA 3: PEMANTAUAN OLEH IBU PEJABAT**

<b>Bil</b>	<b>Perkara / Aktiviti</b>	<b>Ya</b>	<b>Tidak</b>	<b>Pegawai Bertanggungjawab</b>
1.	Memantau statistik yang berkaitan			Pasukan Projek MyHIX Ibu Pejabat
2.	Memastikan infrastruktur dan aplikasi MyHIX di Pusat Data KKM berfungsi dengan baik			Pasukan Projek MyHIX Ibu Pejabat
3.	Memantau keberkesanan aktiviti pengurusan perubahan yang telah dijalankan di fasiliti			Pasukan Projek MyHIX Ibu Pejabat

## **6. B. SENARAI SEMAK KESEDIAAN PELAKSANAAN MyHIX UNTUK FASILITI**

**Tujuan** : Senarai semak ini digunakan untuk memastikan perkara yang perlu dilakukan semasa fasa pra pelaksanaan, fasa pelaksanaan dan fasa pemantauan MyHIX di fasiliti.

**Skop** : Digunakan oleh pasukan projek di fasiliti dalam melaksanakan MyHIX.

**Objektif** : Sebagai persediaan untuk melancarkan pelaksanaan MyHIX di fasiliti.

**Rujukan bersama** : Lampiran 6: MyHIX Model ADKAR / KECA /CM *Checklist* / MyHIX CM *Plan Template*

Lampiran 7: Garispanduan Khidmat Bantuan MyHIX

Lampiran 8: Soalan Lazim MyHIX

Lampiran 9: Keperluan Teknikal untuk Integrasi MyHIX dengan HIS  
Senarai Semak Kesediaan Teknikal dan Proses untuk Fasiliti

Lampiran 10: Senarai Semak Kesediaan Teknikal dan Proses di Fasiliti

Lampiran 11: Bahan promosi MyHIX

## FASA 1: PRA PELAKSANAAN DI FASILITI

Bil	Perkara / Aktiviti	Ya	Tidak	Pegawai Bertanggungjawab
1.	Mengeluarkan arahan penggunaan Sistem MyHIX kepada warga fasiliti			Pengarah hospital / Pegawai Kesihatan Daerah / Pegawai Kesihatan Pergigian Daerah
2.	Mengeluarkan arahan penyediaan dan penghantaran <i>DS</i> , <i>ES</i> , e-Referral dan <i>Addendum DS / ES</i> di peringkat jabatan / unit			Ketua Jabatan / Ketua Unit
3.	Mewujudkan Pasukan Pelaksana MyHIX peringkat fasiliti yang terdiri daripada:- a) Jawatankuasa Kecil (JKK) <i>Business</i> b) JKK Teknikal c) JKK CM			Pengarah hospital / Pegawai Perubatan Yang Menjaga (Klinik)
4.	Memastikan pematuhan kepada Polisi Keselamatan Maklumat Fasiliti ( <i>Facility Information Security Policies</i> ) yang terdiri daripada: a) UACP b) Akta / Peraturan / Pekeliling KKM/MAMPU dan yang berkaitan Dasar Keselamatan ICT			JK Pelaksana Projek MyHIX fasiliti  Unit Rekod Perubatan
5.	Menyediakan dokumen-dokumen berikut: a) Laporan naziran keselamatan ICT(jika ada) b) Polisi Keselamatan Maklumat Fasiliti c) SOP fasiliti untuk DS dan e-Referral d) <i>Print screen interface</i> HIS / CIS untuk DS dan e-Referral			JK Pelaksana Projek MyHIX fasiliti
6.	Mengemaskini SOP berdasarkan penemuan analisa dokumen oleh Pasukan Projek MyHIX Ibu Pejabat. (Rujuk <a href="#">Lampiran 1: MyHIX Policy</a> dan <a href="#">Lampiran 2: SOP MyHIX</a> )			JK Pelaksana Projek MyHIX fasiliti

Bil	Perkara / Aktiviti	Ya	Tidak	Pegawai Bertanggungjawab
7.	Memastikan penyediaan DS, ES, <i>addendum</i> DS/ES, e-Referral dan <i>reply note</i> untuk setiap pesakit mengikut keperluan <i>MyHIX Policy</i>			Ketua Jabatan / Pegawai Jabatan Rekod / Pengarah hospital / Pegawai Kesihatan Daerah / Pegawai Kesihatan Pergigian Daerah
8.	Memastikan kandungan maklumat DS/ES MyHIX yang dihantar ( <i>send</i> ) dan ditarik ( <i>retrieve</i> ) mengikut standard dokumen PD302 dan memastikan pemetaan data ( <i>data mapping</i> ) daripada DS/ES HIS / CIS fasiliti kepada DS/ES MyHIX mengikut format CDA			Pegawai Jabatan Rekod  Unit IT fasiliti
9.	Memastikan kapasiti <i>server database</i> HIS/CIS mampu menampung pertambahan pelaksanaan MyHIX			Unit IT Fasiliti
10.	Mendapatkan maklumat seperti di bawah daripada Pegawai Teknikal Pasukan Projek MyHIX Ibupejabat:-  a) OID untuk Hospital/Klinik b) Kod Fasiliti c) Kod Aplikasi HIS/CIS d) Security ID  * Konfigurasi pengenalan produk dan fasiliti perlu dibuat kepada HIS/CIS sebelum penghantaran data dari fasiliti ke MyHIX dimulakan. Konfigurasi hanya perlu dibuat sekali sahaja bagi setiap produk.			Unit IT Fasiliti
11.	Menyemak dan melaksanakan penyesuaian ( <i>customization</i> ) dengan merujuk dokumen Keperluan Teknikal Untuk Integrasi Sistem MyHIX dengan Sistem HIS ( <a href="#">Lampiran 9</a> ) mengikut kesesuaian fasiliti.			JK Pelaksana Projek MyHIX fasiliti
12.	Menjalankan pengujian kesediaan pelaksanaan MyHIX dari segi teknikal dan proses. (Rujuk			JK Pelaksana Projek MyHIX fasiliti



<b>Bil</b>	<b>Perkara / Aktiviti</b>	<b>Ya</b>	<b>Tidak</b>	<b>Pegawai Bertanggungjawab</b>
	<a href="#">Lampiran 10</a> : Senarai Semak Ksediaan Teknikal dan Proses Di Fasiliti ).			

## FASA 2: PELAKSANAAN DI FASILITI

Bil	Perkara / Aktiviti	Ya	Tidak	Pegawai Bertanggungjawab
1.	Memastikan infrastruktur dan aplikasi HIS/CIS berfungsi dengan baik			Unit IT fasiliti
2.	<p>Menjalankan aktiviti pengurusan perubahan dengan <i>change agent</i> yang dilantik yang melibatkan:</p> <ul style="list-style-type: none"> <li>a) Taklimat kesedaran (<i>awareness</i>)</li> <li>b) Latihan</li> </ul> <p>(Sila rujuk <a href="#">Lampiran 6</a>: MyHIX Model ADKAR / KECA /CM <i>Checklist</i> / MyHIX CM <i>Plan Template</i>)</p>			JK Pelaksana Projek MyHIX fasiliti
3.	Memberikan maklumat/penerangan mengenai Khidmat Meja Bantuan MyHIX ( <a href="#">Lampiran 7</a> ) dan soalan lazim ( <a href="#">Lampiran 8</a> ) kepada warga fasiliti.			JK Pelaksana Projek MyHIX fasiliti

### FASA 3: PEMANTAUAN DI FASILITI

Bil	Perkara / Aktiviti	Ya	Tidak	Pegawai Bertanggungjawab
1.	Pemantauan terhadap perkara berikut: a) Penggunaan sistem MyHIX mengikut SOP b) Pematuhan terhadap DKICT dan UACP			Pengarah hospital / Pegawai Kesihatan Daerah / Pegawai Kesihatan Pergigian Daerah,  Champion,  Pegawai Unit Rekod Perubatan,  Ketua Jabatan / Ketua Unit,  Unit IT Fasiliti
2.	Memastikan infrastruktur dan aplikasi berada dalam ketersediaan yang optima.			Unit IT Fasiliti
3.	Membentangkan laporan seperti yang dinyatakan dalam Keperluan Teknikal Integrasi Sistem MyHIX dengan Sistem HIS/CIS ( <a href="#">Lampiran 9</a> ).			JK Pelaksana MyHIX Fasiliti
4.	Menghantar laporan statistik penggunaan sistem MyHIX kepada Pasukan Projek MyHIX Ibu Pejabat secara berkala / bulanan.			JK Pelaksana MyHIX Fasiliti

## **7. SENARAI LAMPIRAN**

Lampiran 1: *MyHIX Policy*

Lampiran 2: *MyHIX Standard Operating Procedure (SOP)*

- *Appendix 1a: Opt Out form (Bahasa Malaysia version)*
- *Appendix 1b: Opt Out form (English version)*

Lampiran 3: Senarai Semak Kesediaan untuk Pusat Data

Lampiran 4: Borang Stress Test MyHIX

Lampiran 5: Borang Pengesahan Pengujian MyHIX

Lampiran 6: MyHIX Model ADKAR / KECA /CM Checklist /MyHIX CM Plan Template

Lampiran 7: Garispanduan Khidmat Bantuan MyHIX

Lampiran 8: Soalan Lazim MyHIX

Lampiran 9: Keperluan Teknikal untuk Integrasi MyHIX denganHIS

Lampiran 10: Senarai Semak Kesediaan Teknikal dan Proses di Fasiliti

Lampiran 11: Bahan promosi MyHIX

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LAMPIRAN 1

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# MYHIX POLICY

Version 2.0

September 2017

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## **1. INTRODUCTION**

- 1.1. The Malaysia's Health Information Exchange Program (MyHIX) is a service provided by the Ministry of Health (MOH), which allows the electronic sharing of patient health information between the healthcare facilities. The enhanced provider's access to individual's health information stored in multiple, dispersed locations allows a better clinical decision-making to improve the quality of care. The use and access to MyHIX is restricted only to the authorized users, enabling the exchange of clinical information for the purpose of an improved continuity and coordination of care.
- 1.2. The MOH has identified MyHIX is the building blocks for the Lifetime Health Record (LHR) or 1Person1Record. It enables the interoperability between the different information systems found in hospitals or clinics (eg. the Electronic Medical Records, Laboratory Information System etc.), so that the authorized healthcare providers may have access to the relevant clinical information from the previous care episodes concerning the patient under his/her care. This information is shared electronically via the MyHIX integration engine in the form of Clinical Document Architecture (CDA), namely the Discharge Summary, Encounter Summary, E-referral and Reply Note<sup>1</sup>.

## **2. PURPOSE**

- 2.1. This policy establishes a comprehensive set of requirements related to the processes and procedures for implementation and use of MyHIX at MOH healthcare facilities. In addition, this document provides information on MyHIX information security, to guide the administrative unit of the facility in implementing certain procedures required to maintain compliant to Malaysia's governing rights to individual privacy, safeguarding personal health information and protection from unauthorized data disclosure.

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<sup>1</sup> The CDA is a type of document format containing the specific information that can be shared through MyHIX. Many software vendors can produce CDA (according to HL7), so that patient records can be created and read by any EMR software system. MOH has created CDA in the form of Discharge Summary, Encounter Summary, E-referral and Reply Note.

### 3. TARGET AUDIENCE

- (a) Healthcare providers (i.e. doctors, nurses, assistant medical officers, allied health personnel etc)
- (b) Health Clinics/Hospital administration officers (i.e. Hospital Director, Health Clinic Medical officer in-charge, District Medical and Health Officer, etc)
- (c) Medical Record Officers
- (d) Information Technology officers
- (e) MyHIX Project team
- (f) Vendors, which are involved in developing and maintaining information systems (eg. HIS, LIS, CIS etc.) at the respective healthcare facilities
- (g) Health Administrators from MOH Headquarters

### 4. ROLE OF ORGANIZATION

- 4.1. The implementation of MyHIX at the designated MOH healthcare facility (hereinafter referred as “the facility”) shall be established according to the official directive from the relevant MOH authority.
- 4.2. The facility administrative unit shall establish an official directive to implement MyHIX at the facility involving the departments, which are MyHIX system ready.
- 4.3. The facility shall establish a dedicated committee named as “*Pasukan Pelaksana MyHIX*” and other committees as required and chaired by the Hospital Director or any other Senior Officers of the facility. In the “*Pasukan Pelaksana MyHIX*”, there shall be sub-committees consist of business, technical and change management sub-committees.
- 4.4. The facility, through the committees, shall establish and prepare the documentations for the appropriate workflow and procedures for discharge summary, encounter summary, e-referral and reply note, such as entry, verification, submission to MyHIX, addendum made,



retrieval, etc.by using the MyHIX Standard Operating Procedure document as a guideline.

- 4.5. The committees shall also discuss on matters related to the general management issues on MyHIX at the facility such as operation requirement and maintenance.

## **5. MYHIX INFORMATION SECURITY**

### **5.1. Information Security Policy as a pre-requisite for MyHIX**

- 5.1.1 The facility must have its own Information Security Policy statement in place as a pre-requisite, which defines how the facility manages the security of its medical records. The Information Security Policy shall comply with all the standards, policies and existing guidelines of the MOH as well as the central agencies such as MAMPU.
- 5.1.2 The Information Security Policy shall be readily available to all staff at all levels of the organization.
- 5.1.3 It is important that all staff and members of the facility are aware of and comply with all policies, procedures and security measures that have been put in place to protect the patients' medical records.
- 5.1.4 The facility's administrative unit shall establish sanctions for unauthorized or inappropriate access to patients' medical records in line with existing laws and regulations. Any disciplinary action, if needed, shall be taken according to the current rules and regulations.
- 5.1.5 All efforts will be taken by the facility to ensure that all staff is aware of all of the above (e.g. during induction course, posting orientation or refresher training).

## **5.2. User Access Control Policy**

- 5.2.1 The facility shall establish its own User Access Control Policy for MyHIX and comply with the requirements as outlined in the MOH's User Access Control Policy Guidelines.

## **5.3. Incident response policy**

- 5.3.1 The Facilities shall have the following mechanism to monitor any unethical access to MyHIX:
- a) Audit trail
  - b) Enforcement of the user access control policy.
- 5.3.2 The facility shall define the process and procedures outlining how incident response is implemented in the facility's Information Security Policy.

## **6. MYHIX DATA**

### **6.1. Description of MyHIX Data**

- 6.1.1 All of the MyHIX Data (here in after referred as "the Data") is to be obtained from patient's electronic medical record.
- 6.1.2 The Data elements consist of:
- a) Demographics
  - b) Clinical information
- 6.1.3 The Data are shared among the MOH facilities through the following documents:
- a) Discharge / encounter summary
  - b) E-referral
  - c) Reply Note

## **6.2. MyHIX Data Confidentiality Level**

6.2.1 It is the responsibility of the facility to define the confidentiality level of a patient's medical record as per the HL7 Confidentiality Codes, such as the following:

**N – Normal (patient demographic)**

**R – Restricted by default**

**V – Very restricted (Classified information Medico-legal of special cases, VIP as per MOH list)**

## **6.3. Custodian of MyHIX Data**

6.3.1 The Ministry of Health shall be assigned as the custodian of all MyHIX data.

# **7. OPERATIONAL POLICY AND PROCEDURES**

## **7.1. General operational policy**

7.1.1 As a general rule, implied consent is applicable for every patient who is registered with the facility that have implemented MyHIX.

7.1.2 Patients who chose not to participate in MyHIX must sign an 'Opt Out' consent form and the data shall not be sent to the MyHIX (i.e to be stored in MyHIX Central Repository) for that particular encounter.

7.1.3 However, if a patient is subject for further care and deemed necessary to be referred to other facility that has already implemented MyHIX, E-referral and Reply Note will be sent to MyHIX Central Repository regardless of Opt Out status.

7.1.4 The Data that has been sent to the MyHIX Central Repository cannot be retracted should the patient wishes to Opt Out retrospectively for an earlier admission / encounter.

- 7.1.5 Should any patient wishes to reverse his/her Opt Out consent for an earlier admission, the Data of the earlier admission / encounter cannot be sent retrospectively to MyHIX Central Repository.
- 7.1.6 Subject to the policy in place to register all newborn babies into the facility's information system, all data of newborn babies born in the facility shall be sent to MyHIX and therefore a unique 'Registration number' (RN) shall be created for the baby.

## **7.2. Unique Identifier for MyHIX data**

- 7.2.1 The Data shall be sent to MyHIX only if identification of the patient is known. Therefore, a unique identifier of the individual and the following biodata are required which consist of the following data sets:
  - a) Personal ID number. The source of this data can be obtained from:
    - i. Identification Card (IC) number
    - ii. Birth Certificate number
    - iii. Passport number
    - iv. Army or police number
    - v. Registration number for newborn baby
  - b) Name
  - c) Gender
  - d) Date of Birth
- 7.2.2 The information belonging to a patient classified as 'V' (very restricted) are to be accessed according to the facility's Information System Policy in place.

### **7.3. MyHIX for in-patient setting**

7.3.1 For inpatients who are discharged, the data shall be extracted from the clerking notes in the form of the Discharge Summary which contains the following information:

- a) A summary of events during admission
- b) Diagnosis
- c) Orderable (e.g. Laboratory, Radiology investigations, etc.)
- d) Medications and other relevant treatments.

7.3.2 The E-referral and Reply Note of in-patient setting shall consist of data of the following:

- a) Referred facility name and specified department / specialty (if required).
- b) E-referral: Discharge Summary with reason for referral.
- c) Reply Note: Discharge Summary with treatment plan.

### **7.4. MyHIX for out-patient setting**

7.4.1 For patients seen in out-patient setting, the Data shall be extracted in the form of the Encounter Summary which contains the following information from the clerking note as follows:

- a) Problem list
- b) Diagnosis, if available
- c) Orderable (e.g. Laboratory, Radiology investigations, etc,)
- d) Medications and other relevant treatments.

7.4.2 The E-referral and Reply Note in out-patient shall consist of data of the following:

- a) Referred facility name and specified department / specialty (if required).
- b) E-referral: Encounter Summary with reason for referral.
- c) Reply Note: Encounter Summary with treatment plan.

## **7.5. Submission and storing MyHIX Data**

7.5.1 The MyHIX Data shall identify who creates it. Thus, the discharge summary, encounter summary, e-referral and reply note shall contain the following:

- a) Name of the healthcare professionals
- b) Designation
- c) Professional practitioner registration number (i.e MMC registration number)

7.5.2 The facility's Administrative Unit and the Medical Record Department shall ensure the appropriate policy in place to ensure the integrity, accuracy and completeness of Data from the source facility that is to be stored in MyHIX.

7.5.3 The Data shall be sent to MyHIX repository when a patient is being discharged from the facility. The time frame for the Data to be sent to MyHIX shall follow the hospital NIA (National Indicator Approach) standard<sup>2</sup>. The MyHIX system shall acknowledge all the discharge / encounter summaries received.

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<sup>2</sup> For hospitals, the NIA approach shall be applicable. The Health Clinics may determine their own operational policy for the said time-frames.

- a) Discharge summary – to be created and submitted to MyHIX by 72 hours
- b) Encounter summary—to be created and submitted to MyHIX by 24 hours
- c) E-referral – to be created and submitted at time of patient discharge at the referring facility.
- d) Reply Note – to be created and submitted at time of patient discharge at the referred facility.

7.5.4 The facility's information system shall have the ability:

- a) To indicate whether the Data has been sent to MyHIX.
- b) To highlight outstanding Data to be sent to MyHIX.

7.5.5 For in-patient, usage of ICD10classification in the diagnosis is encouraged before the Data is submitted to MyHIX repository<sup>3</sup>.

7.5.6 The Data submitted from the source facility shall be stored and maintained at MyHIX Central Repository and the receiving facility will receive MyHIX Data without being changed, added or deleted.

7.5.7 In the event, if there is the need to change or edit the clinical information of the Data in a particular Discharge or Encounter Summary that has already been submitted to MyHIX Central Repository, the attending healthcare professional may submit Addendum to that particular Discharge or Encounter Summary, and the Addendum shall be incorporated as part of that particular Discharge or Encounter Summary document.

7.5.8 Whenever a patient is managed by multiple disciplines, each discipline within the facility will produce the Discharge or

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<sup>3</sup>It should be noted that the use of ICD10 classification in diagnosis (or any other classification) may be revised and shall be made mandatory in the near future.

Encounter Summary which will be encapsulated in the Data. It is the responsibility of the healthcare professional at the last point of care in the hospital/health clinic to submit the Data to MyHIX.

7.5.9 The requirements for the verification of the Data shall be determined in accordance to the facility's Information System's operational policy as follows:

- a) The Administrative Unit of the Facility shall assign officers to verify the Data.
- b) The name, designation and professional registration number of the verifying officer shall be stated in the Data.
- c) The Data sent shall be stored in MyHIX Central Repository regardless of its verification status.
- d) The quality of the Data is the responsibility of the source facilities.

7.5.10 The Data shall be kept at the MyHIX Central Repository indefinitely and shall be archived after patient's death.

7.5.11 In the event of system downtime, the Data shall be submitted to MyHIX whenever the system is functioning again.

## **7.6 Requesting and Viewing MyHIX Data**

7.6.1 The Data shall be accessible to the authorized users as determined according to the MOH's User Access Control Policy Guidelines (UACP) and the facility's Information System's operational policy.

7.6.2 As a general rule, any query or retrieval of the Data is allowed only upon patient's registration and presence at the facility. The retrieval of E-referral / Reply Note Data shall be carried out in patient's presence during consultations at the receiving



and/or source facility. Any exclusion to this requirement should be documented in the facility's Information System's operational policy.

- 7.6.3 The Data retrieved by a facility from MyHIX Central Repository which is from other source facility will be temporarily cached on that facility's Information System. This Data shall be deleted from the facility's Information System upon patient discharge, and only Data created by the facility will be stored at the facility's Information System.
- 7.6.4 The E-referral and Reply Note shall be retrieved from MyHIX and stored in the respective source facility's Information System as a proof of a patient's care process of referral and reply to the referrer.

## 8. REFERENCES

This policy should be read together with the following documents as reference:

1. Surat Pekeliling Ketua Pengarah Kesihatan Bil. 13/2011 Dasar dan Garis Panduan User Access Control Policy bagi Sistem Maklumat Hospital dan Klinik (HIS/CIS) KKM (MOH User Access Control Policy Guidelines, 2011);
2. The Medical Act 1971(P.U.(A) 172/2005 Medical (Amendment of Third Schedule);
3. The Malaysian Medical Council (MMC) Ethical Codes and Guidelines:
4. MMC Code of Professional Conduct (9 December 1986)
5. MMC Duties of a Doctor
6. MMC Good Medical Practice
7. MMC Patient Confidentiality
8. Pekeliling Ketua Pengarah Kesihatan Bil.17/2010 Garispanduan Pengendalian dan Pengurusan Rekod Perubatan Pesakit bagi Hospital-Hospital dan Institusi Perubatan.
9. Surat Pekeliling Am Ketua Setiausaha Bil. 2/2013 Dasar Keselamatan ICT Kementerian Kesihatan Malaysia (KKM) Versi 4.0

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LAMPIRAN 2

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# MYHIX Standard Operating Procedure (SOP)

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## **1. PURPOSE**

- 1.1. The purpose of this document is to provide guidelines for the Healthcare Facility to establish the Standard Operating Procedure (SOP) for MyHIX. This document shall provide sufficient step-by-step description and the key operational details related to MyHIX which has been approved by Telehealth Division and MyHIX Project Management Team, providing good MyHIX practices to facilitate the electronic sharing of patient health information across the healthcare facilities for the purpose of continuity and coordination of care.

## **2. SCOPE**

- 2.1. The procedures described in this document apply to all healthcare facilities and the authorized users accessing MyHIX, and are intended to ensure that MyHIX is used in an effective, ethical and lawful manner.
- 2.2. This document shall cover the following procedures:
  - a) Description of MyHIX Data (as in para 4)
  - b) Consent for MyHIX (as in para 5)
  - c) Sending and retrieval of MyHIX Data for in-patient setting (as in para 6)
  - d) Sending and retrieval of MyHIX Data for out-patient setting (as in para 7)
  - e) Sending E-referral through MyHIX (as in para 8)
  - f) Sending Reply Note through MyHIX (as in para 9)
- 2.3. The procedures and processes outlined in this document is in accordance and should be read together with the following documents:
  - a) MyHIX Policy (2016)
  - b) Surat Pekeliling Am Ketua Setiausaha Bil. 2/2013 Dasar Keselamatan ICT Kementerian Kesihatan Malaysia (KKM) Versi 4.0

- c) Guidelines for User Access Control Policy, Telehealth Division, MOH (2011)
  - d) General Hospital Operational Policy, Medical Development Division, MOH (2013)
  - e) Pekeliling Ketua Pengarah Kesihatan Bil. 17/2010 Garis panduan Pengendalian dan Pengurusan Rekod Perubatan Pesakit bagi Hospital-Hospital dan Institusi Perubatan (2010)
  - f) The Malaysian Medical Council (MMC) Ethical Codes and Guidelines:
    - Code of Professional Conduct (9 December 1986)
    - Duties of a Doctor
    - Good Medical Practice
    - Patient Confidentiality
- 2.4. The Healthcare Facility must maintain and provide Information Security Policy and comply with the governing laws and regulations regarding Information Security and disclosure of patient's information.
- 2.5. The Healthcare Facility and the Authorized Users shall use reasonable efforts to stay abreast of any changes or updates to and interpretations of all applicable federal, state, and local laws and regulations that may affect their use and disclosure of Data.

### 3. DEFINITION OF TERMS

- 3.1. The terms used in this document shall have the following definitions:

**“Addendum”** means any significant corrections or changes in the clinical information in a signed medical record. In MyHIX, a signed medical record refers to MyHIX Data that has been sent to MyHIX Central Repository.

**“Authorized User”** means an individual of the designated health facility who is authorized by the Management Unit, to have the access and use the Data in accordance to the facility's User Access Control Policy.

**“Data”** means all of MyHIX Data which is to be obtained from patient’s electronic medical record of the facility’s HIS or CIS that consists of patient’s demographic and clinical data, and is submitted to or accessed through MyHIX. The Data shall be in CDA form which includes the Discharge Summary, Encounter Summary, E-Referral and Reply Note. (refer para no. 4)

**“Discharge Summary”** means a summary on the management of an in-patient after being warded at the Healthcare Facility for the purpose of continuity of care.

**“Encounter”** means any physical contact between a patient and Healthcare Provider, during which a clinical assessment or treatment is performed.

**“Encounter Summary”** means a summary on the management of an out-patient during an encounter in the clinic setting for the purpose of continuity of care.

**“E-referral”** means the process of documenting referral of a patient to another Healthcare Facility for continuity of care through MyHIX. The referral process is from the referring Healthcare Facility and the Healthcare Provider TO the referred Healthcare Facility and the Healthcare Provider. The referred Healthcare Provider is encouraged to send a ‘reply note’ after seeing the referred patient.

**“Electronic Medical Record (EMR)”** means an electronic system used at the facility to enter, maintain and store the patient clinical information, including the investigation results and reports, drug prescriptions etc.

**“Healthcare Provider”** means any registered practitioner, such as doctor, assistant medical officer, nurse or other allied health personnel that provides treatment to patients.

**“Healthcare Facility”** means a hospital or health clinic that has obtained official directive from the Program in-charge (of MOH HQ) to participate in MyHIX.

**“In-patient”** means a patient who is admitted to the hospital ward to undergo clinical assessment or receive medical/surgical care from the Healthcare Provider. (Note: Patient who is admitted to the

Observation Ward in the Emergency Department is not considered as an in-patient)

**“Retrieval of MyHIX Data”** means, with regard to MyHIX and/or an applicable technological application, the Data maintained in MyHIX is accessed, viewed, or copied either onto a viewing screen or into the healthcare facility’s EMR or other similar repository at the facility (or local repository) by an Authorized User.

**“Reply Note”** means the process of documenting the description of the proposed treatment or management, or any psychosocial concerns of a referred patient by the referred Healthcare Provider. The Reply Note is only accessible by the referring Healthcare Provider after it is sent and accessible to MyHIX Central Repository.

**“Sending of MyHIX Data”** means, with regard to MyHIX and/or an applicable technological application, the Data residing within a Healthcare Facility (or local repository) is “sent to” the MyHIX Central Repository, either automatically or by batches, according to the Healthcare Facility’s EMR technical capability.

**“Opt-Out”** means the process by which a patient may exercise the choice not to have his or her Data to be made available and accessed through MyHIX.

**“Out-patient”** means a patient who undergoes clinical assessment or receives treatment at the outpatient clinic, specialist clinic, health clinic, dental clinic, Ambulatory Care Centre and Emergency Department.



#### **4. DESCRIPTION OF MYHIX DATA**

- 4.1. Any Data which is available through the Healthcare Facility EMR may be made available through MyHIX, and become MyHIX Data, provided the patient has not 'opted out' to participate in MyHIX.
- 4.2. The MyHIX Data comprises two elements:
  - a) Patient Demographics
  - b) Patient Clinical Information, which can be either In-patient Data (in the form of Discharge Summary) or Out-patient Data (in the form of Encounter Summary). The information may include:
    - problem list
    - diagnosis
    - procedures
    - drug and medication
    - laboratory result
    - radiological report
    - management plan
    - care plan
- 4.3. The Data is to be shared through MyHIX in the form of Clinical Document Architecture (CDA) which consist of:
  - a) Discharge Summary
  - b) Encounter Summary
  - c) E-referral
  - d) Reply Note
- 4.4. The E-referral contains a patient's clinical information in the Discharge Summary / Encounter Summary AND the "Reason for Referral" information. This information shall be provided by the referring (sending) Healthcare Provider; and the referred (receiving) Healthcare Provider shall have access to the E-referral of the said patient.

- 4.5. The Reply Note contains the Discharge Summary / Encounter Summary AND “Management Plan” or “Care Plan” information. This information shall be provided by the referred (receiving) Healthcare Provider after seeing the patient; and the referring Healthcare Provider shall have access to the Reply Note of the said patient.

## **5. CONSENT FOR MYHIX**

- 5.1. **Implied consent** is applicable for MyHIX for every patient registered to any of the Healthcare Facilities with MyHIX.
- 5.2. Patients who is treated by a Healthcare Provider who is also an Authorized User and/or affiliated with the Healthcare Facility shall also be given the option and opportunity to choose whether to have or not to have their Data made available and can be accessible through MyHIX.
- 5.3. Each Healthcare Facility shall establish reasonable and appropriate procedures for MyHIX consent in accordance with this document as well as the applicable rules and regulations to enable the exercise of a patient’s choice about his or her data made available and accessible through MyHIX.
- 5.4. The procedures for MyHIX consent is to ensure that patients understand how their information will be used through MyHIX and they must be given the right to ‘Opt-Out’ of having their information in MyHIX to be made available for access.
- 5.5. For patient who is unable to give expressed consent (i.e: underage, altered mental status or unconscious patient), the decision to ‘Opt Out’ can be made by his / her legal guardian or carer.
- 5.6. The Healthcare Provider who is responsible for overseeing the ‘Opt-Out’ registration process must provide patients with educational material regarding MyHIX and how their Data may be used and shared with the Authorized Users. The Healthcare Provider shall also explain to the patient that the decision to ‘Opt Out’ is per encounter basis.

- 5.7. To facilitate patients' understanding regarding where information about them is being stored and made accessible for exchange, the list of Healthcare Facilities with MyHIX shall be made available through the MyHIX educational and promotional materials.
- 5.8. A patient 'Opt Out' status must be made in writing (as outlined in para 5.9). The nurse in-charge of the patient must ensure that the 'Opt Out' Form has been completed if the patient chose to 'Opt Out' from MyHIX. This shall be carried out as part of the Healthcare Facility's standard procedures for patient discharge.
- 5.9. The patient / guardian / carer who chose to 'Opt Out' is required to complete and sign the 'Opt Out' Form (Appendix 1a & 1b). The completion and signing of the 'Opt Out' Form can be done at any time prior to patient discharge. Each Healthcare Facility shall establish the procedures for safekeeping the 'Opt Out' Form i.e. either to keep it in the patient's physical medical record or scanned into the system as part of the patient's EMR.
- 5.10. The patient's 'Opt Out' status shall be updated in the Healthcare Facility system accordingly. Unless a patient has made the choice to 'Opt Out', the patient's Data in the form of Discharge Summary / Encounter Summary for every patient shall be sent to MyHIX.

## 6. SENDING AND RETRIEVAL OF MyHIX DATA FOR IN-PATIENT SETTING

6.1. The workflow of the procedures for sending and retrieval of MyHIX Data for in-patient setting is illustrated in Figure 1 below.

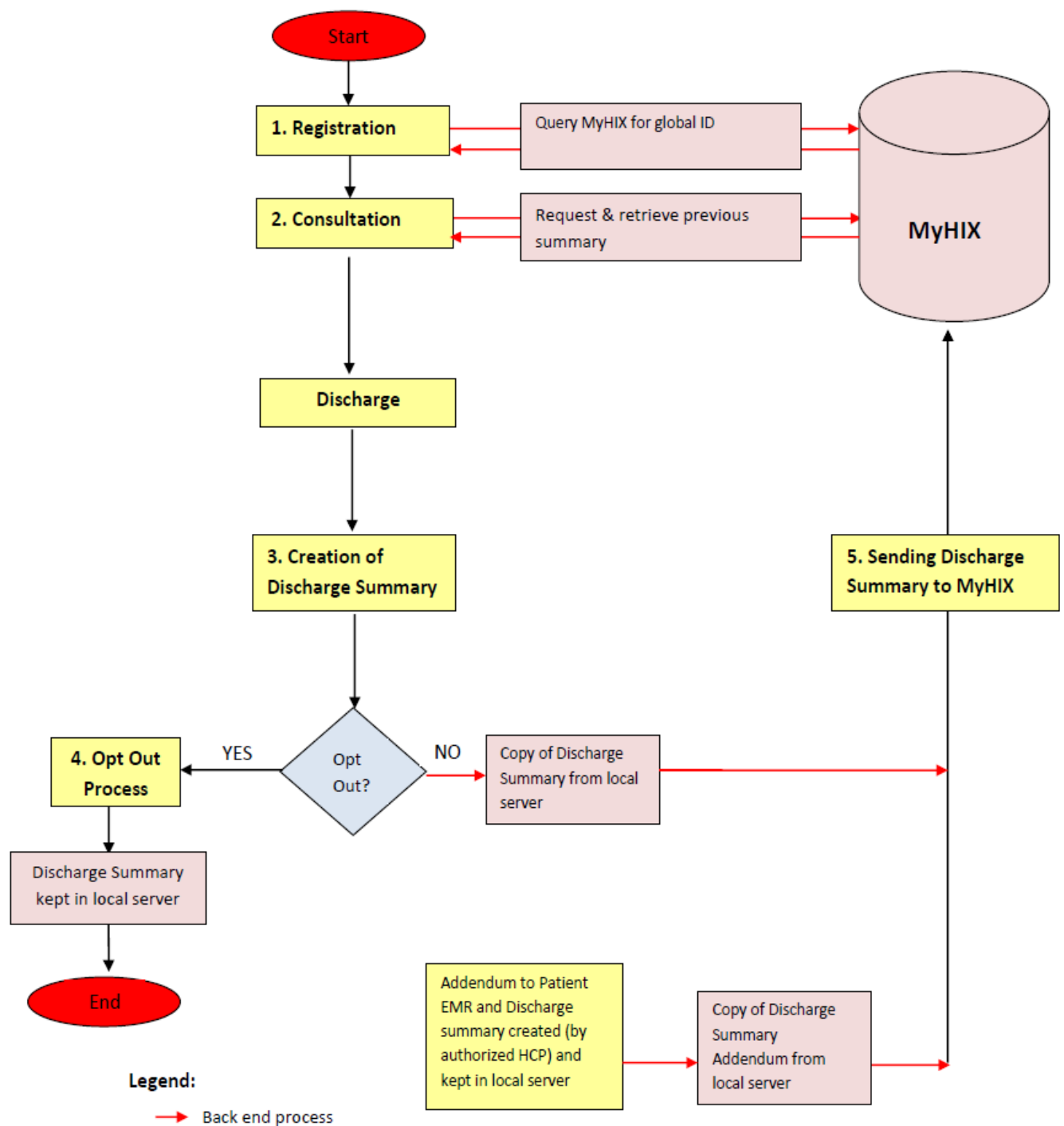


Figure 1: Workflow for sending and retrieval of MyHIX Data of in-patient setting.

6.2. The following is the step-by-step descriptions for sending and retrieval MyHIX Data of in-patient setting (refer Figure 1).

1. Patient registration	
1.1	Patient registration into HIS/CIS done by Registration Counter Personnel (Petugas Kaunter) at the Registration Counter.
1.2	An Implied Consent for MyHIX is applicable every time patient is registered in health care facilities involved in MyHIX (ref. <a href="#">para 5</a> )
1.3	The Query for MyHIX Global ID is through the back-end process of the Healthcare Facility information system.

2. Consultation	
2.1	Consultation is performed by the Healthcare Provider who attends to the patient.
2.2	The Healthcare Provider is able to retrieve previous Discharge or Encounter Summaries from MyHIX (if it is available) to ensure continuity of care. The accessibility of the data is determined by the facility's Information Security Policy.
2.3	The Healthcare Provider provide appropriate explanation about the patient's rights to choose for 'Opt Out' of MyHIX (ref. <a href="#">para 5</a> ).
2.4	If patient's choose to 'Opt Out' of MyHIX, the Healthcare Provider shall made it in writing (by filling in the 'Opt Out' form as in Appendix 1a or 1b) and document it in the EMR.

3. Creation of Discharge Summary	
3.1	Discharge is defined as the departure of patient from the hospital, either alive or dead, after patient was admitted to hospital.
3.2	The patient is discharged under order from the Healthcare Provider, depending on the operational policy of the Healthcare Facility (eg. by the Specialist or Medical Officer).
3.3	The Discharge Summary is to be completed by the attending doctor within 72 hours of patient discharge.
3.4	<p>The Healthcare Facility is responsible to ensure integrity, accuracy and completeness of the Data in the Discharge Summary.</p> <p>The process for Data verification is determined by the Healthcare Facility Policy. For example, for every Discharge Summary created by the House Officer, the Medical Officer must verify it.</p> <p>The facility's Medical Record Officer shall be responsible to monitor data quality according to the Healthcare Facility's Standard Operating Procedure to maintain the medical records data quality.</p> <p>ICD-10 coding of the diagnosis before Discharge Summary is submitted to MyHIX is encouraged. It should be noted that ICD-10 coding may be made mandatory in the future.</p>
3.7	<p>Whenever there is the need to submit additional information or correction to the Discharge Summary that has been sent to MyHIX (the original Discharge Summary), the attending doctor is allowed to make Addendum.</p> <p>The steps for Addendum is as the following:-</p> <ul style="list-style-type: none"> <li>• The attending doctor must make the Addendum to the patient's Electronic Medical Record (EMR) as well as to the patient's Discharge Summary.</li> <li>• The doctor must view and confirm the Addendum before it is sent to MyHIX.</li> </ul>

	<ul style="list-style-type: none"> <li>• MyHIX will incorporate the Addendum to the original Discharge Summary.</li> </ul>
--	--

4. Opt-out Process	
4.1	Regardless of patient 'Opt Out' status, the Discharge Summary shall be stored in the the Healthcare Facility local repository.
4.2	Patients who has chosen to 'Opt Out' of MyHIX, his/her Discharge Summary shall not be sent to MyHIX Central Repository.
4.3	A patient Discharge Summary that is sent to MyHIX Central Repository shall have his/her own Discharge Summary kept in the local repository as well.

5. Sending Discharge Summary To MyHIX	
5.1	All Discharge Summaries except for Discharge Summary of Opt Out patient shall be sent to MyHIX.
5.2	Discharge Summary will be extracted from the local repository and sent to MyHIX.
5.3	Sending of MyHIX Data shall be automated by the Healthcare Facility's Information System (HIS/CIS) either by batches or real-time depending on the Healthcare Facility's HIS/CIS technical capability. Manual MyHIX Data sending is also an option depending on the HIS/CIS functional capability.

6.3. The following is the simplified Procedural Matrix for Sending and Retrieval of MyHIX Data of in-patient setting.

No.	TASK / PROCESS	ACTOR	DESCRIPTION
1.	Patient Registration	Registration Counter Personnel	Query MyHIX for Global ID is a back end process.
2.	Consultation	Attending Healthcare Provider	Retrieve and review previous discharge summary(s) if available.
3.	Creation of Discharge Summary	Attending Healthcare Provider	Create Discharge Summary within 72 hours of patient discharge and verify if necessary (Discharge Summaries created by Houseman must be verified by MO).
4.	Opt Out Process (if applicable)	Attending Healthcare Provider or by the designated staff within department	Counsel patient / guardian / carer.  Opt Out Form for patient / guardian / caretaker to sign.  Keep form in patient's physical folder or scan into the system (designated staff).  System is updated on the OPT OUT status.
5.	Sending Discharge Summary to MyHIX	Automated by system or manually	Submission of Discharge Summary by system.



No.	TASK / PROCESS	ACTOR	DESCRIPTION
	Creating Addendum	Authorized Healthcare Provider	Create Addendum for EMR and Discharge Summary.
	Sending Addendum to MyHIX	Automated by system or manually	Submission of Addendum Discharge Summary by system.

## 7. SENDING AND RETRIEVAL OF MyHIX DATA FOR OUT-PATIENT SETTING

7.1. The workflow of the procedures for sending and retrieval of MyHIX Data for out-patient setting is illustrated in Figure 2 below.

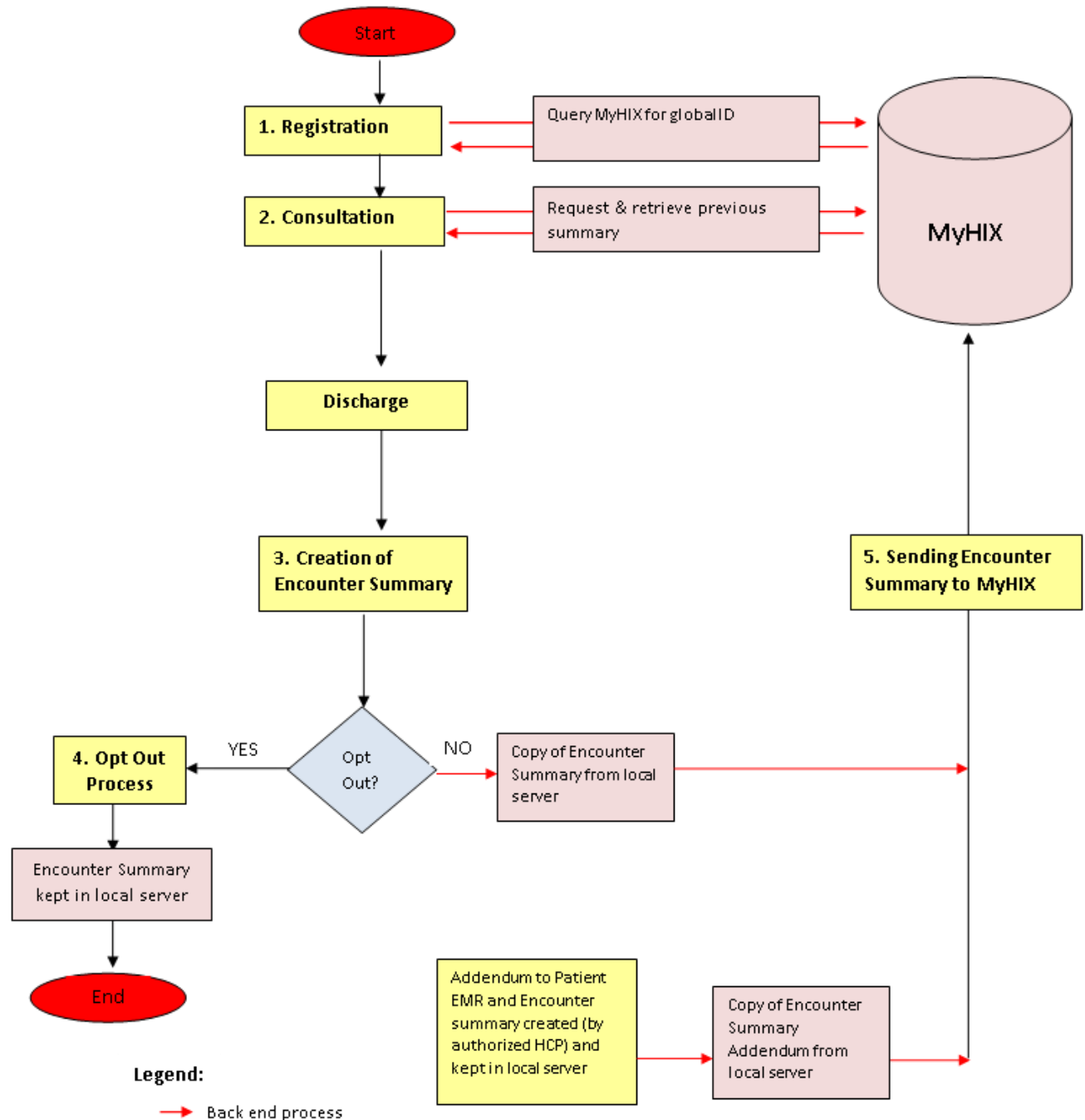


Figure 2: Sending and retrieval of MyHIX Data for out-patient setting

7.2. The following is the step-by-step descriptions for sending and retrieval of MyHIX Data for out-patient setting (refer Figure 2).

1. Patient registration	
1.1	<p>Patient is registered into the Healthcare Facility system (HIS/CIS) by Registration Counter Personnel at these locations:</p> <ul style="list-style-type: none"> <li>• Clinic Registration Counter</li> <li>• Registration Counter of Ambulatory Care Centre</li> <li>• Registration Counter of Emergency and Trauma Department</li> </ul>
1.2	An Implied Consent for MyHIX is applicable every time patient is registered in health care facilities involved in MyHIX (ref. <a href="#">para 5</a> ).
1.3	The Query for MyHIX Global ID is through the back-end process of the Healthcare Facility information system.

2. Consultation	
2.1	Consultation is performed by the Healthcare Provider who attends to the patient.
2.2	The Healthcare Provider is able to retrieve previous Discharge or Encounter Summaries from MyHIX (if it is available) to ensure continuity of care. The accessibility of the data is determined by the facility's Information Security Policy.
2.3	The Healthcare Provider provide appropriate explanation about the patient's rights to choose for 'Opt Out' of MyHIX (ref. <a href="#">para 5</a> ).
2.4	If patient's choose to 'Opt Out' of MyHIX, the Healthcare Provider shall made it in writing (by filling in the 'Opt Out' form as in Appendix 1a or 1b) and document it in the EMR.

3. Creation of Encounter Summary	
3.1	Discharge is created from the clinical note by the attending Healthcare Provider and submitted to MyHIX within 24 hours of patient encounter.
3.2	<p>The Healthcare Facility is responsible to ensure integrity, accuracy and completeness of the Data in the Encounter Summary.</p> <p>The process for Data verification is determined by the Healthcare Facility Policy. For example, for every Encounter Summary created by the House Officer, the Medical Officer must verify it.</p> <p>The facility's Medical Record Officer shall be responsible to monitor data quality according to the Healthcare Facility's Standard Operating Procedure to maintain the medical records data quality.</p> <p>ICD-10 coding of the diagnosis before Encounter Summary is submitted to MyHIX is encouraged. It should be noted that ICD-10 coding may be made mandatory in the future.</p>
3.7	<p>Whenever there is the need to submit additional information or correction to the Encounter Summary that has been sent to MyHIX (the original Encounter Summary), the attending doctor is allowed to make Addendum.</p> <p>The steps for Addendum is as the following:-</p> <ul style="list-style-type: none"> <li>• The attending doctor must make the Addendum to the patient's Electronic Medical Record (EMR) as well as to the patient's Encounter Summary.</li> <li>• The doctor must view and confirm the Addendum before it is sent to MyHIX.</li> <li>• MyHIX will incorporate the Addendum to the original Encounter Summary.</li> </ul>

4. Opt-out Process	
4.1	Regardless of patient 'Opt Out' status, the Encounter Summary shall be stored in the local repository at the Healthcare Facility.
4.2	Patients who has chosen to 'Opt Out' of MyHIX, his/her Encounter Summary shall not be sent to MyHIX Central Repository.
4.3	A patient Encounter Summary that is sent to MyHIX Central Repository shall have his/her own Encounter Summary kept in the Healthcare Facility local repository as well.
4.4	The Healthcare Provider or/and the assisting nurse must ensure that the Opt Out form has been completed before the patient leaves the consultation room.

5. Sending Encounter Summary To MyHIX	
5.1	All Encounter Summaries except for Opt Out patient shall be sent to MyHIX.
5.2	Encounter Summary will be extracted from the Healthcare Facility's local repository and sent to MyHIX.
5.3	Sending of MyHIX Data shall be automated by the Healthcare Facility's Information System (HIS/CIS) either by batches or real-time depending on the Healthcare Facility's HIS/CIS technical capability. Manual MyHIX Data sending is also an option depending on the HIS/CIS functional capability.

7.3. Simplified Procedural Matrix for sending and retrieval of MyHIX Data for out-patient setting.

No.	TASK / PROCESS	ROLE	DESCRIPTION
1.	Patient Registration	Registration Counter Personnel	Query MyHIX for Global ID is a back end process.
2.	Consultation	Attending Healthcare Provider	Retrieve and review previous discharge summary(s) if available.
3.	Creation of Encounter Summary	Attending Healthcare Provider	Create Encounter Summary within 24 hours and verified (Encounter Summaries created by Houseman must be verified).
4.	Opt Out Process	Attending Healthcare Provider or by designated staff within department	Counsel patient / guardian / carer. Opt Out Form for patient / guardian / caretaker to sign. Keep form in patient's folder or scan into the system (designated staff). System is updated on the OPT OUT.
5.	Sending Encounter Summary to MyHIX	Automatically by system or manually	Submission of Encounter Summary by system.

No.	TASK / PROCESS	ROLE	DESCRIPTION
	Creating Addendum	Authorized Healthcare Provider	Create addendum for EMR and encounter summary.
	Sending Addendum Encounter Summary to MyHIX	Automatically by system or manually	Submission of Addendum Encounter Summary by system.

## 8. SENDING E-REFERRAL THROUGH MyHIX

8.1. The workflow of the procedures for sending E-referral through MyHIX is illustrated in Figure 3 below.

Note: The MyHIX E-referral shall be used only for non-critical and non-urgent cases.

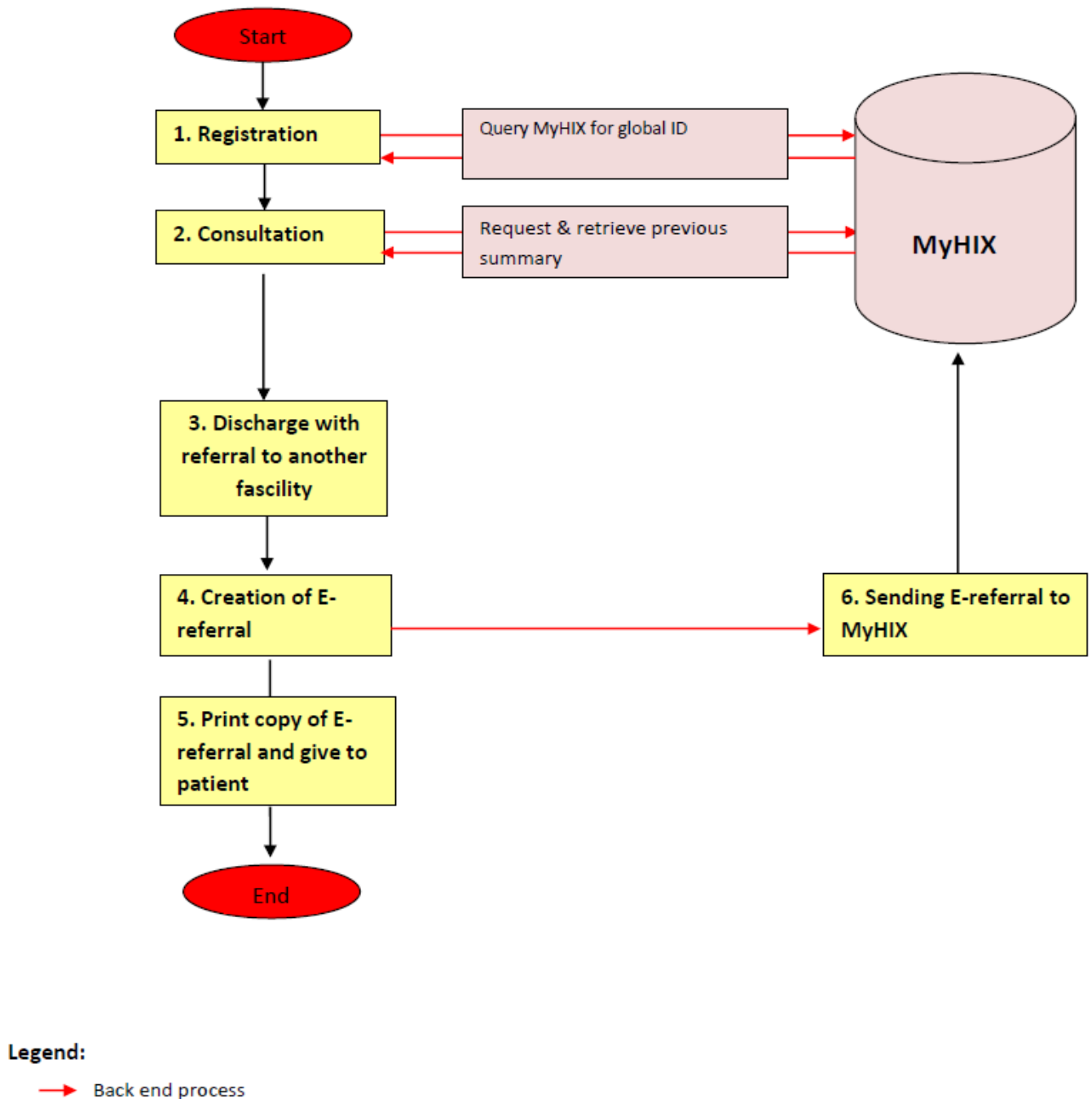


Figure 3: Sending E-referral through MyHIX.



8.2. The following is the step-by-step descriptions for sending of E-Referral through MyHIX (refer Figure 3).

1. Patient registration	
1.1	<p>Patient is registered into CIS or HIS by Registration Counter Personnel at these locations:</p> <ul style="list-style-type: none"> <li>• Hospital Registration Counter</li> <li>• Clinic Registration Counter</li> <li>• Registration Counter of Ambulatory Care Centre</li> <li>• Registration Counter of Emergency and Trauma Department</li> </ul>
1.2	An Implied Consent for MyHIX is applicable every time patient is registered in health care facilities involved in MyHIX (ref. <a href="#">para 5</a> )
1.3	The Query for MyHIX Global ID is through the back-end process of the Healthcare Facility information system.

2. Consultation	
2.1	Consultation is performed by the Healthcare Provider who attends to the patient.
2.2	The Healthcare Provider is able to retrieve previous Discharge or Encounter Summaries from MyHIX (if it is available) to ensure continuity of care. The accessibility of the data is determined by the facility's Information Security Policy.
2.3	The Healthcare Provider provide appropriate explanation about the patient's rights to choose for 'Opt Out' of MyHIX (ref. <a href="#">para 5</a> ).
2.4	If patient's choose to 'Opt Out' of MyHIX, the Healthcare Provider shall made it in writing (by filling in the 'Opt Out' form as in Appendix 1a or 1b) and document it in the EMR (refer step 4.4 below).

3. Patient Discharge with Decision for Referral	
3.1	The Healthcare Provider decides to refer the patient for further care at another Healthcare Facility. The Discharge / Encounter Summary for the patient is created, followed by creation of the E-referral (as outlined in step no. 4 below).
3.2	<p>The Healthcare Facility is responsible to ensure integrity, accuracy and completeness of the Data in the Discharge / Encounter Summary.</p> <p>The process for Data verification is determined by the Healthcare Facility Policy. For example, for every Discharge / Encounter Summary created by the House Officer, the Medical Officer must verify it.</p> <p>The facility's Medical Record Officer shall be responsible to monitor data quality according to the Healthcare Facility's Standard Operating Procedure to maintain the medical records data quality.</p> <p>ICD-10 coding of the diagnosis before Discharge Summary is submitted to MyHIX is encouraged. It should be noted that ICD-10 coding may be made mandatory in the future.</p>

4. Creation of E-referral	
4.1	The Healthcare Provider completes the Discharge / Encounter Summary including the "reason for referral" information.
4.2	The E-referral must include the name of the Healthcare Facility and the Department where the patient is referred to.
4.3	Once E-referral is created, it is to be printed out and handed over to the patient as they leave the ward or consultation room. The patient will have to make the arrangement to be seen at the referred Healthcare Facility using the e-referral print out according to the existing processes.

4.4	Should the patient wishes to Opt Out, the patient's Discharge / Encounter Summary with E-Referral shall not be shared through MyHIX.
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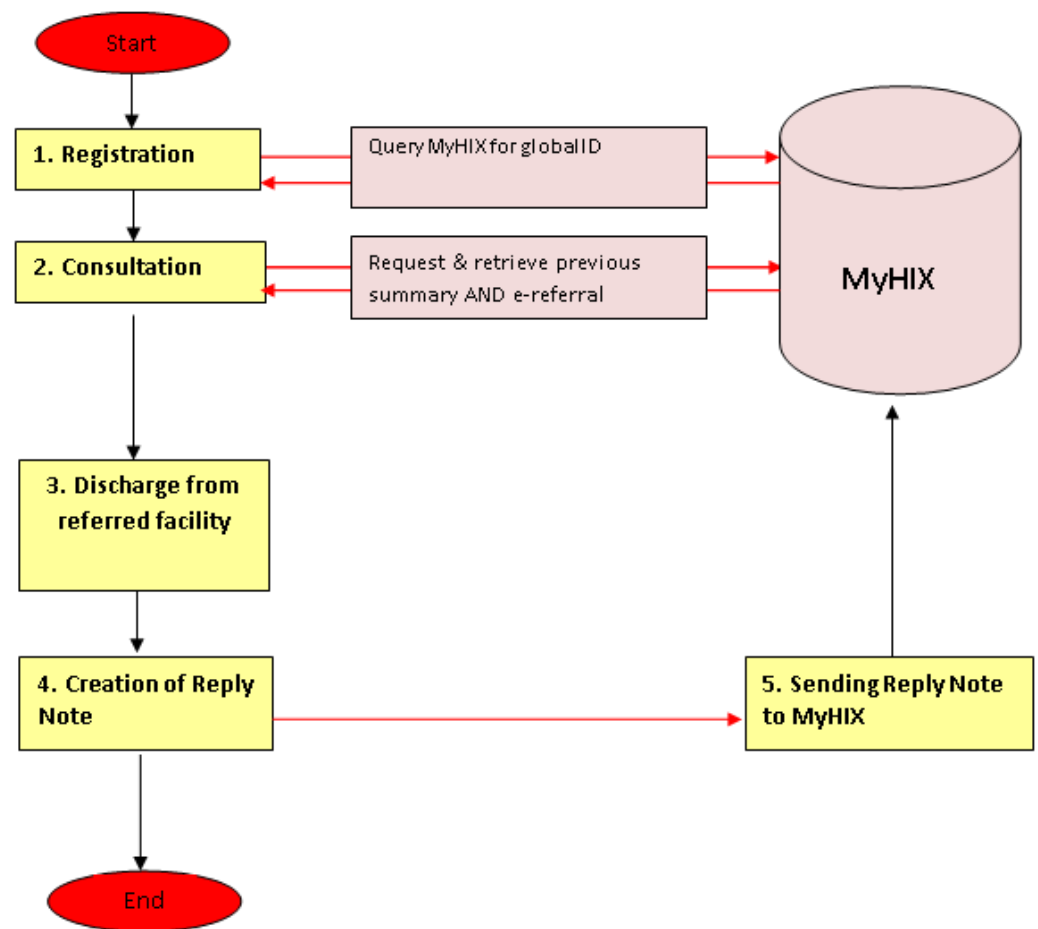
5. E-Referral Print-out is to be given to the Patient	
5.1	Once E-referral is created, it is to be printed out and handed over to the patient as they leave the ward or consultation room. The patient will have to make the arrangement to be seen at the referred Healthcare Facility using the e-referral print out according to the existing processes.

6. Sending Discharge / Encounter Summary with E-Referral to MyHIX	
6.1	All E-Referrals created by the Healthcare Provider and to be shared through MyHIX shall be sent to the Central MyHIX Repository.
6.2	Sending of E-Referral shall be automated by the Healthcare Facility's Information System (HIS/CIS) either by batches or real-time depending on the technical capability. However, manual sending is also an option depending on the HIS/CIS.

### 8.3 Simplified Procedural Matrix for E-Referral

No.	TASK / PROCESS	ACTOR	DESCRIPTION
1.	Patient Registration	Registration Counter Personnel	Query MyHIX for Global ID is a back end process.
2.	Consultation	Attending Healthcare Provider	Retrieve and review previous discharge / encounter summary(s) if available.
3.	Creation of E-referral	Attending/ Referring Healthcare Provider	Create E-referral at time of discharge
4.	Sending E-referral to MyHIX	Automated by system or manually	Submission of E-referral by HIS/CIS.
5.	Printing of E-referral	Referring Healthcare Provider	E-referral print-out is given to the patient before they leave ward / consultation room. The patient shall arrange his/her appointment at the referred Healthcare Facility.
6.	Retrieval of E-referral during consultation (at the receiving Healthcare Facility)	Referred Healthcare Provider	During consultation at the referred (receiving) Healthcare Facility.

## 9. SENDING REPLY NOTE THROUGH MyHIX



### Legend:

→ Back end process

Figure 4: Sending of Reply Note through MyHIX.

9.1. The following is the step-by-step descriptions for sending of Reply Note through MyHIX (refer Figure 4).

1. Patient registration	
1.1	Patient registration into HIS/CIS done by Registration Counter Personnel ( <i>Petugas Kaunter</i> ) at the Registration Counter.
1.2	An Implied Consent for MyHIX is applicable every time patient is registered in health care facilities involved in MyHIX (ref. <a href="#">para 5</a> )
1.3	The Query for MyHIX Global ID is through the back-end process of the Healthcare Facility information system

2. Consultation	
2.1	Consultation is performed by the Healthcare Provider who attends to the patient.
2.2	The Healthcare Provider is able to retrieve the E-referral and previous Discharge or Encounter Summaries from MyHIX (if it is available). The accessibility of the data is determined by the facility's Information Security Policy.
2.3	The Healthcare Provider provide appropriate explanation about the patient's rights to choose for 'Opt Out' of MyHIX (ref. <a href="#">para 5</a> ).
2.4	If patient's choose to 'Opt Out' of MyHIX, the Healthcare Provider shall made it in writing (by filling in the 'Opt Out' form as in Appendix 1a or 1b) and document it in the EMR.

3. Creation of Discharge / Encounter Summary	
3.1	The patient is discharged under order from the Healthcare Provider, depending on the operational policy of the Healthcare Facility (eg. by the Specialist or Medical Officer)
3.2	The Discharge / Encounter Summary is to be completed by the attending Healthcare Provider within the stipulated time depending on the Healthcare Facility's Operational Policy.
3.4	<p>The Healthcare Facility is responsible to ensure integrity, accuracy and completeness of the Data in the Discharge Summary.</p> <p>The process for Data verification is determined by the Healthcare Facility Policy. For example, for every Discharge Summary created by the House Officer, the Medical Officer must verify it.</p> <p>The facility's Medical Record Officer shall be responsible to monitor data quality according to the Healthcare Facility's Standard Operating Procedure to maintain the medical records data quality.</p> <p>ICD-10 coding of the diagnosis before Discharge Summary is submitted to MyHIX is encouraged. It should be noted that ICD-10 coding may be made mandatory in the future.</p>

4. Creation of Reply Note	
4.1	The Reply Note shall be created for the patient who is seen and discharged by the referred (receiving) Healthcare Provider.
4.2	Regardless of patient 'Opt Out' status, the Healthcare Provider shall create the Discharge / Encounter Summary AND the Reply Note which is stored in the local repository at the Healthcare Facility and sent to MyHIX (refer step 5).
4.3	The Reply Note shall be OID-tagged (by the Healthcare Facility's EMR), and only the Authorized User at the referring Healthcare Facility can have access.

5. Sending the Reply Note through MyHIX	
5.1	All Discharge / Encounter Summary AND the Reply Note, except of Opt Out patient, shall be sent to MyHIX.
5.2	Discharge / Encounter Summary AND the Reply Note will be extracted from the local server at the Healthcare Facility and sent to MyHIX Central Repository.
5.3	Sending of MyHIX Data shall be automated by the Healthcare Facility's Information System (HIS/CIS) either by batches or real-time depending on the technical capability. However, manual sending is also an option depending on the HIS/CIS.



## 9.2. Simplified Procedural Matrix for Sending Reply Note through MyHIX

No.	TASK / PROCESS	ACTOR	DESCRIPTION
1.	Patient Registration	Registration Counter Personnel	Query MyHIX for Global ID is a back end process.
2.	Consultation	Referred Healthcare Provider	Retrieve and review E-Referral and previous discharge summary(s) if available.
3.	Creation of Encounter / Discharge Summary	Referred Healthcare Provider	Create Encounter / Discharge Summary at time of discharge at the referred facility.
4.	Creation of Reply Note	Referred Healthcare Provider	Create Reply note at time of discharge together with Encounter / Discharge Summary.
5.	Sending Reply Note to MyHIX	Automated by system or manually	Submission of Reply Note by system.
	Retrieval of Reply Note	Referring Healthcare Provider	Retrieval and review of Reply Note by the Authorized User at the referring facility.

## REFERENCES

1. MyHIX Policy Version 2.0 2016.
2. General Hospital Operational Policy First Edition August 2013 MOH/P/PAK/268.13(BP).
3. Buku Panduan Sistem Maklumat Rawatan Pesakit dan Rawatan Harian (2010).
4. Pekeliling Ketua Pengarah Kesihatan Bil.17/2010 Garis panduan Pengendalian dan Pengurusan Rekod Perubatan Pesakit bagi Hospital-Hospital dan Institusi Perubatan. (2010)
5. Surat Pekeliling Ketua Pengarah Kesihatan Bil. 13/2011 Dasar dan Garis Panduan User Access Control Policy bagi Sistem Maklumat Hospital dan Klinik (HIS/CIS) KKM (MOH User Access Control Policy Guideline), 2011
6. The Medical Act 1971 P.U.(A) 172/2005 Medical (Amendment of Third Schedule);
7. The Malaysian Medical Council (MMC) Ethical Codes and Guidelines:
  - Code of Professional Conduct (1986)
  - Duties of a Healthcare Provider
  - Good Medical Practice
  - Patient Confidentiality

## APPENDIX 1a: OPT OUT FORM (BAHASA MALAYSIA VERSION)

KKM/BTK/MyHIX001(BM)	
	<b>BORANG PENGECEUALIAN KEMASUKAN MAKLUMAT KESIHATAN KE <i>MALAYSIA HEALTH INFORMATION EXCHANGE</i> (MyHIX) KEMENTERIAN KESIHATAN MALAYSIA</b>
Hospital / Klinik .....	
Saya ..... (nama *pesakit / ibu / bapa / penjaga / waris) dengan ini tidak mengizinkan maklumat kesihatan *saya / anak / waris jagaan saya:	
Nama pesakit: .....	
MRN: .....	
No. Kad Pengenalan pesakit: .....	
dimasukkan ke dalam MyHIX bagi tujuan perkongsian maklumat kesihatan antara fasiliti kesihatan pada sesi rawatan kali ini sahaja.	
Saya tidak akan mengambil apa-apa tindakan terhadap hospital / klinik / Kementerian Kesihatan Malaysia / Kerajaan Malaysia sekiranya berlaku sebarang kemudaratan, kesusahan, kerugian atau apa-apa sahaja yang *saya / anak / waris jagaan saya hadapi kesan daripada pengecualian kemasukan maklumat kesihatan tersebut ke dalam MyHIX.	
Tarikh: .....	Tandatangan: ..... *(Pesakit / Ibu / bapa / waris) Tali persaudaraan (Jika berkenaan): ..... No. Kad Pengenalan Diri: .....
Tarikh: .....	Tandatangan saksi: ..... Nama: ..... Jawatan: ..... No. Kad Pengenalan Diri: .....
*Potong yang tidak berkenaan	

## APPENDIX 1b: OPT OUT FORM (ENGLISH VERSION)

KKM/BTK/MyHIX001(BI)	
	<b>OPT OUT FORM OF HEALTH INFORMATION SUBMISSION TO MALAYSIA HEALTH INFORMATION EXCHANGE (MyHIX) MINISTRY OF HEALTH MALAYSIA</b>
Hospital / Klinik .....	
I ..... (name of *patient / parent / guardian / next of kin)	
hereby, do not agree that the health information of *myself / my child / person under my care:	
Name of Patient: .....	
MRN: .....	
Patient Identification No.: .....	
to be submitted to MyHIX for the purpose of sharing health information between the healthcare facilities for current treatment session only.	
I will not undertake any action towards the hospital / clinic / Ministry of Health Malaysia / Government of Malaysia should any injury, inconvenience, loss or other consequences occur to myself / my child / person under my care due to the exclusion of health information submission to MyHIX.	
Date: .....	Signature: ..... *(Patient / parent / guardian / next of kin)
	Relationship (if appropriate): .....
	Identification Number: .....
Date: .....	Signature of witness: .....
	Name: .....
	Designation: .....
	Identification Number: .....
*Strikethrough where inappropriate	

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## LAMPIRAN 3

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# Senarai Semak Kesediaan MyHIX untuk Pusat Data

- Tujuan** : Senarai semak ini digunakan untuk memastikan perkara-perkara yang perlu dilakukan untuk melaksanakan MyHIX (mengikut keperluan)
- Skop** : Digunakan semasa fasa pra pelaksanaan oleh Pasukan Projek (Teknikal) MyHIX IPKKM dalam melaksanakan MyHIX
- Objektif** : Memastikan infrastruktur sistem MyHIX di Pusat Data bersedia untuk pelaksanaan MyHIX
- Pra-syarat** : Perlu digunakan bersama Senarai Semak Kesediaan Pelaksanaan MyHIX di Ibu Pejabat

Bil.	Perkakasan/ Services	Ya	Tidak	Catatan
Pastikan perkakasan berikut berfungsi dengan baik :				
	Server Application			
	Server Database			
	Server Image			
	Server Audit			
	Server CA/NTP			
	SAN Storage			
	SAN Switch 1			
	SAN Switch 2			
	Switch 1			
	Switch 2			
	Firewall 1			
	Firewall 2			
Pastikan <i>service</i> berikut berfungsi ( <i>up</i> ):				
	Mirth			
	Glassfish			
	MySQL			
	LDAP			
Pastikan <i>port</i> berikut dibuka pada <i>firewall</i>				
	8080			
	8081			
	2575			
	2576			
	6514			

Bil.	Perkakasan/ Services	Ya	Tidak	Catatan
Pastikan perkakasan berikut boleh di <i>PING</i> :				
	Server Application (myhix2.moh.gov.my)			
	Server Database			
	Server Image			
	Server Audit			
	Server CA/NTP			
	SAN Storage			
	SAN Switch 1			
	SAN Switch 2			
	Switch 1			
	Switch 2			
	Firewall 1			
	Firewall 2			

\* Perkara 4.b. – 4.l. hanya boleh *ping* menggunakan kaedah *remote server*

Disahkan Oleh :-

.....

(Tandatangan)

Nama : \_\_\_\_\_

Jawatan : \_\_\_\_\_

Tarikh : \_\_\_\_\_



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LAMPIRAN 4

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# Borang Stress Test MyHIX

- Tujuan** : Borang ini digunakan untuk menguji kebolehpayaan sistem dalam menampung permintaan yang diterima (mengikut keperluan).
- Skop** : Digunakan oleh pasukan projek (Teknikal) MyHIX IPKKM dan dibuat dalam dua (2) peringkat iaitu :-
- a) pusat data - tidak melalui *firewall* dan rangkaian (*bypass firewall & network*) ;
  - b) fasiliti - melalui *firewall* fasiliti dan *firewall* pusat data serta melibatkan rangkaian (*ordinary network route*)
- Objektif** : Memastikan had keupayaan sistem MyHIX yang dapat menampung permintaan *global* ID, DS/ES dan eReferral (penerimaan dan penghantaran) sama ada dipengaruhi oleh faktor rangkaian atau tidak untuk dijadikan panduan terhadap keupayaan sistem pada masa akan datang.
- Pra-syarat** : Perlu digunakan bersama Senarai Semak Kesiediaan Pelaksanaan MyHIX di Ibu Pejabat

**Maklumat Fasiliti:-**

<b>Fasiliti</b>	
<b>Nama Rangkaian</b>	
<b>Kelajuan Rangkaian</b>	
<b>Anggaran Pengguna HIS/CIS</b>	
<b>Tarikh</b>	

### A. PIX-PDQ

[illegible]

### B. Discharge Summary (DS) /Encounter Summary (ES)

[illegible]

### C. E-Referral

Bilangan Data	Jumlah tempoh respon (saat)	Min tempoh respon (saat)/ data	Max tempoh respon (saat)/ data	Catatan

---

(Tandatangan Penguji)

Nama :

Jawatan :

Unit/Jabatan :

Tarikh :

---

## LAMPIRAN 5

---

# Borang Pengesahan Pengujian MyHIX

- Tujuan** : Borang ini digunakan untuk memastikan semua proses yang terlibat dalam pelaksanaan MyHIX berjalan lancar
- Skop** : Digunakan oleh pasukan projek MyHIX di IPKKM dan Pasukan Pelaksana di fasiliti sebelum pelaksanaan MyHIX di fasiliti dimulakan.
- Objektif** : Bagi menentusahkan proses pengujian antara fasiliti dan pusat data KKM sebelum MyHIX dilaksanakan secara *live* di fasiliti
- Pra-syarat** : Perlu digunakan bersama Senarai Semak Kesediaan Pelaksanaan MyHIX di Ibu Pejabat

**Maklumat Fasilitas:**

<b>Fasilitas</b>	
<b>Produk dan Versi HIS/CIS</b>	
<b>Vendor HIS/CIS</b>	
<b>Nama Penguji</b>	
<b>Tarikh Pengujian</b>	

**Discharge Summary (DS) /Encounter Summary (ES)**

<b>Bil.</b>	<b>Semakan Pengujian</b>	<b>Lulus / Gagal</b>	<b>Komen / Catatan</b>
1.	Proses pendaftaran/pengemaskinian maklumat pesakit.		
2.	Mendapatkan MyHIX ID ( <i>Global ID</i> ) daripada MyHIX		
3.	Proses penyediaan kes (DS/ES) dan hantar ke MyHIX.		
4.	Semak maklumat yang dihantar ke MyHIX dengan menggunakan kaedah ' <i>remote server</i> ' atau lain-lain kaedah yang difikirkan perlu.		Semakan di <i>server</i> MyHIX
5.	Boleh membuat pilihan untuk <i>opt-out</i> dan berupaya untuk <i>disable</i> dan <i>enable opt-out</i> sebelum maklumat dihantar.		
6.	Proses penyediaan <i>addendum</i> DS dan hantar ke MyHIX.		



Bil.	Semakan Pengujian	Lulus / Gagal	Komen / Catatan
7.	Semak maklumat yang dihantar ke MyHIX dengan menggunakan kaedah ' <i>remote server</i> ' atau lain-lain kaedah yang difikirkan perlu.		Semakan di <i>server</i> MyHIX
8.	Boleh melihat senarai ( <i>view</i> ) DS/ES dan <i>addendum</i> sedia ada di MyHIX		
9.	Mengambil kembali maklumat ( <i>retrieve</i> ) yang telah dihantar ke MyHIX dan paparkan seperti apa yang dihantar pada perkara 1.		
10.	Mengambil maklumat ( <i>retrieve</i> ) dari fasiliti lain yang telah dihantar ke MyHIX dan paparkan.		

## Referral

Bil.	Semakan Pengujian	Lulus / Gagal	Komen / Catatan
1.	Proses pendaftaran/pengemaskinian maklumat pesakit.		
2.	Proses penyediaan dan penghantaran <i>Referral</i> dan DS/ES ke MyHIX. (Fasiliti yang merujuk)		
3.	Semak maklumat yang dihantar ke MyHIX dengan menggunakan kaedah ' <i>remote server</i> ' atau lain-lain kaedah yang difikirkan perlu.		Semakan di <i>server</i> MyHIX
4.	Boleh melihat senarai <i>Referral</i> sedia ada di MyHIX. (Fasiliti yang dirujuk)		

Bil.	Semakan Pengujian	Lulus / Gagal	Komen / Catatan
5.	Mencapai ( <i>retrieve</i> ) <i>Referral</i> yang telah dihantar ke MyHIX dan paparkan seperti apa yang dihantar pada perkara 1. (Fasiliti yang dirujuk)		
6.	Proses penyediaan dan penghantaran <i>Referral Reply Notes</i> dan DS/ES ke MyHIX. (Fasiliti yang dirujuk)		
7.	Mencapai ( <i>retrieve</i> ) <i>Referral Reply Notes</i> (Fasiliti yang merujuk)		

**ISU SEWAKTU PENGUJIAN (nyatakan, jika ada)**

Bil.	Perkara	Komen

**DISAHKAN OLEH:**

---

(Tandatangan)

Nama :  
Jawatan :  
Unit/Jabatan :  
Tarikh :

# MyHIX Change Management Checklist & Template

## ADKAR MODEL FOR CHANGE MANAGEMENT IN MYHIX

ADKAR Model for Change Management in MyHIX includes:

- **Awareness** – of why the change is needed
- **Desire** – to support and participate in the change
- **Knowledge** – of how to change
- **Ability** – to implement new skills and behaviors
- **Reinforcement** – to sustain the change

These building blocks are crucial in assessing the level of change and setting the stage to happen in an individual and subsequently in the organization as a whole:

- i. **Awareness** represents a person's understanding of the nature of the change, why the change is being made and the risk of not changing. It also includes information about the internal and external drivers that created the need for change as well as "what's in it for me".
- ii. **Desire** represents the willingness to support and engage in a change, by an individual's personal situation as well as the intrinsic motivators that are unique to each person.
- iii. **Knowledge** represents the information, training and education necessary to know how to change. It includes information about behaviors, processes, tools, systems, skills, job roles and techniques that are needed to implement the change.
- iv. **Ability** represents the realization or execution of the change. Ability is turning knowledge into action and is achieved when a person or group has the demonstrated capability to implement the change at the required performance levels.
- v. **Reinforcement** represents those internal and external factors that sustain a change. External reinforcement could include recognition, rewards and celebrations that are tied to the realization of the change. Internal reinforcements could be a person's internal satisfaction with his or her achievement or other benefits derived from the change on a personal level.

The building blocks of the Change Management Model embedded the best practice perspectives that examine the influences and interactions among:

- The organization structure;
- Its people;
- The processes; and
- The technology

## KECA MODEL FOR CHANGE MANAGEMENT IN MYHIX

- **K** stands for Keep (Business as usual when MyHIX implemented),
- **E** stands for End (Task expected to stop when MyHIX implemented),
- **C** stands for Change (change expected),
- **A** stands for Add (additional tasks needed when MyHIX implemented).

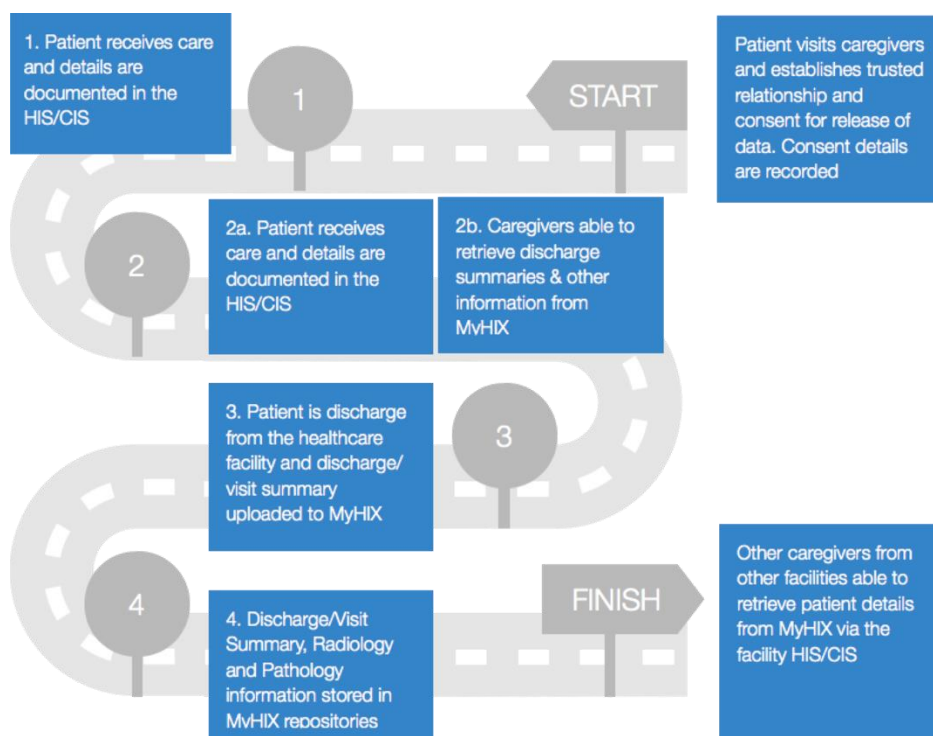
It is the plan for areas of change expected by the doctors between current and future.

It is important for us to clearly identify which parts of business process that will change for it may affect the workflows, policies, roles and responsibilities of the users of the system. Thus, knowing it will help to gear and focus the MyHIX change management strategy towards a more practical and relevant plan.

The scope of the current MyHIX implementation include:

- Development of integration profile for radiology and laboratory
- Integration of e-referral with HIS/CIS
- Amendment and implementation of discharge summary

The diagram below illustrates the user process flow with MyHIX integrated:



**Figure 1: User process flow with MyHIX integrated**

The table below assumes the differences between current and future situation with MyHIX for doctors:

Key Areas	Current	With MyHIX
During Registration	Not Applicable	Not Applicable
During Consultation	<ul style="list-style-type: none"> <li>• Able to view past clinical records/information from same facility only</li> <li>• Patient brings referral letter</li> </ul>	<ul style="list-style-type: none"> <li>• Able to view past clinical records/information from same and other facilities</li> <li>• Retrieve referral letter online with other information</li> </ul>
During Ordering Investigation Procedures	<ul style="list-style-type: none"> <li>• Ordering and viewing results from same facility</li> </ul>	<ul style="list-style-type: none"> <li>• Ordering investigation for same facility or to other facility (to be decided)</li> <li>• Viewing results from same and other facilities</li> </ul>
During Discharge	<ul style="list-style-type: none"> <li>• HIS/CIS generates discharge summary / Visit Summary</li> </ul>	<ul style="list-style-type: none"> <li>• HIS/CIS generates Discharge Summary / Visit Summary</li> </ul>

Table 1: The differences between current and future situation with MyHIX for doctors

Areas of change expected for the doctors are listed in the table below:

KEEP (Business as Usual when MyHIX implemented)	END (Task expected to stop when MyHIX implemented)
<ul style="list-style-type: none"> <li>• Consultation SOP</li> <li>• Consultation policies</li> <li>• Using of HIS/CIS</li> </ul>	Not Applicable
CHANGE (change expected)	ADD (additional tasks needed when MyHIX implemented)
<ul style="list-style-type: none"> <li>• Retrieve MyHIX records during consultation</li> <li>• Ensure completeness of discharge summary</li> </ul>	<ul style="list-style-type: none"> <li>• Clicking or viewing patient past records from other facilities</li> <li>• Privacy and confidentiality awareness</li> </ul>

	<ul style="list-style-type: none"> <li>• Placing electronic orders in HIS/CIS for investigations and procedures will coexist with manual orders</li> <li>• Reason for referral when referring patient through HIS or CIS environment</li> </ul>
--	---

Table 2: Areas of change expected for the doctors

The table below assumes the differences between current and future situation with MyHIX for Nurses, Assistant Medical Doctor and other Allied Health:

Key Areas	Current	With MyHIX
During Registration	Not Applicable	Not Applicable
During Consultation	<ul style="list-style-type: none"> <li>• Able to view past clinical records/information from same facility only</li> </ul>	<ul style="list-style-type: none"> <li>• Able to view past clinical records/information from same and other facilities</li> <li>• Retrieve referral letter online with other relevant clinical information of the current encounter</li> </ul>
During Ordering of Investigations and Procedures	<ul style="list-style-type: none"> <li>• Ordering and viewing results from the same facility</li> </ul>	<ul style="list-style-type: none"> <li>• Ordering task/investigation not available at current facility</li> <li>• Viewing results/tasks executed and reported from other facilities</li> </ul>
During Discharge	Not Applicable	Not Applicable

Table 3: The differences between current and future situation with MyHIX for Nurses, Assistant Medical Doctor and other Allied Health

Areas of change expected for the nurses, assistant medical doctors and allied health are listed in the table below:

<b>KEEP (Business as Usual when MyHIX implemented)</b>	<b>END (Task to Stop when MyHIX implemented)</b>
<ul style="list-style-type: none"> <li>• Consultation/tasks SOP</li> <li>• Consultation/tasks policies</li> <li>• Using of HIS/SPP/CIS/TPC</li> </ul>	Not Applicable
<b>CHANGE (change expected)</b>	<b>ADD (additional tasks needed when MyHIX implemented)</b>
<ul style="list-style-type: none"> <li>• Retrieve MyHIX records during consultation/investigation/report</li> <li>• Ensure completeness of clinical records</li> </ul>	<ul style="list-style-type: none"> <li>• Clicking or viewing patient past records from other facilities</li> <li>• Awareness of privacy and confidentiality</li> </ul>

Table 4: Areas of change expected for the nurses, assistant medical doctors and allied health

The table below assumes the differences between current and future situation with MyHIX for patient:

<b>Key Areas</b>	<b>Current</b>	<b>With MyHIX</b>
During Registration	<ul style="list-style-type: none"> <li>• Normal registration</li> <li>• Bring referral letter</li> </ul>	<ul style="list-style-type: none"> <li>• Need to understand about MyHIX Consent policy</li> <li>• Awareness regarding the functions and benefits of MyHIX</li> <li>• May need no physical referral letter</li> </ul>
During Consultation	Not Applicable	Not Applicable
During Ordering Investigation Procedures	Not Applicable	Not Applicable
During Discharge	Not Applicable	Not Applicable



Key Areas	Current	With MyHIX
Post Discharge (Future: not in current MyHIX implementation)	<ul style="list-style-type: none"> <li>• View future follow up dates in his/her clinic/hospital card</li> </ul>	<ul style="list-style-type: none"> <li>• View future follow up plan in personal lifetime health record</li> </ul>

Table 5: The differences between current and future situation with MyHIX for patient

Besides the identification of areas to change, it is pertinent to note that the success of MyHIX is dependent on:

- Effective use of existing HIS/CIS
- Completeness of discharge or visit summary

## MYHIX CHANGE MANAGEMENT (CM) CHECKLIST

**Purpose** : This checklist is to ensure preparatory actions are taken before and during the implementation phase of MyHIX at the facility.

**Scope** : To be use by change agents at the facility.

**Objective** : To facilitate the implementation of the CM MyHIX at the Facility.

### 1. COMMUNICATIONS

NO.	SUPPORT REQUIRED	YES	NO
1.1	Do you have a Communications Plan? To facilitate communication which is timely, consistent and coordinated and delivers the key messages to specified audiences within (CME sessions/ <i>Ahli Lembaga Pelawat</i> / Permanent Agenda meetings)		
1.2	Have you identified your key stakeholders? To engage with your stakeholders and increase their understanding and adoption of MyHIX		
1.3	Have you identified your different stakeholder groups?		
	1.3.1 Direct Users		
	1.3.2 Keeping Momentum		
	1.3.3 Indirect users		
	1.3.4 Keeping Informed		
	1.3.5 Ad hoc Users e.g. Visiting Consultants/ Specialist/ Allied Services		
	1.3.6 Engage to make aware		

NO.	SUPPORT REQUIRED	YES	NO
1.4	Do you have a nominated communications leader? To plan and manage the communications, to all key stakeholders.		
1.5	Are you familiar with the communication channels available to you?		

	1.5.1 Face to face		
	1.5.2 Hospital website internet / web/ bulk emails to key players		
	1.5.3 Printed material/ fliers/ buntings		

## 2. CHANGE MANAGEMENT PLAN

NO.	SUPPORT REQUIRED FROM THE VARIOUS FACILITIES	YES	NO
2.1	Do you have a Change Management Plan? (eg. Timeline etc.)		
2.2	Is your Governance structure in place?		
	2.2.1 Project Board/ Project Manager/ Change team		
	2.2.2 Building a “Guiding team” to agree change management activities		
2.3	Are your change activities included in your project plan and aligned with project milestones and benefits trajectories? Right information / activity at the right time		
2.4	How will you communicate the change to your staff?		
	2.4.1 Raising awareness		
	2.4.2 Stakeholder mapping / stakeholder groups		
	2.4.3 Understanding the need for change		
2.5	Are your IT teams briefed and on-board?		
	2.5.1 Raising Awareness		
	2.5.2 Understanding the change		
2.6	Do you know how the new IT system / process will impact on Your Business / Your Staff / The Patient		
	2.6.1 Business case – understanding the change / benefits		

NO.	SUPPORT REQUIRED FROM THE VARIOUS FACILITIES	YES	NO
2.7	Do you know what changes are required to your current working practices?		
	2.7.1 Analyze your processes - As-Is Process mapping		
	2.7.2 Local scenarios to assess the impact of changes on people /process		
	2.7.3 Identify barriers		
	2.7.4 Support required?		
2.8	Are all those staff impacted by the change engaged and aware and involved in developing the new processes?		
	2.8.1 Keeping momentum		
	2.8.2 Resolving issues / barriers		
2.9	Have you documented your new processes and working practices?		
	2.9.1 To-Be processes – implement change		
2.10	Have you developed a training plan?		
	2.10.1 Implementing and sustaining change		
2.11	Are all your key users on-board with the new IT system / process?		
	2.11.1 Taking Stock		
	2.11.2 What' s been achieved		
	2.11.3 What's left to do		

NO.	SUPPORT REQUIRED FROM THE VARIOUS FACILITIES	YES	NO
	2.11.4 Addressing issues /barriers		
2.12	Post Implementation - How successful has your Implementation had been?		
	2.12.1 Key successes		
	2.12.2 Key Barriers		
	2.12.3 Lessons learned		
	2.12.4 Moving forward		

## MyHIX Change Management Plan



<InsertYourFacilityNameHere>

<dd/mm/yyyy>

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## **1. Purpose of this CM Plan**

<Insert the purpose of this plan here>

## **2. About MyHIX**

<insert what do you understand about MyHIX>

<Draw a diagram>



### **3. Objective of Change Management in MyHIX**

<Insert Change Management Objective for MyHIX here>

#### 4. CM Sponsorship Networks

##### a) MyHIX CM Sponsors

<insert names>

Sponsors at KKM

Sponsors at JKN

Sponsors at \_\_\_\_\_

b) Change Agents

No.	Department / Unit	Names	Role

c) Roles and Responsibilities of Change Agents

No.	Roles	Responsibilities
1.	As Communicator	
2.	As Coach	
3.	In Training	
4.	In Managing Resistance	
5.		
6.		

## 5. ADKAR

### a) Areas of Change

No	Workflow/Policy	Person Affected	Change

## 6. KECA

Keep	End
Change	Add

Keep	End
Change	Add

Keep	End
Change	Add

<b>Keep</b>	<b>End</b>
<b>Change</b>	<b>Add</b>

<b>Keep</b>	<b>End</b>
<b>Change</b>	<b>Add</b>

## 7. ADKAR Strategy

	A	D	K	A	R
Communication					
Sponsorship					
Coaching					
Training					
Resistant Management					

## 8. CM Implementation Plan

### a) CM Task and Execution (including Timeline)

No	ADKAR	What/Task	Who	How/ Material	When & Where	Remarks
1	Awareness					



b) Risk

No	Risk	Rating	Mitigation	Remarks

## **9. Obstacles Identified**

## **10. Obstacles Removal Plan**

## 11. Monitoring

### a) ADKAR Profiling

[illegible]

b) Issues Log - Post Go-Live

NO	ISSUES	RATING	PLAN

**12. Plan**

- <LIST YOUR PLAN HERE , PLAN – HOW – WHO – WHEN>

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## LAMPIRAN 7

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# Garis panduan Khidmat Meja Bantuan (Helpdesk) MyHIX

## **GARIS PANDUAN KHIDMAT BANTUAN (HELPDESK) UNTUK SISTEM MyHIX**

Garis panduan ini disediakan untuk rujukan semua fasiliti yang terlibat dalam integrasi sistem IT fasiliti dengan MyHIX.

### **PROSEDUR KERJA (Standard Operating Procedure)**

■ Sebarang isu berkaitan MyHIX perlu disalurkan kepada Unit IT difasiliti masing-masing.

■ Isu tersebut akan melalui tiga (3) peringkat tindakan seperti berikut:-

#### **a) Tindakan di peringkat fasiliti**

Unit IT di fasiliti mengambil tindakan sekiranya isu adalah berkaitan masalah IT di fasiliti. Sekiranya ia bukan isu setempat, isu tersebut akan dipanjangkan kepada Khidmat Bantuan / *Helpdesk* Bahagian Pengurusan Maklumat (BPM) melalui email di [helpdesk@moh.gov.my](mailto:helpdesk@moh.gov.my) atau melalui telefon 03-8883-3883.

#### **b) Tindakan di peringkat BPM**

■ BPM akan membuat saringan ke atas isu-isu yang diterima sama ada berkaitan dengan :

- Rangkaian dan pusat data; atau
- Pengoperasian MyHIX

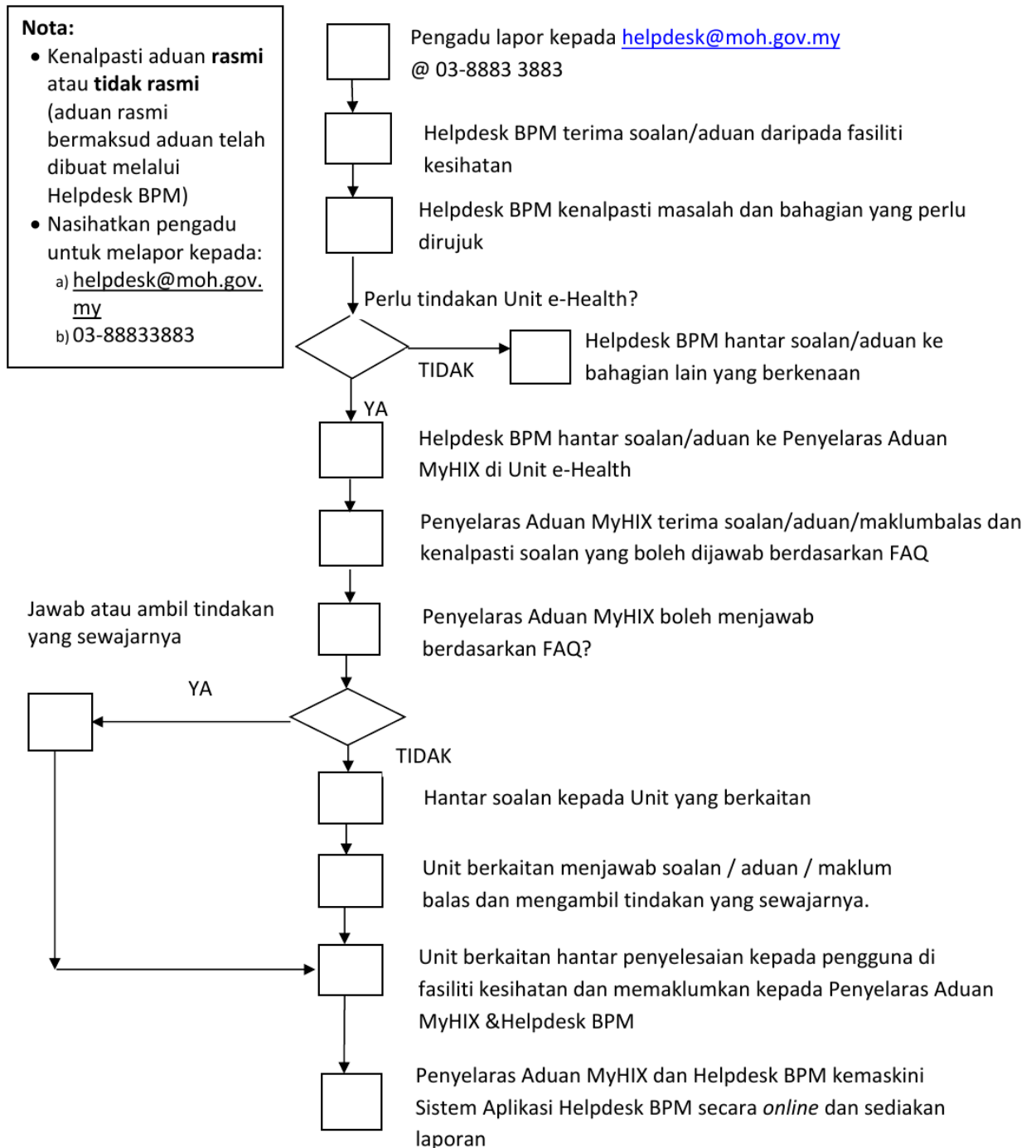
■ BPM hanya mengambil tindakan ke atas isu-isu yang berkaitan dengan masalah rangkaian dan pusat data sahaja

■ BPM akan memanjangkan isu berkaitan dengan pengoperasian MyHIX kepada Seksyen Perancangan eHealth untuk tindakan seterusnya.

#### **c) Tindakan di peringkat Seksyen Perancangan eHealth**

Seksyen Perancangan eHealth bertanggungjawab untuk mengambil tindakan terhadap sebarang isu berkaitan pengoperasian MyHIX. (Rujuk carta aliran kerja di bawah)

## CARTA ALIR KHIDMAT BANTUAN (HELPDESK) UNTUK SISTEM MyHIX



## PIAGAM PELANGGAN

Khidmat Bantuan MyHIX di peringkat Seksyen Perancangan eHealth akan memberi respon dalam masa tiga (3) hari bekerja bagi sebarang isu MyHIX yang diterima.

## **WAKTU OPERASI**

Waktu operasi Khidmat Bantuan MyHIX adalah pada setiap hari bekerja seperti berikut:

Isnin hingga Khamis	8.00 pagi hingga 12.30 petang	2.00 hingga 4.30 petang
Jumaat	8.00 pagi hingga 12.15 petang	2.45 hingga 4.30 petang

Garis panduan ini akan ditambah baik dan dikemaskini dari masa ke semasa secara berkala berdasarkan maklum balas yang diterima daripada semua pihak.



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## LAMPIRAN 8

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# SOALAN LAZIM MyHIX

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## SOALAN LAZIM MyHIX UNTUK ANGGOTA KKM

### Mengenai MyHIX

#### 1. Apakah MyHIX?

Satu sistem yang membolehkan perkongsian maklumat penjagaan kesihatan individu di antara hospital/klinik melalui talian *virtual private network*/1GovNet.

#### 2. Kenapa MyHIX dilaksanakan?

MyHIX dilaksanakan untuk membolehkan doktor atau pemberi rawatan mengakses maklumat kesihatan individu yang lengkap dan menyediakan penjagaan kesihatan yang lebih berkualiti dan berterusan. MyHIX adalah asas kepada pewujudan Rekod Kesihatan Sepanjang Hayat bagi individu yang mendapatkan rawatan dan penjagaan kesihatan di hospital/klinik.

#### 3. Apa itu Rekod Kesihatan Sepanjang Hayat?

Adalah koleksi rekod kesihatan mengenai sebarang aktiviti dan episod berkaitan dengan tahap kesihatan dan rawatan seseorang sepanjang hayat setiap individu dari semua lokasi hospital/klinik di Malaysia.

#### 4. Apakah faedah yang diperolehi?

- Memudahkan pesakit mendapatkan rawatan susulan di mana-mana hospital/klinik kerajaan
- Mengurangkan pemeriksaan dan penyiasatan yang berulang.
- Membolehkan kesinambungan penjagaan kesihatan dan rawatan pesakit yang lebih khusus.

#### 5. Di manakah ia dilaksanakan?

MyHIX telah dilaksanakan di:

1. Hospital Putrajaya, Putrajaya
2. Klinik Kesihatan Putrajaya, Presint 9, Putrajaya
3. Hospital Tuanku Ja'afar, Seremban, Negeri Sembilan
4. Hospital Port Dickson, Negeri Sembilan
5. Hospital Bentong, Pahang
6. Hospital Sultanah Nur Zahirah, Kuala Terengganu, Terengganu
7. Hospital Raja Perempuan Zainab II, Kelantan
8. Institut Kanser Negara, Putrajaya

#### 6. Bila ia dilaksanakan?

Ia telah dilaksanakan sejak September 2011.

#### 7. Apakah maklumat yang dikongsi?

##### i. Maklumat demografi

Maklumat peribadi pesakit seperti nama, jantina, nombor MyKad dan alamat.

ii. Maklumat rawatan pesakit

Ringkasan discaj pesakit mengandungi sejarah perubatan, diagnosa dan rawatan pesakit.

iii. Maklumat rujukan pesakit

Rujukan pesakit mengandungi maklumat ringkasan discaj dan tujuan rujukan.

Pada masa akan datang, maklumat tambahan seperti keputusan makmal dan laporan pengimejan (*X-ray*) akan turut dikongsi.

**8. Bagaimanakah MyHIX dilaksanakan?**

Maklumat kesihatan pesakit disimpan di dalam pangkalan data MyHIX secara automatik (*default: opt-in*) bagi membolehkan maklumat dikongsi oleh semua hospital/klinik kerajaan yang terlibat.

**Hak Pesakit**

**9. Adakah pesakit berhak untuk tidak bersetuju berkongsi maklumat?**

Ya, pesakit boleh memohon pengecualian (*opt-out*) MyHIX semasa sesi rawatan.

**10. Bagaimana proses pengecualian (*opt-out*) MyHIX dilaksanakan?**

Pesakit perlu melengkapkan borang pengecualian (*opt-out*) kemasukan data ke MyHIX. Borang ini boleh didapati daripada anggota kesihatan yang bertugas di kaunter pendaftaran, bilik rawatan, wad atau lokasi yang ditentukan oleh hospital/klinik tersebut.

**11. Di manakah proses pengecualian (*opt-out*) MyHIX dibuat?**

Proses pengecualian (*opt-out*) MyHIX boleh dibuat di kaunter pendaftaran, bilik rawatan atau dalam wad. Walau bagaimanapun ia bergantung kepada prosedur di setiap hospital/klinik tersebut.

**12. Bila proses pengecualian (*opt-out*) MyHIX dibuat?**

Proses pengecualian (*opt-out*) MyHIX boleh dilakukan pada bila-bila masa sebelum ringkasan discaj dihantar ke MyHIX.

**13. Di manakah borang “Pengecualian Kemasukan Data ke MyHIX” yang telah dilengkapkan disimpan?**

Ianya disimpan dalam fail pesakit dan dihantar ke pejabat rekod. Bagi hospital/klinik kerajaan yang menggunakan *Hospital Information System (HIS)* / *Clinical Information System (CIS)*, borang akan diimbas dan disimpan dalam pangkalan data (server) hospital/klinik berkenaan.

**14. Bolehkah pesakit menukar keputusan pengecualian (*opt-out*) MyHIX mereka semasa mendapatkan rawatan?**

Boleh. Pengecualian (*opt-out*) MyHIX boleh dilakukan sebelum rawatan tamat.

**15. Bolehkah pesakit menukar keputusan pengecualian (*opt-out*) MyHIX mereka selepas tamat rawatan?**

Pesakit tidak boleh menukar keputusan pengecualian (*opt-out*) MyHIX selepas tamat rawatan kerana maklumat tersebut telah dihantar dan disimpan dalam pangkalan data MyHIX.

**16. Siapakah yang boleh membuat keputusan untuk pengecualian (*opt-out*) MyHIX bagi pesakit yang tidak mampu membuat keputusan sendiri (berumur 18 tahun dan ke bawah, tidak waras dan tidak sedar diri)?**

Penjaga rasmi atau waris pesakit.

**17. Adakah pemberi rawatan boleh mengakses maklumat pesakit dari MyHIX setelah pesakit memilih untuk pengecualian (*opt-out*) MyHIX?**

Ya. Pemberi rawatan masih boleh mengakses maklumat pesakit walaupun pesakit memilih untuk pengecualian (*opt-out*) MyHIX pada sesi rawatan semasa.

### **Ringkasan Discaj**

**18. Bagaimanakah format Ringkasan Discaj MyHIX diwujudkan?**

Ringkasan discaj MyHIX diwujudkan berdasarkan Borang Ringkasan Discaj PD302.

### **Perkongsian Maklumat**

**19. Bolehkah maklumat pesakit dikongsi antara hospital/klinik kerajaan (Kementerian Kesihatan Malaysia)?**

Boleh, maklumat pesakit boleh dikongsi antara hospital/klinik yang menggunakan perkhidmatan MyHIX.

**20. Bolehkah maklumat pesakit dikongsi dengan hospital/klinik swasta atau badan berkanun (bukan di bawah Kementerian Kesihatan Malaysia)?**

Setakat ini, berdasarkan akta *Private Healthcare Facilities and Services Regulations 2005* (Peraturan 138/2006: 44(2)), maklumat pesakit belum boleh dikongsi.

### **Kerahsiaan Pesakit**

**21. Adakah kerahsiaan maklumat pesakit dalam MyHIX terjamin?**

Ya, kerana setiap hospital/klinik kerajaan yang menggunakan sistem teknologi maklumat adalah tertakluk kepada Dasar Keselamatan ICT dan *User Access Control Policy* yang berkuatkuasa.

### **Penggunaan Maklumat MyHIX**

**22. Bolehkah maklumat MyHIX digunakan untuk membuat analisa penyakit?**

Setakat ini analisa penyakit belum boleh dibuat.

**23. Bolehkah maklumat yang telah dihantar ke MyHIX diubahsuai?**

Maklumat tidak boleh diubahsuai setelah memasuki pangkalan data MyHIX.

**24. Sekiranya doktor atau pemberi rawatan perlu membuat penambahan atau pengubahsuaian maklumat Ringkasan Discaj apakah yang perlu dilakukan?**

Jika terdapat pertambahan atau pengubahsuaian maklumat, penambahan (*addendum*) boleh dibuat kepada ringkasan discaj yang hendak diubah tersebut mengikut prosedur kendalian standard (*SOP*) hospital/klinik masing-masing.

**25. Berapa lama tempoh maklumat disimpan di dalam MyHIX?**

Sepanjang hayat pesakit. Tempoh rekod disimpan adalah berdasarkan Akta Arkib Negara.

**26. Adakah pesakit dibenarkan menggunakan maklumat kesihatan dalam MyHIX untuk tujuan pemantauan persendirian?**

Pada ketika ini, ianya tidak dibenarkan. Namun skop ini akan dimasukkan dalam perancangan masa hadapan.

**Kesan pelaksanaan MyHIX**

**27. Adakah MyHIX akan mengganggu tugas seharian?**

MyHIX tidak mengganggu tugas seharian.

**28. Adakah semua anggota diberi latihan dan pendedahan tentang MyHIX?**

Ya, semua anggota diberi latihan dan pendedahan tentang MyHIX.

***E-referral***

**29. Apakah E-referrral?**

*E-referral* adalah rujukan pesakit secara elektronik.

**30. Bagaimanakan format *E-referral* MyHIX diwujudkan?**

*E-referral* MyHIX diwujudkan berdasarkan format Ringkasan Discaj sedia ada dengan tambahan maklumat "tujuan rujukan pesakit".

**31. Adakah *E-referral* perlu dibuat untuk semua pesakit?**

Pada masa sekarang, penggunaan *E-referral* hanya untuk rujukan pesakit untuk kes-kes yang tidak kritikal dan tidak mendesak (non-urgent) yang dirujuk ke fasiliti yang melaksanakan MyHIX.

**32. Adakah pelaksanaan *E-referral* memudahkan proses rujukan pesakit?**

Ya. *E-referral* membolehkan maklumat perubatan pesakit dikongsi secara elektronik antara doktor yang berada di fasiliti yang berlainan.

**33. Bagaimana proses *E-referral* dilaksanakan?**

Proses kerja *E-referral* adalah sama seperti proses kerja rujukan pesakit secara *manual*. Doktor perlu memberi salinan cetak (*hard copy*) *E-referral* kepada pesakit dan pesakit perlu mendapatkan temujanji di fasiliti yang dirujuk samada melalui telefon atau pergi ke fasiliti yang berkenaan.

**34. Sekiranya pesakit memilih untuk pengecualian (*opt-out*) MyHIX, adakah ini bermaksud *E-referral* tidak perlu dibuat?**

Tidak. Keputusan pengecualian (*opt-out*) MyHIX hanya tertakluk kepada ringkasan discaj sahaja. Walaupun pesakit memilih untuk pengecualian MyHIX, *E-referral* yang dibuat akan tetap dihantar ke pangkalan data MyHIX. *E-referral* tersebut akan dicapai apabila pesakit pergi ke fasiliti yang dirujuk untuk mendapatkan rawatan.

***Reply Note***

**35. Apakah *Reply Note*?**

*Reply Note* adalah laporan perawatan doktor yang merawat kes-kes yang dirujuk melalui MyHIX bertujuan untuk memberi maklum balas kepada doktor yang telah merujuk pesakit.

**36. Bagaimanakan format *Reply Note* diwujudkan?**

*Reply Note* diwujudkan berdasarkan format Ringkasan Discaj dengan tambahan maklumat “pelan rawatan selanjutnya”.

**37. Adakah *Reply Note* perlu dibuat untuk semua pesakit?**

Tidak. Peraturan sedia ada tidak mewajibkan penyediaan *Reply Note*. Walaubagaimanapun, ianya digalakkan bagi meningkatkan koordinasi perawatan dan kualiti penjagaan kesihatan pesakit.

**38. Sekiranya pesakit memilih keputusan pengecualian (*opt-out*) MyHIX, adakah ini bermaksud *Reply Note* tidak perlu dibuat?**

Tidak. Keputusan pengecualian (*opt-out*) MyHIX hanya tertakluk kepada ringkasan discaj sahaja. Sekiranya pesakit telah discaj daripada fasiliti yang dirujuk, *Reply Note* yang disediakan akan dihantar ke pangkalan data MyHIX. Apabila pesakit kembali mendapatkan rawatan di fasiliti yang merujuk, doktor yang merujuk pesakit tersebut boleh melihat *Reply Note* tersebut.

## SOALAN LAZIM MyHIX UNTUK ORANG AWAM

### Mengenai MyHIX

#### 1. Apakah MyHIX?

Satu sistem yang membolehkan perkongsian maklumat penjagaan kesihatan individu di antara hospital/klinik melalui talian *virtual private network*/1GovNet.

#### 2. Kenapa MyHIX dilaksanakan?

MyHIX dilaksanakan untuk membolehkan doktor atau pemberi rawatan mengakses maklumat kesihatan individu yang lengkap dan menyediakan penjagaan kesihatan yang lebih berkualiti dan berterusan. MyHIX adalah asas kepada pewujudan Rekod Kesihatan Sepanjang Hayat bagi individu yang mendapatkan rawatan dan penjagaan kesihatan di hospital/klinik.

#### 3. Apa itu Rekod Kesihatan Sepanjang Hayat?

Adalah koleksi rekod kesihatan mengenai sebarang aktiviti dan episod berkaitan dengan tahap kesihatan dan rawatan seseorang sepanjang hayat setiap individu dari semua lokasi hospital/klinik di Malaysia.

#### 4. Apakah faedah yang diperolehi?

- Memudahkan pesakit mendapatkan rawatan susulan di mana-mana hospital/klinik kerajaan
- Mengurangkan pemeriksaan dan penyiasatan yang berulang.
- Membolehkan kesinambungan penjagaan kesihatan dan rawatan pesakit yang lebih khusus.

#### 5. Di manakah ia dilaksanakan?

**MyHIX telah dilaksanakan di:**

1. Hospital Putrajaya, Putrajaya
2. Klinik Kesihatan Putrajaya, Presint 9, Putrajaya
3. Hospital Tuanku Ja'afar, Seremban, Negeri Sembilan
4. Hospital Port Dickson, Negeri Sembilan
5. Hospital Bentong, Pahang
6. Hospital Sultanah Nur Zahirah, Kuala Terengganu, Terengganu
7. Hospital Raja Perempuan Zainab II, Kelantan
8. Institut Kanser Negara, Putrajaya

#### 6. Bila ia dilaksanakan?

Ia telah dilaksanakan sejak September 2011.

#### 7. Apakah maklumat yang dikongsi?

##### i. Maklumat demografi

Maklumat peribadi pesakit seperti nama, jantina, nombor MyKad dan alamat.



## **ii. Maklumat rawatan pesakit**

Ringkasan discaj pesakit mengandungi sejarah perubatan, diagnosa dan rawatan pesakit.

## **iii. Maklumat rujukan pesakit**

Rujukan pesakit mengandungi maklumat ringkasan discaj dan tujuan rujukan.

Pada masa akan datang, maklumat tambahan seperti keputusan makmal dan laporan pengimejan (*X-ray*) akan turut dikongsi.

### **8. Bagaimanakah MyHIX dilaksanakan?**

Maklumat kesihatan pesakit disimpan di dalam pangkalan data MyHIX secara automatik (*default: opt-in*) bagi membolehkan maklumat dikongsi oleh semua hospital/klinik kerajaan yang terlibat.

## **Hak Pesakit**

### **9. Adakah pesakit berhak untuk tidak bersetuju berkongsi maklumat?**

Ya, pesakit boleh memohon pengecualian (*opt-out*) MyHIX semasa sesi rawatan.

### **10. Bagaimana proses pengecualian (*opt-out*) MyHIX dilaksanakan?**

Pesakit perlu melengkapkan borang pengecualian (*opt-out*) kemasukan data ke MyHIX. Borang ini boleh didapati daripada anggota kesihatan yang bertugas di kaunter pendaftaran, bilik rawatan, wad atau lokasi yang ditentukan oleh hospital/klinik tersebut.

### **11. Di manakah proses pengecualian (*opt-out*) MyHIX dibuat?**

Proses pengecualian (*opt-out*) MyHIX boleh dibuat di kaunter pendaftaran, bilik rawatan atau dalam wad. Walau bagaimanapun ia bergantung kepada prosedur di setiap hospital/klinik tersebut.

### **12. Bila proses pengecualian (*opt-out*) MyHIX dibuat?**

Proses pengecualian (*opt-out*) MyHIX boleh dilakukan pada bila-bila masa sebelum ringkasan discaj dihantar ke MyHIX.

### **13. Di manakah borang “Pengecualian Kemasukan Data ke MyHIX” yang telah dilengkapkan disimpan?**

Ianya disimpan dalam fail pesakit dan dihantar ke pejabat rekod. Bagi hospital/klinik kerajaan yang menggunakan *Hospital Information System (HIS)* / *Clinical Information System (CIS)*, borang akan diimbas dan disimpan dalam pangkalan data (server) hospital/klinik berkenaan.

### **14. Bolehkah pesakit menukar keputusan pengecualian (*opt-out*) MyHIX mereka semasa mendapatkan rawatan?**

Boleh. Pengecualian (*opt-out*) MyHIX boleh dilakukan sebelum rawatan tamat.

**15. Bolehkah pesakit menukar keputusan pengecualian (*opt-out*) MyHIX mereka selepas tamat rawatan?**

Pesakit tidak boleh menukar keputusan pengecualian (*opt-out*) MyHIX selepas tamat rawatan kerana maklumat tersebut telah dihantar dan disimpan dalam pangkalan data MyHIX.

**16. Siapakah yang boleh membuat keputusan untuk pengecualian (*opt-out*) MyHIX bagi pesakit yang tidak mampu membuat keputusan sendiri (berumur 18 tahun dan ke bawah, tidak waras dan tidak sedar diri)?**

Penjaga rasmi atau waris pesakit.

**17. Adakah pemberi rawatan boleh mengakses maklumat pesakit dari MyHIX setelah pesakit memilih untuk pengecualian (*opt-out*) MyHIX?**

Ya. Pemberi rawatan masih boleh mengakses maklumat pesakit walaupun pesakit memilih untuk pengecualian (*opt-out*) MyHIX pada sesi rawatan semasa.

### **Ringkasan Discaj**

**18. Bagaimanakah format Ringkasan Discaj MyHIX diwujudkan?**

Ringkasan discaj MyHIX diwujudkan berdasarkan Borang Ringkasan Discaj PD302.

### **Perkongsian Maklumat**

**19. Bolehkah maklumat pesakit dikongsi antara hospital/klinik kerajaan (Kementerian Kesihatan Malaysia)?**

Boleh, maklumat pesakit boleh dikongsi antara hospital/klinik yang menggunakan perkhidmatan MyHIX.

**20. Bolehkah maklumat pesakit dikongsi dengan hospital/klinik swasta atau badan berkanun (bukan di bawah Kementerian Kesihatan Malaysia)?**

Setakat ini, berdasarkan akta *Private Healthcare Facilities and Services Regulations 2005* (Peraturan 138/2006: 44(2)), maklumat pesakit belum boleh dikongsi.

### **Kerahsiaan Pesakit**

**21. Adakah kerahsiaan maklumat pesakit dalam MyHIX terjamin?**

Ya, kerana setiap hospital/klinik kerajaan yang menggunakan sistem teknologi maklumat adalah tertakluk kepada Dasar Keselamatan ICT dan *User Access Control Policy* yang berkuatkuasa.

### **E-referral**

**39. Apakah E-referral?**

*E-referral* adalah rujukan pesakit secara elektronik.

**40. Adakah *E-referral* perlu dibuat untuk semua pesakit?**

Pada masa sekarang, penggunaan *E-referral* hanya untuk rujukan pesakit untuk kes-kes yang tidak kritikal dan tidak mendesak (non-urgent) yang dirujuk ke fasiliti yang melaksanakan MyHIX.

**41. Adakah pelaksanaan *E-referral* memudahkan proses rujukan pesakit?**

Ya. *E-referral* membolehkan maklumat perubatan pesakit dikongsi secara elektronik antara doktor yang berada di fasiliti yang berlainan.

**42. Bagaimana proses *E-referral* dilaksanakan?**

Proses kerja *E-referral* adalah sama seperti proses kerja rujukan pesakit secara *manual*. Doktor perlu memberi salinan cetak (*hard copy*) *E-referral* kepada pesakit dan pesakit perlu mendapatkan temujanji di fasiliti yang dirujuk samada melalui telefon atau pergi ke fasiliti yang berkenaan.

**43. Sekiranya pesakit memilih untuk pengecualian (*opt-out*) MyHIX, adakah ini bermaksud *E-referral* tidak perlu dibuat?**

Tidak. Keputusan pengecualian (*opt-out*) MyHIX hanya tertakluk kepada ringkasan discaj sahaja. Walaupun pesakit memilih untuk pengecualian MyHIX, *E-referral* yang dibuat akan tetap dihantar ke pangkalan data MyHIX. *E-referral* tersebut akan dicapai apabila pesakit pergi ke fasiliti yang dirujuk untuk mendapatkan rawatan.

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## LAMPIRAN 9

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# Keperluan Teknikal Integrasi Sistem MyHIX dengan Sistem HIS/CIS

- Tujuan** : Senarai semak ini digunakan untuk memastikan perkara-perkara yang perlu dilakukan untuk melaksanakan MyHIX di fasiliti baru
- Skop** : Digunakan oleh Unit IT fasiliti semasa pra pelaksanaan di fasiliti
- Objektif** : Memastikan sistem HIS/CIS di fasiliti bersedia bagi melancarkan pelaksanaan MyHIX
- Pra-syarat** :
  1. Perlu digunakan bersama Senarai Semak Kesediaan Pelaksanaan MyHIX di Fasiliti
  2. Pengubahsuaian (*customization*) HIS/CIS perlu menggunakan Dokumen Profil Integrasi

Bil.	Perkara / Aktiviti	Ya	Tidak	Catatan
1.	<p>Pendaftaran ke MyHIX</p> <p>a. Pendaftaran pesakit ke MyHIX untuk mendapatkan MyHIX ID (<i>Global ID</i>) di kaunter pendaftaran secara automatik (<i>back end</i>).</p>			
2.	<p>Pemetaan Data</p> <p>a. HIS/CIS boleh mengekstrak data secara automatik daripada <i>Discharge Summary</i> (DS)/<i>Encounter Summary</i> (ES) HIS/CIS untuk menjana DS/ES yang akan dihantar ke sistem MyHIX.</p> <p>b. Walaupun DS/ES HIS/CIS mungkin mempunyai maklumat terperinci yang lebih lengkap mengikut keperluan setiap fasiliti tetapi MyHIX hanya memaparkan maklumat mengikut format CDA yang ditetapkan.</p> <p>c. DS/ES yang disediakan perlu mengikut format <i>Clinical Document Architecture</i> (CDA)</p> <p>d. HIS/CIS boleh mengekstrak data alergi ke dalam DS/ES</p> <p>e. HIS/CIS perlu mendapatkan semua senarai alergi daripada DS/ES yang terkini di MyHIX</p> <p>f. HIS/CIS perlu mengemaskini senarai alergi</p> <p>g. HIS/CIS boleh memaparkan maklumat alergi yang terkini</p> <p>h. HIS/CIS boleh mengekstrak tambahan data (<i>addendum</i>) secara automatik</p>			

Bil.	Perkara / Aktiviti	Ya	Tidak	Catatan						
	daripada DS/ES HIS/CIS untuk menjana DS/ES yang akan dihantar ke MyHIX.									
3.	<p>Pesakit <i>Opt-Out</i></p> <p>a. HIS/CIS berupaya untuk <i>flag</i> pesakit <i>opt-out</i> bagi membolehkan pemantauan dibuat.</p> <p>b. HIS/CIS juga mesti berupaya <i>disable</i> pilihan penghantaran ke MyHIX bagi pesakit yang memilih <i>Opt-Out</i>.</p> <p>c. Pilihan untuk menyemak rekod pesakit dari MyHIX mesti sentiasa <i>enable</i> supaya sejarah rawatan pesakit dari MyHIX boleh dicapai semasa rawatan diberikan tanpa mengira samada pesakit <i>opt-out</i> pada episod tersebut atau tidak (untuk <i>view</i>).</p>									
4.	<p>Skrin Paparan Ringkasan Discaj dari MyHIX</p> <p>a. Mempunyai kemudahan memaparkan senarai kesemua DS/ES pesakit yang diambil dari MyHIX dan doktor boleh memilih untuk membuka mana-mana DS/ES dari senarai tersebut menggunakan HIS/CIS (<i>seamless</i>).</p> <p>b. Cadangan format tajuk untuk paparan DS/ES untuk HIS/CIS perlu diselaraskan bagi memudahkan paparan DS/ES.</p> <table border="1"> <tr> <td>Nama Hospital</td> <td>Nama Dokumen (DS/ES)</td> <td>Tarikh</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	Nama Hospital	Nama Dokumen (DS/ES)	Tarikh						
Nama Hospital	Nama Dokumen (DS/ES)	Tarikh								

Bil.	Perkara / Aktiviti	Ya	Tidak	Catatan
	<ul style="list-style-type: none"> <li>c. <i>Addendum</i> perlu dilampirkan kepada DS yang asal</li> <li>d. <i>Addendum</i> mesti ada dalam kumpulan DS yang asal (<i>Parent-Child</i>)</li> <li>e. DS mesti ditandakan/dilabel sebagai DS dengan <i>addendum (view list)</i>.</li> <li>f. Jabatan Kecemasan dan Klinik Pesakit Luar akan menggunakan label ES tetapi format ES adalah seperti di dalam DS.</li> </ul>			
5.	<p>Susun atur skrin DS/ES</p> <ul style="list-style-type: none"> <li>a. Boleh disediakan mengikut kehendak pengguna tetapi ianya juga perlu mempunyai kemudahan untuk membuat pilihan 'edit', 'semak', 'sah', dan 'hantar'.</li> <li>b. Nama pilihan-pilihan ini diselaraskan dengan pilhan yang digunakan dalam HIS/CIS.</li> <li>c. Ianya juga perlu selaras dengan SOP yang disediakan.</li> </ul>			
6.	<p>Kaedah penghantaran DS/ES</p> <ul style="list-style-type: none"> <li>a. HIS/CIS perlu mempunyai kaedah penghantaran DS/ES secara <i>real time</i> dan kelompok (<i>batch</i>).</li> <li>b. Pengguna akan menentukan kaedah penghantaran mengikut SOP fasiliti masing-masing.</li> <li>c. Sistem perlu menyediakan kemudahan untuk membuat <i>setting</i> penghantaran secara automatik.</li> <li>d. Aktiviti penghantaran DS/ES tidak mengganggu operasi doktor dan</li> </ul>			



Bil.	Perkara / Aktiviti	Ya	Tidak	Catatan
	<p>sekiranya penghantaran DS/ES ke sistem MyHIX gagal, HIS/CIS berupaya membuat penghantaran semula (<i>re-send</i>) secara automatik.</p> <p>e. Jika penghantaran gagal, pastikan tidak mengganggu proses penghantaran seterusnya.</p> <p>f. HIS/CIS perlu memberi notifikasi kepada pengguna jumlah DS/ES yang telah berjaya dan gagal dihantar ke MyHIX setiap hari</p>			
7.	<p>Referral</p> <p>a. <i>Referral Summary</i> perlu menggunakan template DS dengan tambahan <i>field "Reason for Referral"</i></p> <p>b. Menyediakan senarai hospital untuk dirujuk (7 fasiliti yang menggunakan MyHIX)</p> <p>c. Menyediakan semua senarai hospital untuk dirujuk tetapi <i>Referral</i> hanya akan dihantar ke MyHIX bagi fasiliti yang mempunyai OID sahaja</p> <p>d. HIS/CIS boleh memuat turun referral daripada MyHIX dan melampirkannya kepada episod rawatan pesakit</p> <p>e. Menyediakan antaramuka untuk carian <i>Referral</i> dan <i>Reply Notes</i></p> <p>f. <i>Referral Reply Notes</i> perlu menggunakan template DS dengan tambahan <i>field "follow-up plan"</i>.</p>			

Bil.	Perkara / Aktiviti	Ya	Tidak	Catatan
	<p>g. <i>Referral Reply Note</i> perlu mempunyai tambahan maklumat berikut :-</p> <ul style="list-style-type: none"> <li>• Fasiliti yang dirujuk</li> <li>• <i>Follow-up plan</i></li> </ul> <p>h. Untuk proses <i>Referral</i> HIS/CIS perlu menyediakan :</p> <ul style="list-style-type: none"> <li>• <i>Referral/Referral Reply Notes</i></li> <li>• DS / ES</li> </ul>			
8.	<p>Laporan</p> <ul style="list-style-type: none"> <li>• HIS berupaya menjana laporan penggunaan MyHIX seperti berikut jika perlu: <ul style="list-style-type: none"> <li>a. Bil. &amp; % penghantaran rekod ke MyHIX berbanding bil pesakit yang dirawat dan discaj. Kiraan berdasarkan bilangan pesakit.</li> <li>b. Bil. &amp; % pesakit yang memilih <i>opt-out</i> berbanding bil pesakit yang dirawat dan discaj.</li> <li>c. Bil. DS ulangan yang dihantar bagi pesakit yang sama (<i>DS addendum</i>). Untuk menunjukkan perbezaan dengan (a.)</li> <li>d. Bil &amp; % untuk pengiraan a, b dan c di atas perlu ditentukan oleh fasiliti.</li> </ul> </li> <li>• Laporan prestasi penggunaan akan dibentangkan kepada pihak pengurusan fasiliti.</li> </ul>			Laporan yang dicadangkan

Bil.	Perkara / Aktiviti	Ya	Tidak	Catatan
9.	<p>Skrin Memantau Pendaftaran dan Penghantaran Maklumat ke MyHIX</p> <p>a. Perlu disediakan skrin untuk memaparkan penghantaran data yang berlaku antara HIS/CIS dan MyHIX.</p> <p>b. Skrin ini akan membolehkan pengguna memantau transaksi yang berlaku antara server di fasiliti dan di <i>server</i> MyHIX-</p> <p>c. Dapat mengesan kegagalan penghantaran dan capaian maklumat dan mengambil tindakan selanjutnya.</p>			

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LAMPIRAN 10

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**Senarai Semak  
Kesediaan Teknikal  
dan Proses Di Fasiliti**

- Tujuan** : Senarai semak ini digunakan untuk memastikan perkara-perkara yang perlu dilakukan semasa fasa pra pelaksanaan dalam melaksanakan MyHIX di fasiliti baru
- Skop** : Digunakan oleh pasukan projek di fasiliti dalam melaksanakan MyHIX
- Objektif** : Memastikan sistem MyHIX di fasiliti bersedia sepenuhnya sebelum pelaksanaan MyHIX boleh diteruskan.
- Pra-syarat** : Perlu digunakan bersama Senarai Semak Kesiapan Pelaksanaan MyHIX di Fasiliti

**Maklumat Fasilitas :-**

<b>Nama Fasilitas :</b>			
<b>Nama produk HIS/CIS yang digunakan :</b>			
<b>Pegawai untuk dihubungi :</b>			
<b>Bil</b>	<b>Nama /Jawatan</b>	<b>Emel</b>	<b>No. Telefon</b>

Bil.	Perkara	Ya	Tidak	Catatan
1. Modul MyHIX berada dalam <i>server Production / Testing</i> ? _____				
2. Pastikan <i>port</i> berikut dibuka pada <i>firewall</i>				
a.	8080			
b.	8081			
c.	6514			
d.	2575			
e.	2576			
3. Lakukan semakan capaian ke pusat data MyHIX secara:				
a.	'PING' domain MyHIX (myhix2.moh.gov.my)			
b.	'TELNET' ke port 2575 (telnet myhix2.moh.gov.my 2576)			
c.	'TELNET' ke port 2576 (telnet myhix2.moh.gov.my 2576)			
d.	'TELNET' ke port 8080 (telnet myhix.moh.gov.my 8080)			
e.	TELNET' ke port 8081 (telnet myhix2.moh.gov.my 8081)			
4. Pastikan sistem HIS/CIS mempunyai fungsi berikut :				
a.	<i>Send Patient Demographic</i>			
b.	<i>Update Patient Demographic</i>			

Bil.	Perkara	Ya	Tidak	Catatan
c.	<i>Query MyHIX ID (Global ID)</i>			
d.	<i>Submit DS/ES</i>			
e.	<i>Retrieve/View DS/ES</i>			
f.	<i>Submit Addendum</i>			
g.	<i>Send Referral Letter/ Referral Reply Note</i>			
h.	<i>Retrieve/View Referral Letter/ Referral Reply Note</i>			
i.	Skrin pemantauan transaksi antara HIS/CIS dan MyHIX  *untuk memudahkan pegawai teknikal mengesan <i>error</i> yang berlaku			
5. Pendaftaran pesakit ke MyHIX				
a.	Boleh mendaftar pesakit baru di MyHIX			
b.	Boleh mendapat MyHIX ID ( <i>Global ID</i> ) daripada MyHIX			
6. Proses <i>opt-out</i> (jika pesakit memilih untuk tidak menghantar DS/ES ke MyHIX)				
a.	Ada pilihan untuk <i>opt-out</i> ( <i>button, flag</i> dll)			
b.	Sistem berupaya untuk <i>enable</i> atau <i>disable opt-out</i> sebelum DS/ES dihantar ke MyHIX			



Bil.	Perkara	Ya	Tidak	Catatan
7. Semakan DS/ES melalui Sistem HIS/CIS				
a.	Boleh papar senarai DS/ES dan <i>addendum</i> yang sedia ada daripada MyHIX ( <i>view list</i> )			
b.	Boleh pilih dan papar DS/ES yang dikehendaki daripada senarai di atas (7.a)			
c.	Boleh papar senarai DS/ES yang sedia ada daripada MyHIX ( <i>view list</i> ) jika pesakit memilih <i>opt-out</i>			
d.	Boleh pilih dan papar DS/ES yang dikehendaki daripada senarai di atas (7.c) jika pesakit memilih <i>opt-out</i>			
e.	Boleh papar maklumat DS/ES sebelum dihantar ke MyHIX  *untuk pastikan pemetaan data DS/ES HIS/CIS kepada DS/ES MyHIX mengikut format CDA			
f.	Boleh hantar <i>addendum</i> ke MyHIX			
8. Semakan <i>Referral / Referral Reply Notes</i> melalui Sistem HIS/CIS				
a.	Boleh papar senarai <i>Referral / Referral Reply Notes</i> yang sedia ada daripada MyHIX ( <i>view list</i> )			
b.	Boleh pilih dan papar <i>Referral / Referral Reply Notes</i> yang dikehendaki daripada senarai di atas (8.a)			

Bil.	Perkara	Ya	Tidak	Catatan
9. Kaedah penghantaran DS/ES dari Sistem HIS/CIS ke MyHIX				
a.	Penghantaran secara <i>real-time</i> atau kelompok ( <i>batch</i> )			
b.	HIS/CIS boleh memberi notifikasi dan nyatakan senarai DS/ES yang gagal dihantar setiap hari			
c.	HIS/CIS berupaya menghantar semula DS/ES tersebut secara automatik bagi DS/ES yang gagal dihantar			
d.	HIS/CIS boleh memberi notifikasi jumlah DS/ES yang telah berjaya dihantar setiap hari			
10. Kaedah penghantaran <i>Referral / Referral Reply Notes</i> dari Sistem HIS/CIS ke MyHIX				
a.	Penghantaran secara <i>real-time</i>			
b.	HIS/CIS boleh memberi notifikasi dan nyatakan senarai <i>Referral / Referral Reply Notes</i> yang gagal dihantar setiap hari			
c.	HIS/CIS berupaya menghantar semula <i>Referral</i> tersebut secara automatik bagi <i>Referral / Referral Reply Notes</i> yang gagal dihantar			
d.	Sistem boleh memberi notifikasi jumlah <i>Referral / Referral Reply Notes</i> yang telah berjaya dihantar setiap hari			

Bil.	Perkara	Ya	Tidak	Catatan
11.HIS/CIS berupaya menjana laporan berikut:				
a.	Bil & % penghantaran rekod ke MyHIX berbanding bilangan pesakit yang dirawat dan discaj. Kiraan berdasarkan bilangan pesakit			
b.	Bil & % pesakit yang memilih <i>opt-out</i> berbanding bilangan pesakit yang dirawat dan discaj.			
c.	Bil DS ulangan yang dihantar bagi pesakit yang sama (DS <i>addendum</i> ) *untuk mendapatkan perbezaan antara bilangan pesakit yang discaj dan bilangan DS/ES yang dihantar ke MyHIX			
12.Pemantauan transaksi pendaftaran dan penghantaran maklumat ke MyHIX				
a.	Menyediakan skrin/kaedah yang boleh memaparkan transaksi yang berlaku antara HIS/CIS dan MyHIX			

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## LAMPIRAN 11

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# Bahan Promosi MyHIX

## BUNTING MyHIX



Ministry of Health  
Malaysia

# MyHIX

Malaysia Health Information Exchange

**TOWARDS  
SHARING  
OF PATIENT'S  
HEALTH  
INFORMATION  
BETWEEN  
HOSPITALS/CLINICS**

***Thank you  
for your  
support!***

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TELEHEALTH DIVISION, MINISTRY OF HEALTH MALAYSIA



Kementerian Kesihatan  
Malaysia

# MyHIX

Malaysia Health Information Exchange

**KE ARAH  
PERKONGSIAN  
MAKLUMAT  
KESIHATAN  
PESAKIT  
ANTARA  
HOSPITAL/KLINIK**

***Terima kasih  
atas sokongan  
anda!***

Diterbitkan oleh:  
BAHAGIAN TELEKESIHATAN, KEMENTERIAN KESIHATAN MALAYSIA



# MyHIX : ONLINE SHARING OF PATIENT HEALTH INFORMATION

病患者网上分享 医疗资讯

MyHIX is a system that enables online individual healthcare information sharing between healthcare facilities. It is fundamental to the creation of the Lifetime Health Record for every individual who seek health/medical care at healthcare facilities.

MyHIX是一项能让您在各类医疗保健设施，进行网上分享个人医疗保健资讯的系统。每位在医疗保健设施寻求医疗/医药护理的人士，可将它作为一生医疗记录的基础。



## BENEFITS 好处

1. Facilitates follow-up treatment at any healthcare facility. 协助病人在任何医疗机构定期治疗。
2. Reduces repetitive examinations and investigations. 可避免重复检测与审查。
3. Enables continuity of care and specific patient treatment. 病患者能获得持续性的护理与专业治疗。

## IMPLEMENTATION 实施

MyHIX is implemented in phases at health facilities with Hospital Information System (HIS) and Clinical Information System (CIS). MyHIX以医院资讯系统(HIS)及临床资讯系统(CIS)的医疗设施分阶段实施。

Currently the system is available at:

- 目前该系统提供于：
- Hospital Putrajaya
  - Klinik Kesihatan Putrajaya, Precinct 9
  - Hospital Tuanku Ja'afar, Seremban
  - Hospital Port Dickson
  - Hospital Bentong
  - Hospital Sultanah Nur Zahirah, Kuala Terengganu
  - Hospital Raja Perempuan Zainab II, Kota Bharu

## SHARED INFORMATION 资料分享

Consist of:

- Patient demography 病患者统计**  
Biodata such as name, gender, MyKad number and address. 病历信息如姓名、性别、MyKad号码与地址。
- Patient clinical information 病患者临床资讯**  
Discharge summary which comprises of medical history, diagnosis and treatment provided. 出院病历包括病史、诊断与治疗的资讯。

\*\*In future, additional information such as referral letter, laboratory results and imaging report will be shared. 未来将分享转介信、实验室检查结果与影像报告。

## CONFIDENTIALITY AND SECURITY OF INFORMATION

资料的保密性与安全性

Confidentiality and security of patients' health information is guaranteed and it is bound by laws and regulations. Only authorized personnel can access patient's information and access is permitted only during treatment.

病患者健康资料的保密性与安全性获得保证并受法律与法规的约束。只有获授权人员才可使用病患者的资料，而且仅限于治疗期间。

Patients who do not wish to share their information may opt out by completing the MyHIX Opt Out Form for each episode of care.

病患者若不想分享他们的资料，可填写每份病历的MyHIX退出表格以要求停止使用该资料。

FOR FURTHER INFORMATION, PLEASE REFER TO YOUR DOCTOR.

预知更多详情，请咨询您的医生。



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MOH/SH/01/15







## PERKONGSIAN MAKLUMAT KESIHATAN PESAKIT SECARA ATAS TALIAN

நோயாளிகளின் சுகாதார தகவல் இணைய வாயிலாக பகிர்வு

MyHIX adalah satu sistem yang menyediakan kaedah perkongsian maklumat penjagaan kesihatan individu secara atas talian antara fasiliti penjagaan kesihatan. Ia merupakan asas kepada pawujudan Rekod Kesihatan Sepanjang Hayat bagi setiap individu yang mendapatkan rawatan atau penjagaan kesihatan di fasiliti penjagaan kesihatan.

MyHIX என்பது இணைய வாயிலாக தனிநபரின் சுகாதார தகவல்களை சுகாதார சேவைகளுடன் பகிர்ந்துக் கொள்வதோடு ஒவ்வொருடைய சுகாதார தகவல்களையும் ஆயுள்காலம் வரை பாதுகாக்கக்கூடிய அடிப்படை உருவாக்கமாகும். உங்களின் சுகாதார தேவைகளை சுகாதார பாதுகாப்பு வசதியின் வழி பெறலாம்.



### FAEDAH சலுகைகள்

1. Memudahkan rawatan susulan di mana-mana fasiliti penjagaan kesihatan.  
தொடர் சிகிச்சைகளுக்கான வசதிகள் அனைத்து சுகாதார நிலையங்களிலும் மேற்கொள்ளலாம்.
2. Mengurangkan pemeriksaan dan penyiasatan yang berulang.  
தொடர் பரிசோதனைகள் மற்றும் சிவன்களை தவிர்க்கலாம்.
3. Membolehkan kesinambungan penjagaan kesihatan dan rawatan pesakit yang lebih khusus.  
தொடர் கவனிப்பு மற்றும் நோயாளிகளின் பிரத்தியேக சிகிச்சைக்கு உதவுகிறது.

### PELAKSANAAN அமலாக்கம்

MyHIX dilaksanakan secara berperingkat bermula dengan fasiliti yang mempunyai sistem aplikasi Hospital Information System (HIS) dan Clinical Information System (CIS).  
முந்தைய மருத்துவமனைகளில் தகவல் முறை (HIS) & மருத்துவ தகவல் முறை (CIS) ஆகியவற்றின் மூலமாக MyHIX அமலாக்கம் செய்யப்படுகிறது.

Projek perintis telah dilaksanakan di fasiliti berikut:  
பிரதிநிதி இடங்களில் இச்சேவை தொடங்கப்பட்டுள்ளது:

- Hospital Putrajaya
- Klinik Kesihatan Putrajaya, Presint 9
- Hospital Tuanku Ja'afar, Seremban
- Hospital Bentong
- Hospital Sultanah Nur Zahirah, Kuala Terengganu
- Hospital Raja Perempuan Zainab II, Kota Bharu
- Hospital Port Dickson

### MAKLUMAT YANG DIKONGSI தகவல் பகிர்வு

Terdari daripada :  
தகவல் உள்ளடக்கம் :

i **Demografi pesakit** நோயாளிகளின் விவரங்கள்  
Biodata pesakit seperti nama, jantina, nombor MyKad dan alamat. பெயர், பாலினம், அடையாள அட்டை எண் மற்றும் முகவரி.

ii **Maklumat klinikal pesakit** நோயாளிகளின் மருத்துவ விவரங்கள்  
Ringkasan discaj iaitu ringkasan maklumat rawatan pesakit seperti sejarah perubatan, diagnosis dan rawatan. முழுமையான மருத்துவ தகவல், நோய் அண்டறிதல் விவரங்கள் மற்றும் சிகிச்சை விவரங்கள்.

\*\*Pada masa akan datang, maklumat tambahan seperti surat rujukan pesakit, keputusan makmal, dan laporan pengimejan akan turut dikongsi.

வரும் காலங்களில், மருத்துவமனை குறிப்பு தகவல், ஆய்வு முடிவுகள், இமேஜிங் ஆரிக்ஸஸ் போன்றவை கூடுதல் தகவல்களை தகவல் பகிர்வில் சேர்த்துக் கொள்ளப்படும்.

### KERAHSIAAN DAN KESELAMATAN MAKLUMAT

தகவல்கள் முற்றிலும் இரகசியமாக பாதுகாக்கப்படும்

Kerahsiaan dan keselamatan maklumat kesihatan pesakit adalah terjamin kerana dikendalikan mengikut peraturan dan undang-undang kerajaan. Hanya anggota yang diberi kuasa boleh mengakses maklumat pesakit dan akses hanya boleh dilakukan semasa pesakit mendapatkan rawatan.

நோயாளிகளின் ஆரோக்கியம் தொடர்பில் வழங்கப்பட்ட தகவல்கள் அனைத்தும் சட்ட விதிகளின்படி இரகசியமாக பாதுகாக்கப்படும். அங்கீகரிக்கப்பட்ட நபர்கள் மட்டுமே நோயாளிகளின் சிகிச்சை விவரங்களை சிகிச்சை நேரத்தில் மட்டும் தெரிந்துக் கொள்ள முடியும்.

Pesakit yang tidak bersetuju untuk berkongsi maklumat boleh memohon pengecualian dengan melengkapkan Borang Pengecualian MyHIX pada setiap sesi perawatan. தகவல்களை பகிர்வு செய்யாத நோயாளிகள், ஒவ்வொரு முறை சுகாதார கவனிப்பை பெறும்போதும் MyHIX வலைப் பார்வை மூலம் செய்தி பெறும்.

UNTUK MAKLUMAT LANJUT, SILA RUJUK DOKTOR YANG MERAWAT ANDA.

மேல் விவரங்களுக்கு உங்கள் மருத்துவரை அணுகவும்.



BAGIAN TELEKESIHATAN, KEMENTERIAN KESIHATAN MALAYSIA

03-8950-1015



# RISALAH MyHIX DEPAN & BELAKANG (BAHASA INGGERIS DAN BAHASA MANDARIN)

## 好处

1. 协助病人在任何医疗机构定期治疗。
2. 可避免重复检测与审查。
3. 病人能获得持续性的护理与专业治疗。

## 实施

MyHIX以医院资讯系统(HIS)及临床资讯系统(CIS)的医疗设施分阶段实施。

目前该系统提供于:

- Hospital Putrajaya
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- Hospital Port Dickson
- Hospital Bentong
- Hospital Sultanah Nur Zahirah, Kuala Terengganu
- Hospital Raja Perempuan Zainab II, Kota Bharu

## 资料分享

包括:

- 病患者统计**  
履历信息如姓名, 性别, MyKad号码与地址。
- 病患者临床资料**  
出院病历包括病史, 诊断与治疗的信息资源。

未来将分享附加资料如转介信, 实验室检查结果与影像报告。

## 资料的保密性与安全性

病患者健康资料的保密性与安全性获得保证并受法律与法规的约束。只有获授权人员才可使用病患者的资料, 而且仅限于治疗期间。

病患者若不要分享他们的资料, 可填写每份保健的MyHIX退出表格以要求停止使用该资料。



预知更多详情,  
请咨询您的医生。



Published by:  
**TELEHEALTH DIVISION,  
MINISTRY OF HEALTH MALAYSIA**  
MOH/15.000/2015



**ONLINE SHARING OF PATIENT  
HEALTH INFORMATION**

MyHIX is a system that enables online individual healthcare information sharing between healthcare facilities. It is fundamental to the creation of the Lifetime Health Record for every individual who seek health/medical care at healthcare facilities.



**Shared information**

1. Patient biodata
2. Discharge summary
3. Referral letter\*\*
4. Laboratory results\*\*
5. Imaging report\*\*

\*\*Information to be shared in future

## BENEFITS

1. Facilitates follow-up treatment at any healthcare facility.
2. Reduces repetitive examinations and investigations.
3. Enables continuity of care and specific patient treatment.

## IMPLEMENTATION

MyHIX is implemented in phases at health facilities with Hospital Information System (HIS) and Clinical Information System (CIS).

Currently the system is available at:

- Hospital Putrajaya
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- Hospital Tuanku Ja'afar, Seremban
- Hospital Port Dickson
- Hospital Bentong
- Hospital Sultanah Nur Zahirah, Kuala Terengganu
- Hospital Raja Perempuan Zainab II, Kota Bharu

## SHARED INFORMATION

Consist of:

- Patient demography**  
Biodata such as name, gender, MyKad number and address.
- Patient clinical information**  
Discharge summary which comprises of medical history, diagnosis and treatment provided.

In future, additional information such as referral letter, laboratory results, and imaging report will be shared.

## CONFIDENTIALITY AND SECURITY OF INFORMATION

Confidentiality and security of patients' health information is guaranteed and it is bound by laws and regulations. Only authorized personnel can access patient's information and access is permitted only during treatment.

Patients who do not wish to share their information may opt out by completing the MyHIX Opt Out Form for each episode of care.



FOR FURTHER INFORMATION,  
PLEASE REFER TO  
YOUR DOCTOR.



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**病患者网上分享  
医疗资讯**

MyHIX是一项能让您在各类医疗保健设施, 进行网上分享个人医疗保健资讯的系统。每位在医疗保健设施寻求医疗/医药护理的人士, 可将它作为一生医疗记录的基础。



**资讯分享**

1. 病患者的履历
2. 出院病历摘要
3. 转介信\*\*
4. 实验室检查结果\*\*
5. 影像报告\*\*

\*\*未来资讯的分享



# RISALAH MyHIX DEPAN & BELAKANG (BAHASA MALAYSIA DAN BAHASA TAMIL)

## சலுகைகள்

1. தொடர் சிகிச்சைகளுக்கான வசதிகள் அனைத்து சுகாதார நிலையங்களிலும் மேற்கொள்ளலாம்.
2. தொடர் பரிசோதனைகள் மற்றும் விசாரணைகளை தவிர்க்கலாம்.
3. தொடர் கவனிப்பு மற்றும் நோயாளிகளின் பிரத்தியேக சிகிச்சைக்கு உதவுகிறது.

## அமலாக்கம்

மருத்துவமனைகளின் தகவல் முறை (HIS) & மருந்தக தகவல் முறை(CIS)ஆகியவற்றின் துணையுடன் MyHIX அமலாக்கம் செய்யப்படுகிறது.

கீழ்க்கண்ட இடங்களில் இச்சேவை தொடங்கப்பட்டுள்ளது:

- Hospital Putrajaya
- Klinik Kesihatan Putrajaya, Precinct 9
- Hospital Tuanku Ja'afar, Seremban
- Hospital Port Dickson
- Hospital Bentong
- Hospital Sultanah Nur Zahirah, Kuala Terengganu
- Hospital Raja Perempuan Zainab II, Kota Bharu

## தகவல் பகிர்வு

தகவல் உள்ளடக்கம் :

**நோயாளிகளின் விவரங்கள்**  
பெயர், பாலினம், அடையாள அட்டை எண் மற்றும் முகவரி.

**ii நோயாளிகளின் மருந்தக விவரங்கள்**  
முழுமையான மருத்துவ தகவல், நோய் கண்டறிந்த விவரங்கள் மற்றும் சிகிச்சை விவரங்கள்.

வரும் காலங்களில், மருத்துவரின் குறிப்பு தகவல், ஆய்வக முடிவுகள், இமேஜிங் அறிக்கை போன்றவை கூடுதல் தகவல்களாக தகவல் பகிர்வில் சேர்த்துக் கொள்ளப்படும்.

## தகவல்கள் முற்றிலும் இரகசியமாக பாதுகாக்கப்படும்

நோயாளிகளின் ஆரோக்கியம் தொடர்பில் வழங்கப்பட்ட தகவல்கள் அனைத்தும் சட்ட விதிகளின்படி இரகசியமாக பாதுகாக்கப்படும். அங்கீகரிக்கப்பட்ட நபர்கள் மட்டுமே நோயாளிகளின் சிகிச்சை விவரங்களை சிகிச்சை நேரத்தில் மட்டும் தெரிந்துக் கொள்ள முடியும்.

தகவல்களை பகிர் விரும்பாத நோயாளிகள், ஒவ்வொரு முறை சுகாதார கவனிப்பை பெறும்போதும் MyHIX விலகல் பாதைத் தூத்தி செய்ய வேண்டும்.

## மேல் விவரங்களுக்கு உங்கள் மருத்துவரை அணுகவும்.

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# MyHIX

Malaysia Health Information Exchange

## PERKONGSIAN MAKLUMAT KESIHATAN PESAKIT SECARA ATAS TALIAN

MyHIX adalah satu sistem yang menyediakan kaedah perkongsian maklumat penjagaan kesihatan individu secara atas talian antara fasiliti penjagaan kesihatan. Ia merupakan asas kepada pewujudan Rekod Kesihatan Sepanjang Hayat bagi setiap individu yang mendapatkan rawatan atau penjagaan kesihatan di fasiliti penjagaan kesihatan.

**Maklumat yang dikongsi**

1. Biodata pesakit\*\*
2. Ringkasan discal
3. Surat rujukan\*\*
4. Keputusan makmal\*\*
5. Laporan pengimejan\*\*

\*\*Maklumat yang akan dikongsi pada masa hadapan

## FAEDAH

1. Memudahkan rawatan susulan di mana-mana fasiliti penjagaan kesihatan.
2. Mengurangkan pemeriksaan dan penyiasatan yang berulang.
3. Membolehkan kesinambungan penjagaan kesihatan dan rawatan pesakit yang lebih khusus.

## PELAKSANAAN

MyHIX dilaksanakan secara berperingkat bermula dengan fasiliti yang mempunyai sistem aplikasi Hospital Information System (HIS) dan Clinical Information System (CIS).

MyHIX telah dilaksanakan di fasiliti berikut:

- Hospital Putrajaya
- Klinik Kesihatan Putrajaya, Presint 9
- Hospital Tuanku Ja'afar, Seremban
- Hospital Port Dickson
- Hospital Bentong
- Hospital Sultanah Nur Zahirah, Kuala Terengganu
- Hospital Raja Perempuan Zainab II, Kota Bharu

## MAKLUMAT YANG DIKONGSI

Terdiri daripada :

- i Demografi pesakit**  
Biodata pesakit seperti nama, jantina, nombor MyKad dan alamat.
- ii Maklumat klinikal pesakit**  
Ringkasan discal iaitu ringkasan maklumat rawatan pesakit seperti sejarah perubatan, diagnosa dan rawatan.

Pada masa akan datang, maklumat tambahan seperti surat rujukan pesakit, keputusan makmal dan laporan pengimejan akan turut dikongsi.

## KERAHSIAAN & KESELAMATAN MAKLUMAT

Kerahsiaan dan keselamatan maklumat kesihatan pesakit adalah terjamin kerana dikendalikan mengikut peraturan dan undang-undang kerajaan. Hanya anggota yang diberi kuasa boleh mengakses maklumat pesakit dan akses hanya boleh dilakukan semasa pesakit mendapatkan rawatan.

Pesakit yang tidak bersetuju untuk berkongsi maklumat boleh memohon pengecualian dengan melengkapkan Borang Pengecualian MyHIX pada setiap sesi perawatan.

## UNTUK MAKLUMAT LANJUT, SILA RUJUK DOKTOR YANG MERAWAT ANDA.

Ditulis oleh:  
BAHAGIAN TELEKESIHATAN,  
KEMENTERIAN KESIHATAN MALAYSIA  
KKM/15.000/2015

# MyHIX

Malaysia Health Information Exchange

## நோயாளிகளின் சுகாதார தகவல் இணைய வாயிலாக பகிர்வு

MyHIX என்பது இணைய வாயிலாக தனிநபரின் சுகாதார தகவல்களை சுகாதார சேவைகளுடன் பகிர்ந்துக் கொள்வதோடு ஒவ்வொருடைய சுகாதார தகவல்களையும் ஆயுள்காலம் வரை பாதுகாக்கக்கூடிய அடிப்படை உருவாக்கமாகும். உங்களின் சுகாதார தேவைகளை சுகாதார பாதுகாப்பு வசதியின் வழி பெறலாம்.

**தகவல் பகிர்வு**

1. நோயாளிகளின் விவரம்
2. மருந்து குறிக்கம்
3. குறிப்பு கடிதம்\*\*
4. ஆய்வக முடிவுகள்\*\*
5. இமேஜிங் அறிக்கை\*\*

\*\*எதிர்காலத்தில் தகவல்கள் பகிர்வு செய்யப்படும்

## **PENGHARGAAN**

Ucapan TERIMA KASIH dan PENGHARGAAN kepada semua penyumbang di atas kerjasama yang diberikan dalam memastikan kandungan Toolkit MyHIX versi 2.0 ini adalah tepat pada ketika ianya dicetak. Mereka yang terlibat adalah:-

1. Datuk Dr. Hj. Rohaizat bin Hj. Yon – Pengarah Bahagian Perancangan
2. Dr.Amiruddin bin Hisan – Mantan Pengarah Bahagian Telekesihatan
3. Dr.Fazilah binti Shaik Allaudin – Timbalan Pengarah Kanan, Cawangan Perancangan, Pelan Kesihatan, Fasiliti dan eHealth
4. Dr.Shaifuzah binti Ariffin – Ketua Seksyen Perancangan eHealth
5. Dr. Nuraidah binti Mohd Marzuki
6. Dr. Sam Pradeep a/l Thillakkannu
7. Dr. Wan Syafni binti Wan Mohd Suleiman
8. En. Lee Kok Seng
9. Dr. Pradeep a/l Balakrishnan
- 10.Dr.Chandravany a/p Supramaniam
- 11.Dr. Muhammad Azlan bin Abdul Rahman
- 12.En. Hasnan bin Hj. Ibrahim
- 13.Dr.Nilavu a/p Karuppiah
- 14.Pn. Haniza binti Mohamad Hassan
- 15.En. Asraful Kamal bin Ariffin
- 16.En. Muhammad Azuwan bin Ali
- 17.Pn. Nor Asian binti Jamaludin
- 18.Pn. Azura binti Abdullah
- 19.En. Mohd Izraee Razimie bin Ibrahim
- 20.Pn. Rozita binti Masiran
- 21.Pn. Irni Nadia binti Itamta
- 22.Dr. Hjh Selamah binti Othman (Wakil Bahagian Perkembangan Perubahan)
- 23.Dr. Amizan binti Mohamed (Wakil Bahagian Perkembangan Perubahan)
- 24.Dr Siti Raidah binti Mohamad Azman (Wakil Bahagian Pembangunan Kesihatan Keluarga)
- 25.Dr. Lily Laura binti Azmi (Wakil Bahagian Kesihatan Pergigian)
- 26.Tuan Yuswana binti Tuan Soh (Wakil Bahagian Kesihatan Pergigian)
- 27.YM Raja Liana binti YM Raja Yacob (Wakil Bahagian Pengurusan Maklumat)
- 28.Pn. Khairul Anizah binti Yaakob (Wakil Cawangan Pembangunan Projek & Penyelenggaraan Projek ICT,Unit Aplikasi HIS)