

ベトナム社会主義共和国  
保健省

ベトナム社会主義共和国  
チョーライ第二病院整備事業  
準備調査報告書

要約

(資料編)

平成 26 年 10 月  
(2014 年)

独立行政法人  
国際協力機構 (JICA)

アイテック株式会社  
株式会社佐藤総合計画  
株式会社伊藤喜三郎建築研究所

東大
JR
14-044

**【資料】**

1. 調査団員・氏名
2. 調査工程
3. 関係者（面談者）リスト
4. PROJECT ON CONSTRUCTION THE SECOND BRANCH OF THE CHO RAY HOSPITAL
5. Technical Note
6. 類似サンプル病院別施設規模・機能比較分析表
7. 類似サンプル病院別施設規模・面積比較分析表
8. 日本におけるヘリポートの制限表面規制資料
9. 災害時およびパンデミック時における施設対応
10. 概略設計図
11. 計画機材リスト
12. 情報システム詳細機能一覧
13. 端末配置台数案
14. 部門職種職能別人材配置
15. 浸水しない床高さ
16. モニタリングフォーム例

資料一 調査団員・氏名

## 調査団員・氏名

## (1) 第一次現地調査

氏名	担当分野	所属
高橋 淳 Jun TAKAHASHI	総括/病院運営 Consultant Leader / Hospital Management	アイテック株式会社 International Total Engineering Corporation (ITEC)
鈴木 光一 Koichi SUZUKI	副総括/病院建築計画 1 Consultant Sub Leader / Hospital Construction Planning-1	株式会社伊藤喜三郎建築 研究所 K. ITO Architects & Engineers Inc.
岡田 世郎 Sero OKADA	病院建築計画 2 Hospital Construction Planning-2	株式会社佐藤総合計画 AXS Satow Inc.
古澤 靖久 Yasuhisa FURUSAWA	経営分析 Business Analysis	アイテック株式会社 International Total Engineering Corporation (ITEC)
中村 巧 Takumi NAKAMURA	病院管理 Hospital Operation	アイテック株式会社 International Total Engineering Corporation (ITEC)
高橋 洋乙 Yoichi TAKAHASHI	保健医療・リファラル体制 Health Care / Referral System Planning	アイテック株式会社 International Total Engineering Corporation (ITEC)
仲谷 茂樹 Shigeki NAKAYA	建築設計 Architectural Design	株式会社佐藤総合計画 AXS Satow Inc.
石黒 竜夫 Tatsuo ISHIGURO	設備(電気) Electrical Facility Design	株式会社伊藤喜三郎建築 研究所 K. ITO Architects & Engineers Inc.
井元 知明 Chiaki IMOTO	設備(機械・給排水) Mechanical & Plumbing Facility Design	株式会社伊藤喜三郎建築 研究所 K. ITO Architects &

		Engineers Inc.
渡邊 朋宏 Tomohiro WATANABE	構造計算 Structural Calculation	株式会社佐藤総合計画 AXS Satow Inc.
浅原 利彦 Toshihiko ASAHARA	施工計画・調達・積算 Construction Scheme/ Procurement/ Cost Planning-1	株式会社伊藤喜三郎建築 研究所 K. ITO Architects & Engineers Inc.
島田 隆次 Takatsugu SHIMADA	施工計画・調達・積算 Construction Scheme/ Procurement/ Cost Planning-2	株式会社伊藤喜三郎建築 研究所 K. ITO Architects & Engineers Inc.
浪江 勉 Tsutomu NAMIE	機材計画(1)/医療機材市 場分析 Equipment Planning-1 / Market Analysis	アイテック株式会社 International Total Engineering Corporation (ITEC)
横森 永治 Nagaharu YOKOMORI	機材計画(2)/機材維持管 理計画 Equipment Planning-2 / Operation & Management Planning	アイテック株式会社 International Total Engineering Corporation (ITEC)
舘野 広大 Kodai TATENO	機材調達・積算 Medical Equipment Procurement / Cost Planning	アイテック株式会社 International Total Engineering Corporation (ITEC)
岸田 幸博 Yukihiro KISHIDA	情報管理・IT Information System Management/ Information Technology	アイテック株式会社 International Total Engineering Corporation (ITEC)
藤田 大 Dai FUJITA	人材育成計画 Human Resource Development Planning	アイテック株式会社 International Total Engineering Corporation (ITEC)
宇都宮 雅人 Masato UTSUNOMIYA	環境社会配慮 Environmental & Social Considerations	株式会社伊藤喜三郎建築 研究所 K. ITO Architects & Engineers Inc.

森山 尚 Takashi MORIYAMA	医療廃棄物 Medical Waste Management	株式会社佐藤総合計画 AXS Satow Inc.
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## (2) 第二次現地調査

氏名	担当分野	所属
高橋 淳 Jun TAKAHASHI	総括/病院運営 Consultant Leader / Hospital Management	アイテック株式会社 International Total Engineering Corporation (ITEC)
鈴木 光一 Koichi SUZUKI	副総括/病院建築計画1 Consultant Sub Leader / Hospital Construction Planning-1	株式会社伊藤喜三郎建築 研究所 K. ITO Architects & Engineers Inc.
岡田 世郎 Sero OKADA	病院建築計画2 Hospital Construction Planning-2	株式会社佐藤総合計画 AXS Satow Inc.
古澤 靖久 Yasuhisa FURUSAWA	経営分析 Business Analysis	アイテック株式会社 International Total Engineering Corporation (ITEC)
中村 巧 Takumi NAKAMURA	病院管理 Hospital Operation	アイテック株式会社 International Total Engineering Corporation (ITEC)
高橋 洋乙 Yoichi TAKAHASHI	保健医療・リファラル体制 Health Care / Referral System Planning	アイテック株式会社 International Total Engineering Corporation (ITEC)
仲谷 茂樹 Shigeki NAKAYA	建築設計 Architectural Design	株式会社佐藤総合計画 AXS Satow Inc.
石黒 竜夫 Tatsuo ISHIGURO	設備(電気) Electrical Facility Design	株式会社伊藤喜三郎建築 研究所 K. ITO Architects & Engineers Inc.
井元 知明 Chiaki IMOTO	設備(機械・給排水) Mechanical & Plumbing Facility Design	株式会社伊藤喜三郎建築 研究所 K. ITO Architects & Engineers Inc.

渡邊 朋宏 Tomohiro WATANABE	構造計算 Structural Calculation	株式会社佐藤総合計画 AXS Satow Inc.
浅原 利彦 Toshihiko ASAHARA	施工計画・調達・積算 Construction Scheme/ Procurement/ Cost Planning-1	株式会社伊藤喜三郎建築 研究所 K. ITO Architects & Engineers Inc.
島田 隆次 Takatsugu SHIMADA	施工計画・調達・積算 Construction Scheme/ Procurement/ Cost Planning-2	株式会社伊藤喜三郎建築 研究所 K. ITO Architects & Engineers Inc.
浪江 勉 Tsutomu NAMIE	機材計画(1)/医療機材市 場分析 Equipment Planning-1 / Market Analysis	アイテック株式会社 International Total Engineering Corporation (ITEC)
横森 永治 Nagaharu YOKOMORI	機材計画(2)/機材維持管 理計画 Equipment Planning-2 / Operation & Management Planning	アイテック株式会社 International Total Engineering Corporation (ITEC)
舘野 広大 Kodai TATENO	機材調達・積算 Medical Equipment Procurement / Cost Planning	アイテック株式会社 International Total Engineering Corporation (ITEC)
岸田 幸博 Yukihiro KISHIDA	情報管理・IT Information System Management/ Information Technology	アイテック株式会社 International Total Engineering Corporation (ITEC)
藤田 大 Dai FUJITA	人材育成計画 Human Resource Development Planning	アイテック株式会社 International Total Engineering Corporation (ITEC)
宇都宮 雅人 Masato UTSUNOMIYA	環境社会配慮 Environmental & Social Considerations	株式会社伊藤喜三郎建築 研究所 K. ITO Architects & Engineers Inc.



## (3) 第三次現地調査

氏名	担当分野	所属
高橋 淳 Jun TAKAHASHI	総括/病院運営 Consultant Leader / Hospital Management	アイテック株式会社 International Total Engineering Corporation (ITEC)
鈴木 光一 Koichi SUZUKI	副総括/病院建築計画 1 Consultant Sub Leader / Hospital Construction Planning-1	株式会社伊藤喜三郎建築 研究所 K. ITO Architects & Engineers Inc.
藤田 大 Dai FUJITA	人材育成計画 Human Resource Development Planning	アイテック株式会社 International Total Engineering Corporation (ITEC)

## 資料-2 調査工程

調査行程

(1) 第一次現地調査

日数	日付	総括/ 病院運営	経営分析	病院管理	保健医療- JICA体制	情報管理- IT	人材育成計画	副院長/ 病院設計計画	施工計画-調査-種 別	施工計画-調査-種 別	電機設備	設備 (機材・給排水)	設備 (機材・給排水)	病院建築計画2	建築設計	構造計画	医療医薬物	機材計画(1)/ 医療機器代理店	機材計画(2)/ 機材計画(2)計画	機材計画- 機材
		高橋 淳	古澤 晴久	中村 巧	高橋 淳之	岸田 隆博	藤田 大	鈴木 光一	滝原 利彦	島田 隆次	宇都宮 雅人	石黒 高夫	井元 和明	岡田 世郎	伴谷 茂樹	奥津 朋宏	森山 尚	渡江 尚	横井 尚	横井 尚
1	11月10日 (日)	NRT-HAN (JL 751)																		
2	11月11日 (月)	部内打合せ 在ベトナム日本国大使館表敬訪問 JICAベトナム事務所表敬訪問																		
3	11月12日 (火)	保健省表敬訪問・キックオフミーティング 保健省財務企画局打ち合わせ WHOベトナム事務所表敬訪問																		
4	11月13日 (水)	ハックマイ病院視察 保健省財務企画局打ち合わせ																		
5	11月14日 (木)	ハックマイ病院打合せ HAN-SGN (VN773)																		
6	11月15日 (金)	フォーライ病院キックオフミーティング																		
7	11月16日 (土)	資料整理																		
8	11月17日 (日)	資料整理																		
9	11月18日 (月)	フォーライ病院調査 打合せ	フォーライ病院調査 ホーチン市保健局訪問・打合せ	フォーライ病院調査・打合せ	フォーライ病院調査・打合せ	フォーライ病院調査・打合せ	フォーライ病院調査・打合せ	フォーライ病院調査・打合せ	フォーライ病院調査・打合せ	フォーライ病院調査・打合せ	フォーライ病院調査・打合せ	フォーライ病院調査・打合せ	フォーライ病院調査・打合せ	フォーライ病院調査・打合せ	フォーライ病院調査・打合せ	フォーライ病院調査・打合せ	フォーライ病院調査・打合せ	フォーライ病院調査・打合せ	フォーライ病院調査・打合せ	フォーライ病院調査・打合せ
10	11月19日 (火)	プロジェクトサイト視察 フォーライ病院調査																		
11	11月20日 (水)	フォーライ病院調査 建設事情調査	フォーライ病院調査 1A病院視察	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査
12	11月21日 (木)	フォーライ病院調査	フォーライ病院調査 ドンナイ省総合病院視察	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査
13	11月22日 (金)	JICA TV会議 フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査
14	11月23日 (土)	資料整理																		
15	11月24日 (日)	資料整理 部内会議																		
16	11月25日 (月)	自然条件調査 フォーライ病院調査	フォーライ病院調査	自然条件調査 FV病院視察	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査
17	11月26日 (火)	フォーライ病院調査	フォーライ病院調査 経済状況調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査
18	11月27日 (水)	HCM-HNI (VN232) JICAベトナム事務所 打合せ	フォーライ病院調査 経済状況調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査	フォーライ病院調査
19	11月28日 (木)	保健省副大臣打合せ HCM-NRT (JL 750)	フォーライ打合せ	フォーライ打合せ	フォーライ打合せ	フォーライ打合せ	フォーライ打合せ	フォーライ打合せ	フォーライ打合せ	フォーライ打合せ	フォーライ打合せ	フォーライ打合せ	フォーライ打合せ	フォーライ打合せ	フォーライ打合せ	フォーライ打合せ	フォーライ打合せ	フォーライ打合せ	フォーライ打合せ	フォーライ打合せ
20	11月29日 (金)	JICA TV会議 成田着	JICA TV会議 フォーライ病院打合せ HCM-NRT (JL 750)	フォーライ病院打合せ	TuDu病院視察 フォーライ病院打合せ	JICA TV会議 フォーライ病院打合せ	HCM-NRT (JL 750)	HCM-NRT (JL 750)	フォーライ病院打合せ HCM-NRT (JL 750)	TuDu病院視察 フォーライ病院打合せ	JICA TV会議 フォーライ病院打合せ	HCM-NRT (JL 750)	HCM-NRT (JL 750)	JICA TV会議 フォーライ病院打合せ	フォーライ病院調査 HCM-NRT (JL 750)	TuDu病院視察 フォーライ病院打合せ	TuDu病院視察 フォーライ病院打合せ	フォーライ病院打合せ HCM-NRT (JL 750)	フォーライ病院打合せ HCM-NRT (JL 750)	フォーライ病院打合せ HCM-NRT (JL 750)
21	11月30日 (土)	資料整理																		
22	12月1日 (日)	資料整理																		
23	12月2日 (月)	ホーチン市建設局打合せ 建設事情調査打合せ																		
24	12月3日 (火)	保健省打合せ	フォーライ病院調査 医療機器代理店訪問	消防局打合せ 資源現場打合せ	消防局打合せ 資源現場打合せ	消防局打合せ 資源現場打合せ	消防局打合せ 資源現場打合せ	消防局打合せ 資源現場打合せ	消防局打合せ 資源現場打合せ	消防局打合せ 資源現場打合せ	消防局打合せ 資源現場打合せ	消防局打合せ 資源現場打合せ	消防局打合せ 資源現場打合せ	消防局打合せ 資源現場打合せ	消防局打合せ 資源現場打合せ	消防局打合せ 資源現場打合せ	消防局打合せ 資源現場打合せ	消防局打合せ 資源現場打合せ	消防局打合せ 資源現場打合せ	消防局打合せ 資源現場打合せ
25	12月4日 (水)	ハノイロンチ病院視察 ハックマイ病院視察																		
26	12月5日 (木)	保健省打合せ ホーチン市医療大学病院視察 HCM-HNI (VN264)																		
27	12月6日 (金)	保健省打合せ JICAベトナム事務所打合せ 在ベトナム日本大使館 HNI-NRT (JL752)																		
28	12月7日 (土)	成田着																		

## (2) 第二次現地調査

日付	日付	総務/病院運営		経営分析	病院管理	保健医療-リハビリ体制		情報管理-IT		人材育成計画	副院長/病院建築計画		施工計画-調達-積算1		施工計画-調達-積算2		環境社会配慮	設備(電気)		設備(機械・給排水)		病院建築計画2	建築設計	構造計算	機材計画(1)/設備材料単価分析		機材計画(2)/設備材料管理計画		機材調達・管理	
		高橋 淳	古澤 靖久			中村 巧	高橋 洋之	深田 幸博	藤田 大		鈴木 光一	浅原 利彦	島田 隆次	宇都宮 雅人	石黒 竜夫	井元 和明		岡田 世郎	仲谷 茂樹	渡邊 朋宏	渡江 勉				横森 永治	笠野 広大				
1	2月23日 (日)	NRT-HAN(JL5001)									NRT-HAN(JL5001)														NRT-HAN(JL5001)				NRT-HAN(JL5001)	
2	2月24日 (月)	保健省協議 JICA協議									保健省協議 JICA協議			保健省協議 MCONRE協議												保健省協議 JICA協議				保健省協議 JICA協議
3	2月25日 (火)	院内会議 JICA打合せ HAN-SGN(VN265)									院内会議 建設省協議 HAN-SGN(VN265)			フォーライ病院調査 類似施工現場視察												院内会議 HAN-SGN(VN265)				院内会議 HAN-SGN(VN265)
4	2月26日 (水)	フォーライ病院調査 現地企業訪問									フォーライ病院調査			フォーライ病院調査 設計事務所訪問												フォーライ病院調査				フォーライ病院調査
5	2月27日 (木)	フォーライ病院調査 現地企業訪問									フォーライ病院調査			フォーライ病院調査 建設会社訪問												フォーライ病院調査				フォーライ病院調査
6	2月28日 (金)	フォーライ病院調査									フォーライ病院調査			フォーライ病院調査 設計事務所訪問												フォーライ病院調査				フォーライ病院調査
7	3月1日 (土)	院内会議									City International Hospital 見学			City International Hospital 見学												院内会議				City International Hospital 見学
8	3月2日 (日)	院内会議									NRT-SGN(JL5005) 院内会議			フォーライ病院調査												院内会議				院内会議
9	3月3日 (月)	フォーライ病院調査									フォーライ病院調査			フォーライ病院調査												フォーライ病院調査				フォーライ病院調査
10	3月4日 (火)	フォーライ病院調査 SGN-HAN(VN270)									フォーライ病院調査			フォーライ病院調査 SGN-HAN(VN270)												フォーライ病院調査				フォーライ病院調査 SGN-HAN(VN270)
11	3月5日 (水)	保健省協議									フォーライ病院調査			フォーライ病院調査 バトナムJICA友好 病院見学												フォーライ病院調査				保健省協議
12	3月6日 (木)	保健省協議 JICA協議	保健省協議 JICA協議								HAN-SGN(VN273)			フォーライ病院調査												フォーライ病院調査 現地代理店訪問				保健省協議 JICA協議
13	3月7日 (金)	HAN-NRT(JL752)									フォーライ病院調査			フォーライ病院調査												病院見学 SGN-NRT(JL750)				現地企業訪問
14	3月8日 (土)	成田翁									院内会議			建設予定地調査 院内会議												成田翁				HAN-SGN
15	3月9日 (日)										NRT-SGN(JL5005) 院内会議			フォーライ病院調査												NRT-SGN(JL5005) 院内会議				院内会議
16	3月10日 (月)										フォーライ病院調査-協議			フォーライ病院調査												フォーライ病院調査-協議				フォーライ病院調査-協議
17	3月11日 (火)										フォーライ病院調査			フォーライ病院調査												フォーライ病院調査				フォーライ病院調査
18	3月12日 (水)										フォーライ病院調査			フォーライ病院調査												フォーライ病院調査				フォーライ病院調査
19	3月13日 (木)										フォーライ病院調査			フォーライ病院調査												フォーライ病院調査				フォーライ病院調査
20	3月14日 (金)										フォーライ病院協議 SGN-NRT(JL750)			フォーライ病院協議 SGN-HUI(VN1376)												フォーライ病院協議 SGN-NRT(JL750)				フォーライ病院協議 SGN-NRT(JL750)
21	3月15日 (土)										院内会議			フォーライ病院協議 SGN-NRT(JL750)												フォーライ病院協議 SGN-NRT(JL750)				フォーライ病院協議 SGN-NRT(JL750)
22	3月16日 (日)										院内会議			HUI-SGN(VN1373) 院内会議												院内会議				院内会議
23	3月17日 (月)										フォーライ病院調査			フォーライ病院調査												フォーライ病院調査				フォーライ病院調査 現地代理店訪問
24	3月18日 (火)										フォーライ病院調査			フォーライ病院調査												フォーライ病院調査				フォーライ病院調査 現地代理店訪問
25	3月19日 (水)										フォーライ病院調査			フォーライ病院調査												フォーライ病院調査				フォーライ病院調査 現地代理店訪問
26	3月20日 (木)										フォーライ病院調査			フォーライ病院調査												フォーライ病院協議				フォーライ病院協議
27	3月21日 (金)										フォーライ病院協議 SGN-HAN(VN270) HAN-NRT(JL752)			フォーライ病院協議 SGN-HAN(VN270) HAN-NRT(JL752)												フォーライ病院協議 SGN-HAN(VN270) HAN-NRT(JL752)				フォーライ病院協議 SGN-HAN(VN270) HAN-NRT(JL752)
28	3月22日 (土)										成田翁			成田翁												成田翁				成田翁

## (3) 第三次現地調査

日期	日付	総括/ 病院運営	副総括/ 病院建築計画1	人材育成計画
		高橋 淳	鈴木 光一	藤田 大
	6月1日 (日)		NRT-SGN(JL5005)	
	6月2日 (月)			
1	6月3日 (火)	HND-SGN(JL079) 院内会議	院内会議	HND-SGN(JL079) 院内会議
2	6月4日 (水)	フォーライ病院協議		
3	6月5日 (木)	フォーライ病院協議		
4	6月6日 (金)	SGN-HAN(VN268) 保健省協議		
5	6月7日 (土)	院内会議		
6	6月8日 (日)	院内会議		
7	6月9日 (月)	JICA協議		
8	6月10日 (火)	JICA協議 保健省協議		
9	6月11日 (水)	JICA協議 保健省協議		
10	6月12日 (木)	在ベトナム日本国大使館訪問 保健省協議 HAN-NRT(JL752)		
11	6月13日 (金)	成田晋		

### 資料-3 関係者（面談者）リスト

## 関係者（面談者）リスト

<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
MINISTRY OF HEALTH	Minister	Nguyen Thi Kim Tien
	Vice Minister	Pham Le Tuan
	Director General, International Cooperation Department	Tran Thi Giang Huong
	Vice Director, Planning and Finance Department	Dang Viet Hung
	Vice Director, Planning and Finance Department	Nguyen Hoang Long
	Vice Head, ODA Division, Planning and Finance Department	Tran Minh Trung
	Vice Director, Information Technology Administration	Nguyen Hoang Phuong
	Information Technology Administration	Nguyen Tuan Anh
	Official, Planning and Finance Department	Nguyen Van Quang
	Official, International Cooperation Department	Vu Ha Thu
	Vice Director, Planning and Wealth Policy	Duong Due Trun
	Official	Nguyen Dien Tien
	Official, Medical Equipment and Construction Department	Nguyen Kim Trung
	Planning and Innovation Department	Vu Viet Anh
	Vice Director, Science Technology and Training Administration	Nguyen Minh Loi
	Science Technology and	Thong Thi Tan

	Training Administration	
	Director General, Medical	Luong Ngoc Khue
	Service Administration	
	Vice Director, Medical	Nguyen Chien Thang
	Equipment and	
	Construction Department	
<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
MINISTRY OF FINANCE	Vice Director of Debt	Nguyen Xuan Thao
	Management and External	
	Finance	
	Vice Director, Bilateral	Nguyen Ngoc Hung
	Division II, Department of	
	Debt Management and	
	External Finance	
	Bilateral Division II,	Oanh
	Department of Debt	
	Management and External	
	Finance	
<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
MINISTRY OF PLANNING AND	Head of Japanese Division,	Nguyen Hoang Linh
INVESTMENT	Foreign Economic	
	Relations Department	
<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
MINISTRY OF NATURAL	Agency for Environmental	Mai Thanh Dung
RESOURCES AND	Impact Assessment and	
ENVIRONMENT	Appraisal Director	
<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
MINISTRY OF	International Cooperation	Mai Thanh Dung
CONSTRUCTION	Dept. Director General	
	International Cooperation	Pham Khanh Toan
	Dept. Official	
	Construction Activities	Do Nguyet Anh



	Management Dept. Deputy Director	
	Environment and Energy Efficiency Division Official	Mcm. Hoang Tho Vinh Nguyen Ngoc Duong

<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
DEPARTMENT OF CONSTRUCTION, HO CHI MINH CITY	Secretariat Quality control Economic bid Construction permission Quantity Survey	Anh Thinh Hung Hai Thanh

<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
FIRE DEPARTMENT, HO CHI MINH CITY	General Manager Consulting General Manager Prevention General Manager Evaluation Supervisor Specialist	Vo Tan Dat Nguyen Manh Tung Nguyen Duc Vinh Hoang Van Su Do Tien Dung

<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
DEPARTMENT OF NATURAL RESOURCE ENVIRONMENT (DONRE) in HO CHI MINH CITY	Deputy Chief Deputy Chief	Nguyen Hoai Nam Le Phuong Dung, Nguyen Thi Tam

<u>Organization</u>	<u>Title</u>	<u>Name</u>
DEPARTMENT OF INDUSTRY AND TRADE, HO CHI MINH CITY	Electric Power Administrative Department General Manager Power Administrative Department Vice Manager	Vong A Loc    Luong Xuan Nhung

<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
THE COMMUNIST PARTY BINH CHANH DISTRICT BRANCH	Branch manager	Hoa
<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
PEOPLE'S COMMITTEE OF BINH CHANH DISTRICT	Chief	Tui
	Chief	Phan Thi Bao Chau
	Department of Natural Resources and Environment	Nguyen Tien Moi
		Hyanh Cong Huan
	Le Minh Xuan Committee	Le Quang Minh
	The right to use of the site and resettlement	Vo Van Cong
	Official	Bui Phan Thanh Tam
	Official	Tran Van Yong
	Official	Nguyen Thi Tuong
	Official	Nguyen Van Nhan
	Official	Phan Thi Cam Nhung
	Official	Nguyen Van Thong
	Official	Tran Thanh Huy
<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
SAIGON VRG INVESTMENT HOLDING CORPORATION	Vice President	Tran Ngoc Nhan
	Vice President	Tran Nhu Hung
	Deputy Manager of Construction Management Department	Pham Van Ding
	Office manager	Le Trung Nghia
<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
PHU AN THANH CO., LTD.	President	Ho Trung Hieu

<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
CHO RAY HOSPITAL	Director	Nguyen Truong Son
	Vice Director	Nguyen Van Khoi
	Vice Director	Tran Minh Truong
	Vice Director	Tran Quyet Tien
	Vice Director	Pham Thi Ngoc Thao
	Chief of International Affairs	Huynh Kim Phuong
	Chief of Interventional Cardiology Department	Vo Thanh Nhan
	Chief of Cardiology Department	Le Thanh Liem
	Chief of Infection Control and Risk Management	Le Thi Anh Thu
	Chief of Medical Equipment Department	Huynh Huu Pho
	Chief of IT Department	Le Thanh Chuong
	Chief of Personnel Department	Nguyen Duc Trong
	Chief of Personnel Department	Nguyen Trung Son
	Chief of GPD	Pham Thanh Viet
	Secretary of Second Hospital Project	Dang Minh Hien
	Chief of Media and Clinical Skills Lab	Le Thanh Ni
	Chief of Research Department	Le Ngoc Anh
	Nursing Department	Nguyen Thi Oanh
	Nursing Department	Vuong Thi Nhat Le
	Chief of Financial Department	Nguyen Nhat Hai,
	Chief of Nutrition Department	Luu Ngan Tam
	Chief of Radiology Department	Le Van Phuoc

Chief of Pharmacy Department	Truong Khoa
Pharmacist	Nguyen Quoc Binh
Chief of Clinical Microbiology Department	Tran Thi Thanh Nga
Chief of Nuclear Physician Department	Bui Dieu Hang
Vice Chief of Material Management Dept.	Doan Thanh Phong
Vice Chief of Material Management Department	Nguyen Thi Thanh Binh
Vice Chief of Material Management Department and Project Management Unit	Nguyen Quoc Tuong
Chief of Training Department	Nguyen Ngoc Bich
Vice Chief of Respiratory Medicine Department	Dang Vu Thong
Medical Equipment Department	Van Cap Qui
Medical Equipment Department	Vo Hoang Nhan
Medical Equipment Department	Phan Minh Tuan
Medical Equipment Department	Nguyen Tan Khanh
Medical Equipment Department	Pham Khanh Thanh
Medical Equipment Department	Nguyen Nhan Thien
Medical Equipment Department	Tran Thi Hoang Diep
Medical Equipment Department	Vo Hoang Nhan
Chief of T.D Department	Tran Quang Binh

Radiation Safety Unit	Nguyen Van Hoa
Radiology Department	Vo Thanh Phuong
Chief of Endocrinology Department	Lam Van Hoang
Chief of Dialysis Department	Nguyen Minh Tuan
Vice chief of Biochemistry Department	Tran Thanh Vinh
Chief of Vascular surgery Department	Pham Minh Anh
Chief of Thoracic Surgery Department	Vu Huu Vinh
Chief of ICU Department	Phan Thi Xuan
Chief of Outpatient Department	Dao Duy Khanh
Vice chief of Ophthalmology Department	Ngo Van Hong
Ophthalmology Department	Vu Tuan Son
Vice Chief of Emergency Department	Truong The Hiep
Chief of Operating and Anesthesia Department	Pham Van Dong
Chief of HPB Surgery Department	Doan Tien My
Hepato-Pancreato-Biliary Surgery Department	Bui An Tho
Chief of Urology Department	Thai Minh Sam
Chief of Cardiac Surgery Department	Nguyen Thai An
Chief of General Internal Medicine Department	Truong Ngoc Hai
Chief of Digestive Surgery Department	Lam Viet Trung

Digestive Surgery Department	Vo Hoang Nhan
Chief of Nephrology Department	Chau Thi Kim Lien
Neurology Department	Nguyen Anh Tu
Chief of Emergency Department	Pham Tri Dung
Chief of Physical Therapy Department	Nguyen Dang Khoa
Vice Chief of Blood Transfusion Department	Tran Van Bao
Chief of Nursing Department	Le Thi My Hanh
Chief of Endoscopy Department	Ho Dang Quy Dung
Chief of Ultrasonography and Function Test Department	Bui Phu Quang
Vice Chief of Nuclear Medicine Department	Pham Van Trieu
Chief of Oncology Department	Le Tuan Anh
Chief, Unit of PET-CT and Cyclotron	Nguyen Xuan Canh
Chief of Rheumatology Department	Nguyen Dinh Khoa
Chief of Hematology Department	Tran Thanh Tung
Department of Tech	Ho Trong Toan Le Thi Thu Suong Tran Dinh Dung
Vice chief of Neurosurgery Department	Nguyen Ngoc Khang

DM-C Deputy Director	Nguyen Huen Thang
Vice Chief of Gastroenterology and Hepatology Department	Ho Tan Phat
Vice Chief of Digestic Surgical Digestive ORh	Tran Phung Dung Tien Tran Anh Bich
Physiology Department	Bib Plu Gucuy  Le Thi Thu Tuan
Secretary of the Project	Nguyen Hoang Hanh
Vice Chief of Interventional Cardiology Dept.	Nguyen Thuong Nghia
Vice Chief of Operating and Anesthesia Department	Le Huu Dat  Le Thi Thu Suong  Tran Dinh Dung
Vice chief of Neurosurgery Department	Nguyen Ngoc Khang

訪問先  
BACH MAI HOSPITAL

<u>職位</u>	<u>氏名</u>
Vice Director	Loi Do Doan
Chief of Administrative Department	Do Long Loi
Vice Chief of IT Department	Tran Long
Vice Chief of International Cooperation Department	Hguyen Thi Houg
International Cooperation	Pham Thug Linh

<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
FV HOSPITAL	Department Chief of Ophthalmology & Refractive Surgery Department Medical Affairs Office Manager, Medical Affairs Office	Nguyen Dinh Boi Anh, Nguyen Tra My
DEPARTMENT OF HEALTH IN HO CHI MINH CITY	Health Department Chief of Office	Nguyen Than Vin Le Anh Tuan
DONG NAI GENERAL HOSPITAL	Vice Director	Huong
CITY INTERNATIONAL HOSPITAL	Chief Executive Officer CFO Secretary	Stephens Lo Le Dinh Hoan Thu
FUE CENTRAL HOSPITAL	Head International Cooperation Dept. Vice-Head of Eye Dept.	Huong Ngoc Son Pham Nhu Vinh Tuyen
WHO Vietnam Office	WHO Representative Technical Officer	Takeshi Kasai Socorro Escalante
FUJITA CORPORATION	Project Manager Manager International Business	Shuji Ueno Takamitsu Imai



<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
New CC Construction Consultants Co., Ltd.	Division General Director Director in charge planning& Japanese Clinents	Nguyen Ngoc An 野澤憲明
<u>訪問先</u> VINA PSMC PRECAST CONCRETE J.V. CO	<u>職位</u> General Manager	<u>氏名</u> Hirofumi Ota
<u>訪問先</u> FUDO TETRA CORPORATION	<u>職位</u> Sales Manager International Department Geo-Technical Division	<u>氏名</u> Tooru Inoue
<u>訪問先</u> TENOC CORPORATION	<u>職位</u> Manager Marketing & Sales Division	<u>氏名</u> Yumenari Shimizu
<u>訪問先</u> TENOX KYUSYU VIETNAM CORPORATION	<u>職位</u> Deputy Director	<u>氏名</u> Takao Minami
<u>訪問先</u> NGHI SON CEMENT CORPORATION	<u>職位</u> Director Manager Manager	<u>氏名</u> Masao Osumi Akira Enoshita Tatsuya Sato
<u>訪問先</u> NIPPON STEEL & SUMIKIN PIPE VIETNAM CORPORATION	<u>職位</u> General Manager	<u>氏名</u> Sei Hiraoka
<u>訪問先</u>	<u>職位</u>	<u>氏名</u>

NIPPON STEEL & SUMIKIN ENGINEERING CORPORATION	Chief Representative	Shuzo Chiba
<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
JAPAN PILE CORPORATION	Senior Engineer	Toshikazu Suzuki
<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
FHAN VU DONG NAI	Director	Bui Duc Thong
<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
TAISEI CORPORATION HO CHI MINH OFFICE	Deputy General Manager Project Manager Deputy Project Manager, M&E Manager	松田育夫 吉岡恒二 町口浩之
<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
NISHIMATSU CONSTRUCTION CO., LTD.	General Manager & Chief Representative Manager, Building Department M&E Manager Deputy Project Manager	望月敏洋 中島夏樹 本田均 石井悟
<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
MARUBENI-ITochu STEEL VIETNAM CO.ITD	Assistant General Director	中村誠児
<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
OBAYASHI VIETNAM CORPORATION	General manager Building Department Deputy General Director	鈴木成義 馬淵亮
<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
SUMITOMO CORPORATION	General Manager	藤川英大

VIETNAM LLC	Transportation Project Dept.	
<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
SHIMIZU CORPORATION	Project Director	檜原直人
	Marketing Manager	牧之内祐介
<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
MAEDA VIETNAM CO., LTD	General Director	戸田耕資
	General Manager	Tran Tuan Khanh
<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
SUMISO VIETNAM CO., LTD.	General Director	桧垣拓司
<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
SMC SUMMIT	Sales Director	石橋穰
KAJIMA OVERSEAS ASIA PTE LTD	Senior General Manager	鈴木忠明
<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
VCC	Vice Director	Nguyen Van Hoang
<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
COTECCONS	Business Development Director	Tu Dai Phuc
	Deputy General Director	Tran Quang Quan
<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
HOA BINH CONSTRUCTION AND REAL ESTATE CORPORATION	Corporate Planning Director	Vo Dac Khoi
	Tendering Department Manager	Andy Nguyen
	Financial Analyst	Nguyen Quang Huy

<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
CONSTRUCTION JOINT STOCK COMPANY No.1 (COFICO) FUJINAMI CONSTRUCTION CONSULTANT CO., LTD	Vice President of Operations Deputy Director General Director	田中秀治  Rey Sebolino 藤波美知男
<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
VINKA KYOEI STEEL CO. LTD	General Director Deputy General Director	森光廣 大北剛
<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
SAIGON-RDC CO., LTD	General Director Deputy General Director	Michel Williams 宮下隆
<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
LANGDON & SEAH VIET NAM CO., LTD	Deputy General Director	Truong Minh Tri
<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
APAVE	Director Director Asst. General Director Deputy Project Manager Construction Division Marketing Executive Technical & Commercial Technical & Commercial Director	Nguyen Ha Trang Pham Ngoc Ton  Nguyen Quoc Tuan  Tran Thanh Tuan  Ha Minh Man
<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
LAM NGUYEN	Deputy Director	Nguyen Dan Viet
<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
SHINRYO VIETNAM	Director Marketing Manager	名取徹 葛西勇人

	<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
KINDEN		General Director	貴志好孝
		Manager	Doan Hoang Hai
	<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
SEAREFICO		Director	Mai Chanh Thanh
		Deputy Director	Tran Dinh Muoi
		Technical Director	橋本廣幸
	<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
TAIKISYA LTD.		General Manager	篠原徳道
		Senior manager	上阪正行
			中地雅之
	<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
LIXIL INAX		General Manager	寺尾和弘
	<u>訪問先</u>	<u>職位</u>	<u>氏名</u>
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MITSUBISHI ELECTRIC CORPORATION	General Manager General Manager,	井川朋宏 Pham Anh Hao
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## INSTITUTE

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資料一4 PROJECT ON CONSTRUCTION THE SECOND BRANCH OF  
THE CHO RAY HOSPITAL



**MINISTRY OF HEALTH**

**CHO RAY HOSPITAL**

**SUMMARY DRAFT**

**PROJECT ON CONSTRUCTION THE SECOND BRANCH  
OF THE CHO RAY HOSPITAL**

**ADDRESS: LE MINH XUAN, BINH CHANH DISTRICT, HO  
CHI MINH CITY  
SCALE: 7HA**

**HO CHI MINH CITY  
MARCH 2013**

## CHAPTER I

### INVESTMENT OBJECTIVE – NECESSITY OF THE PROJECT

#### 1. LEGISLATIVE BACKGROUND

- Pursuant the Law on Construction No. 16/11/2003, Based on the Decree No, 12/2009 ND-CP dated February 10, 2009 of the Government on the management of investment project and facility construction; Decree No.83/2009-ND-CP dated October 15m 2009 of the Government on supplementation for the Decree No, 12/2009 ND-CP dated February 10, 2009 of the Government on the management of investment project and facility construction.
- Pursuant to the Decision No. 348/QD-BYT dated February 17, 2005 of the Minister of Health on the approval of Master Plan on Cho Ray Hospital Development in period 2005-2010 with vision to 2020.
- In accordance with the Notice No. 711/UB-VP dated September 18, 2012 of Ho Chi Minh City People’s Committee informing of “ Conclusion of the Vice Chairman of the People’s Committee Le Manh Ha in the meeting on implementation of Le Minh Xuan 3 Industrial Zone and its nearby living quarter for the Industrial Zone”, in which, a plan of Cho Ray II Hospital is included, aiming to reduce the hospital overload of the Government
- Pursuant to the Decision No. 4400 / QD-BYT dated November 9<sup>th</sup>, 2012 of the Health Minister in approving the investment preparation for the Investment Project on construction of the second branch of Cho Ray Hospital at Le Minh Xuan 3 Industrial Zone, Binh Chanh District, Ho Chi Minh City
- In accordance with the Letter No, 93/TNMT-QLSDD of the Department of Natural Resources and Environment of Ho Chi Minh City on the implementation of construction project “ Second branch – Cho Ray Hospital” at Binh Chanh District.
- Based on the memorandum on hand over of the site for construction of Second branch – Cho Ray Hospital.

#### II. OVERVIEW ON THE HEALTH SITUATION IN HO CHI MINH CITY AND OTHER PROVINCES IN THE SOUTH AREA

At present, the Strategy on Protection, care and improve health condition of people in the period 2011-2020 with a vision to 2030 and the Master Plan on Development of Health System up to 2020 with a vision to 2030 are being draft by the Ministry of Health and will be submitted to Prime Minister for approval, In those documents, priority are given to the health management, investment to health facilities, enhancement of the service quality and reducing overload of the upper hospitals.

Despite of a number of measures have been taken, but the over crowded situation has not yet improved, The average hospitalization length in Vietnam is long ( 10 days comparing to 3-4 days in developed countries).

The bed occupancy rate at all the hospitals in Ho Chi Minh City is always in overloaded situation. According to the report of Medical Service Administration, previously, the bed ratio per 10,000 citizen was 24, but in 2012, despite of a number of measures have been taken to reduce the overload situation, this ratio is remained to 21. The bed ratio per 10,000 population of Vietnam is ranked on 99/140 in the

world. At the plan of health sector, Cho Ray Hospital is one of the nuclear hospitals, that are responsible for transferring the comprehensive technical packages – one of the solution that is expected to reduce the bed occupancy rate to lower than 100 % in 2015 and then up to 2020, the overload situation may be sustainable solved.

The health situation in Ho Chi Minh City is as the same as the general picture of the health sector. The city is facing with a drastically change in population size, from more than 4 millions in 1995, up to nearly 8 millions in 2010 ( a rough estimation). High density of population, particularly in the urban area (approximate 24,000 per km<sup>2</sup>), excluding a large number of laborers and visitors come to live temporary, resulted in an increasing needs on medical examination and treatment. According to statistic data, every year, all the hospitals in city receives more than 10 millions out patients and more the 500,000 in patients, in which, patients from other Southern provinces account for 50 ~ 60%.

The network of medical examination and treatment in the city is concentrated in the urban districts. All the hospitals were constructed before 1975, most of them have been expanded and renovated, but still at the moderate level that response to the basic functions and duties.

The bed occupancy at all hospitals in the area of Ho Chi Minh City is always at over crowded situation. One of the measures for reducing this over crowded situation is establishment of the sateline hospitals in the sub urban. This is considered as the best solution for the plan of reducing overload situation.

### **III. NECESSITY AND INVESTMENT OBJECTIVE**

Cho Ray Hospital is a special grade general hospital with 1,800 beds under direct management of Ministry of Health, is responsible for providing examination and treatment to people living in the Southern Region from Ninh Thuan to Ca Mau. After many years of operation, the hospital has been truly operated as the final backup and top referral hospital for 37 provinces in the South, including Ho Chi Minh City. The hospital has some high tech specialties such as Internal – Surgical Neurology, Internal – Surgical Cardiology and Thorax, Surgical Urology, Artificial Kidney, Internal Gastrology, Emergency, Intensive Care, Imaging Diagnosis, Nuclear Medicine, Ultrasound, Endoscope, and other high tech medical units such as Kidney transplant, neurology surgery, Cardiology intervention, Heart surgery, cancer treatment. The hospital is a practical training site, science research, DOHA for students, researchers of HCMC Medicine and Pharmacy University and the other medicine schools of the country. Some of hospital departments such as nuclear medicine, x-ray therapy, and cardiology are playing a leading role not only at the South but also in the country.

With the increasing number of patient, the overload is often occurred. Quality of service and number of provided medical service are given high priority by the Government, Ministry of Health and all people in the society. According to the report of Ministry of Health, at present, central hospitals including those in Ho Chi Minh City are facing with extremely difficulties due to the large numbers of by-pass patients (patients came directly without referral note from lower level). This is resulted from the insufficient medical care service of the health system and not yet responded to the needs of the region and of Ho Chi Minh City. Particularly, primary health care facilities still can response to the complicated diseases which require high technology and special care.

With the current capacity, Cho Ray Hospital could not respond to the large number of patients as explained above and the diversified needs. The hospital has 1,800 planned beds, but the actual beds in use is 2,445 with the bed occupancy rate at 140%. The current site of Cho Ray Hospital is getting cramped, leading to many difficulties in providing care to patients, namely are i) increasing trend of hospital nosocomial infection rate, ii) the long line waiting for treatment, iii) 2~3 patients are sharing one bed is often occurred at in-wards.

Operational data at the Cho Ray Hospital in 2008 – 2011

No	Professional indicator	2008	2009	2010	2011
1.	<b>BED</b>				
	Plan	1,400	1,800	1,800	1,800
	Actual Bed	1,631	1,735	1,623	1,629
	Bed occupancy in plan	183	140	138	140
	Bed occupancy in actual	157	145	153	154
<b>2. OUT PATIENT</b>					

Total		943,288	985,800	1,091,647	1,174,591
In which, with health insurance		214,127	345,868	475,874	569,559
<b>IN</b>					
<b>PATIENT</b>					
Total		109,304	113,219	118,594	125,918
		933,033	918,843	903,616	918,026
<b>SURGERY</b>					
Total of big and medium		35,645	37,409	38,890	40,647
Super surgery		4,873	5,234	4,752	5,364
First grade		18,008	17,886	18,668	19,414
Second grade		8,553	9,717	10,159	10,512
Third grade		4,211	4,572	5,311	5,384

Regarding personnel, the hospital has more than 3,420 staff, in which, 730 are professors, doctors, pharmacists and 1,447 nurses .

In such emergency condition as above explained, in order to reduce the hospital overload in line with the instruction from the Government and within a framework of the project on “ Reducing hospital overload” of Ministry of Health, the project of “ Constructing the second branch of Cho Ray Hospital has the following objectives:

- Newly constructing the second branch of Cho Ray Hospital with 1,000 beds for in patients with high quality care. Some of specialties such as cancer,

cardiovascular, trauma are expected to meet with regional level, serving people in the Southern area and the whole country as well.

- In line with Government's policy and Ministry of Health 's instruction in reducing overload situation of hospitals in the urban city, contributing to the improvement of health care service to people.
- Enhancing the international cooperation with foreign countries in professional activities such as training, teaching, technical transfer.

Regarding personnel, the hospital has more than 3,420 staff, in which, 730 are professors, doctors, pharmacists and 1,447 nurses. With this number of qualified personnel workforce, we can anticipate that once the second branch is completed, necessary personnel workforce will be surely allocated to the branch.

## **CHAPTER II**

### **CAPACITY AND SCALE OF THE FACILITY**

#### **I. CAPACITY OF THE FACILITY**

Cho Ray Hospital was firstly built in 1900s, the hospital has been making significant contribution to the people health care in over last 100 years. Over many years, with the attention of Ministry of Health, the hospital had carried out the rehabilitation and upgrading the infrastructure as well as procured a lot of modern medical equipments for examination and treatment, but still not yet fully responded to the increasing requirements of people.

Construction the second branch of Cho Ray Hospital at Le Minh Xuan Industrial Zone, Binh Chanh District, Ho Chi Minh City based on the decision of the Health Minister means that the health sector will have one more modern health facility under the management of Ministry of Health and inline with policy of the Government, Ministry of Health and People's Committee of Ho Chi Minh City. This project is expected to contribute to the improvement of health care service in the Southern area, and will become a training institution for students, researchers of the Ho Chi

Minh City Pharmacy – Medicine University, other hospitals, scientific research and DOHA.

The organizational mechanism of the Second branch of Cho Ray Hospital will be as the same as the public general hospital, including professional wards, functional departments as regulated in the “ Hospital regulation” issued by the Ministry of Health.

## II. SCALE OF INVESTMENT

- Pursuant to the Decision No. 348/QD-BYT dated February 17, 2005 of the Minister of Health on the approval of Master Plan on Cho Ray Hospital Development in period 2005-2010 with vision to 2020.
- Pursuant to the Decision No. 4400 / QD-BYT dated November 9<sup>th</sup>, 2012 of the Health Minister in approving the investment preparation for the Investment Project on construction of the second branch of Cho Ray Hospital
- Based on the draft master plan of Cho Ray Hospital from 2013-2020 with vision to 2030

The Second branch of Cho Ray Hospital is a completed health facility with 1,000 beds, matching criteria of the “special grade hospital”, which will have some specialties at regional level.

The Cho Ray Hospital – Second Branch

Project site:

- At Le Minh Xuan Industrial Zone 3, Binh Chanh District, Ho Chi Minh City
- Area: 7ha
- The site was approved by People’s Committee of HCMC in the Le Minh Xuan Industrial Zone. Ministry of Health has issued the letter No. 1062/BYT-TB-CT agreeing with the proposed site as suitable for constructing a hospital. Establishing a new hospital will help to reduce the overload to the main hospital as indirectly help to reduce the pressure to the infrastructure of the city, as well as matching with the total design of the area.

Regarding bed scale

By 2020, the in ward beds is expected to reach to 1,000 (one thousand) at the Cho Ray II Hospital.

The organization chart is as bellows:

a) Management Board:

The hospital has 1 director and some vice directors

b) functional departments (13)

1. Administrative department
2. Personnel department
3. General Planning department
4. Nursing department
5. Finance and accounting department

6. General Affairs department
  7. Medical Equipment department
  8. IT department
  9. Internal affair protection – security department
  10. External relation – PR
  11. Radiation Safety
  12. Medical – Society department
  13. Hospital medical department
- c) Clinical department (33)
1. Examination department
  2. Daily examination and treatment
  3. Emergency
  4. Intensive care unite
  5. Internal cardiovascular
  6. Intervention cardiovascular
  7. Internal respiratory – TB
  8. Internal nephrology
  9. Artificial kidney
  10. Internal muscle – skeleton – articulation
  11. General internal medicine and tropical diseases
  12. Internal gastro logy
  13. Internal neurology
  14. Endocrinology
  15. Selective treatment
  16. Hematology
  17. Anesthesia – Resuscitation
  18. Resuscitation – heart surgery
  19. Vascular surgery
  20. Surgery gastro logy
  21. Surgical liver – bile – pancreas
  22. Surgical urology
  23. Surgical trauma
  24. Surgical neurology
  25. Surgical chest
  26. Burn
  27. ENT
  28. Eye
  29. Obstetrics
  30. Pediatrics
  31. Rehabilitation (Therapy)
  32. Traditional Medicine
- d) Para clinical (12)
1. Hematology analysis
  2. Bio chemistry
  3. Micro biology
  4. Imaging diagnosis
  5. Nuclear medicine
  6. Ultrasound and functional examination
  7. Endoscope
  8. Anatomy
  9. Infection Control



- 10. Sterilization
- 11. Pharmacy
- 12. Clinical nutrition

The other departments, centers will be setting up upon necessary and approved by related authorities.

Regarding human resources

1. Strengthen training, refresh training (including training in domestic and abroad, graduate and post graduate, nurse, technician, etc) to ensure the health workforce in both quantity and quality that can respond to requirement of each post / title in the general context of the country, of the city and of the hospital.
2. Step by step to develop the human resources so that by 2020, the ratio of technical labor per bed is 1.7/1 bed (exclude normal worker, guard, transporter)

## II. METHOD OF INVESTMENT

Newly constructed health facility under the management of Ministry of Health

### CHAPTER III INITIAL SELECTION OF TECHNOLOGY

#### 1. Main economic and technology indicators

Main economic and technology indicators are as bellows:

- a) bed scale
  - First stage: Examination and treatment ward with 500 beds
  - Second stage: 500 beds
- b) Indicator of used area / patient
  - Examination and in ward: 10- 14m<sup>2</sup>/ patient
  - Service – technical corridor: 4-6 m<sup>2</sup>/ patient
  - Green: 8-10m<sup>2</sup> / patient
  - Transport factor: 14- 17 m<sup>2</sup>/ patient
- c) Used land ratio: 75-85%
- d) average construction density: 20-25%
- e) land used ratio: 1.8
- f) average height: 10 floors
- g) infrastructure indicators:
  - electricity: 1000-1800kwh/person/ year
  - water supply: 150-200 little/person/ day night
  - drainage: 150 little/ person / day night
  - medical waste / normal waste: 1,0kg/person/ day night

#### 2. Plan and usage of the land

- The land will be used for examination ward, in- patient ward connecting with clinical departments and a training center for nurses and accommodation for patient's relatives.

- The land will be used as follows:

Total used area: 7ha (70,000 m<sup>2</sup>)

- a. First construction stage: examination and treatment ward with 500 bed
- b. Second construction stage: 500 beds

The detailed function of each ward, transportation and infrastructure is setting up based on the connection to ensure objectives – standards of the design and related profession.

### 3. Medical equipment

The examination technology and modern treatment of the region and the world will be applied. The medical equipment will be procured in accordance with regulation of the Ministry of Health. Equipment that used in construction also should match to the present regulation of Vietnam and general health guideline of the world.

## **CHAPTER IV TOTAL INVESTMENT FUND**

### **I TOTAL INVESTMENT FUND**

#### 1. Determining total budget for the facility

Breakdown of budget for construction

##### 1.1 Construction budget

Construction budget includes for facilities, site clearance , site filling, temporary facility, supporting facility for construction, temporary house for managing the construction work

##### 1.2 Equipment budget

Equipment budget includes expense for procuring technology and equipment, expense for training and technical transfer, installation, test running, transportation, insurance, taxes and other related fees

##### 1.3 Compensation and site clearance

Compensation and site clearance expense includes : compensation for houses, building, trees and other fee, re-allocation, site clearance, fee of land usage (if any), and expense for constructing technical infrastructure.

##### 1.4 Project management fee

Project management fee includes necessary expense for project management from preparation stage to the completion stage

##### 1.5 Consultant fee

Consultant fee includes for study, design, assessment the technical design, assessment the estimation budget, construction supervision and other fee

##### 1.6 Other fee

Includes interest during construction period and other necessary fee

##### 1.7 Contingency fee

Contingency fee for additional works and for inflation during construction period.

Contingency fee is 5% of total expense for construction, equipment, site clearance, construction consultant and others.

#### 2. Legislative background to estimate the budget

- Pursuant Decree No. 12/2009/ND-CP dated February 10, 2009 of the Government on management of investment and construction project
- Based on the Decision No. 725/QĐ-BXD dated August 9, 2012 of Ministry of Construction on the announcement of the investment for a construction facility and price of construction in 2011
- Based on the circular 01/2013/TT-BXD on February 8, 2013 of Ministry of Construction on the guidance on defining, managing fee of construction and city design

- Pursuant the Decision No. 4400/QD-BYT dated November 9, 2012 of Ministry of Health approving preparation for the project on construction the second branch of Cho Ray Hospital

3. Total budget for the project  
Total budget (tentative)

Item	Amount
(1) Preparation fee	10,000,000,000 VND 500,000 USD
(2) Site clearance	150,000,000,000 VND 7,500,000 USD
(3) Construction	623,000,000,000 VND 31,150,000 USD
(4) Equipment and installation	704,000,000,000 VND 35,200,000 USD
(5) Medical equipment	1,363,000,000,000 VND 68,150,000 USD
(6) Contingency and other fee	150,000,000,000 VND 7,500,000 USD
<b>TOTAL</b>	<b>3,000,000,000,000 VND</b> <b>150,000,000 USD</b>

### III. FUND SOURCE

- Investment fund from State Budget though Ministry of Health: 800 billion VND as the counterpart fund and for some activities in the preparation stage and partial of the first stage of the project.
- ODA of the Government of Japan: 2,200 billion VND, equivalence to approximate 110 million USD

#### Road map of the construction

- Preparation of investment, formulating project (including completion of land procedure and land hand over: 2013)
- Ground Breaking of construction (including the land compensation, site clearance, site filling) : from 2013
- Completion of the first stage with 300 ~ 500 beds in 2015
- Completion of the second stage: complete 1,000 bed hospital in 2018

### IV. OPERATION PLAN OF THE HOSPITAL AND SUSTAINABILITY OF THE PROJECT

1. Regarding profession:  
Operate all the departments as explained in the above parts.

## 2. Regarding personnel

In short term period, the hospital will rotate present staff at the Cho Ray Hospital with sufficient number responding the needs at the second branch appropriately.

## 3. Regarding finance

Be operated based on the Decree 85/CP: Fully autonomous in regular expenditure. The service fee will follow the table rate regulated by Ministry of Health (except for the selective treatment per patient request)

# **CHAPTER V ASSESSMENT ON SOCIO-ECONOMIC OF THE PROJECT**

## Assessment on socio-economic of the project

Once operated, the second branch of Cho Ray Hospital will make great contribution to respond to the needs on examination and treatment of people in the Southwest Region.

The hospital also is expected to reduce overload of hospitals in the city, then helping to provide better medical care to patient.

Under supervision of Ministry of Health, the hospital will participate in the healthcare network in the South and whole country.

In term of socio- politic: contribute to ensure healthy life of people. The hospital has been actively participating in primary health care, preventing outbreak of infectious disease, helping to reduce poverty and reducing treatment fee for people.

In term of environment: The hospital will protect the maintain the eco- environment in a suitable way.

In term of human resource: The project to build Cho Ray II Hospital aiming to respond to the increasing needs of people. The project is formulated based on decree 05 of the Government on socialization of the Party and the State, helping to reduce the overload of public hospitals, in which, social objective – to ensure the needs of people in examination and treatment and economic objective – make business of examination and treatment service, are combined. With well trained medical doctors from Cho Ray Hospital and well equipped medical equipment as the same as other countries in the region, the hospital is expected to become an international medical center, providing medical service to patient of Ho Chi Minh city, other Southern provinces and foreigners living in Vietnam.

資料—5 Technical Note

**Technical Note**  
**on**  
**the 2nd Field Survey**  
**From 23rd February to 20th March, 2014**

## 1. Hospital Operation and Management

### 1) Support for operation

The survey team proposed the support program of hospital management at Cho Ray Second Hospital, which is classified into 5 objects as follows and the detail is annexed as Appendix 1-1:

- (1) Advanced Medical Service and Regional Network
- (2) Respect for the will of the patients.
- (3) Hospitality
- (4) Safety and Security
- (5) Related matters

Roles of the Vietnamese side and the Japanese side are proposed, and these were confirmed.

### 2) Planned clinical departments and number of beds for each department

The survey team proposed the number of beds for each department based on the analysis of patients' increasing rate and other factors. After several discussions between the director of Cho Ray Hospital (herein after say CRH) and the survey team, the number of beds for each department is confirmed as in Appendix 1-2.

## 2. Human Resource Management

### 1) Human Resource Development / Training Program

The Vietnamese side submitted the request for training programs, and both sides have confirmed human resource development / training program plan as in Appendix 2-1.

The Vietnamese side strongly requests to implement the programs as soon as possible.

The detail of the programs (duration, timing, number of trainees, scheme to be used, etc.) shall be considered by the Japanese side and discussed between the Vietnamese side and the Japanese side.

### 2) Personnel Allocation and Recruitment

Necessary number of the staff in CRH (including Cancer Center which is under construction and schedule to open in 2015) and Cho Ray Second Hospital is calculated based on the Joint Circular No. 08/2007/TTLT-BYT-BNV.

The Vietnamese side plans to open Cho Ray Second Hospital with 800 beds at the beginning and open another 200 beds in 2 years after the opening.

According to the Circular, approx. 1,700 new employees might be necessary at the time of hospital opening, and approx. another 300 new staff to be employed in 2 years after the opening (Appendix 2-2).

The Vietnamese side assured of securing adequate human resources for Cho Ray Second Hospital and provided the recruitment plan (Appendix 2-3).

## 3. ICT

CRH has experienced the development of electronic medical record system, so based on the analysis

of the present situation of CRH, the Vietnamese market, etc., we proposed 3 plans as in Appendix 3-1, 3-2.

As the survey team, considering cost, capacity, effectiveness, etc., the plan B is recommended.

#### 4. Medical Equipment

##### 1) Medical Equipment Planning

Aiming at high advanced medicine, medical equipment has been planned after discussion with the doctors of each department. As listed in Appendix 4-1, CT with 640 slices and MRI with 3 Tesla have been planned in Radiology Department. Hybrid operation theatre which is equipped with DSA has been planned.

Planned medical equipment is under evaluation based on the necessity for Cho Ray Second Hospital and could be reviewed accordingly.

##### 2) Optional Proposal

In order to reduce cost of the planned medical equipment, the survey team proposed that the following items shall be options to be reviewed.

- a. Others (unlisted in Appendix 4-1, for example, fixture, furniture, beds, medical instrument, etc.)
- b. Medical Equipment for Oncology and Nuclear Medicine
- c. Ambulance for Cho Ray Second Hospital
- d. Medical Equipment in Clinical Laboratory Department (on lease)

The following answers were responded by CRH accordingly.

- The above options shall be considered after referring to the price of each option.
- Medical equipment for Oncology such as LINAC could be deleted from the list since 4 LINAC will be installed in the Cancer Center which is under construction in CRH, and also Cho Ray Second Hospital mainly introduces Chemotherapy as cancer treatment.
- Nuclear medicine is important role for Cho Ray Second Hospital. Therefore, PET-CT, SPECT-CT and Gamma Camera were requested.
- As for option a, tables, beds, medical instrument, etc. are preferable for Japanese made. Therefore, those items were requested to be included in the project.
- Medical Equipment in Clinical Laboratory Department could be introduced on lease. However, basic items such as experiment tables and refrigerators were not applicable for lease.
- 4 ambulances for Cho Ray Second Hospital were suitable.

#### 5. Building Construction

##### 1) Construction Site

The construction site (area of 10ha )has been fixed at Le Minh Xuan 3 Industrial Park, Binh Chanh District, Ho Chi Minh City, under the agreement of Ho Chi Minh City People 's Committee and Saigon VRG Investment Holding Corporation. (Appendix 5-1)

##### 2) Building Regulations of the site

Maximum building coverage 37%, Minimum Green Area 30% is required by the local government (People's Committee of Binh Chan District, Ho Chi Minh City). The height of the building is not regulated. (Appendix 5-2)

### 3) Car Parking

The survey team had proposed to make underground parking, anticipating shortage of the ground parking when the extension buildings are fully constructed to the maximum building coverage. However, the team will consider quitting underground parking in order to reduce cost and shorten the construction period, finding that the green area is negotiable to change into parking in the future construction.

### 4) Size and Height of the Hospital Building

Total floor area of Cho Ray Second Hospital will be 100,000m<sup>2</sup> (excluding underground parking). The height of the building should not exceed 9 stories due to the fire safety regulation (QCVN 06:2010/BXD). However, CRH is eager to place doctors' office and administration office on the 10<sup>th</sup> floor, if it is negotiable in the design stage. (Appendix 5-3)

### 5) Standard bed room of general ward

Standard inpatient bed room should be 4 bed room that is compatible to a 6 bed room in accordance with patient's needs. Total 1000 bed capacity should be secured. (Appendix 5-4)

### 6) Heliport

In addition to the original proposal of facilitating a heliport on the top roof of the hospital building, the survey team will study a heliport on the ground. CRH will confirm aviation regulations in Vietnam, while the survey team offers reference information on Japanese standard regulations.

### 7) Mechanical Conveying System

Through the departmental hearing, the pharmacy department and Laboratory department requested a mechanical conveying system to be facilitated. However, the survey team recommends a concentrated vertical elevators system connecting nearby to the two departments, because the mechanical conveying system costs much for maintenance. Besides this, CRH requested to equip urgent carry system among emergency unit, ICU, operation department and laboratory such as pneumatic tube (capsule carrier).

### 8) Patient's Family Dormitory.

A patient's family dormitory is strongly requested to be included to the project by CRH because of the essential relationship between the nursing and inpatient/family in terms of medical service system. The team receives the issue to be discussed with JICA.

### 9) Electric Power

The survey team confirmed the followings with DOIT (Department of Industry and Trade).

- Incoming of power line is planned to be 2 lines.
- DOIT will complete development of power infrastructure by the opening of the hospital.
- DOIT will hold joint meetings with People's Committee, EVN and CRH. CRH is requested to participate in the said meetings.

### 10) Drainage

Cho Ray Second will be equipped with an on-site waste water treatment plant including chemical and radioactive treatment systems. Treated water in compliance with the drainage regulations (QCVN40:2011) will be discharged to the watercourse in the site north side of the site. Improvement of the existing watercourse is responsible to the people's committee.



## 6. Implementation of the Project

### 1) Organization of PMU (Project Management Unit)

The survey team proposed the Organization of PMU (Appendix 6-1), and it shall be confirmed by the Vietnamese side. In order to reduce the project implementation period, PMU shall be established at the soonest possible time.

### 2) Role of Consultant

The survey team proposed the structure and role of the consulting services at the implementation stage (Appendix 6-2), and it was confirmed by the Vietnamese side.

### 3) Project implementation Schedule

The survey team submitted a revised schedule, in which the design and construction period are pressed 3 months and 6 months respectively. Furthermore, shortening the tender procedure is desirable. JICA advised that Cho Ray Hospital should consult with MOH how to speed up the procurement procedure under ODA project. (Appendix 6-3)

### 4) Operation Indicator / Effect Indicator / Qualitative Assessment Indicator


In order to evaluate the achievement of the project, operation/effect/qualitative indicators (list of the draft indicators is annexed as Appendix 6-4) shall be set and used to analyze the before-after situation (approx. 3 years after the completion of the project).

The Vietnamese side is requested to cooperate with the Japanese side in collecting necessary information, data, etc.

We hereby report the major items discussed during the term of 2<sup>nd</sup> field survey.

Faithful yours

21<sup>st</sup> of March, 2014

  
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Koichi SUZUKI  
The Sub Leader  
The Preparatory Survey on  
Cho Ray Second Hospital Development Project



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Prof. Nguyen Truong Son  
Director  
Cho Ray Hospital

## Support program of Hospital Management at Cho Ray 2nd Hospital (CH2)

### ◆ Vision

The aim: a medical center of international standards that can offer high level medical services to people in southern Vietnam by deploying and applying advanced technology as well as transferring advanced medical technology to subordinate hospitals.

### ◆ Mission

- Offer healthcare services to patients.
- Guarantee patient safety and advanced medical services by introducing a high-quality management system.
- Introduce advanced medical treatment techniques.
- Transfer advanced medical technology and practices to subordinate hospitals through training centers and clinical research.
- Offer a world-wide as well as regional medical base and international cooperation.
- Establish a good staff environment.

### ◆ Objective of the Project : To achieve "a medical center of International Standards"

	Important factors in achieving a "medical center of international standards"	Current Issue	Solutions	Vietnam	Japan
1	<p><b>Advanced Medical Service and Regional Network (Especially for lifestyle-related diseases).</b></p> <p>Specifically as follows;</p> <ul style="list-style-type: none"> <li>• Improvement of medical skills of the staff of CH2.</li> <li>• Team Medicine that involves various categories of medical staff.</li> <li>• Contribution to improvement of medical skills in the Southern Vietnam.</li> </ul>	<p>(1)Lifestyle-related Diseases</p> <p>While the technical level of medical staff in Cho Ray Hospital (CH) is high, there is the need for structural improvements and technology in response to lifestyle-related diseases that are expected to increase in the future. The main issues are below.</p> <p>1) Gathering and analysis of multi-faceted information about the condition of the patients are essential to treat lifestyle-related diseases, but these are not sufficient CH.</p>	<p>(1) Lifestyle-related Diseases</p> <p>1) Development of Electrical Medical Record System (EMRS) that enables gathering and analysis of multi-faceted information about the condition of patients.</p> <p>(a) Development of data gathering and analysis skill by training programs.</p> <p>(b) Development of Data Ware House (DWH) on the EMRS</p> <p>(c) Issue an annual report of hospital which includes both management and clinical statistics.</p>		<p>◎</p> <p>Japan has preceded, it is possible to provide know-how.</p>

Important factors in achieving a "medical center of international standards"	Current Issues	Solutions	Vietnam	Japan
	<p>2) Evidence Based Medicine (EBM) that is valid in treating lifestyle-related diseases is not introduced enough.</p> <p>3) System of team medicine that is needed for treating lifestyle-related diseases is not yet developed. For example, nurses are not able to participate in the clinical practice.</p> <p>4) Continuous care that is needed to treat lifestyle-related diseases is not developed yet. For example, number of reverse reference is not sufficient.</p> <p>Because of the increase of lifestyle-related diseases, it is desirable to establish role sharing among CH2 (and CH) and subordinate hospitals; CH2 focuses on acute phase and subordinate hospitals focus on post-acute rehabilitation phase.</p>	<p>2) Introduction of EBM</p> <ul style="list-style-type: none"> <li>(a) Acquisition of standard medical procedures and knowledges.</li> <li>(b) Introduction of PDCA cycle to measure and evaluate the medical outcomes and to feed them back to the future medical practice.</li> <li>(c) Promotion of clinical research to disseminate the research output through literatures and academic conferences.</li> </ul> <p>3) Establishing Team Medicine (Collaborative Approach To Medicine)</p> <ul style="list-style-type: none"> <li>(a) Development of a clinical pathway to make a team collaboration.</li> <li>(b) Training system for doctor, nurse, technician and office clerk to collaborate each other.</li> <li>(c) Trial a pilot group</li> </ul> <p>4) Enhancement of continuous care</p> <p>Especially for regional network for rehabilitation follow-up.</p> <ul style="list-style-type: none"> <li>(a) Strengthening skills of CH2 staff to treat acute phase.</li> <li>(b) Clarification of roles among hospitals and strengthening regional cooperation.</li> <li>- Systems for information exchange, path of rehabilitation, human resource development, and handling of emergencies.</li> <li>- Cooperation and information, path of rehabilitation, human resource development.</li> <li>- Forward and backward linkage</li> </ul> <p>5) Developing operation standard to achieve the above 1)-4) in CH2 as follows:</p> <ul style="list-style-type: none"> <li>(a) Developing operation flow and manuals</li> <li>(b) Developing demarcation model among different medical departments and staff.</li> <li>(c) Human resource development based on the above manuals.</li> </ul>		

Important factors in achieving a "medical center of international standards"	Current Issue	Solutions	Vietnam	Japan
	<p>5) Preventive medicine is not yet prevalent.</p> <p>(2) Other diseases</p> <p>1) System in the Emergency Department is weak.</p> <p>(a) Because of no master plan on the role sharing among the major hospitals in HCMC, roles of CH2 is unclear.</p>	<p>6) For the above 1)-4), set pilot hospital(s), to establish a model for regional cooperation and continuous care. Examples are as follows;</p> <p>(a) Development of Clinical Pathway</p> <ul style="list-style-type: none"> <li>- Creation of treatment model of each major disease (For example, rehabilitation after cerebral infarction. These models could be created based on the medical cooperation path in Japan.)</li> <li>- Roles of a team of pilot hospital and CH2</li> <li>- Exchange rules of medical cooperation data (such as the introduction of HL7-CDA R2)</li> </ul> <p>(b) Human resource development</p> <ul style="list-style-type: none"> <li>- Knowledge and skill enhancement of human resources of the individual staff of the medical team. (For example, lifestyle guidance, rehabilitation, medication instruction, and nutritional guidance.)</li> <li>- Training to develop team system and awareness raising (including introduction of PDCA cycle and ensure its thorough application)</li> </ul> <p>5) Strengthening of preventive medicine</p> <p>(a) Increase the medical facilities in accordance with the disease structure.</p> <p>(b) Awareness raising (educational activities) by the government on preventing lifestyle diseases. *This will be included in the report as a policy recommendation. In the future, it is desirable to make a countermeasures based on the data analysis corresponds intensively targeted disease.</p> <p>(c) Strengthen governmental policies (ex. Medical check-ups at companies and commune level, and educational activities) *To be put into policy recommendation in the survey report.</p> <p>(2) Other diseases</p> <p>1) Reinforcement of the Emergency Department</p> <p>(a) Development of a master plan and specification of the roles of CH2.</p> <p><i>Because this issue is in the realm of the government policy and cannot be solved by the JICA Project, the survey team plans to put a policy recommendation in the survey report on developing emergency network for patient transportation and patient transportation protocol.</i></p>	<p>◎</p> <p>It is already practiced in Vietnamese and is able to continue.</p>	Japan

Important factors in achieving a "medical center of international standards"	Current Issue	Solutions	Vietnam	Japan
	<p>(b) Lack of emergency ward</p> <p>(c) Insufficient preparation of disaster</p>	<p>(b) Establishing emergency center and emergency ward in CH2.</p> <ul style="list-style-type: none"> <li>- Establishing systems to treat circulatory disturbance and brain infarction, especially both physical layouts and human training that ensures smooth transportation to SCU/CCU. SCU/CCU.</li> <li>- Medical equipment Improvement, such as catheter.</li> <li>- Capacity building including medical equipment management and triage.</li> </ul> <p>(c) Preparation for disaster</p> <ul style="list-style-type: none"> <li>- Development of a Business Contingency Plan for expected cases of disaster.</li> <li>- Periodical training.</li> <li>- Preparation of supplies and establishing communication system with the related in-hospital and out-hospital organizations at the time of the disaster.</li> </ul>		<p>○</p> <p>After checking the correspondence of the current Vietnam situation, consider support.</p>
	<p>2) Need to keep the medical system against infectious diseases</p>	<p>2) Strengthening systems to address infectious diseases</p> <ul style="list-style-type: none"> <li>(a) Dysentery, parasites, etc.</li> <li>(b) Preparation for pandemic               <ul style="list-style-type: none"> <li>- Periodical training</li> <li>- Consulting room for infectious disease patients</li> </ul> </li> </ul> <p><i>Need further hearing to review necessary matters.</i></p>	<p>◎</p> <p>It is already carried out in Vietnam . Check the contents of the WHO is supporting</p>	

Important factors in achieving a "medical center of international standards"	Current Issues	Solutions	Vietnam	Japan
	<p>3) Need to establish regional cooperation network for rehabilitation.</p> <p>4) Perinatal Period Reconfirm the need. (rethink it based on the information submitted on March 13th) The number of the delivery is expected to increase for the next around ten years</p> <p>5) Geriatric Medicines (request from MOH) It necessary to introduce geriatric medicines in order to prepare for aged society.</p>	<p>3) Strengthening of regional network for rehabilitation follow-up.</p> <p>(a) Strengthening skills of CH2 staff to treat acute phase.</p> <p>(b) Clarification of roles among hospitals and strengthening regional cooperation. - Systems for information exchange, path of rehabilitation, human resource development, and handling of emergencies. - Cooperation and information, path of rehabilitation, human resource development. - Forward and backward linkage</p> <p>4) Strengthening Perinatal system Development of human resources capable of handling (such as an increase in late childbearing) high-risk delivery.</p> <p>5) Strengthening knowledge and skill of the staff</p>	<p>◎ It is already practiced in Vietnamese and is able to continue.</p> <p>○ It is necessary to analyse the need in this project. (Is it better to establish the Geriatric dept. at CH1 after CH2 project is completed?)</p>	<p>△ Cho Ray hospital is developing regional network in rehabilitation medicine based of the JICA Project. So, it is considered that vietnamese side is able to establish this by themselves to certain extent. However, there may be some room for Japan's support</p>
<p>2 <b>Respect for the will of the patients</b> Disclosure of medical information to the patients, medical description that is easy to understand, and respect for the decision-making by the patients about the selection of treatments.</p>	<p>(1) Explanation is not adequately done to patients before medical treatment.</p>	<p><i>The survey team's idea is to firstly introduce this to the VIP Department as a pilot case within the JICA Project, and expand gradually to other departments in the future by CH2.</i></p> <p>(1) Give explanation on the description to each patients before treatment. (a) Creation of brochures that explain the symptoms and ways of treatments. (b) visualization of the medical examination results for individual patient by using EMRS. (c) Integration of explanation and consultation time into the examination process.</p>	<p>◎ it is possible to provide knowledge in Japan.</p>	

Important factors in achieving a "medical center of international standards"	Current Issue	Solutions	Vietnam	Japan
	<p>(2) The decision making on the choice of treatment is not done by patients.</p>	<p>(d) Thorough appointment and referral system for reduce the number of patients per staff so as to keep adequate time of consultations with each Promotion of explanation from the nurse. *Second opinion (e) Presentation of treatment options to patients.</p> <p>(2) Promotion of decision-making by patients. (a) Ensure the process to hear the will of the patient by promoting standardization and documentation of the process. (b) Training and awareness raising of hospital staff.</p>		
<p>3 <b>Hospitality (short waiting time, good manner with the patients, comfortable amenity, cleanliness of the facility)</b></p>	<p>1) Quality of medical services in regional hospital is low.</p> <p>2) Lack of role sharing of emergency medicine among hospitals which could be resulting to unnecessary concentration to CH.</p> <p>3) Improvement of accessibility as a result of Kanto Bridge, increase in motorbike, etc...</p> <p>4) Improvement of living standard and increase of information that lead to people's mind shift and concentration on Cho Ray hospital.</p> <p>5) Insufficient efficiency of medical services because of lack of adequate Electrical Medical Record System (EMRS).</p>	<p>1) Continue strengthening of medical services in the regional hospitals. (a) Trainings of the regional hospitals at the training center of CH2 with an emphasis on lifestyle-related diseases. (b) Further address by the government such as the Circular 18/16. *Policy recommendation.</p> <p>2) Development of emergency network. *Policy recommendation. Need further information on the jurisdiction of ambulances.</p> <p>3) Introduction of strict appointment system (People who come without reservation need to wait.)</p> <p>4) Change the payment system that promote people to go to lower hospitals if the symptom is not severe. *To be put into policy recommendation in the survey report.</p> <p>5) While based on the electronic medical record system of the current CH, from the point of view of the management of the entire hospital, to introduce a system aimed at 1)-3) less in this project. 1) Data analysis and management system (Data ware house) 2) Patient Safety and security (Patient authentication, Check prescription, etc.) 3) Explanation function (Graphical indicator, Clinical path-way for patient, etc.)</p>	<p>○</p>	<p>◎</p>

Important factors in achieving a "medical center of international standards"	Current Issue	Solutions	Vietnam	Japan
	<p>(2) Quality of service to patients</p> <ol style="list-style-type: none"> <li>1) The reception desk is not efficient and unclear.</li> <li>2) The cleaning services outsourced, but the performance level is low because of no quality standard.</li> <li>3) Staff lacks the sense of service for patients.</li> <li>4) The hospital guide is not clear enough.</li> <li>5) Convenient facilities within the hospital is insufficient.</li> <li>6) The quality of hospital food is low.</li> </ol>	<p>(2) Improvement of the service to the patient</p> <ol style="list-style-type: none"> <li>1) Staff training</li> <li>2) Outsourcing some services ( ex. Reception, cleaning, etc.)</li> </ol> <p>* Concerning the cleaning, introduce quality standard (including no-notice inspection).</p> <ol style="list-style-type: none"> <li>3) User-friendly guidance and signs / indicators</li> <li>4) Introduce in-hospital facilities (ex. Convenient stores)</li> <li>5) Improvement of hospital food service (choice meal, or other)</li> </ol>	<p>◎</p>	<p>◎</p> <p>Japan has preceded, it is possible to provide know-how.</p>
<p>4 <b>Safety and Security (infection control for the patients and staff and prevention of medical accident)</b></p>	<p>(1) There is much hospital infection of a patient and the staff (for example, that there are 7 or 8 hepatitis and HIV infection in one year by the needle pad accident of the staff)</p> <ol style="list-style-type: none"> <li>1) Awareness on hospital-acquired infection is low.</li> <li>2) There are no specific procedures of prevention</li> <li>3) Inconsistent of medical waste treatment</li> </ol> <p>(2) Medical accidents are often</p> <ol style="list-style-type: none"> <li>1) There is no standard manual</li> <li>2) Accident report has not been made</li> <li>3) Countermeasures after the accident is not clear</li> </ol>	<p>(1) Increase infection control for the patients and staff</p> <ol style="list-style-type: none"> <li>1) Training for the staff.</li> <li>2) Establish standard precaution (manualization of the procedure of hand-washing, treatment to affected area, etc.)</li> <li>3) Appropriate disposal of medical waste (introduction of appropriate equipment, manualization of procedure, no-notice inspection, etc.)</li> </ol> <p>(2) Prevention of medical accidents</p> <ol style="list-style-type: none"> <li>1) For precaution, introduce standard manual and training, definite indication, user-friendly tools.</li> <li>2) Incident and accident report (awareness-raising of staff. Need to review the experience of ongoing JICA Project for Quality Improvement.)</li> <li>3) Correspondence after the accident (Need to review the experience of the ongoing JICA Projects.) <ol style="list-style-type: none"> <li>a) to the patient: explanation, re-treatment</li> <li>b) to the staff: making standard manual and training, correspondence for lawsuit and media (need to conduct hearings about Vietnamese custom)</li> </ol> </li> </ol>	<p>◎</p>	<p>○</p> <p>Small support program for process will be possible to examine</p> <p>○</p> <p>Small support program for process will be possible to examine.</p>



	Important factors in achieving a "medical center of international standards"	Current Issue	Solutions	Vietnam	Japan
		(3) Reducing in-hospital crime	(3) Reducing in-hospital crime - Introduction of security system (setting the security zone (operation rooms, ICU, etc. A-C zone)	◎ It will be available in Vietnam.	
5	Related matters Comprehensive Hospital management	(1) To be an international hospital.  (3) Staff awareness	(1) Introduction of modern management system, 1) Organization 2) Management based management indicator. 3) Acquisition of international certification (2) Introduction of a new management skill (Japan like excellent services) 1) Marketing 2) Publicity activity. 3) Service delivery system (with Omotenashi spirits) (3) Change minds of staff 1) Patient centered care. (Patient's right, Privacy, Protection of Personal information, etc.) 2) Empowerment of medical staff except doctors. 3) Motivation to improve training and research To achieve above (1)-(3), a competent Japanese advisor is required.	○  ○  ○	◎  ◎  ◎

## Number of beds for each department in Cho Ray 2nd Hospital

Cho Ray Hospital				
Department	Actual Bed 2012	Inpatients per day 2012	Surpassing Patients	Patients' increase rate 2020 *
a	b	c	d=c-b	e
Intensive Care depart.	31	32	1	-
Emergency Dept.	20	86	66	124%
Dept. of Operating and Anesthesia	20	6	(14)	128%
Cardiology Dept.	136	232	96	128%
Vascular Dept.	34	44	10	129%
Thoracic surgery Dept.	40	70	30	125%
Department of Ears, Noses and Throats + Beauty treatment	57	78	21	200%
Ophthalmology Dept.	32	29	(3)	131%
Urology Dept.	69	103	34	127%
Internal medicine & Tropical Diseases Dept.	75	84	9	118%
Pneumology Dept.	69	127	58	127%
Hepatitis Dept.	14	21	7	124%
Digestive medicine Dept.	69	125	56	127%
Liver Gallbladder Pancreas surgery Dept.	80	120	40	259%
Gastrointestinal surgery Dept.	70	162	92	131%
Endocrinology Dept.	50	69	19	131%
Neuro Surgery Dept.	190	371	181	119%
Neurosurgery Intensive care Dept.	36	37	1	115%
Neurology Dept.	78	97	19	125%
Burning Dept.	60	66	6	113%
Orthopedic Dept.	91	145	54	114%
Arthology Dept. (Rheumatology)	58	76	18	125%
Clinical Hematology Dept.	28	61	33	126%
Nephrology Dept. (Dialysis)	82	129	47	126%
Alleviation treatment Dept.	24	45	21	137%
Nuclear Medicine Dept.	6	-	(6)	134%
Hepatic tumor dept.	34	58	24	136%
General Medicine Dept. (Profit)	118	111	(7)	198%
Cancer Center				
Total	1,671	2,584	913	140%

\*Patients' increasing rate for each dept. is estimated based on the future population and the variation of diseases

\*ICU and SCU are estimated based on the number of surgery around 16,000 in 2020

\*Obstetrics Gynecology and Pediatric are estimated based on the expected no. of patients 2020

The composition of general ward, MFICU, NICU, GCU is based on the cases of similar Japanese hospitals.

\*Geriatric dept. shall not have any beds

Cho Ray 2nd Hospital 2020						
Department based on the concept	Draft of Cho Ray Hospital	Draft of survey team 1	Draft of survey team 2	Adjustment	No. of beds	
f	g	h	i	j	k=i+j	
Intensive Care Unit *	25	23	25		25	
Emergency and Disaster Medicine (EUCU)	20	41	40	(16)	24	
Dept. of Operating and Anesthesia	20	9	10	10	20	
Dept. of Cardiology, Interventional Cardiology, Cardiac Surgery	81	76	88		88	
Dept. of Vascular Surgery	27	11	22		22	
Dept. of Thoracic Surgery	22	22	22		22	
Dept. of Otorhinolaryngology	22	47	22		22	
Dept. of Ophthalmology	10	3	10		10	
Dept. of Urology	34	29	34		34	
Dept. of Tropical Disease	27	11	10	2	12	
Dept. of Pulmonary Medicine	44	43	44		44	
Dept. of Hepatobiliary-Gastroenterology		6	2	(2)	(0)	
Dept. of Hepatobiliary-Gastroenterology	88	42	42	2	44	
Dept. of Hepatobiliary Pancreatic Surgery	44	108	88	(44)	44	
Dept. of Digestive Surgery	44	67	68	(24)	44	
Dept. of Endocrinology	22	19	20	24	44	
Dept. of Neurosurgery	88	117	122	(44)	78	
Neurosurgery Intensive care Dept. *		7	10		10	
Dept. of Neurology	30	20	20	24	44	
Dept. of Burn-Plastic Surgery	14	7	10		10	
Dept. of Orthopedics	44	35	44		44	
Dept. of Rheumatology	24	17	22		22	
Dept. of Clinical Hematology	22	23	22		22	
Dept. of Nephrology	64	37	44	20	64	
Dept. of Oncology		39	30		30	
Dept. of Oncology	20	-	-		-	
Dept. of Oncology		-	-		-	
Dept. of General Medicine (VIP)	96	48	48	48	96	
Obstetrics Gynecology Dept. *		74	71		71	
- General ward		46	44		44	
- MFICU	44	6	6		6	
- NICU		10	10		10	
- GCU		12	11		11	
Pediatric Dept. *	24	19	10		10	
Geriatric Dept. *		-	-		-	
Total	1,000	1,000	1,000	-	1,000	

## Human Resource Development / Training Plan

## 1. Requested Training Programs with Priority

No	Article	Current Situation and Needs	Timing CRH	Timing CRH-2	Target	Priority
1	Clinical Pathway	There are only few clinical pathways presently being used in CRH, but these pathways are not created based on the right theory and method, also, MOH requests (base on the decision) to introduce clinical pathways. Also, Clinical Pathway is one of the candidate targets for the Support program of Hospital Management.	2014-15	2018-19	CRH CRH-2	A
2	Quality Indicator	MOH requests (based on the decision) to use defined indicators to evaluate hospital quality, and CRH has to submit an evaluation report annually. However, there is lack of theory and knowledge to evaluate properly and prepare the report. Also, Quality Indicator is one of the candidate targets for the Support program of Hospital Management.	2014-15	2018-19	CRH CRH-2	A
3	Data Analysis	In order to introduce “Clinical Pathway” and “Quality Indicator” as well as all other objectives for the project such as team medicine, EBM, ICT, etc., data analysis is basic skills which have to obtain, but	2014-15	2018-19	CRH CRH-2	A

		presently there is lack of knowledge and skills.				
4	Medical Equipment Management	It is a new system and very important to centralize management of medical equipment in order to use sufficiently and effectively. This management system could be introduced in CRH as well.	2015-16	2018-19	CRH CRH-2	A
5	Facility Management	New building management system is planned to be introduced in CRH-2. Since it is a new system and very important for the new hospital in order to maintain the facilities properly and also to save energy.		2018-19	CRH-2	B
6	Team Medicine	Basic knowledge and awareness of importance are high, and also training programs of this article are on-going by another JICA project.	2014-15	2018-19	CRH CRH-2	C
7	Nursing Management	It is partly introduced in CRH. Basic knowledge and awareness of importance are high, and also training programs of this article are on-going by another JICA project.	2014-15	2018-19	CRH CRH-2	C
8	Safety Management	Basic knowledge and awareness of importance are high, and also training programs of this article are on-going by another JICA project.	2015-16	2018-19	CRH CRH-2	C

9	Medication Management	It is partly introduced in CRH, and there is capacity to strengthen and expand by their own efforts.	2015-16	2019-20	CRH CRH-2	C
10	Managerial Accounting	This system shall be introduced in accordance with the accounting system in Vietnam.	2015-16	2018-19	CRH CRH-2	C
11	Referral System	It is being conducted base on DOHA activity (Satellite Hospital Project, 1816 Project, etc.), and also there is a training program by another JICA project.	2015-16	2018-19	CRH CRH-2	C
12	Nutritional Guidance	It is partly introduced in CRH, and there is capacity to strengthen and expand by their own efforts.	2016-17	2019-20	CRH CRH-2	C
13	Clinical Skills (New departments)	There are top-referral hospitals for the new departments in Vietnam and could be trained by them.	2015-18	2019-20	CRH CRH-2	C

2. Procedure and Goal to Achieve  
The trainings would be the combination of the following steps.
  - 1st Step: TOT in Japan.
  - 2nd Step: The trainers trained in Japan will train to the staff in CRH/CRH-2.
  - 3rd Step: Japanese experts might be dispatched in CRH/CRH-2 and advise/supervise the implementation of each trained article.
  - 4th Step: Improving continuously using PDCA cycle.Goal: Implementing sustainably in CRH/CRH-2, and expanding to lower level hospitals.
3. Timing and Duration of the Training Programs  
Timing and duration of TOT programs and experts dispatch will be considered by JICA, but the Vietnamese side requests to implement the training programs as soon as possible, especially for “Data Analysis”, “Quality Indicator” and “Clinical Pathway.”
4. Scheme to be Used  
Whether these programs are implemented by technical assistance program or a part of soft loan project will be considered by JICA and discussed between Vietnamese side and Japanese side

**CHO RAY HOSPITAL & CHO RAY SECOND HOSPITAL  
STAFF ALLOCATION & RECRUITING PLAN**
**Precondition**

1. Number of permanent staff is calculated based on the Circular\*
2. Actual number of bed in Cho Ray Hospital is 1,620, and 1800 after opening Cho Ray Second Hospital
3. Number of ICUs is 117 beds in Cho Ray Hospital, approx. 90 beds in Cho Ray Second Hospital

\*\*Number of the each profession is provided by the Personnel Department

\*No. of Permanent Staff  
= No. of General Bed x 1.625 +  
No. of ICUs Bed x 2.1

Year		CHO RAY HOSPITAL (2013/12/31)	Oncology Center	CHO RAY SECOND HOSPITAL	New Employment
2013	Number of Planned Bed	1,800			
	Number of Actual Bed	1,620			
	Average Number of Inpatient	2,432			
	Number of ICU Bed	117			
	Bed Occupancy Rate	150.1%			
	Doctor	705			
	Nurse	1,484			
	Pharmacist	97			
	Medical Technician	348			
	Engineer	58			
	IT Technician	103			
	Others	663			
	Total	3,458			
Permanent Staff	2,688				
Contract Staff	770				
2015	Number of Planned Bed	1,800	250		
	Number of Actual Bed	1,620	250		
	Average Number of Inpatient	2,226	206		
	Number of ICU Bed	117	-		
	Bed Occupancy Rate	137.4%	82.4%		
	Doctor	677	28		
	Nurse	1,439	45		
	Pharmacist	97	0		
	Medical Technician	333	15		
	Engineer	53	5		
	IT Technician	100	3		
	Others	659	4		
	Total for each hospital	3,358	100		
Total		3,458			
Permanent Staff		3,094			
Contract Staff		364			
2nd Hospital Opening	Number of Planned Bed	1,800	250	1,000	
	Number of Actual Bed	1,800	250	800	
	Average Number of Inpatient	1,710	238	640	
	Number of ICU Bed	117	-	90	
	Bed Occupancy Rate	95.0%	95.0%	80.0%	
	Doctor	596	81	269	241
	Nurse	1,690	230	761	1,197
	Pharmacist	89	12	40	44
	Medical Technician	397	54	179	282
	Engineer	15	2	7	-
	IT Technician	26	4	12	-
	Others	168	23	75	-
	Total for each hospital	2,981	406	1,343	
Total		4,730			
Permanent Staff		4,730		1,764	
Contract Staff					
2 years after opening	Number of Planned Bed	1,800	250	1,000	
	Number of Actual Bed	1,800	250	1,000	
	Average Number of Inpatient	1,710	238	950	
	Number of ICU Bed	117	-	90	
	Bed Occupancy Rate	95.0%	95.0%	95.0%	
	Doctor	596	81	334	65
	Nurse	1,690	230	946	185
	Pharmacist	89	12	50	10
	Medical Technician	397	54	222	43
	Engineer	15	2	8	1
	IT Technician	26	4	15	3
	Others	168	23	93	18
	Total for each hospital	2,981	406	1,668	
Total		5,055			
Permanent Staff		5,055		325	
Contract Staff					

## Recruitment Plan for Cho Ray Second Hospital

\*following plan was provided by the Personnel Department

### 1. Existing Departments

#### a. Cho Ray Hospital

- Annual number of displace personnel (retirement and other reason) is approx. 4% of the total staff, which is equivalent to 100 – 150 persons/year.
- Therefore, Cho Ray Hospital has to employ the same number annually.
- From 2014 to 2020, in accordance with the annual recruitment plan following standard procedure, necessary personnel will be recruited from medical universities in the whole country.
- Only high capable personnel will be hired and be trained at Cho Ray Hospital, Ho Chi Minh Medical and Pharmaceutical University, Japan (if possible).
- Totally approx. 800 personnel will be hired till 2020 from now and will work in Cho Ray Hospital and Cho Ray Second Hospital.
- At the time of Cho Ray Second Hospital, doctors who have management experience and specialized qualification will be the management level of Cho Ray Second Hospital.

#### b. Cho Ray Second Hospital

- In 3 years (2015-2017), 50 – 100 personnel are planned to be employed every year (Doctors: 20%, Nurses: 70%, Technicians and Others: 10%).
- From 2018 (3 years before the opening of Cho Ray Second Hospital), 200 – 300 personnel are planned to be employed every year to meet the necessary number of staff in Cho Ray Second Hospital and will be trained as follows.
  - o Training Academy (ex. Master's degree, PhD, Specialist courses)
  - o Continuous Training Program (in Cho Ray Hospital, Ho Chi Minh Medical & Pharmaceutical University, Japan if possible)
- From 2019, experienced personnel will be recruited for Cho Ray Second Hospital.



## Appendix 2-3 (English for Reference)

## 2. New Departments

- As for the new department, doctors, nurses, technicians, etc. will be hired 3 years prior to the opening (same as above) and be trained.
- Doctors with management experience and specialized qualification will be dispatched from universities and/or special hospitals in the city and be the chief of the department.
- Approximately 10 – 20% of the total recruited staff will be experienced personnel, and other will be hired 3 years prior to the opening and trained.

## Recruitment Plan for Cho Ray Second Hospital

## 1) Existing Departments

**a. Tuyển bổ sung nhân sự cho Chợ Rẫy hiện hữu**

- Số nhân viên nghỉ hưu và nghỉ khác hàng năm chiếm khoảng 4% nhân viên, tương đương 100 – 150 người/ năm.
- Do đó việc tuyển bổ sung hàng năm cho Chợ Rẫy (hiện hữu) là phải bổ sung lượng người đó hàng năm.
- Việc tuyển bổ sung từ 2014 đến 2020 sẽ được tuyển theo kế hoạch hàng năm của Bệnh viện theo quy trình bình thường từ các nguồn: Đại học Y khoa trong cả nước số lượng khá dồi dào.
- Chúng tôi rất quan tâm đến chất lượng sau khi tuyển Tiếp tục đào tạo tại Chợ Rẫy, Đại học Y Dược TPHCM và tại Nhật Bản.
- Số lượng sẽ tuyển đến năm 2020 khoảng 800 người. Đây là thế hệ khá quan trọng cho chất lượng của Chợ Rẫy (bao gồm Chợ Rẫy và II sắp tới).
- Các bác sĩ đã có kinh nghiệm về quản lý và chuyên môn của Chợ Rẫy hiện hữu vào thời điểm đó ( 2020) sẽ được điều động sang Chợ Rẫy II để điều hành và làm việc.

**b. Tuyển nhân sự cho Chợ Rẫy II**

- Trong 3 năm (2015-2017) chúng tôi sẽ tuyển bổ sung 50 - 100 người/ năm (theo tỷ lệ 20% Bác sĩ, 70% Điều dưỡng – Kỹ thuật viên và 10% Khác).
- Từ năm 2018 (trước 3 năm tính từ thời điểm Chợ Rẫy II chính thức hoạt động) sẽ tập trung tuyển một số lượng lớn để đào tạo hàng năm từ 200 – 300 người để đáp ứng nhu cầu nhân lực của Chợ Rẫy II, theo 02 hình thức: tuyển để đào tạo:
  - o Đào tạo hàn lâm
  - o Đào tạo lại, đào tạo liên tục (tại Chợ Rẫy, Đại học Y Dược TPHCM, Nhật Bản).
- Từ năm 2019, sẽ cho thi tuyển để chọn nhân sự có kinh nghiệm làm việc cho Chợ Rẫy và Chợ Rẫy II.

**2) New Departments**

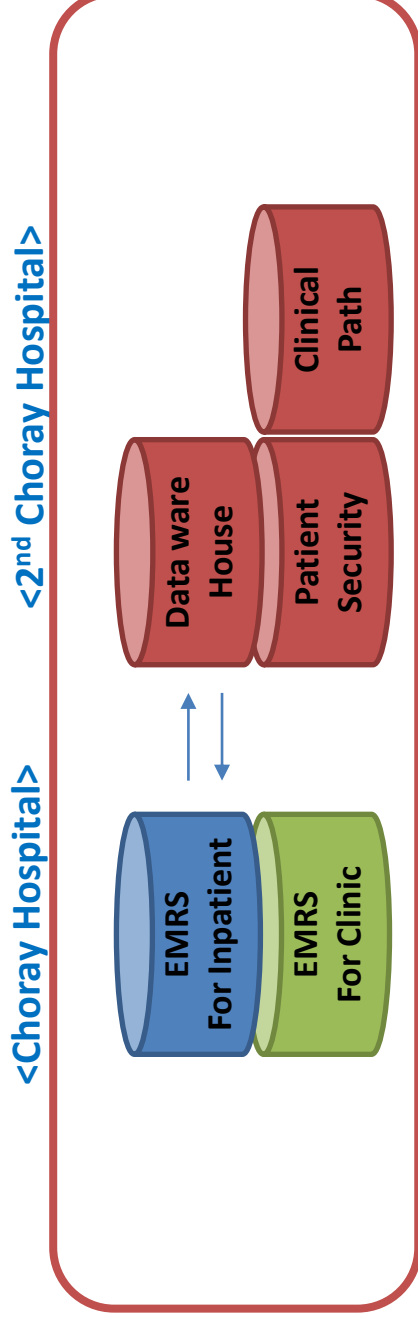
- Đối với khoa mới thành lập, lực lượng Bác sĩ và Điều dưỡng, Kỹ thuật viên vẫn được tuyển trước 3 năm để đào tạo (như phương thức đã trình bày ở trên)
- Đối với lực lượng Bác sĩ cần có trình độ chuyên môn và quản lý thì sẽ áp dụng hình thức hợp đồng hợp tác hỗ trợ làm việc từ các Bệnh viện chuyên ngành và các trường Đại học tại TPHCM.
- Về số lượng thì sẽ tuyển khoảng 10 – 20% có kinh nghiệm làm việc, số còn lại sẽ tuyển mới đào tạo trước 3 năm

### < Cho-ray Hospital >

- An Electrical Medical Record System(EMRS) advances in the outpatient department, but not for hospitalization, so the information is not shared among departments.
- The outpatient department uses ICT for more efficiency, but it is not reached to the advanced use such as the analysis of the information.

### < 2nd Cho-ray Hospital >

- The Integration of the EMRS both of outpatient and inpatient that is able to take over the information to existing hospital.
- An analytical tool of the information should be introduced and fixes the condition for statistical analysis.
- The clinical pass should be adopted for improving operability of medical care, cooperation of various profession, and control of medical treatment quality.
- Connecting to the cooperation Hospital and sharing the information.
- Use it for the business duties support such as control of patient's security.

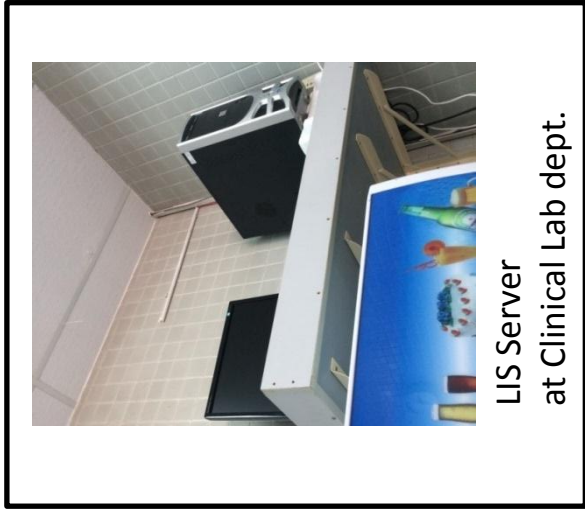
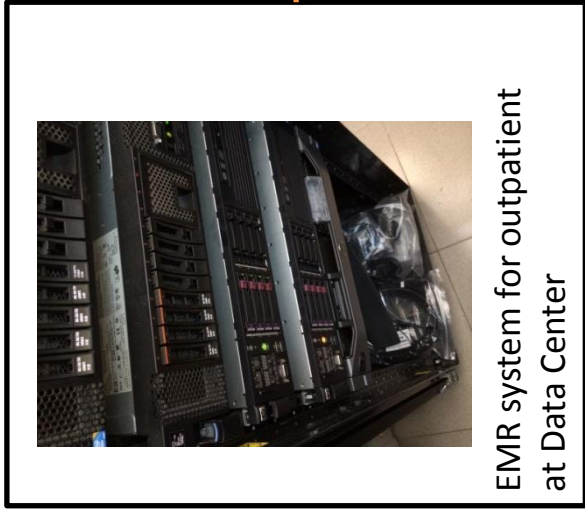


1 EMRS				2 Sub System			
	CH (2010)	CH (2015)	CH2		CH (2010)	CH (2015)	CH2
1-1. Patient information/registra	△OD	○	○	PACS	△CT,MRI	○	○
1-2. Medical Record	△OD	○	○	Drug	○	○	○
1-3. Order entry/Result				Laboratory	○	○	○
Prescription	△OD	○	◎	Physical test		○	○
Injection		○	◎	Pathology		○	○
Laboratory	△OD	○	○	Bacteriology system		○	○
Physical test	△	○	○	Molecular biology		○	○
Pathology	△OD	○	○	Radiology		○	○
Radiology	△OD	○	○	RI		○	○
Treatment	△OD	○	○	Endoscopy		○	○
Endoscopy	△OD	○	○	Surgery		○	○
Surgery		○	○	Blood bank	○	○	○
Blood transfusion		○	○	Dialysis		○	○
Dialysis		○	○	Rehabilitation		○	○
Rehabilitation	△OD	○	○	Nutrition		○	○
Inpatient	△OD	○	○	CSSD		○	○
Nutrition		○	○	SPD		○	○
Disease name		○	○	ME management		○	○
Reservation		△	○	Nursing Management		○	○
Patient certificate		△ER	○	Infection management		○	○
Referral letter		○	○	Emergency room		○	○
Clinical pathway			○	Referral		○	○
1-4. Accounting	○	○	○	Preventive medicine		○	○
				Finance		○	○
				Humanresource/salary		○	○
				Internal Information		○	○
				Administration Information		○	○
				Business analysis			○
				Tele pathology			○
				Tele conference			○
				Internet appointment			○
				Referral communication			○

△ : development for limited area    OD : outpatient dept.  
 ○ : development                          ER : Emergency room  
 ◎ : Functional Improvement

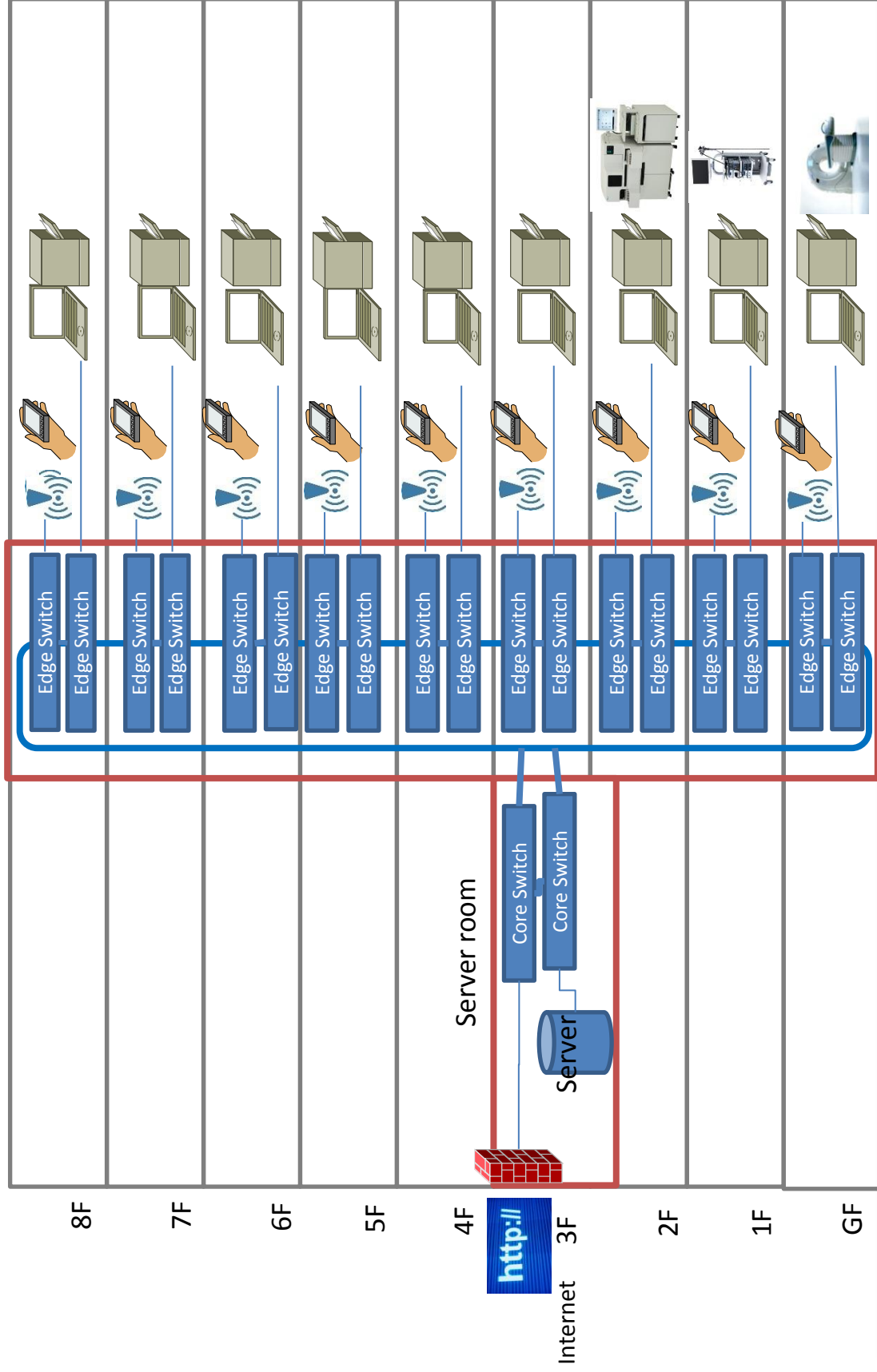
# Current IT system

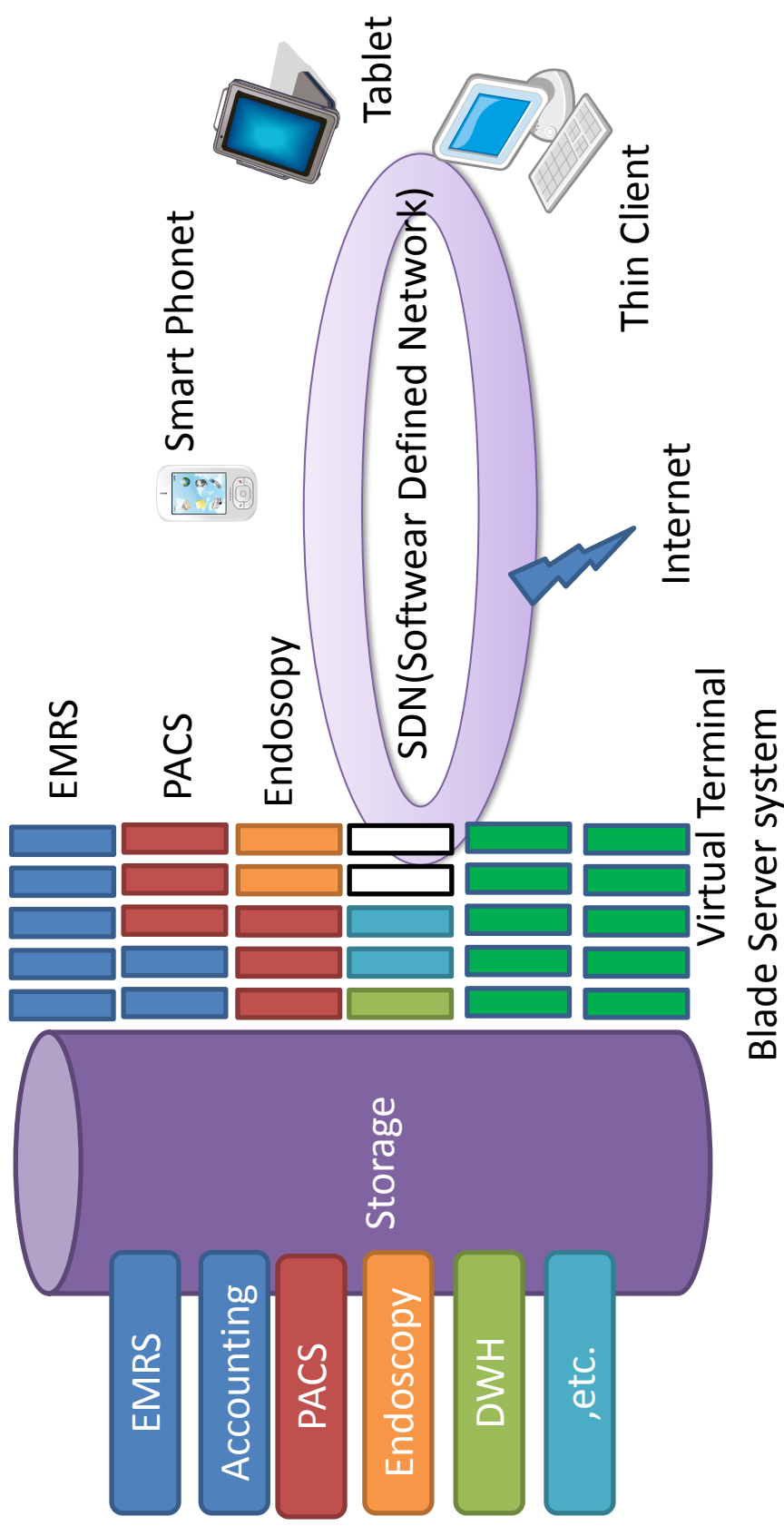
Physical security needs to be strengthened.



## Recommendations:

- Every edge switch should be housed in EPS for physical security.
  - Also, the redundancy of system including duplication is necessary.
- ### EPS for Network





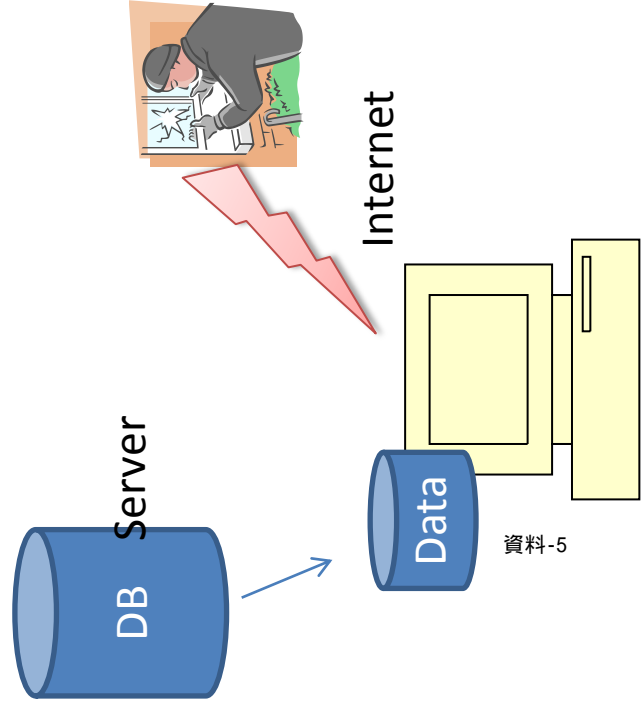
<Virtualization>



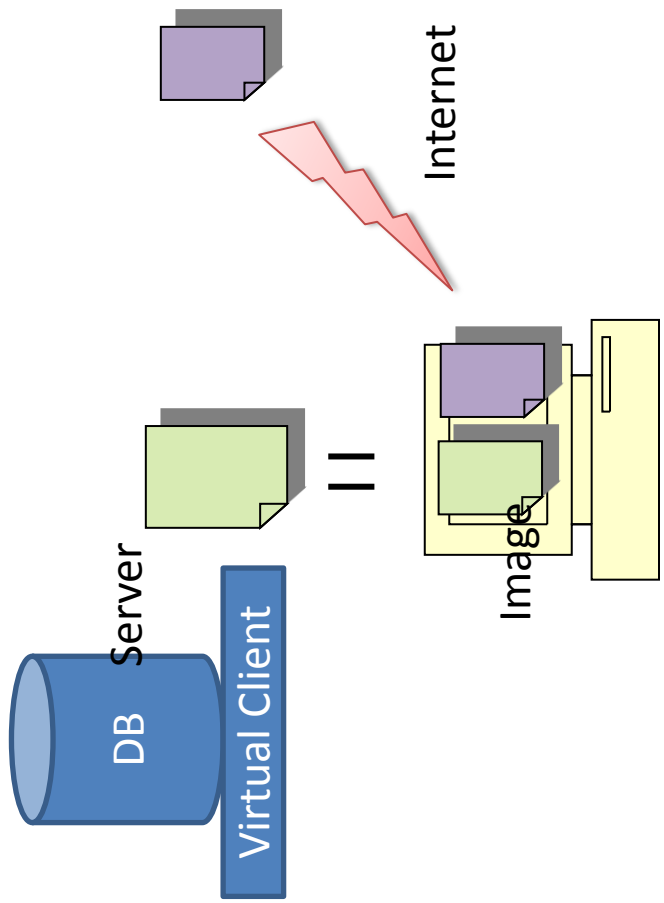
# Virtual Client

- Virtual Client System does not store data in the client terminal, the security is ensured.
- Since it is not limited OS and applications, it can be utilized various terminals.

<Client-Server System>



<Virtual Client>



Data does not remain on the client terminal.

## ■ Cho-ray 2nd Hospital □ IT System Development Plan

### 1. The Present Situation

- 1) Cho-ray Hospital has already introduced Electrical Medical Record System(EMRS) to outpatient department, which makes the work efficiency.
- 2) The new EMRS including outpatient and inpatient will be launched after two years, and the function of it will be improved.
- 3) The security of IT system is very poor, in particular, server and network. It should be developed modern security solutions.

### 2. Subject

To suit for the hospital management of CH2, new function are necessary as follows:

- 1) Advanced Medical Service and Regional Network
  - Data Ware House for data gathering and analysis
  - Clinical Pathway System
  - Data exchange system with regional network(HL7-CDA-R2 format), Tele-medicine Tele-conference
- 2) Respect for the will of the patients
  - Graphical description for explaining to patient(use graph, description documents, clinical path for patients)
  - Clinical Pathway System for patient
- 3) Hospitality
  - Auto Reception System
  - Reservation System
- 4) Safety and Security
  - Stengthening security of Hardware and Network (Reductunct and Duplication).
  - Error check function (Prescription check and so on)
  - Authentication for patient and staff
- 5) Related matters
  - The standardization of function (The standard model in Vietnam) and the system which contributes to the popularization
    - The standardization of terms (make MOH standard)
    - The standardization of date format and communication tool (ISO,DICOM,HL7 and so on)
  - The following correspondence is necessary to make EMRS the original of the medical record.
    - Legal maintenance (refer to three general rules of EMRS, authenticity, visual readability, and conservation)
    - To ensure it including the network and hard wear

• Security enhancement(access, encryption time stamp)

\* It will be better to transfer the knowledge in Japan (in cooperate with theMinistry of Health, Labor and Welfare, Medis.DC and Jahis,etc.)

### 3.The introduced System in CH2 (△:consider the phased introduction)

	PLAN A	PLAN B	PLAN C
Function of EMRS & Sub system	0) System that has been introduced in CH at 2015.	○	○
	1) Advanced Medical Service and Regional Network	○	○
	2) Respect for the will of the patients	○	○
	3) Hospitality	△	○
	4) Safety and Security		△
	5) Related matters		△
Software Development	1) Mainly Vendor in Vietnam	○	
	2) Mainly Vietnam Vendor but some solution is adopted from Japan.		○
	3) Mainly Vendor in Japan.		○
Server	1) Same level as security in CH	○	
	2) Introduce Virtual Server and client to achieve redundancy and optimum response.		○
Network	1) Same level as security of in CH	○	
	2) introduce redundancy solution such as duplication.		○

Medical Equipment List for Cho Ray Second Hospital (Draft)

No.	Floor	Department	Unit	Room	Description	Qty
1	1	Outpatient	General	Examination Room	X-ray Illumination	47
2	1	Outpatient	General	Examination Room	Examination Table	47
3	1	Outpatient	General	Examination Room	Refrigerator for Medicine	47
4	1	Outpatient	Cardiology	Examination Room	X-ray Illumination	1
5	1	Outpatient	Cardiology	Examination Room	Examination Table	1
6	1	Outpatient	Cardiology	Examination Room	Refrigerator for Medicine	1
7	1	Outpatient	Pneumology	Examination Room	X-ray Illumination	1
8	1	Outpatient	Pneumology	Examination Room	Examination Table	1
9	1	Outpatient	Pneumology	Examination Room	Refrigerator for Medicine	1
10	2	Outpatient	General	Examination Room	X-ray Illumination	70
11	2	Outpatient	General	Examination Room	Examination Table	70
12	2	Outpatient	General	Examination Room	Refrigerator for Medicine	70
13	2	Outpatient	Nephrology	Examination Room	X-ray Illumination	1
14	2	Outpatient	Nephrology	Examination Room	Examination Table	1
15	2	Outpatient	Nephrology	Examination Room	Refrigerator for Medicine	1
16	2	Outpatient	Nephrology	Lithotripsy Room	Ultrasound Diagnostic Imaging System	1
17	2	Outpatient	Nephrology	Lithotripsy Room	Lithotripter	1
18	2	Outpatient	Nephrology	Lithotripsy Room	Patient Monitor	1
19	2	Outpatient	Nephrology	Lithotripsy Room	Electronystagmography	1
20	2	Outpatient	Nephrology	Lithotripsy Room	Visual Nystagmus Stimulation Apparatus	1
21	2	Outpatient	Nephrology	Lithotripsy Room	Treatment Table	1
22	2	Outpatient	Nephrology	Laboratory Nephrology	Urine flow measurement devise	1
23	2	Outpatient	Nephrology	Laboratory Nephrology	Diagnostic Ultrasound Imaging System	1
24	2	Outpatient	Nephrology	Laboratory Nephrology	Examination Table	1
25	2	Outpatient	Nephrology	Laboratory Nephrology	Patient Monitor	1
26	2	Outpatient	Nephrology	Laboratory Nephrology	Endoscopy, lower digestive	1

27	2	Outpatient	Nephrology	Laboratory Nephrology	Laboratory Nephrology	Endoscope for Urinary Bladder	1
28	2	Outpatient	Nephrology	Laboratory Nephrology	Laboratory Nephrology	Endoscope Washer	1
29	2	Outpatient	Nephrology	Examination Room	Examination Room	X-ray Illumination	1
30	2	Outpatient	Nephrology	Examination Room	Examination Room	Examination Table	1
31	2	Outpatient	Nephrology	Examination Room	Examination Room	Refrigerator for Medicine	1
32	1	Outpatient	Orthopedics	Examination Room	Examination Room	X-ray Illumination	1
33	1	Outpatient	Orthopedics	Examination Room	Examination Room	Examination Table	1
34	1	Outpatient	Orthopedics	Examination Room	Examination Room	Refrigerator for Medicine	1
35	1	Outpatient	Orthopedics	Cast Room	Cast Room	X-ray Illumination	1
36	1	Outpatient	Orthopedics	Cast Room	Cast Room	Examination Table	1
37	1	Outpatient	Orthopedics	Cast Room	Cast Room	Stretcher	1
38	1	Outpatient	Orthopedics	Cast Room	Cast Room	Gypsum Cutter	1
39	1	Outpatient	Orthopedics	Cast Room	Cast Room	Gypsum Plaster Table	1
40	1	Outpatient	Burn-Plastic Surgery	Examination Room	Examination Room	X-ray Illumination	1
41	1	Outpatient	Burn-Plastic Surgery	Examination Room	Examination Room	Examination Table	1
42	1	Outpatient	Burn-Plastic Surgery	Examination Room	Examination Room	Refrigerator for Medicine	1
43	1	Outpatient	Burn-Plastic Surgery	Examination Room	Examination Room	Freezer for Ice	1
44	2	Outpatient	Pediatric	Examination Room	Examination Room	X-ray Illumination	1
45	2	Outpatient	Pediatric	Examination Room	Examination Room	Examination Table, Pediatric	1
46	2	Outpatient	Pediatric	Examination Room	Examination Room	Refrigerator for Medicine	1
47	1	Outpatient	General surgery	Examination Room	Examination Room	X-ray Illumination	1
48	1	Outpatient	General surgery	Examination Room	Examination Room	Examination Table	1
49	1	Outpatient	General surgery	Examination Room	Examination Room	Refrigerator for Medicine	1
50	2	Outpatient	Otorhinolaryngology	Examination Room	Examination Room	X-ray Illumination	1
51	2	Outpatient	Otorhinolaryngology	Examination Room	Examination Room	Examination Table	1
52	2	Outpatient	Otorhinolaryngology	Examination Room	Examination Room	Refrigerator for Medicine	1
53	2	Outpatient	Otorhinolaryngology	Examination Room	Examination Room	ENT Diagnostic Unit	1
54	2	Outpatient	Otorhinolaryngology	Examination Room	Examination Room	Head Lamp	1
55	2	Outpatient	Otorhinolaryngology	Examination Room	Examination Room	Light Source, Head Lamp	1

56	2	Outpatient	Otorhinolaryngology	Examination Room	Endoscope, ENT TV System	1
57	2	Outpatient	Otorhinolaryngology	Examination Room	Treatment Table	1
58	2	Outpatient	Otorhinolaryngology	Examination Room	Suction Unit	1
59	2	Outpatient	Otorhinolaryngology	Examination Room	Ultrasonic Washer	1
60	2	Outpatient	Otorhinolaryngology	Examination Room	Ultrasound Diagnostic System	1
61	2	Outpatient	Otorhinolaryngology	Examination Room	Microscope	1
62	2	Outpatient	Otorhinolaryngology	Audio Room	Audio Booth	1
63	2	Outpatient	Otorhinolaryngology	Audio Room	Audiometer	1
64	2	Outpatient	Otorhinolaryngology	Operating Room	Acoustic Radiation Test Equipment	1
65	2	Outpatient	Otorhinolaryngology	Operating Room	Stabilometer	1
66	2	Outpatient	Otorhinolaryngology	Operating Room	EMG	1
67	2	Outpatient	Otorhinolaryngology	Operating Room	Audio Impedencemeter	1
68	2	Outpatient	Otorhinolaryngology	Treatment Room	Treatment Table	1
69	2	Outpatient	Otorhinolaryngology	Treatment Room	Examination Table	1
70	2	Outpatient	Otorhinolaryngology	Treatment Room	CO2 Gas Laser Surgical Unit	1
71	2	Outpatient	Otorhinolaryngology	Treatment Room	TV system, Surgical Microscope	1
72	2	Outpatient	Otorhinolaryngology	Treatment Room	Endoscope, ENT TV System	1
73	2	Outpatient	Otorhinolaryngology	Treatment Room	Suction Unit	1
74	2	Outpatient	Otorhinolaryngology	Treatment Room	Ultrasonic Washer	1
75	2	Outpatient	Otorhinolaryngology	Treatment Room	Refrigerator for Medicine	1
76	2	Outpatient	Otorhinolaryngology	Treatment Room	Patient Monitor	1
77	2	Outpatient	Otorhinolaryngology	Treatment Room	X-ray Illumination	1
78	2	Outpatient	Otorhinolaryngology	Treatment Room	Syringe pump	2
79	2	Outpatient	Otorhinolaryngology	Treatment Room	Infusion Pump	1
80	2	Outpatient	Otorhinolaryngology	Equilibrium Function Room	Eye Movement Test Equipment	1
81	2	Outpatient	Otorhinolaryngology	Equilibrium Function Room	Visual Nystagmus Stimulation Apparatus	1
82	2	Outpatient	Otorhinolaryngology	Equilibrium Function Room	Apnea Monitor	1
83	2	Outpatient	Otorhinolaryngology	Equilibrium Function Room	Blinking Type Eye-tracking Machine	1
84	2	Outpatient	Otorhinolaryngology	Equilibrium Function Room	Nystamograph	1

85	2	Outpatient	Otorhinolaryngology	Equilibrium Function Room	Evoked Potential Test Equipment	1
86	2	Outpatient	Ophthalmology	Examination Room	X-ray Illumination	1
87	2	Outpatient	Ophthalmology	Examination Room	Examination table	1
88	2	Outpatient	Ophthalmology	Examination Room	Examination Chair for Ophthalmology	1
89	2	Outpatient	Ophthalmology	Examination Room	Ultrasound Diagnostic, Ophthalmic	1
90	2	Outpatient	Ophthalmology	Examination Room	Specular Microscope	1
91	2	Outpatient	Ophthalmology	Examination Room	Auto Refract Keratometer	1
92	2	Outpatient	Ophthalmology	Examination Room	Refrigerator for Medicine	1
93	2	Outpatient	Ophthalmology	Eye Test Room	Visual Acuity Test Apparatus	1
94	2	Outpatient	Ophthalmology	Eye Test Room	Auto Refract Keratometer	1
95	2	Outpatient	Ophthalmology	Eye Test Room	Goldman Perimeter	1
96	2	Outpatient	Ophthalmology	Eye Test Room	Slit Lamp	1
97	2	Outpatient	Ophthalmology	Eye Test Room	Slit Lamp, Microscope	1
98	2	Outpatient	Ophthalmology	Eye Test Room	CCD Camera for Slit Lamp	1
99	2	Outpatient	Ophthalmology	Eye Test Room	Noncontact Tonometer	1
100	2	Outpatient	Ophthalmology	Eye Test Room	Specular Microscope	1
101	2	Outpatient	Ophthalmology	Eye Test Room	Auto Retinoscope	1
102	2	Outpatient	Ophthalmology	Eye Test Room	Laser Flare Cell Meter	1
103	2	Outpatient	Ophthalmology	Eye Test Room	Fundas Camera System	1
104	2	Outpatient	Ophthalmology	Eye Test Room	Axial Length, Corneal Thickness Measurement Instrument	1
105	2	Outpatient	Ophthalmology	Eye Test Room	Ophthalmoscope wall transformer	1
106	2	Outpatient	Ophthalmology	Eye Test Room	Examination Chair for Ophthalmology	1
107	2	Outpatient	Ophthalmology	Eye Test Room	Examination Lamp	1
108	2	Outpatient	Ophthalmology	Eye Test Room	Photo Slit Lamp	1
109	2	Outpatient	Ophthalmology	Eye Test Room	Accommodopolyrecorder	1
110	2	Outpatient	Ophthalmology	Eye Test Room	Eye Test Chart	1
111	2	Outpatient	Ophthalmology	Eye Test Room	Tonometers	1
112	2	Outpatient	Ophthalmology	Dark Room	Multi-color Laser Photocoagulation System	1
113	2	Outpatient	Ophthalmology	Dark Room	Argon Dia Laser Photocoagulation System	1

114	2	Outpatient	Ophthalmology	Dark Room	Green Laser Photocoagulation System	1
115	2	Outpatient	Ophthalmology	Dark Room	Yag Laser	1
116	2	Outpatient	Ophthalmology	Dark Room	Static Auto Retinoscope	1
117	2	Outpatient	Ophthalmology	Dark Room	Goldman Perimeter	1
118	2	Outpatient	Ophthalmology	Dark Room	Portable VEP & ERG	1
119	2	Outpatient	Ophthalmology	Dark Room	Goldman Slit Lamp	1
120	2	Outpatient	Ophthalmology	Dark Room	Slit Lamp	1
121	2	Outpatient	Ophthalmology	Dark Room	Ultrasound Diagnostic, Ophthalmic	1
122	2	Outpatient	Ophthalmology	Dark Room	Auto Retinoscope	1
123	2	Outpatient	Ophthalmology	Dark Room	Anterior Chamber Protein Analyzer	1
124	2	Outpatient	Ophthalmology	Dark Room	Fundas Camera System	1
125	2	Outpatient	Ophthalmology	Dark Room	Refrigator for Medicine	1
126	2	Outpatient	Ophthalmology	Dark Room	Patient Monitor	1
127	2	Outpatient	Ophthalmology	Dark Room	X-ray Illumination	1
128	2	Outpatient	Ophthalmology	Dark Room	Syringe pump	2
129	2	Outpatient	Ophthalmology	Dark Room	Infusion Pump	1
130	2	Outpatient	Ophthalmology	Dark Room	Suction Unit	1
131	2	Outpatient	Obstetrics Gynecologic	Examination Room	X-ray Illumination	1
132	2	Outpatient	Obstetrics Gynecologic	Examination Room	Examination Table	1
133	2	Outpatient	Obstetrics Gynecologic	Examination Room	Refrigator for Medicine	1
134	2	Outpatient	Obstetrics Gynecologic	Examination Room	Ultrasound Diagnostic, Transvaginal	1
135	2	Outpatient	Obstetrics Gynecologic	Examination Room	Ultrasound Diagnostic, Abdominal	1
136	2	Outpatient	Obstetrics Gynecologic	Examination Room	Doppler	1
137	2	Outpatient	Obstetrics Gynecologic	Internal Examination Room	Examination Table	1
138	2	Outpatient	Obstetrics Gynecologic	Internal Examination Room	Electric Examination Table, Gynecology	1
139	2	Outpatient	Obstetrics Gynecologic	Internal Examination Room	Examination Unit, Gynecology	1
140	2	Outpatient	Obstetrics Gynecologic	Internal Examination Room	Ultrasound Diagnostic, Transvaginal	1
141	2	Outpatient	Obstetrics Gynecologic	Internal Examination Room	Ultrasound Diagnostic, Abdominal	1
142	2	Outpatient	Obstetrics Gynecologic	Internal Examination Room	Fetus Monitor	1



143	2	Outpatient	Obstetrics Gynecologic	Internal Examination Room	Internal Examination Room	Labor Monitor	1
144	2	Outpatient	Obstetrics Gynecologic	Internal Examination Room	Internal Examination Room	System Microscope	1
145	2	Outpatient	Obstetrics Gynecologic	Internal Examination Room	Internal Examination Room	Ultrasound Washer	1
146	2	Outpatient	Obstetrics Gynecologic	Internal Examination Room	Internal Examination Room	Infusion Pump	1
147	2	Outpatient	Obstetrics Gynecologic	Internal Examination Room	Internal Examination Room	Syringe Pump	2
148	2	Outpatient	Obstetrics Gynecologic	Internal Examination Room	Internal Examination Room	Suction Unit	1
149	2	Outpatient	Obstetrics Gynecologic	Internal Examination Room	Internal Examination Room	Refrigerator for Medicine	1
150	2	Outpatient	Obstetrics Gynecologic	Recovery Room	Recovery Room	Labor Monitor	1
151	2	Outpatient	Dentistry	Examination Room	Examination Room	X-ray Illumination	1
152	2	Outpatient	Dentistry	Examination Room	Examination Room	Refrigerator for Medicine	1
153	2	Outpatient	Dentistry	Examination Room	Examination Room	Dental Unit	1
154	2	Outpatient	Dentistry	Examination Room	Examination Room	Dental Chair	1
155	2	Outpatient	Dentistry	Examination Room	Examination Room	Auto Sphygmomanometer	1
156	2	Outpatient	Dentistry	Examination Room	Examination Room	Sphygmomanometer	1
157	2	Outpatient	Dentistry	Examination Room	Examination Room	Semiconductor Laser	1
158	2	Outpatient	Dentistry	Examination Room	Examination Room	PS Wall Cabinet	1
159	2	Outpatient	Dentistry	Examination Room	Examination Room	Implant Surgical Set	1
160	2	Outpatient	Dentistry	Examination Room	Examination Room	Implant Set	1
161	2	Outpatient	Dentistry	Examination Room	Examination Room	Dental Portable Unit	1
162	2	Outpatient	Dentistry	Dental X-Ray Room	Dental X-Ray Room	Paranora X-Ray	1
163	2	Outpatient	Dentistry	Dental X-Ray Room	Dental X-Ray Room	CR system	1
164	2	Outpatient	Dentistry	Dental Laboratory	Dental Laboratory	Drill Set for Implant	1
165	2	Outpatient	Dentistry	Dental Laboratory	Dental Laboratory	Die cutting Unit for dental	1
166	2	Outpatient	Dentistry	Dental Laboratory	Dental Laboratory	Vacuum for Examinationtable	1
167	2	Outpatient	Dentistry	Dental Laboratory	Dental Laboratory	Vacuum for Oral surgery	1
168	2	Outpatient	Dentistry	Dental Laboratory	Dental Laboratory	Compressor	1
169	1	Outpatient	Central Treatment Room	Central Treatment Room	Central Treatment Room	Automatic Preparation Apparatus for Blood Collection	1
170	1	Outpatient	Central Treatment Room	Central Treatment Room	Central Treatment Room	X-ray Illumination	1
171	1	Outpatient	Central Treatment Room	Central Treatment Room	Central Treatment Room	Stretcher	1

172	1	Outpatient	Central Treatment Room	Central Treatment Room	Central Treatment Room	Treatment Table	10
173	1	Outpatient	Central Treatment Room	Central Treatment Room	Central Treatment Room	Refrigerator for Medicine	1
174	1	Outpatient	Central Treatment Room	Central Treatment Room	Central Treatment Room	Refrigerator for Blood	1
175	1	Outpatient	Central Treatment Room	Central Treatment Room	Central Treatment Room	Blood Pressure Pulse Wave Inspection Apparatus	1
176	1	Outpatient	Central Treatment Room	Central Treatment Room	Central Treatment Room	Laser Rheometer	1
177	1	Outpatient	Central Treatment Room	Central Treatment Room	Central Treatment Room	Automatic Preparation Apparatus for Blood Collection	1
178	1	Outpatient	Central Treatment Room	Central Treatment Room	Central Treatment Room	Automated Sphygmomanometer	1
179	1	Outpatient	Central Treatment Room	Central Treatment Room	Central Treatment Room	Syringe Pump	2
180	1	Outpatient	Central Treatment Room	Central Treatment Room	Central Treatment Room	Infusion Pump	1
181	1	Outpatient	Central Treatment Room	Central Treatment Room	Central Treatment Room	Patient Monitor	1
182	1	Outpatient	Central Treatment Room	Central Treatment Room	Central Treatment Room	Ventilator	1
183	1	Outpatient	Central Treatment Room	Central Treatment Room	Central Treatment Room	Diagnostic Ultrasound Imaging System	1
184	1	Outpatient	Central Treatment Room	Central Treatment Room	Central Treatment Room	Defibrillator	1
185	1	Outpatient	Central Treatment Room	Central Treatment Room	Central Treatment Room	Suction Unit	1
186	1	Outpatient	Central Treatment Room	Central Treatment Room	Central Treatment Room	Shadowless Lamp, Portable	1
187	1	Outpatient	Central Treatment Room	Central Treatment Room	Central Treatment Room	Ceiling Pendant (Shadowless Lamp)	1
188	1	Outpatient	Central Treatment Room	Central Treatment Room	Central Treatment Room	Ceiling Pendant (Multi)	1
189	1	Outpatient	Central Treatment Room	Central Treatment Room	Central Treatment Room	Pulse Oximeter	1
190	1	Outpatient	Central Treatment Room	Central Treatment Room	Central Treatment Room	ECG	1
191	1	Outpatient	Central Treatment Room	Central Treatment Room	Skin Laser Room	Treatment Table	1
192	1	Outpatient	Central Treatment Room	Central Treatment Room	Skin Laser Room	CO2 Gas Laser	1
193	1	Outpatient	Central Treatment Room	Central Treatment Room	Skin Laser Room	Infrared Ray Therapy Unit	1
194	1	Outpatient	Central Treatment Room	Central Treatment Room	Skin Laser Room	Xenon Beam Therapy Unit	1
195	1	Outpatient	Central Treatment Room	Central Treatment Room	Skin Laser Room	Shadowless Lamp, Portable	1
196	1	Outpatient	Central Treatment Room	Central Treatment Room	Skin Laser Room	Patient Monitor	1
197	1	Outpatient	Central Treatment Room	Central Treatment Room	Skin Laser Room	Syringe Pump	2
198	1	Outpatient	Central Treatment Room	Central Treatment Room	Skin Laser Room	Infusion Pump	1
199	1	Outpatient	Central Treatment Room	Central Treatment Room	Skin Laser Room	Refrigerator for Medicine	1
200	1	Emergency	Outpatient	Examination Room	Examination Room	Suction Unit	1

201	1	Emergency	Outpatient	Examination Room	Examination Room	Patient monitor	1
202	1	Emergency	Outpatient	Examination Room	Examination Room	X-ray Illuminator	1
203	1	Emergency	Outpatient	X-ray Room, Emergency	X-ray Room, Emergency	X-ray diagnostic Unit	1
204	1	Emergency	Outpatient	X-ray Room, Emergency	X-ray Room, Emergency	Film Processor	1
205	1	Emergency	Outpatient	IVR – CT Room	IVR – CT Room	IVR-CT	1
206	1	Emergency	Outpatient	IVR – CT Room	IVR – CT Room	CR system	1
207	1	Emergency	Outpatient	IVR – CT Room	IVR – CT Room	Patient monitor	1
208	1	Emergency	Outpatient	Treatment Room	Treatment Room	Treatment Table	1
209	1	Emergency	Outpatient	Treatment Room	Treatment Room	Ceiling Pendant(Operating Light)	1
210	1	Emergency	Outpatient	Treatment Room	Treatment Room	Defibrillator	1
211	1	Emergency	Outpatient	Treatment Room	Treatment Room	Ventilation, Portable	1
212	1	Emergency	Outpatient	Treatment Room	Treatment Room	Ultrasound Diagnos Apparatus, General	1
213	1	Emergency	Outpatient	Treatment Room	Treatment Room	Stracher	1
214	1	Emergency	Outpatient	Treatment Room	Treatment Room	ECG	1
215	1	Emergency	Outpatient	Examination Room	Examination Room	Examination Table	1
216	1	Emergency	Outpatient	Examination Room	Examination Room	Blood Gas Analyzer	1
217	1	Emergency	Outpatient	First Aid Room	First Aid Room	Ceiling Pendant (Operating Lamp)	1
218	1	Emergency	Outpatient	First Aid Room	First Aid Room	Ceiling Pendant (Aneathesia)	1
219	1	Emergency	Outpatient	First Aid Room	First Aid Room	Patient monitor	1
220	1	Emergency	Outpatient	First Aid Room	First Aid Room	Ultrasound Diagnos Apparatus, General	1
221	1	Emergency	Outpatient	First Aid Room	First Aid Room	Defibrilator	1
222	1	Emergency	Outpatient	First Aid Room	First Aid Room	ECG	1
223	1	Emergency	Outpatient	First Aid Room	First Aid Room	Treatment Table	1
224	1	Emergency	Outpatient	First Aid Room	First Aid Room	Syringe pump	2
225	1	Emergency	Outpatient	First Aid Room	First Aid Room	Hand Washer	1
226	1	Emergency	Outpatient	First Aid Room	First Aid Room	Electrosurgery Unit	1
227	1	Emergency	Outpatient	First Aid Room	First Aid Room	Endoscope System with probe	1
228	1	Emergency	Outpatient	First Aid Room	First Aid Room	Automated Endoscope Reprocessor	1
229	1	Emergency	Outpatient	First Aid Room	First Aid Room	Syringe pump	2

230	1	Emergency	Outpatient	First Aid Room	Ventilator	1
231	1	Emergency	Outpatient	Internal Examination Room	Examination Table	1
232	1	Emergency	Outpatient	Internal Examination Room	Electric Examination Table, Gynecology	1
233	1	Emergency	Outpatient	Internal Examination Room	Examination Unit, Gynecology	1
234	1	Emergency	Outpatient	Internal Examination Room	Ultrasound Diagnostic, Transvaginal	1
235	1	Emergency	Outpatient	Internal Examination Room	Ultrasound Diagnostic, Abdominal	1
236	1	Emergency	Outpatient	Internal Examination Room	Fetus Monitor	1
237	1	Emergency	Outpatient	Internal Examination Room	Labor Monitor	1
238	1	Emergency	Outpatient	Internal Examination Room	System Microscope	1
239	1	Emergency	Outpatient	Internal Examination Room	Laparoscopy System	1
240	1	Emergency	Outpatient	Internal Examination Room	Ultrasound Washer	1
241	1	Emergency	Outpatient	Internal Examination Room	Infusion Pump	1
242	1	Emergency	Outpatient	Internal Examination Room	Syringe Pump	2
243	1	Emergency	Outpatient	Internal Examination Room	Suction Unit	1
244	1	Emergency	Outpatient	Internal Examination Room	Refrigerator for Medicine	1
245	1	Emergency	Outpatient	Recovery Room	Labor Monitor	1
246	1	Emergency	Outpatient	Storage	Examination Light, mobile	1
247	1	Emergency	Outpatient	Storage	Syringe pump	2
248	1	Emergency	Outpatient	Storage	Ventilator, Portable	1
249	1	Emergency	Outpatient	HCU(Including Infection)	Ventilator	1
250	1	Emergency	Outpatient	HCU(Including Infection)	Patient monitor	6
251	1	Emergency	Outpatient	HCU(Including Infection)	Syringe pump	6
252	1	Emergency	Outpatient	HCU(Including Infection)	Oximeter	6
253	1	Emergency	Outpatient	HCU(Including Infection)	Suction Unit	6
254	1	Emergency	Outpatient	HCU(Including Infection)	Defibrillator	1
255	1	Emergency	Outpatient	HCU(Including Infection)	X-ray Illuminator	1
256	1	Emergency	Outpatient	HCU(Including Infection)	Ultrasound Diagnos Apparatus, General	1
257	1	Emergency	Outpatient	HCU(Including Infection)	ICU Bed	6
258	1	Emergency	Outpatient	HCU(Including Infection)	Ceiling Pendant (Shadowless Lamp)	1

259	1	Emergency	Outpatient		HCU (Including Infection)	Ceiling Pendant (Aneathesia)	1
260	1	Emergency	Outpatient		HCU (Including Infection)	ECG	1
261	1	Emergency	Outpatient		HCU (Including Infection)	Bed Pun Washer	1
262	1	Emergency	Outpatient		HCU (Including Infection)	Medical Refrigerator	1
263	1	Emergency	Outpatient		Patient Preparation room	Recovery Bed	1
264	1	Emergency	Outpatient		Patient Preparation room	Patient monitor	1
265	1	Emergency	Outpatient		Staff Station	Central Monitor	1
266	1	Emergency	Outpatient		Staff Station	Defibrillator	1
267	1	Emergency	Operation		Operation Room, emergency	Ceiling Pendant (Shadowless Lamp)	1
268	1	Emergency	Operation		Operation Room, emergency	Ceiling Pendant (Aneathesia)	1
269	1	Emergency	Operation		Operation Room, emergency	Syringe pump	2
270	1	Emergency	Operation		Operation Room, emergency	Pulse Oximeter	1
271	1	Emergency	Operation		Operation Room, emergency	Suction Unit	1
272	1	Emergency	Operation		Operation Room, emergency	Electrosurgery Unit	1
273	1	Emergency	Operation		Operation Room, emergency	Operation Table	1
274	1	Emergency	Operation		Operation Room, emergency	Ventilator	1
275	1	Emergency	Operation		Operation Room, emergency	Patient monitor	1
276	1	Emergency	Operation		Operation Room, emergency	Patient monitor	1
277	1	Emergency	Operation		Ante Room	Hand Washer	1
278	1	Emergency	Outpatient		First Aid Room	C Arm for Orthopedics	1
279	1	Health Check-up	Health Check-up		Examination Room	X-ray Illumination	1
280	1	Health Check-up	Health Check-up		Examination Room	Examination table	1
281	1	Health Check-up	Health Check-up		Examination Room	Blood Pressure Pulse Wave Inspection Apparatus	1
282	1	Health Check-up	Health Check-up		Examination Room	Laser Rheometer	1
283	1	Health Check-up	Health Check-up		Examination Room	Refrigerator for Medicine	1
284	1	Health Check-up	Health Check-up		Examination Room	Automatic Preparation Apparatus for Blood Collection	1
285	1	Health Check-up	Health Check-up		Examination Room	Automated Sphygmomanometer	1
286	1	Health Check-up	Health Check-up		Physiology Test Room	Polysomnography Monitoring System	1
287	1	Health Check-up	Health Check-up		Physiology Test Room	Spirometer	1

288	1	Health Check-up	Health Check-up	Health Check-up	Physiology Test Room	ECG	1
289	1	Health Check-up	Health Check-up	Health Check-up	Physiology Test Room	Examination Table	1
290	1	Health Check-up	Health Check-up	Health Check-up	Physiology Test Room	Diagnostic Ultrasound System	1
291	1	Health Check-up	Health Check-up	Health Check-up	Audio Room	Audio Booth	1
292	1	Health Check-up	Health Check-up	Health Check-up	Eye Test Room	Tonometer	1
293	1	Health Check-up	Health Check-up	Health Check-up	Eye Test Room	Automated Perimeter	1
294	1	Health Check-up	Health Check-up	Health Check-up	Eye Test Room	Fundas Camera System	1
295	1	Health Check-up	Health Check-up	Health Check-up	Eye Test Room	Slit Lamp	1
296	1	Health Check-up	Health Check-up	Health Check-up	Eye Test Room	Eye Test Chart	1
297	1	Health Check-up	Health Check-up	Health Check-up	X-Ray Room 1	X-ray, Chest	1
298	1	Health Check-up	Health Check-up	Health Check-up	X-Ray Room 1	X-ray, General	1
299	1	Health Check-up	Health Check-up	Health Check-up	X-Ray Room 2	X-TV, Fluoroscopy	1
300	1	Health Check-up	Health Check-up	Health Check-up	X-Ray Operation Room	CR system	1
301	1	Health Check-up	Health Check-up	Health Check-up	X-Ray Operation Room	X-ray Illuminator	1
302	1	Health Check-up	Health Check-up	Health Check-up	Mammography Room	Mammography	1
303	1	Health Check-up	Health Check-up	Health Check-up	Bone Mineral Measurement Devise Room	Bone Mineral Measurement Devise	1
304	3	Intensive Care	Intensive Care	Intensive Care	ICU	Patient Monitor	25
305	3	Intensive Care	Intensive Care	Intensive Care	ICU	Bed Pan Washer	1
306	3	Intensive Care	Intensive Care	Intensive Care	ICU	Ventilator	25
307	3	Intensive Care	Intensive Care	Intensive Care	ICU	Diagnostic Ultrasound Imaging System	1
308	3	Intensive Care	Intensive Care	Intensive Care	ICU	Ceiling Pendant (Multi)	1
309	3	Intensive Care	Intensive Care	Intensive Care	ICU	Ceiling Pendant (Shadowless Lamp)	1
310	3	Intensive Care	Intensive Care	Intensive Care	ICU	Syringe Pump	25
311	3	Intensive Care	Intensive Care	Intensive Care	ICU	Infusion Pump	25
312	3	Intensive Care	Intensive Care	Intensive Care	ICU	Electrolyte Analyzer	1
313	3	Intensive Care	Intensive Care	Intensive Care	ICU	ICU Bed	25
314	3	Intensive Care	Intensive Care	Intensive Care	Staff Station	Defibrillator	1
315	3	Intensive Care	Intensive Care	Intensive Care	Staff Station	Medical Telemeter	1
316	3	Intensive Care	Intensive Care	Intensive Care	Staff Station	Central Monitor	1

317	3	Intensive Care	Intensive Care	Staff Station	Staff Station	Pulse Oximeter	1
318	3	Intensive Care	Intensive Care	Staff Station	Staff Station	ECG	1
319	3	Intensive Care	Intensive Care	Staff Station	Staff Station	Heart-lung Machine	1
320	3	Intensive Care	Intensive Care	Staff Station	Staff Station	Refrigerator for Medicine	1
321	3	Intensive Care	Intensive Care	Staff Station	Staff Station	Refrigerator for Blood	1
322	3	Intensive Care	Intensive Care	Staff Station	Staff Station	Ventilator, Portable	1
323	3	Intensive Care	Intensive Care	Storage Room	Storage Room	Suction Unit	1
324	3	Intensive Care	Intensive Care	Storage Room	Storage Room	Shadowless Lamp, Portable	1
334	3	Intensive Care	Cardiology	Staff Station	Staff Station	Defibrillator	1
335	3	Intensive Care	Cardiology	Staff Station	Staff Station	Medical Telemeter	1
336	3	Intensive Care	Cardiology	Staff Station	Staff Station	Central Monitor	1
337	3	Intensive Care	Cardiology	Staff Station	Staff Station	Pulse Oximeter	1
338	3	Intensive Care	Cardiology	Staff Station	Staff Station	ECG	1
339	3	Intensive Care	Cardiology	Staff Station	Staff Station	Heart-lung Machine	1
340	3	Intensive Care	Cardiology	Staff Station	Staff Station	Refrigerator for Medicine	1
341	3	Intensive Care	Cardiology	Staff Station	Staff Station	Refrigerator for Blood	1
342	3	Intensive Care	Cardiology	Staff Station	Staff Station	Ventilator, Portable	1
343	3	Intensive Care	Cardiology	Storage Room	Storage Room	Suction Unit	1
344	3	Intensive Care	Cardiology	Storage Room	Storage Room	X-ray, Portable	1
345	3	Intensive Care	Cardiology	Storage Room	Storage Room	Shadowless Lamp, Portable	1
346	3	Intensive Care	Cardiology	Storage Room	Storage Room	Heart-lung Machine	1
412	3	Intensive Care	HCU	HCU	HCU	Patient Monitor	48
413	3	Intensive Care	HCU	HCU	HCU	Bed Pan Washer	5
414	3	Intensive Care	HCU	HCU	HCU	Ventilator	48
415	3	Intensive Care	HCU	HCU	HCU	Syringe Pump	48
416	3	Intensive Care	HCU	HCU	HCU	Infusion Pump	48
417	3	Intensive Care	HCU	HCU	HCU	Electrolyte Analyzer	5
418	3	Intensive Care	HCU	HCU	HCU	Blood Gas Analyzer	5
419	3	Intensive Care	HCU	HCU	HCU	ICU Bed	48

420	3	Intensive Care	HCU	Staff Station	Defibrillator	1
421	3	Intensive Care	HCU	Staff Station	Medical Telemeter	1
422	3	Intensive Care	HCU	Staff Station	Central Monitor	1
423	3	Intensive Care	HCU	Staff Station	Pulse Oximeter	1
424	3	Intensive Care	HCU	Staff Station	ECG	1
425	3	Intensive Care	HCU	Staff Station	Heart-lung Machine	1
426	3	Intensive Care	HCU	Staff Station	Refrigerator for Medicine	1
427	3	Intensive Care	HCU	Staff Station	Refrigerator for Blood	1
428	3	Intensive Care	HCU	Staff Station	Ventilator, Portable	1
429	3	Intensive Care	HCU	Storage Room	Suction Unit	1
430	3	Intensive Care	HCU	Storage Room	Shadowless Lamp, Portable	1
431	5	Intensive Care	NICU	NICU	Patient Monitor	5
432	5	Intensive Care	NICU	NICU	Bed Pan Washer	1
433	5	Intensive Care	NICU	NICU	Ventilator for Neonate	5
434	5	Intensive Care	NICU	NICU	Diagnostic Ultrasound Imaging System	1
435	5	Intensive Care	NICU	NICU	Ceiling Pendant (Multi)	1
436	5	Intensive Care	NICU	NICU	Ceiling Pendant (Shadowless Lamp)	1
437	5	Intensive Care	NICU	NICU	Syringe Pump	5
438	5	Intensive Care	NICU	NICU	Infusion Pump	5
439	5	Intensive Care	NICU	NICU	Electrolyte Analyzer	1
440	5	Intensive Care	NICU	NICU	Incubator	5
441	5	Intensive Care	NICU	NICU	Incubator for Extreme Premature Infant	1
442	5	Intensive Care	NICU	NICU	Incubator for Conveyance	1
443	5	Intensive Care	NICU	NICU	Light Therapy Unit	1
444	5	Intensive Care	NICU	NICU	Bilirubin Meter	1
445	5	Intensive Care	NICU	NICU	Infant Warmer	4
446	5	Intensive Care	NICU	NICU	Oxygen Tent	4
447	5	Intensive Care	NICU	Premature Infant Room	Incubator	2
448	5	Intensive Care	NICU	Premature Infant Room	Incubator for Extreme Premature Infant	3



449	5	Intensive Care	NICU	Premature Infant Room	Incubator for Conveyance	1
450	5	Intensive Care	NICU	Premature Infant Room	Light Therapy Unit	1
451	5	Intensive Care	NICU	Premature Infant Room	Bilirubin Meter	1
452	5	Intensive Care	NICU	Premature Infant Room	Patient Monitor	5
453	5	Intensive Care	NICU	Premature Infant Room	Infant Warmer	4
454	5	Intensive Care	NICU	Premature Infant Room	Oxygen Tent	4
455	5	Intensive Care	NICU	Premature Infant Room	Ventilator for Neonate	5
456	5	Intensive Care	NICU	Premature Infant Room	Syringe Pump	5
457	5	Intensive Care	NICU	Premature Infant Room	Infusion Pump	5
458	5	Intensive Care	NICU	Premature Infant Room	Electrolyte Analyzer	1
459	5	Intensive Care	NICU	Staff Station	Defibrillator for Neonate	1
460	5	Intensive Care	NICU	Staff Station	Medical Telemeter	1
461	5	Intensive Care	NICU	Staff Station	Central Monitor	1
462	5	Intensive Care	NICU	Staff Station	Pulse Oximeter	1
463	5	Intensive Care	NICU	Staff Station	ECG	1
464	5	Intensive Care	NICU	Staff Station	Heart-lung Machine	1
465	5	Intensive Care	NICU	Staff Station	Refrigerator for Medicine	1
466	5	Intensive Care	NICU	Staff Station	Refrigerator for Blood	1
467	5	Intensive Care	NICU	Staff Station	Ventilator for Neonate, Portable	1
468	5	Intensive Care	NICU	Storage Room	Suction Unit	1
469	5	Intensive Care	NICU	Storage Room	Shadowless Lamp, Portable	1
470	5	Intensive Care	MFICU	MFICU	Patient Monitor	6
471	5	Intensive Care	MFICU	MFICU	Bed Pan Washer	1
472	5	Intensive Care	MFICU	MFICU	Ventilator	6
473	5	Intensive Care	MFICU	MFICU	Diagnostic Ultrasound Imaging System	1
474	5	Intensive Care	MFICU	MFICU	Ceiling Pendant (Multi)	1
475	5	Intensive Care	MFICU	MFICU	Ceiling Pendant (Shadowless Lamp)	1
476	5	Intensive Care	MFICU	MFICU	Syringe Pump	6
477	5	Intensive Care	MFICU	MFICU	Infusion Pump	6

478	5	Intensive Care	MFICU	MFICU	MFICU	Electrolyte Analyzer	1
479	5	Intensive Care	MFICU	MFICU	MFICU	Blood Gas Analyzer	1
480	5	Intensive Care	MFICU	MFICU	MFICU	Examination Unit, Gynecology	1
481	5	Intensive Care	MFICU	MFICU	MFICU	Ultrasound Diagnostic, Transvaginal	1
482	5	Intensive Care	MFICU	MFICU	MFICU	Ultrasound Diagnostic, Abdominal	1
483	5	Intensive Care	MFICU	MFICU	MFICU	Fetus Monitor	1
484	5	Intensive Care	MFICU	MFICU	MFICU	Laparoscopy System	1
485	5	Intensive Care	MFICU	MFICU	MFICU	Ultrasound Washer	1
486	5	Intensive Care	MFICU	MFICU	MFICU	Incubator	1
487	5	Intensive Care	MFICU	MFICU	MFICU	Incubator for conveyence	1
488	5	Intensive Care	MFICU	MFICU	MFICU	Oxygen Tent	1
489	5	Intensive Care	MFICU	MFICU	MFICU	Ventilation for Neonate	6
490	5	Intensive Care	MFICU	MFICU	MFICU	Light Therapy Unit	1
491	5	Intensive Care	MFICU	MFICU	MFICU	Bilirubin Meter	1
492	5	Intensive Care	MFICU	MFICU	MFICU	Infant Warmer	1
493	5	Intensive Care	MFICU	MFICU	MFICU	ICU Bed	6
494	5	Intensive Care	MFICU	MFICU	Staff Station	Defibrillator	1
495	5	Intensive Care	MFICU	MFICU	Staff Station	Defibrillator for Neonate	1
496	5	Intensive Care	MFICU	MFICU	Staff Station	Medical Telemeter	1
497	5	Intensive Care	MFICU	MFICU	Staff Station	Central Monitor	1
498	5	Intensive Care	MFICU	MFICU	Staff Station	Pulse Oximeter	1
499	5	Intensive Care	MFICU	MFICU	Staff Station	ECG	1
500	5	Intensive Care	MFICU	MFICU	Staff Station	Heart-lung Machine	1
501	5	Intensive Care	MFICU	MFICU	Staff Station	Refrigerator for Medicine	1
502	5	Intensive Care	MFICU	MFICU	Staff Station	Refrigerator for Blood	1
503	5	Intensive Care	MFICU	MFICU	Staff Station	Ventilator, Portable	1
504	5	Intensive Care	MFICU	MFICU	Storage Room	Suction Unit	1
505	5	Intensive Care	MFICU	MFICU	Storage Room	X-ray, Portable	1
506	5	Intensive Care	MFICU	MFICU	Storage Room	Shadowless Lamp, Portable	1

433	5	Intensive Care	NICU	NICU	NICU	Ventilator for Neonate	5
434	5	Intensive Care	NICU	NICU	NICU	Diagnostic Ultrasound Imaging System	1
435	5	Intensive Care	NICU	NICU	NICU	Ceiling Pendant (Multi)	1
436	5	Intensive Care	NICU	NICU	NICU	Ceiling Pendant (Shadowless Lamp)	1
437	5	Intensive Care	NICU	NICU	NICU	Syringe Pump	5
438	5	Intensive Care	NICU	NICU	NICU	Infusion Pump	5
439	5	Intensive Care	NICU	NICU	NICU	Electrolyte Analyzer	1
440	5	Intensive Care	NICU	NICU	NICU	Incubator	5
441	5	Intensive Care	NICU	NICU	NICU	Incubator for Extreme Premature Infant	1
442	5	Intensive Care	NICU	NICU	NICU	Incubator for Conveyance	1
443	5	Intensive Care	NICU	NICU	NICU	Light Therapy Unit	1
444	5	Intensive Care	NICU	NICU	NICU	Bilirubin Meter	1
445	5	Intensive Care	NICU	NICU	NICU	Infant Warmer	4
446	5	Intensive Care	NICU	NICU	NICU	Oxygen Tent	4
447	5	Intensive Care	NICU	Premature Infant Room	NICU	Incubator	2
448	5	Intensive Care	NICU	Premature Infant Room	NICU	Incubator for Extreme Premature Infant	3
449	5	Intensive Care	NICU	Premature Infant Room	NICU	Incubator for Conveyance	1
450	5	Intensive Care	NICU	Premature Infant Room	NICU	Light Therapy Unit	1
451	5	Intensive Care	NICU	Premature Infant Room	NICU	Bilirubin Meter	1
452	5	Intensive Care	NICU	Premature Infant Room	NICU	Patient Monitor	5
453	5	Intensive Care	NICU	Premature Infant Room	NICU	Infant Warmer	4
454	5	Intensive Care	NICU	Premature Infant Room	NICU	Oxygen Tent	4
455	5	Intensive Care	NICU	Premature Infant Room	NICU	Ventilator for Neonate	5
456	5	Intensive Care	NICU	Premature Infant Room	NICU	Syringe Pump	5
457	5	Intensive Care	NICU	Premature Infant Room	NICU	Infusion Pump	5
458	5	Intensive Care	NICU	Premature Infant Room	NICU	Electrolyte Analyzer	1
459	5	Intensive Care	NICU	Staff Station	NICU	Defibrillator for Neonate	1
460	5	Intensive Care	NICU	Staff Station	NICU	Medical Telemeter	1
461	5	Intensive Care	NICU	Staff Station	NICU	Central Monitor	1

462	5	Intensive Care	NICU	Staff Station	Pulse Oximeter	1
463	5	Intensive Care	NICU	Staff Station	ECG	1
464	5	Intensive Care	NICU	Staff Station	Heart-lung Machine	1
465	5	Intensive Care	NICU	Staff Station	Refrigerator for Medicine	1
466	5	Intensive Care	NICU	Staff Station	Refrigerator for Blood	1
467	5	Intensive Care	NICU	Staff Station	Ventilator for Neonate, Portable	1
468	5	Intensive Care	NICU	Storage Room	Suction Unit	1
469	5	Intensive Care	NICU	Storage Room	Shadowless Lamp, Portable	1
470	5	Intensive Care	MFICU	MFICU	Patient Monitor	6
471	5	Intensive Care	MFICU	MFICU	Bed Pan Washer	1
472	5	Intensive Care	MFICU	MFICU	Ventilator	6
473	5	Intensive Care	MFICU	MFICU	Diagnostic Ultrasound Imaging System	1
474	5	Intensive Care	MFICU	MFICU	Ceiling Pendant (Multi)	1
475	5	Intensive Care	MFICU	MFICU	Ceiling Pendant (Shadowless Lamp)	1
476	5	Intensive Care	MFICU	MFICU	Syringe Pump	6
477	5	Intensive Care	MFICU	MFICU	Infusion Pump	6
478	5	Intensive Care	MFICU	MFICU	Electrolyte Analyzer	1
479	5	Intensive Care	MFICU	MFICU	Blood Gas Analyzer	1
480	5	Intensive Care	MFICU	MFICU	Examination Unit, Gynecology	1
481	5	Intensive Care	MFICU	MFICU	Ultrasound Diagnostic, Transvaginal	1
482	5	Intensive Care	MFICU	MFICU	Ultrasound Diagnostic, Abdominal	1
483	5	Intensive Care	MFICU	MFICU	Fetus Monitor	1
484	5	Intensive Care	MFICU	MFICU	Laparoscopy System	1
485	5	Intensive Care	MFICU	MFICU	Ultrasound Washer	1
486	5	Intensive Care	MFICU	MFICU	Incubator	1
487	5	Intensive Care	MFICU	MFICU	Incubator for conveyance	1
488	5	Intensive Care	MFICU	MFICU	Oxygen Tent	1
489	5	Intensive Care	MFICU	MFICU	Ventilation for Neonate	6
490	5	Intensive Care	MFICU	MFICU	Light Therapy Unit	1

491	5	Intensive Care	MFICU	MFICU	MFICU	Bilirubin Meter	1
492	5	Intensive Care	MFICU	MFICU	MFICU	Infant Warmer	1
493	5	Intensive Care	MFICU	MFICU	MFICU	ICU Bed	6
494	5	Intensive Care	MFICU	Staff Station	Staff Station	Defibrillator	1
495	5	Intensive Care	MFICU	Staff Station	Staff Station	Defibrillator for Neonate	1
496	5	Intensive Care	MFICU	Staff Station	Staff Station	Medical Telemeter	1
497	5	Intensive Care	MFICU	Staff Station	Staff Station	Central Monitor	1
498	5	Intensive Care	MFICU	Staff Station	Staff Station	Pulse Oximeter	1
499	5	Intensive Care	MFICU	Staff Station	Staff Station	ECG	1
500	5	Intensive Care	MFICU	Staff Station	Staff Station	Heart-lung Machine	1
501	5	Intensive Care	MFICU	Staff Station	Staff Station	Refrigerator for Medicine	1
502	5	Intensive Care	MFICU	Staff Station	Staff Station	Refrigerator for Blood	1
503	5	Intensive Care	MFICU	Staff Station	Staff Station	Ventilator, Portable	1
504	5	Intensive Care	MFICU	Storage Room	Storage Room	Suction Unit	1
505	5	Intensive Care	MFICU	Storage Room	Storage Room	X-ray, Portable	1
506	5	Intensive Care	MFICU	Storage Room	Storage Room	Shadowless Lamp, Portable	1
507	5~8	Ward	General Medicine	Staff Station	Staff Station	Refrigerator	1
508	5~8	Ward	General Medicine	Staff Station	Staff Station	X-ray Illuminator	1
509	5~8	Ward	Oncology	Staff Station	Staff Station	Refrigerator	1
510	5~8	Ward	Pulmonary	Staff Station	Staff Station	Refrigerator	1
511	5~8	Ward	Pulmonary	Staff Station	Staff Station	X-ray Illuminator	1
512	5~8	Ward	Pulmonary	Storage Room	Storage Room	UV Lamp	1
513	5~8	Ward	Pulmonary	Storage Room	Storage Room	PCPS	1
514	5~8	Ward	Pulmonary	Storage Room	Storage Room	Pulmonary Function Testing Apparatus	1
515	5~8	Ward	Nephrology	Staff Station	Staff Station	Refrigerator	1
516	5~8	Ward	Nephrology	Storage Room	Storage Room	Urine Quality Measurement Device	1
517	5~8	Ward	Nephrology	Storage Room	Storage Room	Ultrasound Diagnos Apparatus, General	1
518	5~8	Ward	Neurology	Staff Station	Staff Station	Refrigerator	1
519	5~8	Ward	Neurology	Staff Station	Staff Station	X-ray Illuminator	1

520	5~8	Ward	Neurology	Storage Room	EEG	1
521	5~8	Ward	Endocrinology	Staff Station	Refrigerator	1
522	5~8	Ward	Endocrinology	Staff Station	X-ray Illuminator	1
523	5~8	Ward	Clinical Hematology	Staff Station	Refrigerator	1
524	5~8	Ward	Clinical Hematology	Aseptic Room	Refrigerator	1
525	5~8	Ward	Clinical Hematology	Staff Station	X-ray Illuminator	1
526	5~8	Ward	Tropical Disease	Staff Station	Refrigerator	1
527	5~8	Ward	Tropical Disease	Storage Room	Vaporizer	1
528	5~8	Ward	Tropical Disease	Isolation Room	Refrigerator	1
529	5~8	Ward	Tropical Disease	Isolation Room	Vaporizer	1
530	5~8	Ward	Tropical Disease	Staff Station	X-ray Illuminator	1
531	5~8	Ward	Orthopedics	Staff Station	Refrigerator	1
532	5~8	Ward	Orthopedics	Staff Station	X-ray Illuminator	1
533	5~8	Ward	Orthopedics	Cast Room	X-ray Illumination	1
534	5~8	Ward	Orthopedics	Cast Room	Examination Table	1
535	5~8	Ward	Orthopedics	Cast Room	Stretcher	1
536	5~8	Ward	Orthopedics	Cast Room	Gypsum Cutter	1
537	5~8	Ward	Orthopedics	Cast Room	Gypsum Plaster Table	1
538	5~8	Ward	Burn-Plastic Surgery	Staff Station	Refrigerator	1
539	5~8	Ward	Burn-Plastic Surgery	Staff Station	Freezer for ice	1
540	5	Ward	Pediatric	Staff Station	Freezer for ice	1
541	5	Ward	Pediatric	Staff Station	Defibrillator for Infant	1
542	5	Ward	Pediatric	Staff Station	X-ray Illuminator	1
543	5	Ward	Pediatric	Storage Room	Suction Unit, Pediatric	1
544	5	Ward	Pediatric	Storage Room	Ventilator, Pediatric	1
545	5	Ward	Obstetric Gynecologic	Ward	Refrigerator for Medicine	1
546	5	Ward	Obstetric Gynecologic	Staff Station	X-ray Illuminator	1
547	5	Ward	Obstetric Gynecologic	Anteroom	Examination Unit, Gynecology	1
548	5	Ward	Obstetric Gynecologic	Anteroom	Fetus Monitor	1

549	5	Ward	Obstetric Gynecologic	Anteroom	Labor Monitor	1
550	5	Ward	Obstetric Gynecologic	LDR Room	Delivery Table	1
551	5	Ward	Obstetric Gynecologic	LDR Room	Fetus Monitor	1
552	5	Ward	Obstetric Gynecologic	LDR Room	Labor Monitor	1
553	5	Ward	Obstetric Gynecologic	LDR Room	Refrigerator for Medicine	1
554	5	Ward	Obstetric Gynecologic	LDR Room	Shadowless Lamp	1
555	5	Ward	Obstetrics Gynecologic	LDR Room	Heating Humidifier	1
556	5	Ward	Obstetrics Gynecologic	LDR Room	Light Therapy Unit	1
557	5	Ward	Obstetric Gynecologic	Delivery Room	Delivery Table	1
558	5	Ward	Obstetrics Gynecologic	Delivery Room	Examination Unit, Gynecology	1
559	5	Ward	Obstetric Gynecologic	Delivery Room	Ultrasound Diagnostic, Transvaginal	1
560	5	Ward	Obstetric Gynecologic	Delivery Room	Ultrasound Diagnostic, Abdominal	1
561	5	Ward	Obstetric Gynecologic	Delivery Room	Fetus Monitor	1
562	5	Ward	Obstetric Gynecologic	Delivery Room	Labor Monitor	1
563	5	Ward	Obstetric Gynecologic	Delivery Room	Ultrasound Washer	1
564	5	Ward	Obstetric Gynecologic	Delivery Room	Aspirator for Obstetrics	1
565	5	Ward	Obstetric Gynecologic	Delivery Room	Refrigerator for Medicine	1
566	5	Ward	Obstetric Gynecologic	Delivery Room	Refrigerator for Blood	1
567	5	Ward	Obstetrics Gynecologic	Delivery Room	Ceiling Pendant (Shadowless Lamp)	1
568	5	Ward	Obstetrics Gynecologic	Delivery Room	Ceiling Pendant (Multi)	1
569	5	Ward	Obstetric Gynecologic	Delivery Room	Incubator	1
570	5	Ward	Obstetric Gynecologic	Delivery Room	Incubator for Conveyance	1
571	5	Ward	Obstetric Gynecologic	Delivery Room	Ventilation for Neonate	1
572	5	Ward	Obstetric Gynecologic	Delivery Room	Infant Warmer	1
573	5	Ward	Obstetrics Gynecologic	Delivery Room	Fetal Actocardiograph	1
574	5	Ward	Obstetrics Gynecologic	Delivery Room	Heating Humidifier	1
575	5	Ward	Obstetrics Gynecologic	Delivery Room	Light Therapy Unit	1
576	5~8	Ward	Otorhinolaryngology	Staff Station	Refrigerator	1
577	5~8	Ward	Otorhinolaryngology	Staff Station	X-ray Illuminator	1

578	5~8	Ward	Common	Storage Room	Syringe Pump	20
579	5~8	Ward	Common	Storage Room	Infusion Pump	10
580	5~8	Ward	Common	Sluce Room	Bedpan Washer	10
581	5~8	Ward	Common	Storage Room	Patient Monitor	5
582	5~8	Ward	Common	Staff Station	Defibrillator	5
583	5~8	Ward	Common	Staff Station	ECG	5
584	5~8	Ward	Common	Staff Station	Medical Telemeter	5
585	5~8	Ward	Common	Staff Station	Central Monitor	5
586	5~8	Ward	Common	Staff Station	Pulse Oximeter	5
587	5~8	Ward	Common	Storage Room	Suction Unit	5
588	5~8	Ward	Common	Storage Room	Ventilator	5
589	5~8	Ward	Common	Storage Room	Treatment Lamp	5
590	5~8	Ward	Common	Storage Room	X-ray, Portable	5
591	3	Operation	General	Day Surgery 1	Refrigerator for Medicine	1
592	3	Operation	General	Day Surgery 1	Refrigerator for Blood	1
593	3	Operation	General	Day Surgery 1	Patient Monitor	1
594	3	Operation	General	Day Surgery 1	Anesthesia Unit	1
595	3	Operation	General	Day Surgery 1	Ceiling Pendant (Multi)	1
596	3	Operation	General	Day Surgery 1	Ceiling Pendant (Shadowless Lamp)	1
597	3	Operation	General	Day Surgery 1	Surgical Table, electrical	1
598	3	Operation	General	Day Surgery 1	X-ray Illuminator	1
599	3	Operation	General	Day Surgery 1	Electrical Surgery Unit	1
600	3	Operation	General	Day Surgery 1	Syringe Pump	2
601	3	Operation	General	Day Surgery 1	Infusion Pump	1
602	3	Operation	General	Day Surgery 1	Anesthesia Unit	1
603	3	Operation	General	Day Surgery 1	Suction Unit	1
604	3	Operation	General	Day Surgery 2	Refrigerator for Medicine	1
605	3	Operation	General	Day Surgery 2	Refrigerator for Blood	1
606	3	Operation	General	Day Surgery 2	Patient Monitor	1



607	3	Operation	General	Day Surgery 2	Anesthesia Unit	1
608	3	Operation	General	Day Surgery 2	Ceiling Pendant (Multi)	1
609	3	Operation	General	Day Surgery 2	Ceiling Pendant (Shadowless Lamp)	1
610	3	Operation	General	Day Surgery 2	Surgical Table, electrical	1
611	3	Operation	General	Day Surgery 2	X-ray Illuminator	1
612	3	Operation	General	Day Surgery 2	Electrical Surgery Unit	1
613	3	Operation	General	Day Surgery 2	Syringe Pump	2
614	3	Operation	General	Day Surgery 2	Infusion Pump	1
615	3	Operation	General	Day Surgery 2	Anesthesia Unit	1
616	3	Operation	General	Day Surgery 2	Suction Unit	1
617	3	Operation	General	Day Surgery 3	Refrigerator for Medicine	1
618	3	Operation	General	Day Surgery 3	Refrigerator for Blood	1
619	3	Operation	General	Day Surgery 3	Patient Monitor	1
620	3	Operation	General	Day Surgery 3	Anesthesia Unit	1
621	3	Operation	General	Day Surgery 3	Ceiling Pendant (Multi)	1
622	3	Operation	General	Day Surgery 3	Ceiling Pendant (Shadowless Lamp)	1
623	3	Operation	General	Day Surgery 3	Surgical Table, electrical	1
624	3	Operation	General	Day Surgery 3	X-ray Illuminator	1
625	3	Operation	General	Day Surgery 3	Electrical Surgery Unit	1
626	3	Operation	General	Day Surgery 3	Syringe Pump	2
627	3	Operation	General	Day Surgery 3	Infusion Pump	1
628	3	Operation	General	Day Surgery 3	Anesthesia Unit	1
629	3	Operation	General	Day Surgery 3	Suction Unit	1
630	3	Operation	General	Day Surgery 4	Refrigerator for Medicine	1
631	3	Operation	General	Day Surgery 4	Refrigerator for Blood	1
632	3	Operation	General	Day Surgery 4	Patient Monitor	1
633	3	Operation	General	Day Surgery 4	Anesthesia Unit	1
634	3	Operation	General	Day Surgery 4	Ceiling Pendant (Multi)	1
635	3	Operation	General	Day Surgery 4	Ceiling Pendant (Shadowless Lamp)	1

636	3	Operation	General	Day Surgery 4	Day Surgery 4	Surgical Table, electrical	1
637	3	Operation	General	Day Surgery 4	Day Surgery 4	X-ray Illuminator	1
638	3	Operation	General	Day Surgery 4	Day Surgery 4	Electrical Surgery Unit	1
639	3	Operation	General	Day Surgery 4	Day Surgery 4	Syringe Pump	2
640	3	Operation	General	Day Surgery 4	Day Surgery 4	Infusion Pump	1
641	3	Operation	General	Day Surgery 4	Day Surgery 4	Anesthesia Unit	1
642	3	Operation	General	Day Surgery 4	Day Surgery 4	Suction Unit	1
643	3	Operation	Hybrid	Operation Theater 1	Operation Theater 1	Operative Blood Collection Machine	1
644	3	Operation	Hybrid	Operation Theater 1	Operation Theater 1	Refrigerator for Medicine	1
645	3	Operation	Hybrid	Operation Theater 1	Operation Theater 1	Refrigerator for Blood	1
646	3	Operation	Hybrid	Operation Theater 1	Operation Theater 1	Patient Monitor	1
647	3	Operation	Hybrid	Operation Theater 1	Operation Theater 1	Anesthesia Unit	1
648	3	Operation	Hybrid	Operation Theater 1	Operation Theater 1	Ceiling Pendant (Multi)	1
649	3	Operation	Hybrid	Operation Theater 1	Operation Theater 1	Ceiling Pendant (Shadowless Lamp)	1
650	3	Operation	Hybrid	Operation Theater 1	Operation Theater 1	Surgical Table, electrical	1
651	3	Operation	Hybrid	Operation Theater 1	Operation Theater 1	X-ray Illuminator	1
652	3	Operation	Hybrid	Operation Theater 1	Operation Theater 1	Electrical Surgery Unit	1
653	3	Operation	Hybrid	Operation Theater 1	Operation Theater 1	Syringe Pump	2
654	3	Operation	Hybrid	Operation Theater 1	Operation Theater 1	Infusion Pump	1
655	3	Operation	Hybrid	Operation Theater 1	Operation Theater 1	Anesthesia Unit	1
656	3	Operation	Hybrid	Operation Theater 1	Operation Theater 1	Suction Unit	1
657	3	Operation	Hybrid	Operation Theater 1	Operation Theater 1	Angiography System	1
658	3	Operation	Orthopedics	Operation Theater 8	Operation Theater 8	Operative Blood Collection Machine	1
659	3	Operation	Orthopedics	Operation Theater 8	Operation Theater 8	Refrigerator for Medicine	1
660	3	Operation	Orthopedics	Operation Theater 8	Operation Theater 8	Refrigerator for Blood	1
661	3	Operation	Orthopedics	Operation Theater 8	Operation Theater 8	Patient Monitor	1
662	3	Operation	Orthopedics	Operation Theater 8	Operation Theater 8	Anesthesia Unit	1
663	3	Operation	Orthopedics	Operation Theater 8	Operation Theater 8	Ceiling Pendant (Multi)	1
664	3	Operation	Orthopedics	Operation Theater 8	Operation Theater 8	Ceiling Pendant (Shadowless Lamp)	1

665	3	Operation	Orthopedics	Operation Theater 8	Operation Theater 8	Surgical Table, electrical	1
666	3	Operation	Orthopedics	Operation Theater 8	Operation Theater 8	X-ray Illuminator	1
667	3	Operation	Orthopedics	Operation Theater 8	Operation Theater 8	Electrical Surgery Unit	1
668	3	Operation	Orthopedics	Operation Theater 8	Operation Theater 8	Syringe Pump	2
669	3	Operation	Orthopedics	Operation Theater 8	Operation Theater 8	Infusion Pump	1
670	3	Operation	Orthopedics	Operation Theater 8	Operation Theater 8	Anesthesia Unit	1
671	3	Operation	Orthopedics	Operation Theater 8	Operation Theater 8	Suction Unit	1
672	3	Operation	Orthopedics	Operation Theater 8	Operation Theater 8	Arthroscope System	2
673	3	Operation	Orthopedics	Operation Theater 8	Operation Theater 8	External Fixation Device	1
674	3	Operation	Orthopedics	Operation Theater 8	Operation Theater 8	Lateral Fixation Unit	1
675	3	Operation	Orthopedics	Operation Theater 8	Operation Theater 8	Electric Bone Surgery Instrument	1
676	3	Operation	Orthopedics	Operation Theater 8	Operation Theater 8	Bone Surgery Instrument, Air	1
677	3	Operation	Cardiology	Operation Theater 2	Operation Theater 2	Ceiling Pendant (Shadowless Lamp)	1
678	3	Operation	Cardiology	Operation Theater 2	Operation Theater 2	Surgical Table, electrical	1
679	3	Operation	Cardiology	Operation Theater 2	Operation Theater 2	X-ray Illuminator	1
680	3	Operation	Cardiology	Operation Theater 2	Operation Theater 2	Electrical Surgery Unit	1
681	3	Operation	Cardiology	Operation Theater 2	Operation Theater 2	Syringe Pump	2
682	3	Operation	Cardiology	Operation Theater 2	Operation Theater 2	Infusion Pump	1
683	3	Operation	Cardiology	Operation Theater 2	Operation Theater 2	Anesthesia Unit	1
684	3	Operation	Cardiology	Operation Theater 2	Operation Theater 2	Suction Unit	1
685	3	Operation	Cardiology	Operation Theater 2	Operation Theater 2	Heart-lung Machine	1
686	3	Operation	Cardiology	Operation Theater 2	Operation Theater 2	Defibrillator	1
687	3	Operation	Cardiology	Operation Theater 2	Operation Theater 2	Automatic Blood Purification Device	1
688	3	Operation	Cardiology	Operation Theater 2	Operation Theater 2	Coagulation Analyzer	1
689	3	Operation	Cardiology	Operation Theater 2	Operation Theater 2	Supporting Endoscope, Microsurgery	1
690	3	Operation	Cardiology	Operation Theater 2	Operation Theater 2	Endoscope System, Abdominal and Thoracic Cavities	1
691	3	Operation	Cardiology	Operation Theater 2	Operation Theater 2	Operation Microscope for Thoracic	1
692	3	Operation	Cardiology	Operation Theater 2	Operation Theater 2	IABP	1
693	3	Operation	Pneumology	Operation Theater 3	Operation Theater 3	Operative Blood Collection Machine	1

694	3	Operation	Pneumology	Operation Theater 3	Operation Theater 3	Refrigerator for Medicine	1
695	3	Operation	Pneumology	Operation Theater 3	Operation Theater 3	Refrigerator for Blood	1
696	3	Operation	Pneumology	Operation Theater 3	Operation Theater 3	Patient Monitor	1
697	3	Operation	Pneumology	Operation Theater 3	Operation Theater 3	Anesthesia Unit	1
698	3	Operation	Pneumology	Operation Theater 3	Operation Theater 3	Ceiling Pendant (Multi)	1
699	3	Operation	Pneumology	Operation Theater 3	Operation Theater 3	Ceiling Pendant (Shadowless Lamp)	1
700	3	Operation	Pneumology	Operation Theater 3	Operation Theater 3	Surgical Table, electrical	1
701	3	Operation	Pneumology	Operation Theater 3	Operation Theater 3	X-ray Illuminator	1
702	3	Operation	Pneumology	Operation Theater 3	Operation Theater 3	Electrical Surgery Unit	1
703	3	Operation	Pneumology	Operation Theater 3	Operation Theater 3	Syringe Pump	2
704	3	Operation	Pneumology	Operation Theater 3	Operation Theater 3	Infusion Pump	1
705	3	Operation	Pneumology	Operation Theater 3	Operation Theater 3	Anesthesia Unit	1
706	3	Operation	Pneumology	Operation Theater 3	Operation Theater 3	Suction Unit	1
707	3	Operation	Pneumology	Operation Theater 3	Operation Theater 3	Bronchoscope System	1
708	3	Operation	Pneumology	Operation Theater 3	Operation Theater 3	Supporting Endoscope, Microsurgery	1
709	3	Operation	Pneumology	Operation Theater 3	Operation Theater 3	Endoscope System, Abdominal and Thoracic Cavities	1
710	3	Operation	Pneumology	Operation Theater 3	Operation Theater 3	Operation Microscope for Thoracic	1
711	3	Operation	Pneumology	Operation Theater 3	Operation Theater 3	Heart-lung Machine	1
712	3	Operation	Pneumology	Operation Theater 3	Operation Theater 3	IABP	1
713	3	Operation	Neurology	Operation Theater 5	Operation Theater 5	Refrigerator for Medicine	1
714	3	Operation	Neurology	Operation Theater 5	Operation Theater 5	Refrigerator for Blood	1
715	3	Operation	Neurology	Operation Theater 5	Operation Theater 5	Patient Monitor	1
716	3	Operation	Neurology	Operation Theater 5	Operation Theater 5	Anesthesia Unit	1
717	3	Operation	Neurology	Operation Theater 5	Operation Theater 5	Ceiling Pendant (Multi)	1
718	3	Operation	Neurology	Operation Theater 5	Operation Theater 5	Ceiling Pendant (Shadowless Lamp)	1
719	3	Operation	Neurology	Operation Theater 5	Operation Theater 5	Surgical Table, electrical	1
720	3	Operation	Neurology	Operation Theater 5	Operation Theater 5	X-ray Illuminator	1
721	3	Operation	Neurology	Operation Theater 5	Operation Theater 5	Electrical Surgery Unit	1
722	3	Operation	Neurology	Operation Theater 5	Operation Theater 5	Syringe Pump	2

723	3	Operation	Neurology	Operation Theater 5	Operation Theater 5	Infusion Pump	1
724	3	Operation	Neurology	Operation Theater 5	Operation Theater 5	Anesthesia Unit	1
725	3	Operation	Neurology	Operation Theater 5	Operation Theater 5	Suction Unit	1
726	3	Operation	Neurology	Operation Theater 5	Operation Theater 5	Operation Microscope for Neurosurgery	1
727	3	Operation	Neurology	Operation Theater 5	Operation Theater 5	Endoscope System, Neurosurgery	1
728	3	Operation	Neurology	Operation Theater 5	Operation Theater 5	Drill Set, Neurosurgery	1
729	3	Operation	Neurology	Operation Theater 5	Operation Theater 5	Nerve Function Test Unit	1
730	3	Operation	Hepatobiliary-Pancreatic Surgery	Operation Theater 7	Operation Theater 7	Operative Blood Collection Machine	1
731	3	Operation	Hepatobiliary-Pancreatic Surgery	Operation Theater 7	Operation Theater 7	Refrigerator for Medicine	1
732	3	Operation	Hepatobiliary-Pancreatic Surgery	Operation Theater 7	Operation Theater 7	Refrigerator for Blood	1
733	3	Operation	Hepatobiliary-Pancreatic Surgery	Operation Theater 7	Operation Theater 7	Patient Monitor	1
734	3	Operation	Hepatobiliary-Pancreatic Surgery	Operation Theater 7	Operation Theater 7	Anesthesia Unit	1
735	3	Operation	Hepatobiliary-Pancreatic Surgery	Operation Theater 7	Operation Theater 7	Ceiling Pendant (Multi)	1
736	3	Operation	Hepatobiliary-Pancreatic Surgery	Operation Theater 7	Operation Theater 7	Ceiling Pendant (Shadowless Lamp)	1
737	3	Operation	Hepatobiliary-Pancreatic Surgery	Operation Theater 7	Operation Theater 7	Surgical Table, electrical	1
738	3	Operation	Hepatobiliary-Pancreatic Surgery	Operation Theater 7	Operation Theater 7	X-ray Illuminator	1
739	3	Operation	Hepatobiliary-Pancreatic Surgery	Operation Theater 7	Operation Theater 7	Electrical Surgery Unit	1
740	3	Operation	Hepatobiliary-Pancreatic Surgery	Operation Theater 7	Operation Theater 7	Syringe Pump	2
741	3	Operation	Hepatobiliary-Pancreatic Surgery	Operation Theater 7	Operation Theater 7	Infusion Pump	1
742	3	Operation	Hepatobiliary-Pancreatic Surgery	Operation Theater 7	Operation Theater 7	Anesthesia Unit	1
743	3	Operation	Hepatobiliary-Pancreatic Surgery	Operation Theater 7	Operation Theater 7	Suction Unit	1
744	3	Operation	Hepatobiliary-Pancreatic Surgery	Operation Theater 7	Operation Theater 7	Laparoscope System	1
745	3	Operation	Hepatobiliary-Pancreatic Surgery	Operation Theater 7	Operation Theater 7	Endoscope System	1
746	3	Operation	Hepatobiliary-Pancreatic Surgery	Operation Theater 7	Operation Theater 7	Probe Set	1
747	3	Operation	Hepatobiliary-Pancreatic Surgery	Operation Theater 7	Operation Theater 7	Pneumoperitoneum Apparatus	1
748	3	Operation	Hepatobiliary-Pancreatic Surgery	Operation Theater 7	Operation Theater 7	Cryo Surgical Unit	1
749	3	Operation	Nephrology	Operation Theater 4	Operation Theater 4	Operative Blood Collection Machine	1
750	3	Operation	Nephrology	Operation Theater 4	Operation Theater 4	Refrigerator for Medicine	1
751	3	Operation	Nephrology	Operation Theater 4	Operation Theater 4	Refrigerator for Blood	1

752	3	Operation	Nephrology	Operation Theater 4	Operation Theater 4	Patient Monitor	1
753	3	Operation	Nephrology	Operation Theater 4	Operation Theater 4	Anesthesia Unit	1
754	3	Operation	Nephrology	Operation Theater 4	Operation Theater 4	Ceiling Pendant (Multi)	1
755	3	Operation	Nephrology	Operation Theater 4	Operation Theater 4	Ceiling Pendant (Shadowless Lamp)	1
756	3	Operation	Nephrology	Operation Theater 4	Operation Theater 4	Surgical Table, electrical	1
757	3	Operation	Nephrology	Operation Theater 4	Operation Theater 4	X-ray Illuminator	1
758	3	Operation	Nephrology	Operation Theater 4	Operation Theater 4	Electrical Surgery Unit	1
759	3	Operation	Nephrology	Operation Theater 4	Operation Theater 4	Syringe Pump	2
760	3	Operation	Nephrology	Operation Theater 4	Operation Theater 4	Infusion Pump	1
761	3	Operation	Nephrology	Operation Theater 4	Operation Theater 4	Anesthesia Unit	1
762	3	Operation	Nephrology	Operation Theater 4	Operation Theater 4	Suction Unit	1
763	3	Operation	Nephrology	Operation Theater 4	Operation Theater 4	Laparoscope System	1
764	3	Operation	Nephrology	Operation Theater 4	Operation Theater 4	Lithotripter System	1
765	3	Operation	Nephrology	Operation Theater 4	Operation Theater 4	Cryosurgery	1
766	3	Operation	Nephrology	Operation Theater 4	Operation Theater 4	Urethroscope	1
767	3	Operation	Nephrology	Operation Theater 4	Operation Theater 4	Urethrotomy Scope	1
768	3	Operation	Nephrology	Operation Theater 4	Operation Theater 4	Systoscope test set	1
769	3	Operation	Nephrology	Operation Theater 4	Operation Theater 4	Urine Quantity Measurement Device	1
770	3	Operation	Burn-Plastic Surgery	Operation Theater 9	Operation Theater 9	Operative Blood Collection Machine	1
771	3	Operation	Burn-Plastic Surgery	Operation Theater 9	Operation Theater 9	Refrigerator for Medicine	1
772	3	Operation	Burn-Plastic Surgery	Operation Theater 9	Operation Theater 9	Refrigerator for Blood	1
773	3	Operation	Burn-Plastic Surgery	Operation Theater 9	Operation Theater 9	Patient Monitor	1
774	3	Operation	Burn-Plastic Surgery	Operation Theater 9	Operation Theater 9	Anesthesia Unit	1
775	3	Operation	Burn-Plastic Surgery	Operation Theater 9	Operation Theater 9	Ceiling Pendant (Multi)	1
776	3	Operation	Burn-Plastic Surgery	Operation Theater 9	Operation Theater 9	Ceiling Pendant (Shadowless Lamp)	1
777	3	Operation	Burn-Plastic Surgery	Operation Theater 9	Operation Theater 9	Surgical Table, electrical	1
778	3	Operation	Burn-Plastic Surgery	Operation Theater 9	Operation Theater 9	X-ray Illuminator	1
779	3	Operation	Burn-Plastic Surgery	Operation Theater 9	Operation Theater 9	Electrical Surgery Unit	1
780	3	Operation	Burn-Plastic Surgery	Operation Theater 9	Operation Theater 9	Syringe Pump	2

781	3	Operation	Burn-Plastic Surgery	Operation Theater 9	Operation Theater 9	Infusion Pump	1
782	3	Operation	Burn-Plastic Surgery	Operation Theater 9	Operation Theater 9	Anesthesia Unit	1
783	3	Operation	Burn-Plastic Surgery	Operation Theater 9	Operation Theater 9	Suction Unit	1
784	3	Operation	Burn-Plastic Surgery	Operation Theater 9	Operation Theater 9	Dermatome Set	1
785	3	Operation	Burn-Plastic Surgery	Operation Theater 9	Operation Theater 9	CO2 Gas Lazer	1
786	3	Operation	Burn-Plastic Surgery	Operation Theater 9	Operation Theater 9	Yag Lazer	1
787	3	Operation	Oral Surgery	Operation Theater 11	Operation Theater 11	Operative Blood Collection Machine	1
788	3	Operation	Oral Surgery	Operation Theater 11	Operation Theater 11	Refrigerator for Medicine	1
789	3	Operation	Oral Surgery	Operation Theater 11	Operation Theater 11	Refrigerator for Blood	1
790	3	Operation	Oral Surgery	Operation Theater 11	Operation Theater 11	Patient Monitor	1
791	3	Operation	Oral Surgery	Operation Theater 11	Operation Theater 11	Anesthesia Unit	1
792	3	Operation	Oral Surgery	Operation Theater 11	Operation Theater 11	Ceiling Pendant (Multi)	1
793	3	Operation	Oral Surgery	Operation Theater 11	Operation Theater 11	Ceiling Pendant (Shadowless Lamp)	1
794	3	Operation	Oral Surgery	Operation Theater 11	Operation Theater 11	Surgical Table, electrical	1
795	3	Operation	Oral Surgery	Operation Theater 11	Operation Theater 11	X-ray Illuminator	1
796	3	Operation	Oral Surgery	Operation Theater 11	Operation Theater 11	Electrical Surgery Unit	1
797	3	Operation	Oral Surgery	Operation Theater 11	Operation Theater 11	Syringe Pump	2
798	3	Operation	Oral Surgery	Operation Theater 11	Operation Theater 11	Infusion Pump	1
799	3	Operation	Oral Surgery	Operation Theater 11	Operation Theater 11	Anesthesia Unit	1
800	3	Operation	Oral Surgery	Operation Theater 11	Operation Theater 11	Suction Unit	1
801	3	Operation	Oral Surgery	Operation Theater 11	Operation Theater 11	CO2 Gas Lazer	1
802	3	Operation	Oral Surgery	Operation Theater 11	Operation Theater 11	Oral Surgery Bone Surgical Drill System	1
803	3	Operation	Oral Surgery	Operation Theater 11	Operation Theater 11	Patient Monitor, Oral Surgery	1
804	3	Operation	Oral Surgery	Operation Theater 11	Operation Theater 11	Implant System	1
805	3	Operation	Oral Surgery	Operation Theater 11	Operation Theater 11	Jowbone Surgical System	1
806	3	Operation	Ophthalmology	Operation Theater 12	Operation Theater 12	Operative Blood Collection Machine	1
807	3	Operation	Ophthalmology	Operation Theater 12	Operation Theater 12	Refrigerator for Medicine	1
808	3	Operation	Ophthalmology	Operation Theater 12	Operation Theater 12	Refrigerator for Blood	1
809	3	Operation	Ophthalmology	Operation Theater 12	Operation Theater 12	Patient Monitor	1

810	3	Operation	Ophthalmology	Operation Theater 12	Anesthesia Unit	1
811	3	Operation	Ophthalmology	Operation Theater 12	Ceiling Pendant (Multi)	1
812	3	Operation	Ophthalmology	Operation Theater 12	Ceiling Pendant (Shadowless Lamp)	1
813	3	Operation	Ophthalmology	Operation Theater 12	Surgical Table, electrical	1
814	3	Operation	Ophthalmology	Operation Theater 12	X-ray Illuminator	1
815	3	Operation	Ophthalmology	Operation Theater 12	Electrical Surgery Unit	1
816	3	Operation	Ophthalmology	Operation Theater 12	Multi-color Laser Photocoagulation System	1
817	3	Operation	Ophthalmology	Operation Theater 12	Argon Dia Laser Photocoagulation System	1
818	3	Operation	Ophthalmology	Operation Theater 12	Green Laser Photocoagulation System	1
819	3	Operation	Ophthalmology	Operation Theater 12	Yag Laser	1
820	3	Operation	Ophthalmology	Operation Theater 12	Syringe Pump	2
821	3	Operation	Ophthalmology	Operation Theater 12	Infusion Pump	1
822	3	Operation	Ophthalmology	Operation Theater 12	Anesthesia Unit	1
823	3	Operation	Ophthalmology	Operation Theater 12	Suction Unit	1
824	3	Operation	Ophthalmology	Operation Theater 12	Operating Microscope, Ophthalmology	1
825	3	Operation	Ophthalmology	Operation Theater 12	Vituous Body Surgical Unit	1
826	3	Operation	Obstetrics Gynecologic	Operation Theater 13	Operative Blood Collection Machine	1
827	3	Operation	Obstetric Gynecologic	Operation Theater 13	Refrigerator for Medicine	1
828	3	Operation	Obstetric Gynecologic	Operation Theater 13	Refrigerator for Blood	1
829	3	Operation	Obstetric Gynecologic	Operation Theater 13	Patient Monitor	1
830	3	Operation	Obstetric Gynecologic	Operation Theater 13	Anesthesia Unit	1
831	3	Operation	Obstetrics Gynecologic	Operation Theater 13	Ceiling Pendant (Multi)	1
832	3	Operation	Obstetrics Gynecologic	Operation Theater 13	Ceiling Pendant (Shadowless Lamp)	1
833	3	Operation	Obstetric Gynecologic	Operation Theater 13	Surgical Table, electrical	1
834	3	Operation	Obstetric Gynecologic	Operation Theater 13	X-ray Illuminator	1
835	3	Operation	Obstetrics Gynecologic	Operation Theater 13	Electrical Surgery Unit	1
836	3	Operation	Obstetric Gynecologic	Operation Theater 13	Syringe Pump	2
837	3	Operation	Obstetric Gynecologic	Operation Theater 13	Infusion Pump	1
838	3	Operation	Obstetric Gynecologic	Operation Theater 13	Anesthesia Unit	1



839	3	Operation	Obstetric Gynecologic	Operation Theater 13	Operation Theater 13	Suction Unit	1
840	3	Operation	Obstetric Gynecologic	Operation Theater 13	Operation Theater 13	Laparoscopy System	1
841	3	Operation	Obstetric Gynecologic	Operation Theater 13	Operation Theater 13	Fetus Monitor	1
842	3	Operation	Obstetric Gynecologic	Operation Theater 13	Operation Theater 13	Labor Monitor	1
843	3	Operation	Obstetrics Gynecologic	Operation Theater 13	Operation Theater 13	Cryo Surgical Unit	1
844	3	Operation	General	Operation Theater 14 for Training 1	Operation Theater 14 for Training 1	Operative Blood Collection Machine	1
845	3	Operation	General	Operation Theater 14 for Training 1	Operation Theater 14 for Training 1	Refrigerator for Medicine	1
846	3	Operation	General	Operation Theater 14 for Training 1	Operation Theater 14 for Training 1	Refrigerator for Blood	1
847	3	Operation	General	Operation Theater 14 for Training 1	Operation Theater 14 for Training 1	Patient Monitor	1
848	3	Operation	General	Operation Theater 14 for Training 1	Operation Theater 14 for Training 1	Anesthesia Unit	1
849	3	Operation	General	Operation Theater 14 for Training 1	Operation Theater 14 for Training 1	Ceiling Pendant (Multi)	1
850	3	Operation	General	Operation Theater 14 for Training 1	Operation Theater 14 for Training 1	Ceiling Pendant (Shadowless Lamp)	1
851	3	Operation	General	Operation Theater 14 for Training 1	Operation Theater 14 for Training 1	Surgical Table, electrical	1
852	3	Operation	General	Operation Theater 14 for Training 1	Operation Theater 14 for Training 1	X-ray Illuminator	1
853	3	Operation	General	Operation Theater 14 for Training 1	Operation Theater 14 for Training 1	Electrical Surgery Unit	1
854	3	Operation	General	Operation Theater 14 for Training 1	Operation Theater 14 for Training 1	Syringe Pump	2
855	3	Operation	General	Operation Theater 14 for Training 1	Operation Theater 14 for Training 1	Infusion Pump	1
856	3	Operation	General	Operation Theater 14 for Training 1	Operation Theater 14 for Training 1	Anesthesia Unit	1
857	3	Operation	General	Operation Theater 14 for Training 1	Operation Theater 14 for Training 1	Suction Unit	1
858	3	Operation	General	Operation Theater 14 for Training 1	Operation Theater 14 for Training 1	Operative Blood Collection Machine	1
859	3	Operation	General	Operation Theater 14 for Training 1	Operation Theater 14 for Training 1	Refrigerator for Medicine	1
860	3	Operation	General	Operation Theater 14 for Training 1	Operation Theater 14 for Training 1	Refrigerator for Blood	1
861	3	Operation	General	Operation Theater 14 for Training 1	Operation Theater 14 for Training 1	Patient Monitor	1
862	3	Operation	General	Operation Theater 14 for Training 1	Operation Theater 14 for Training 1	Anesthesia Unit	1
863	3	Operation	General	Operation Theater 14 for Training 1	Operation Theater 14 for Training 1	Ceiling Pendant (Multi)	1
864	3	Operation	General	Operation Theater 14 for Training 1	Operation Theater 14 for Training 1	Ceiling Pendant (Shadowless Lamp)	1
865	3	Operation	General	Operation Theater 14 for Training 1	Operation Theater 14 for Training 1	Surgical Table, electrical	1
866	3	Operation	General	Operation Theater 14 for Training 1	Operation Theater 14 for Training 1	X-ray Illuminator	1
867	3	Operation	General	Operation Theater 14 for Training 1	Operation Theater 14 for Training 1	Electrical Surgery Unit	1

868	3	Operation	General	Operation Theater 14 for Training 1	Syringe Pump	2
869	3	Operation	General	Operation Theater 14 for Training 1	Infusion Pump	1
870	3	Operation	General	Operation Theater 14 for Training 1	Anesthesia Unit	1
871	3	Operation	General	Operation Theater 14 for Training 1	Suction Unit	1
872	3	Operation	General	Operation Theater 15	Operative Blood Collection Machine	1
873	3	Operation	General	Operation Theater 15	Refrigerator for Medicine	1
874	3	Operation	General	Operation Theater 15	Refrigerator for Blood	1
875	3	Operation	General	Operation Theater 15	Patient Monitor	1
876	3	Operation	General	Operation Theater 15	Anesthesia Unit	1
877	3	Operation	General	Operation Theater 15	Ceiling Pendant (Multi)	1
878	3	Operation	General	Operation Theater 15	Ceiling Pendant (Shadowless Lamp)	1
879	3	Operation	General	Operation Theater 15	Surgical Table, electrical	1
880	3	Operation	General	Operation Theater 15	X-ray Illuminator	1
881	3	Operation	General	Operation Theater 15	Electrical Surgery Unit	1
882	3	Operation	General	Operation Theater 15	Syringe Pump	2
883	3	Operation	General	Operation Theater 15	Infusion Pump	1
884	3	Operation	General	Operation Theater 15	Anesthesia Unit	1
885	3	Operation	General	Operation Theater 15	Suction Unit	1
886	3	Operation	General	Operation Theater 16	Operative Blood Collection Machine	1
887	3	Operation	General	Operation Theater 16	Refrigerator for Medicine	1
888	3	Operation	General	Operation Theater 16	Refrigerator for Blood	1
889	3	Operation	General	Operation Theater 16	Patient Monitor	1
890	3	Operation	General	Operation Theater 16	Anesthesia Unit	1
891	3	Operation	General	Operation Theater 16	Ceiling Pendant (Multi)	1
892	3	Operation	General	Operation Theater 16	Ceiling Pendant (Shadowless Lamp)	1
893	3	Operation	General	Operation Theater 16	Surgical Table, electrical	1
894	3	Operation	General	Operation Theater 16	X-ray Illuminator	1
895	3	Operation	General	Operation Theater 16	Electrical Surgery Unit	1
896	3	Operation	General	Operation Theater 16	Syringe Pump	2

897	3	Operation	General	Operation Theater 16	Infusion Pump	1
898	3	Operation	General	Operation Theater 16	Anesthesia Unit	1
899	3	Operation	General	Operation Theater 16	Suction Unit	1
900	3	Operation	Common Space	Storage	Patient Monitor	2
901	3	Operation	Common Space	Storage	Anesthesia Unit	2
902	3	Operation	Common Space	Storage	Syringe Pump	6
903	3	Operation	Common Space	Storage	Infusion Pump	2
904	3	Operation	Common Space	Storage	Anesthesia Unit	2
905	3	Operation	Common Space	Storage	Suction Unit	6
906	3	Operation	Common Space	Storage	Electrical Surgery Unit	2
907	3	Operation	Common Space	Storage	Lazer Surgery Unit	2
908	3	Operation	Common Space	Storage	Ultrasound Surgery Unit	2
909	3	Operation	Common Space	Storage	Body Temperature Control System	6
910	3	Operation	Common Space	Storage	Ultrasonic Blood Flowmeter	10
911	3	Operation	Common Space	Storage, X-ray	Portable X-Ray	2
912	3	Operation	Common Space	Storage, X-ray	X-TV Unit, Mobile	2
913	3	Operation	Common Space	Storage	Patient Warmer	10
914	3	Operation	Common Space	Storage	Irrigation System	2
915	3	Operation	Common Space	Storage	Hemostatic Instrument	10
916	3	Operation	Common Space	Storage	Medical Photography System	2
917	3	Operation	Common Space	Storage	AV-Impulse System	2
918	3	Operation	Common Space	Storage	Shaver System	2
919	3	Operation	Common Space	Storage	Retractor Supporting Unit	6
920	3	Operation	Common Space	Storage	Head Light	20
921	3	Operation	Common Space	Storage	Supporting Endoscope, Microsurgery	2
922	3	Operation	Common Space	Storage	Endoscope System	2
923	3	Operation	Common Space	Storage	Probe Set	2
924	3	Operation	Common Space	Storage	Heart-lung Machine	2
925	3	Operation	Common Space	Storage	IABP	2

926	3	Operation	Common Space	Corridor	Corridor	Defibrillator	2
927	3	Operation	Common Space	Corridor	Corridor	Hand Wash Unit	8
928	3	Operation	Common Space	Corridor	Corridor	Refrigerator for Medicine	2
929	3	Operation	Common Space	Corridor	Corridor	Refrigerator for Blood	2
930	3	Operation	Common Space	Corridor	Corridor	Freezer for Medicine	2
931	3	Operation	Common Space	Corridor	Corridor	Deep Freezer for Medicine	2
932	3	Operation	Common Space	Corridor	Corridor	Stretcher	4
933	3	Operation	Common Space	Corridor	Corridor	Patient Transfer Unit	2
934	3	Operation	Common Space	Stat Laboratory	Stat Laboratory	Blood Gas Analyzer	1
935	3	Operation	Common Space	Stat Laboratory	Stat Laboratory	Electrolyte Analyzer	1
936	3	Operation	Common Space	Stat Laboratory	Stat Laboratory	Label Sealer	1
937	3	Operation	Common Space	Stat Laboratory	Stat Laboratory	Refrigerator for Medicine	1
938	3	Operation	Common Space	Stat Laboratory	Stat Laboratory	Refrigerator for Blood	1
939	3	Operation	Common Space	Stat Laboratory	Stat Laboratory	Freezer for Medicine	1
940	3	Operation	Common Space	Stat Laboratory	Stat Laboratory	Deep Freezer for Medicine	1
941	3	Operation	Common Space	Staff Station	Staff Station	Central Monitor	2
942	3	Operation	Common Space	Conference Room	Conference Room	X-Ray Illuminator	2
943	3	Operation	Common Space	Preparation Room	Preparation Room	Low Temperature Plasma Sterilizer	1
944	3	Operation	Common Space	Preparation Room	Preparation Room	Autoclave	4
945	3	Operation	Common Space	Preparation Room	Preparation Room	Washer Sterilizer	1
946	3	Operation	Common Space	Preparation Room	Preparation Room	Dryer	1
947	3	Operation	Common Space	Recovery Room	Recovery Room	ICU Bed	4
948	3	Operation	Common Space	Recovery Room	Recovery Room	Patient Monitor	4
949	3	Operation	Common Space	Recovery Room	Recovery Room	Syringe Pump	8
950	3	Operation	Common Space	Recovery Room	Recovery Room	Infusion Pump	4
951	3	Operation	Common Space	Recovery Room	Recovery Room	Ventilator	4
952	3	Operation	Common Space	Recovery Room	Recovery Room	Suction Unit	4
953	1	Radiology	Radiological Image	MRI 1	MRI 1	MRI 1.5T	1
954	1	Radiology	Radiological Image	MRI 2	MRI 2	MRI 3.0T	1

955	1	Radiology	Radiological Image	MRI 2	Auto Injector	1
956	1	Radiology	Radiological Image	MRI operation room	Dry Imager	1
957	1	Radiology	Radiological Image	MRI operation room	Incubator for contrast medium	1
958	1	Radiology	Radiological Image	MRI operation room	Dry Imager	1
959	1	Radiology	Radiological Image	MRI operation room	Incubator for contrast medium	1
960	1	Radiology	Radiological Image	CT 1	CT Scanner, 64 Slices	1
961	1	Radiology	Radiological Image	CT 1	Auto Injector	1
962	1	Radiology	Radiological Image	CT 1	Suction Unit	1
963	1	Radiology	Radiological Image	CT 1	Medical Refrigerator	1
964	1	Radiology	Radiological Image	CT 1 operation room	Dry Imager	1
965	1	Radiology	Radiological Image	CT 1 operation room	Incubator for contrast medium	1
966	1	Radiology	Radiological Image	CT 2	CT Scanner, 64 Slices	1
967	1	Radiology	Radiological Image	CT 2	Auto Injector	1
968	1	Radiology	Radiological Image	CT 2	Suction Unit	1
969	1	Radiology	Radiological Image	CT 2	Medical Refrigerator	1
970	1	Radiology	Radiological Image	CT 2 operation room	Dry Imager	1
971	1	Radiology	Radiological Image	CT 2 operation room	Incubator for contrast medium	1
972	1	Radiology	Radiological Image	CT 3	CT Scanner, 320 rows, 640 Slices	1
973	1	Radiology	Radiological Image	CT 3	Auto Injector	1
974	1	Radiology	Radiological Image	CT 3	Suction Unit	1
975	1	Radiology	Radiological Image	CT 3	Medical Refrigerator	1
976	1	Radiology	Radiological Image	CT 3 operation room	Dry Imager	1
977	1	Radiology	Radiological Image	CT 3 operation room	Incubator for contrast medium	1
978	1	Radiology	Radiological Image	CT 4	CT Scanner, 64 Slices	1
979	1	Radiology	Radiological Image	CT 4	Auto Injector	1
980	1	Radiology	Radiological Image	CT 4	Suction Unit	1
981	1	Radiology	Radiological Image	CT 4	Medical Refrigerator	1
982	1	Radiology	Radiological Image	CT 4 operation room	Dry Imager	1
983	1	Radiology	Radiological Image	CT 4 operation room	Incubator for contrast medium	1

984	1	Radiology	Radiological Image	X-ray 2	X-ray, Abdominal	5
985	1	Radiology	Radiological Image	X-ray 2	Patient monitor	1
986	1	Radiology	Radiological Image	X-ray operation room	X-ray Film Processor	5
987	1	Radiology	Radiological Image	X-ray operation room	Computed Radiology Reader	5
988	1	Radiology	Radiological Image	X-ray operation room	X-ray Illuminator	5
989	1	Radiology	Radiological Image	Mammography	Mammography	1
990	1	Radiology	Radiological Image	Bone densitometry	Bone Densitometer	1
991	1	Radiology	Cardiology	DSA	Digital Subtraction Angiography System, bi-plane	2
992	1	Radiology	Cardiology	DSA	Auto Injector	2
993	1	Radiology	Cardiology	DSA	Patient monitor	2
994	1	Radiology	Cardiology	Cardia Catheter room	Digital Subtraction Angiography System, single-plane	2
995	1	Radiology	Cardiology	Cardia Catheter room	Auto Injector	2
996	1	Radiology	Cardiology	Cardia Catheter room	Ventilator, Portable	1
997	1	Radiology	Cardiology	Cardia Catheter room	Ultrasound Diagnostic System, for Heart	1
998	1	Radiology	Cardiology	Cardia Catheter room	Defibrillator	1
999	1	Radiology	Cardiology	Cardia Catheter room	Patient Monitor	1
1000	1	Radiology	Cardiology	Cardia Catheter room	Cardiac Ablation System	1
1001	1	Radiology	Cardiology	Cardia Catheter room	Intravascular Pressure Measurement System	1
1002	1	Radiology	Cardiology	Cardia Catheter room	Cardiac Electro Stimulator	1
1003	1	Radiology	Cardiology	Cardia Catheter room	General Anesthetic Apparatus	1
1004	1	Radiology	Cardiology	Cardia Catheter room	Shadowless Lamp, Ceiling type	1
1005	1	Radiology	Cardiology	Cardia Catheter room	Ceiling Pendant for VAC	1
1006	1	Radiology	Cardiology	Cardia Catheter room	Percutaneous Cardiopulmonary Support System (PCPS)	1
1007	1	Radiology	Cardiology	Cardia Catheter room	IABP	1
1008	1	Radiology	Cardiology	Cardia Catheter room	Pacemaker	1
1009	1	Radiology	Cardiology	Cervical Catheter Room	Digital Subtraction Angiography System, bi-plane	1
1010	1	Radiology	Cardiology	Cervical Catheter Room	Auto Injector	1
1011	1	Radiology	Cardiology	Cervical Catheter Room	Ventilator, Portable	1
1012	1	Radiology	Cardiology	Cervical Catheter Room	Ultrasound Diagnostic System	1

1013	1	Radiology	Cardiology	Cervical Catheter Room	Cervical Catheter Room	Defibrillator	1
1014	1	Radiology	Cardiology	Cervical Catheter Room	Cervical Catheter Room	Patient monitor	1
1015	1	Radiology	Cardiology	Cervical Catheter Room	Cervical Catheter Room	Cerebral Blood Flow Measurement System	1
1016	1	Radiology	Cardiology	Cervical Catheter Room	Cervical Catheter Room	General Anesthetic Apparatus	1
1017	1	Radiology	Cardiology	Cervical Catheter Room	Cervical Catheter Room	Shadowless Lamp, ceiling type	1
1018	1	Radiology	Cardiology	Cervical Catheter Room	Cervical Catheter Room	Ceiling Pendant for VAC	1
1019	1	Radiology	Oncology	Hyperthermia	Hyperthermia	Hyperthermia	1
1020	1	Radiology	Oncology	CT scanner	CT scanner	CT Scanner, 32 Slices	1
1021	1	Radiology	Oncology	CT scanner	CT scanner	Auto Injector	1
1022	1	Radiology	Oncology	CT Operation	CT Operation	Radiotherapy Simulator	1
1023	1	Radiology	Oncology	CT Operation	CT Operation	X-ray Illuminator	1
1024	1	Radiology	Oncology	CT Operation	CT Operation	X-ray Film Processor	1
1025	1	Radiology	Oncology	CT Operation	CT Operation	Computed Radiography Reader	1
1026	1	Radiology	Oncology	LINAC	LINAC	LINAC (Linear Accelerator)	4
1027	1	Radiology	Oncology	LINAC	LINAC	Endoscopy Sytem	1
1028	1	Radiology	Oncology	LINAC Preparation	LINAC Preparation	Dosimeter	1
1029	1	Radiology	Oncology	dyagnostic Planning	dyagnostic Planning	Dosimeter	1
1030	1	Radiology	Oncology	Recovery	Recovery	Patient monitor	1
1031	1	Radiology	Oncology	Dygnostic Room	Dygnostic Room	Radiotherapy Unit (High Dose rate Brachithery,24 channel)	1
1032	1	Radiology	Oncology	Dygnostic Room	Dygnostic Room	Shadowless Lamp, Portable	1
1033	1	Radiology	Oncology	Dygnostic Room	Dygnostic Room	Dosimeter	1
1034	1	Radiology	Oncology	Gamma Knife	Gamma Knife	Gamma Knife	1
1035	1	Radiology	Oncology	Gamma Knife	Gamma Knife	X-ray Illuminator	1
1036	1	Radiology	Oncology	Gamma Knife	Gamma Knife	Stretcher	1
1037	1	Radiology	Nuclear Medicine	ESWL	ESWL	ESWL Litotriptor	1
1038	1	Radiology	Nuclear Medicine	SPECT-CT	SPECT-CT	SPECT-CT	1
1039	1	Radiology	Nuclear Medicine	SPECT-CT	SPECT-CT	Auto Injector	1
1040	1	Radiology	Nuclear Medicine	SPECT-CT Preparation	SPECT-CT Preparation	Sr89 Dispensing Unit	1
1041	1	Radiology	Nuclear Medicine	SPECT-CT Preparation	SPECT-CT Preparation	Gamma Meter	1

1042	1	Radiology	Nuclear Medicine	SPECT-CT Preparation	Dose Calibrator	1
1043	1	Radiology	Nuclear Medicine	SPECT-CT Preparation	RI Lab System Unit	1
1044	1	Radiology	Nuclear Medicine	SPECT-CT Preparation	Treatment Table	1
1045	1	Radiology	Nuclear Medicine	SPECT-CT Preparation	Thyroidal scintillation scanner	1
1046	1	Radiology	Nuclear Medicine	SPECT-CT Preparation	Thyroidal absorber	1
1047	1	Radiology	Nuclear Medicine	SPECT-CT Preparation	Microscope with Monitor	1
1048	1	Radiology	Nuclear Medicine	SPECT-CT Preparation	Incubator	1
1049	1	Radiology	Nuclear Medicine	SPECT-CT Preparation	Clean Bench	1
1050	1	Radiology	Nuclear Medicine	SPECT-CT Preparation	X-ray Illuminator	1
1051	1	Radiology	Nuclear Medicine	RI testing Room	Gamma Camera	1
1052	1	Radiology	Nuclear Medicine	RI testing Room	Auto Injector	1
1053	1	Radiology	Nuclear Medicine	RI testing Room	Ergometer	1
1054	1	Radiology	Nuclear Medicine	RI testing Room	ECG	1
1055	1	Radiology	Nuclear Medicine	RI testing Room	Defibrillator	1
1056	1	Radiology	Nuclear Medicine	PET-CT room	PET-CT	1
1057	1	Radiology	Nuclear Medicine	PET-CT preparation	Dose Calibrator	1
1058	1	Radiology	Nuclear Medicine	RI Storage	RI Fireproof-related lead storehouse	1
1059	1	Radiology	Nuclear Medicine	RI Storage	Cleance Monitor	1
1060	1	Radiology	Nuclear Medicine	RI Storage	Gas Monitor	1
1061	1	Radiology	Nuclear Medicine	RI Storage	Safety Filler Unit	1
1062	1	Radiology	Nuclear Medicine	RI Storage	Drain Unit	1
1063	1	Radiology	Nuclear Medicine	RI Storage	Storage Unit, Floor type and RI Drain Control Panel	1
1064	1	Radiology	Nuclear Medicine	Dirty room	Hand Foot Cloth	1
1065	1	Radiology	Nuclear Medicine	Dirty room	Auto Feeder	1
1066	1	Radiology	Nuclear Medicine	In-vitro Measurement	Treadmil	1
1067	1	Radiology	Nuclear Medicine	In-vitro Measurement	Exercise Unit, for Myocardium	1
1068	1	Radiology	Nuclear Medicine	RI control room	Personal Exposure Management System	1
1069	1	Radiology	Nuclear Medicine	RI control room	Nuclear Medicine Supporting system	1
1070	1	Radiology	Nuclear Medicine	RI control room	RI Monitoring System	1



1071	1	Radiology	Nuclear Medicine	RI control room	RI control room	Erea Monitor	1
1072	1	Radiology	Nuclear Medicine	RI preparation	RI preparation	Clean Bench	1
1073	1	Radiology	Nuclear Medicine	RI preparation	RI preparation	Refrigelator	1
1074	1	Radiology	Nuclear Medicine	RI preparation	RI preparation	RI Fire resistance Lead Storage	1
1075	1	Radiology	Nuclear Medicine	RI preparation	RI preparation	Usotope Claribration Unit	1
1076	1	Radiology	Nuclear Medicine	RI preparation	RI preparation	Capsule Maker	1
1077	1	Radiology	Nuclear Medicine	RI preparation	RI preparation	Treatment Table	1
1078	1	Radiology	Nuclear Medicine	RI Laboratory	RI Laboratory	X-ray Illuminator	1
1079	1	Radiology	Nuclear Medicine	RI Laboratory	RI Laboratory	Radioimmunoassay	1
1080	1	Radiology	Nuclear Medicine	RI Laboratory	RI Laboratory	Voltex	1
1081	1	Radiology	Nuclear Medicine	RI Laboratory	RI Laboratory	Hotplate	1
1082	1	Radiology	Nuclear Medicine	RI Laboratory	RI Laboratory	Centrifuge	1
1083	1	Radiology	Nuclear Medicine	RI Laboratory	RI Laboratory	Refrigelator	1
1084	1	Radiology	Nuclear Medicine	RI Laboratory	RI Laboratory	Dosimeter	1
1085	2	Radiology	Chemotherapy	Chemotherapy Room	Chemotherapy Room	X-ray Illumination	1
1086	2	Radiology	Chemotherapy	Chemotherapy Room	Chemotherapy Room	Stretcher	1
1087	2	Radiology	Chemotherapy	Chemotherapy Room	Chemotherapy Room	Treatment Table, Chemotherapy	25
1088	2	Radiology	Chemotherapy	Chemotherapy Room	Chemotherapy Room	Safety Cabinet	1
1089	2	Radiology	Chemotherapy	Chemotherapy Room	Chemotherapy Room	Refrigerator for Medicine	4
1090	2	Radiology	Chemotherapy	Chemotherapy Room	Chemotherapy Room	Refrigerator for Blood	4
1091	2	Radiology	Chemotherapy	Chemotherapy Room	Chemotherapy Room	Blood Pressure Pulse Wave Inspection Apparatus	1
1092	2	Radiology	Chemotherapy	Chemotherapy Room	Chemotherapy Room	Laser Rheometer	1
1093	2	Radiology	Chemotherapy	Staff Station	Staff Station	ECG	1
1094	2	Radiology	Chemotherapy	Chemotherapy Room	Chemotherapy Room	Automated Sphygmomanometer	1
1095	2	Radiology	Chemotherapy	Chemotherapy Room	Chemotherapy Room	Syringe Pump	2
1096	2	Radiology	Chemotherapy	Staff Station	Staff Station	Medical Telemeter	1
1097	2	Radiology	Chemotherapy	Staff Station	Staff Station	Central Monitor	1
1098	2	Radiology	Chemotherapy	Chemotherapy Room	Chemotherapy Room	Infusion Pump	1
1099	2	Radiology	Chemotherapy	Chemotherapy Room	Chemotherapy Room	Patient Monitor	1

1100	2	Radiology	Chemotherapy	Staff Station	X-ray Illuminator	1
1101	2	Radiology	Chemotherapy	Chemotherapy Room	Ventilator	1
1102	2	Radiology	Chemotherapy	Staff Station	Pulse Oximeter	1
1103	2	Radiology	Chemotherapy	Preparation Room	Suction Unit	1
1104	2	Radiology	Chemotherapy	Preparation Room	Ventilator	1
1105	2	Radiology	Chemotherapy	Chemotherapy Room	Defibrillator	1
1106	2	Radiology	Chemotherapy	Preparation Room	Treatment Lamp	1
1107	2	Radiology	Chemotherapy	Chemotherapy Room	Suction Unit	1
1108	2	Radiology	Chemotherapy	Chemotherapy Room	Shadowless Lamp, Portable	1
1109	2	Radiology	Chemotherapy	Chemotherapy Room	Ceiling Pendant (Shadowless Lamp)	1
1110	2	Radiology	Chemotherapy	Chemotherapy Room	Ceiling Pendant (Multi)	1
1111	2	Radiology	Chemotherapy	Chemotherapy Room	Pulse Oximeter	1
1112	2	Radiology	Chemotherapy	Examination Room	X-ray Illumination	1
1113	2	Radiology	Chemotherapy	Examination Room	Examination Table	1
1114	2	Radiology	Chemotherapy	Examination Room	Refrigerator for Medicine	1
1115	2	Clinical Test	Physiology	Preparation Room	Respiratory Examination Unit	1
1116	2	Clinical Test	Physiology	Pulmonary Function Room	Pulmonary Function Examination System	1
1117	2	Clinical Test	Physiology	ECG Room	ECG	1
1118	2	Clinical Test	Physiology	ECG Room	Blood Pressure and Pulse Examination Unit	1
1119	2	Clinical Test	Physiology	ECG Room	ECG Analyzer	1
1120	2	Clinical Test	Physiology	ECG Room	Blood Pressure Monitor System, 24h	1
1121	2	Clinical Test	Physiology	ECG Room	ECG Recorder	1
1122	2	Clinical Test	Physiology	ECG Room	Treatment Table	1
1123	2	Clinical Test	Physiology	Treadmill Room	ECG	1
1124	2	Clinical Test	Physiology	Treadmill Room	Aerobike	1
1125	2	Clinical Test	Physiology	Treadmill Room	Tred Mill	1
1126	2	Clinical Test	Physiology	Treadmill Room	Stress Test System	1
1127	2	Clinical Test	Physiology	Treadmill Room	Tred Mill Exercise ECG set	1
1128	2	Clinical Test	Physiology	Treadmill Room	Defibrillator	1

1129	2	Clinical Test	Physiology	Treadmill Room	Pulse Oximeter	1
1130	2	Clinical Test	Physiology	Treadmill Room	Examination Table	1
1131	2	Clinical Test	Physiology	Treadmill Room	Arteriosclerosis Examination Apparatus	1
1132	2	Clinical Test	Physiology	Cardiac Echo Room	Ultrasound Diagnosis System, General	1
1133	2	Clinical Test	Physiology	Cardiac Echo Room	Ultrasound Diagnosis System, Cardiology	1
1134	2	Clinical Test	Physiology	Cardiac Echo Room	Examination Table	1
1135	2	Clinical Test	Physiology	Abdominal Echo Room	Ultrasound Diagnosis System, General	1
1136	2	Clinical Test	Physiology	Abdominal Echo Room	Examination Table	1
1137	2	Clinical Test	Physiology	EEG Room	EEG	1
1138	2	Clinical Test	Physiology	EEG Room	Blood Pressure and Pulse Examination Unit	1
1139	2	Clinical Test	Physiology	EEG Room	EMG	1
1140	2	Clinical Test	Physiology	EEG Room	Neurofunction Examination Unit	1
1141	2	Clinical Test	Physiology	EEG Room	Intravascular Diagnostic Device	1
1142	2	Clinical Test	Physiology	EEG Room	Magnetic Stimulator	1
1143	2	Clinical Test	Physiology	EEG Room	Treatment Table	1
1144	2	Clinical Test	Physiology	EMG Room	EMG	1
1145	2	Clinical Test	Physiology	Physiology Examination Room	Medical Thermography	1
1146	2	Clinical Test	Physiology	Physiology Examination Room	Holter ECG analyzer	1
1147	2	Clinical Test	Physiology	Physiology Examination Room	EEG Analyzer	1
1148	2	Clinical Test	Physiology	Physiology Examination Room	EEG	1
1149	2	Clinical Test	Physiology	Physiology Examination Room	Patient Monitor	1
1150	2	Clinical Test	Physiology	Physiology Examination Room	Digital Holter Recorder	1
1151	2	Clinical Test	Physiology	Physiology Examination Room	Polysomnograph System	1
1152	2	Clinical Test	Physiology	Physiology Examination Room	Nose Air Flow	1
1153	2	Clinical Test	Physiology	Physiology Examination Room	Blood Pressure Analyzer, 24h	1
1154	2	Clinical Test	Physiology	Physiology Examination Room	ABI Folm	1
1155	2	Clinical Test	Physiology	Physiology Examination Room	EMG	1
1156	2	Clinical Test	Physiology	Physiology Examination Room	Respiratory Resistance Measurement	1
1157	2	Clinical Test	Physiology	Physiology Examination Room	ECG	1

1158	2	Clinical Test	Physiology	Physiology Examination Room	Physiology Examination Room	Diagnostic Ultrasound Imaging System	1
1159	2	Clinical Test	Physiology	Physiology Examination Room	Physiology Examination Room	Evoked Potential Measurement System	1
1160	2	Clinical Test	Physiology	Physiology Examination Room	Physiology Examination Room	Auto Spirometer	1
1161	2	Clinical Test	Physiology	Physiology Examination Room	Physiology Examination Room	Respiratory Function Total Analyzer System	1
1162	2	Clinical Test	Physiology	Physiology Examination Room	Physiology Examination Room	Doppler Blood Flow Measurement	1
1163	2	Clinical Test	Physiology	ME Storage	ME Storage	Ultrasound Diagnosis System	1
1164	2	Clinical Test	Physiology	ME Storage	ME Storage	ECG	1
1165	2	Clinical Test	Physiology	ME Storage	ME Storage	Nystagmograph	1
1166	2	Clinical Test	Physiology	ME Storage	ME Storage	Polysomnograph System	1
1167	2	Clinical Test	Physiology	ME Storage	ME Storage	Electrocardiograph Blood Pressure	1
1168	2	Clinical Test	Physiology	ME Storage	ME Storage	Patient Monitor 24 hours	1
1169	2	Clinical Laboratory	Biochemistry	Central Examination Room	Central Examination Room	Blood Collection, Urine Collection Supporting System	1
1170	2	Clinical Laboratory	Biochemistry	Central Examination Room	Central Examination Room	Water Purification System	1
1171	2	Clinical Laboratory	Biochemistry	Central Examination Room	Central Examination Room	Multi Automatic Analyzer	1
1172	2	Clinical Laboratory	Biochemistry	Central Examination Room	Central Examination Room	Full Automatic pH / Blood Gas / Electrolyte Gullucose Hematoerit / CO Oximeter Analyzer	1
1173	2	Clinical Laboratory	Biochemistry	Central Examination Room	Central Examination Room	Sample Pretreatment Pipetting Device	1
1174	2	Clinical Laboratory	Biochemistry	Central Examination Room	Central Examination Room	Chemistry Analyzer	1
1175	2	Clinical Laboratory	Biochemistry	Central Examination Room	Central Examination Room	Semi-automatic Immunology System	1
1176	2	Clinical Laboratory	Biochemistry	Central Examination Room	Central Examination Room	Optical Microscope	1
1177	2	Clinical Laboratory	Biochemistry	Central Examination Room	Central Examination Room	ELISA Chemiluminescence Analyzer	1
1178	2	Clinical Laboratory	Biochemistry	Central Examination Room	Central Examination Room	Cytokine	1
1179	2	Clinical Laboratory	Biochemistry	Central Examination Room	Central Examination Room	Centrifuge, high-speed	1
1180	2	Clinical Laboratory	Biochemistry	Central Examination Room	Central Examination Room	Centrifuge, cooling	1
1181	2	Clinical Laboratory	Biochemistry	Central Examination Room	Central Examination Room	Tumor marker	1
1182	2	Clinical Laboratory	Biochemistry	Central Examination Room	Central Examination Room	Refrigerator for medicine	1
1183	2	Clinical Laboratory	Biochemistry	Central Examination Room	Central Examination Room	Refrigerator for specimen	1
1184	2	Clinical Laboratory	Biochemistry	Central Examination Room	Central Examination Room	Freezer for medicine	1
1185	2	Clinical Laboratory	Biochemistry	Central Examination Room	Central Examination Room	Freezer for specimen	1
1186	2	Clinical Laboratory	Biochemistry	Central Examination Room	Central Examination Room	Deep Freezer for medicine	1

1187	2	Clinical Laboratory	Biochemistry	Central Examination Room	Central Examination Room	Deep Freezer for specimen	1
1188	2	Clinical Laboratory	Biochemistry	Central Examination Room	Central Examination Room	Urine Analyzer	1
1189	2	Clinical Laboratory	Biochemistry	Central Examination Room	Central Examination Room	Analytical Device for Material Component in Urine	1
1190	2	Clinical Laboratory	Biochemistry	Central Examination Room	Central Examination Room	Chemistry and Immunoassay Analyzer	1
1191	2	Clinical Laboratory	Biochemistry	Central Examination Room	Central Examination Room	Electrolyte Analyzer	1
1192	2	Clinical Laboratory	Biochemistry	Central Examination Room	Central Examination Room	Blood Gas Analyzer	1
1193	2	Clinical Laboratory	Biochemistry	Central Examination Room	Central Examination Room	Shaker	1
1194	2	Clinical Laboratory	Biochemistry	Central Examination Room	Central Examination Room	Water Bath	1
1195	2	Clinical Laboratory	Biochemistry	Central Examination Room	Central Examination Room	Incubator	1
1196	2	Clinical Laboratory	Biochemistry	Central Examination Room	Central Examination Room	Tube Sealer	1
1197	2	Clinical Laboratory	Biochemistry	Central Examination Room	Central Examination Room	Atomic Absorption Photometer	1
1198	2	Clinical Laboratory	Biochemistry	Central Examination Room	Central Examination Room	Automatic Osmometer	1
1199	2	Clinical Laboratory	Hematology	Central Examination Room	Central Examination Room	Blood Collection, Urine Collection Supporting System	1
1200	2	Clinical Laboratory	Hematology	Central Examination Room	Central Examination Room	Water Purification System	1
1201	2	Clinical Laboratory	Hematology	Central Examination Room	Central Examination Room	Multi Automatic Analyzer	1
1202	2	Clinical Laboratory	Hematology	Central Examination Room	Central Examination Room	Full Automatic pH / Blood Gas / Electrolyte Gullucose Hematocrit / CO Oximeter Analyzer	1
1203	2	Clinical Laboratory	Hematology	Central Examination Room	Central Examination Room	Sample Pretreatment Pipetting Device	1
1204	2	Clinical Laboratory	Hematology	Central Examination Room	Central Examination Room	Refrigerator for medicine	1
1205	2	Clinical Laboratory	Hematology	Central Examination Room	Central Examination Room	Refrigerator for specimen	1
1206	2	Clinical Laboratory	Hematology	Central Examination Room	Central Examination Room	Freezer for medicine	1
1207	2	Clinical Laboratory	Hematology	Central Examination Room	Central Examination Room	Freezer for specimen	1
1208	2	Clinical Laboratory	Hematology	Central Examination Room	Central Examination Room	Deep Freezer for medicine	1
1209	2	Clinical Laboratory	Hematology	Central Examination Room	Central Examination Room	Deep Freezer for specimen	1
1210	2	Clinical Laboratory	Hematology	Central Examination Room	Central Examination Room	Centrifuge, high-speed	1
1211	2	Clinical Laboratory	Hematology	Central Examination Room	Central Examination Room	Centrifuge, cooling	1
1212	2	Clinical Laboratory	Hematology	Central Examination Room	Central Examination Room	Flow Cytometry Analyzer	1
1213	2	Clinical Laboratory	Hematology	Central Examination Room	Central Examination Room	Shaker	1
1214	2	Clinical Laboratory	Hematology	Central Examination Room	Central Examination Room	Water Bath	1
1215	2	Clinical Laboratory	Hematology	Central Examination Room	Central Examination Room	Incubator	1

1216	2	Clinical Laboratory	Hematology	Central Examination Room	Central Examination Room	Tube Sealer	1
1217	2	Clinical Laboratory	Hematology	Central Examination Room	Central Examination Room	Optical Microscope	1
1218	2	Clinical Laboratory	Hematology	Central Examination Room	Central Examination Room	Glycohemoglobin Analyzer	1
1219	2	Clinical Laboratory	Hematology	Central Examination Room	Central Examination Room	Coagulating Analyzer	1
1220	2	Clinical Laboratory	Hematology	Central Examination Room	Central Examination Room	Blood Cell Analyzer with smear machine, conveyor line	1
1221	2	Clinical Laboratory	Hematology	Central Examination Room	Central Examination Room	Fecal Occult Blood Analyzer	1
1222	2	Clinical Laboratory	Hematology	Central Examination Room	Central Examination Room	Discussion Microscope	1
1223	2	Clinical Laboratory	Hematology	Central Examination Room	Central Examination Room	Erythrocyte Sedimentation Rate Measuring Device	1
1224	2	Clinical Laboratory	Hematology	Central Examination Room	Central Examination Room	Na / K / Cl Analyzer	1
1225	2	Clinical Laboratory	Microbiology	Preparation Room	Preparation Room	Clean Bench	1
1226	2	Clinical Laboratory	Microbiology	Preparation Room	Preparation Room	Balance	2
1227	2	Clinical Laboratory	Microbiology	Preparation Room	Preparation Room	Incubator, Large Size	1
1228	2	Clinical Laboratory	Microbiology	Preparation Room	Preparation Room	Incubator, Table top.	1
1229	2	Clinical Laboratory	Microbiology	Preparation Room	Preparation Room	CO2 Incubator	1
1230	2	Clinical Laboratory	Microbiology	Preparation Room	Preparation Room	Refrigerator for Specimen	1
1231	2	Clinical Laboratory	Microbiology	Preparation Room	Preparation Room	Refrigerator for Medicine	1
1232	2	Clinical Laboratory	Microbiology	Preparation Room	Preparation Room	Freezer for Specimen	1
1233	2	Clinical Laboratory	Microbiology	Preparation Room	Preparation Room	Freezer for Medicine	1
1234	2	Clinical Laboratory	Microbiology	Preparation Room	Preparation Room	Deep Freezer for Specimen	1
1235	2	Clinical Laboratory	Microbiology	Preparation Room	Preparation Room	Deep Freezer for Medicine	1
1236	2	Clinical Laboratory	Microbiology	Preparation Room	Preparation Room	Media dispenser	1
1237	2	Clinical Laboratory	Microbiology	Preparation Room	Preparation Room	Mwdia sterilization Production Unit	1
1238	2	Clinical Laboratory	Microbiology	Machine Room	Machine Room	RO Water supply Unit	1
1239	2	Clinical Laboratory	Microbiology	Machine Room	Machine Room	RO Tank	1
1240	2	Clinical Laboratory	Microbiology	Machine Room	Machine Room	Autoclave	1
1241	2	Clinical Laboratory	Microbiology	Cleaning Room	Cleaning Room	Autoclave	1
1242	2	Clinical Laboratory	Microbiology	Cleaning Room	Cleaning Room	Dryer	1
1243	2	Clinical Laboratory	Microbiology	Cleaning Room	Cleaning Room	Dry-heat Sterilizer	1
1244	2	Clinical Laboratory	Microbiology	Cleaning Room	Cleaning Room	Ultrasonic Washer	1

1245	2	Clinical Laboratory	Microbiology	Cleaning Room	Wqasher	1
1246	2	Clinical Laboratory	Microbiology	Cleaning Room	Persoaking Tank	1
1247	2	Clinical Laboratory	Microbiology	Culture Room Class 2	Blood Culture Equipment	1
1248	2	Clinical Laboratory	Microbiology	Culture Room Class 2	Blood Culture Analyzer	1
1249	2	Clinical Laboratory	Microbiology	Culture Room Class 2	Incubator, Table top.	1
1250	2	Clinical Laboratory	Microbiology	Culture Room Class 2	Incubator, Large Size	1
1251	2	Clinical Laboratory	Microbiology	Culture Room Class 2	Clean Bench	1
1252	2	Clinical Laboratory	Microbiology	Culture Room Class 2	Centrifuge	1
1253	2	Clinical Laboratory	Microbiology	Culture Room Class 2	<b>Shaker</b>	1
1254	2	Clinical Laboratory	Microbiology	Culture Room Class 2	Auto Bacterium Identification Unit	1
1255	2	Clinical Laboratory	Microbiology	Culture Room Class 2	Microscope with Camera	1
1256	2	Clinical Laboratory	Microbiology	Culture Room Class 2	System Microscope	1
1257	2	Clinical Laboratory	Microbiology	Culture Room Class 2	Cultured bacteria Analyzer	1
1258	2	Clinical Laboratory	Microbiology	Culture Room Class 2	CO2 Incubator	1
1259	2	Clinical Laboratory	Microbiology	Culture Room Class 2	Cold Centrifuge	1
1260	2	Clinical Laboratory	Microbiology	Culture Room Class 2	Microscope Imaging Device	1
1261	2	Clinical Laboratory	Microbiology	Culture Room Class 2	Microorganism Sensitivity Analyzer	1
1262	2	Clinical Laboratory	Microbiology	Culture Room Class 2	Objective Lens Set	1
1263	2	Clinical Laboratory	Microbiology	Culture Room Class 2	Fluorescence microscope	1
1264	2	Clinical Laboratory	Microbiology	Culture Room Class 1	Blood Culture Equipment	1
1265	2	Clinical Laboratory	Microbiology	Culture Room Class 1	Blood Culture Analyzer	1
1266	2	Clinical Laboratory	Microbiology	Culture Room Class 1	Incubator, Table top.	1
1267	2	Clinical Laboratory	Microbiology	Culture Room Class 1	Incubator, Large Size	1
1268	2	Clinical Laboratory	Microbiology	Culture Room Class 1	Clean Bench	1
1269	2	Clinical Laboratory	Microbiology	Culture Room Class 1	Centrifuge	1
1270	2	Clinical Laboratory	Microbiology	Culture Room Class 1	<b>Shaker</b>	1
1271	2	Clinical Laboratory	Microbiology	Culture Room Class 1	Auto Bacterium Identification Unit	1
1272	2	Clinical Laboratory	Microbiology	Culture Room Class 1	Microscope with Camera	1
1273	2	Clinical Laboratory	Microbiology	Culture Room Class 1	System Microscope	1

1274	2	Clinical Laboratory	Microbiology	Culture Room Class I	Microbiology	Culture Room Class I	Cultured bacteria Analyzer	1
1275	2	Clinical Laboratory	Microbiology	Culture Room Class I	Microbiology	Culture Room Class I	CO2 Incubator	1
1276	2	Clinical Laboratory	Microbiology	Culture Room Class I	Microbiology	Culture Room Class I	Cold Centrifuge	1
1277	2	Clinical Laboratory	Microbiology	Culture Room Class I	Microbiology	Culture Room Class I	Microscope Imaging Device	1
1278	2	Clinical Laboratory	Microbiology	Culture Room Class I	Microbiology	Culture Room Class I	Microorganism Sensitivity Analyzer	1
1279	2	Clinical Laboratory	Microbiology	Culture Room Class I	Microbiology	Culture Room Class I	Objective Lens Set	1
1280	2	Clinical Laboratory	Microbiology	Culture Room Class I	Microbiology	Culture Room Class I	Fluorescence microscope	1
1281	2	Clinical Laboratory	Microbiology	Anteroom	Microbiology	Anteroom	Air Shower	1
1282	2	Clinical Laboratory	Microbiology	Anteroom	Microbiology	Anteroom	Blood Culture Monitoring System	1
1283	2	Clinical Laboratory	Microbiology	Common Room	Microbiology	Common Room	Cold Room	1
1284	2	Clinical Laboratory	Genetic and Molecular Biology	Genetic Testing Room	Genetic and Molecular Biology	Genetic Testing Room	Clean Bench	1
1285	2	Clinical Laboratory	Genetic and Molecular Biology	Genetic Testing Room	Genetic and Molecular Biology	Genetic Testing Room	Refrigerator for Specimen	1
1286	2	Clinical Laboratory	Genetic and Molecular Biology	Genetic Testing Room	Genetic and Molecular Biology	Genetic Testing Room	Freezer for Specimen	1
1287	2	Clinical Laboratory	Genetic and Molecular Biology	Genetic Testing Room	Genetic and Molecular Biology	Genetic Testing Room	Deep Freezer for Specimen	1
1288	2	Clinical Laboratory	Genetic and Molecular Biology	Genetic Testing Room	Genetic and Molecular Biology	Genetic Testing Room	Refrigerator for Medicine	1
1289	2	Clinical Laboratory	Genetic and Molecular Biology	Genetic Testing Room	Genetic and Molecular Biology	Genetic Testing Room	Freezer for Medicine	1
1290	2	Clinical Laboratory	Genetic and Molecular Biology	Genetic Testing Room	Genetic and Molecular Biology	Genetic Testing Room	Deep Freezer for Medicine	1
1291	2	Clinical Laboratory	Genetic and Molecular Biology	Genetic Testing Room	Genetic and Molecular Biology	Genetic Testing Room	Centrifuge	1
1292	2	Clinical Laboratory	Genetic and Molecular Biology	Genetic Testing Room	Genetic and Molecular Biology	Genetic Testing Room	Cold Centrifuge	1
1293	2	Clinical Laboratory	Genetic and Molecular Biology	Genetic Testing Room	Genetic and Molecular Biology	Genetic Testing Room	Vortex Shaker	1
1294	2	Clinical Laboratory	Genetic and Molecular Biology	Genetic Testing Room	Genetic and Molecular Biology	Genetic Testing Room	Shaker	1
1295	2	Clinical Laboratory	Genetic and Molecular Biology	Genetic Testing Room	Genetic and Molecular Biology	Genetic Testing Room	Heat Block	1
1296	2	Clinical Laboratory	Genetic and Molecular Biology	Genetic Testing Room	Genetic and Molecular Biology	Genetic Testing Room	Water Purifier	1
1297	2	Clinical Laboratory	Genetic and Molecular Biology	Genetic Testing Room	Genetic and Molecular Biology	Genetic Testing Room	analytical Balance	2
1298	2	Clinical Laboratory	Genetic and Molecular Biology	Genetic Testing Room	Genetic and Molecular Biology	Genetic Testing Room	Stirrer	1
1299	2	Clinical Laboratory	Genetic and Molecular Biology	Genetic Testing Room	Genetic and Molecular Biology	Genetic Testing Room	Incubator	1
1300	2	Clinical Laboratory	Genetic and Molecular Biology	Genetic Testing Room	Genetic and Molecular Biology	Genetic Testing Room	Water Bath	1
1301	2	Clinical Laboratory	Genetic and Molecular Biology	Genetic Testing Room	Genetic and Molecular Biology	Genetic Testing Room	PCR	1
1302	2	Clinical Laboratory	Genetic and Molecular Biology	Genetic Testing Room	Genetic and Molecular Biology	Genetic Testing Room	Sample Preparation Device for real-time PCR	1



1303	2	Clinical Laboratory	Genetic and Molecular Biology	Genetic Testing Room	DNA / RNA Detector	1
1304	2	Clinical Laboratory	Genetic and Molecular Biology	Genetic Testing Room	Real-time PCR Analyzer	1
1305	2	Clinical Laboratory	Genetic and Molecular Biology	Cleaning Room	Autoclave	1
1306	2	Clinical Laboratory	Genetic and Molecular Biology	Cleaning Room	Washer	1
1307	2	Clinical Laboratory	Genetic and Molecular Biology	Cleaning Room	Preparatory Bath	1
1308	2	Clinical Laboratory	Genetic and Molecular Biology	Cleaning Room	Dryer	1
1309	2	Clinical Laboratory	Genetic and Molecular Biology	Cleaning Room	Dry-heat Sterilizer	1
1310	2	Clinical Laboratory	Pathology	Preparation Room	Refrigerator for Specimen	1
1311	2	Clinical Laboratory	Pathology	Preparation Room	Refrigerator for Medicine	1
1312	2	Clinical Laboratory	Pathology	Preparation Room	Freezer for Specimen	1
1313	2	Clinical Laboratory	Pathology	Preparation Room	Freezer for Medicine	1
1314	2	Clinical Laboratory	Pathology	Preparation Room	Deep Freezer for Specimen	1
1315	2	Clinical Laboratory	Pathology	Preparation Room	Deep Freezer for Medicine	1
1316	2	Clinical Laboratory	Pathology	Preparation Room	Water Bath	1
1317	2	Clinical Laboratory	Pathology	Preparation Room	Water Bath, Paraffin	1
1318	2	Clinical Laboratory	Pathology	Preparation Room	Tissue Processors, Vacuum Infiltration	1
1319	2	Clinical Laboratory	Pathology	Preparation Room	Staining Device	1
1320	2	Clinical Laboratory	Pathology	Preparation Room	Special Staining Device	1
1321	2	Clinical Laboratory	Pathology	Preparation Room	Staining Device for Cytodiagnosis	1
1322	2	Clinical Laboratory	Pathology	Preparation Room	Staining Device	1
1323	2	Clinical Laboratory	Pathology	Preparation Room	Centrifuge	1
1324	2	Clinical Laboratory	Pathology	Preparation Room	Cold Centrifuge	1
1325	2	Clinical Laboratory	Pathology	Preparation Room	Microtome	1
1326	2	Clinical Laboratory	Pathology	Preparation Room	Frozen Microtome	1
1327	2	Clinical Laboratory	Pathology	Preparation Room	Frozen Section Maker	1
1328	2	Clinical Laboratory	Pathology	Preparation Room	Shaker	1
1329	2	Clinical Laboratory	Pathology	Preparation Room	Immunanalyzer	1
1330	2	Clinical Laboratory	Pathology	Preparation Room	ELISA	1
1331	2	Clinical Laboratory	Pathology	Preparation Room	Automatic Glass Insert Machine	1

1332	2	Clinical Laboratory	Pathology	Preparation Room	System Microscope	1
1333	2	Clinical Laboratory	Pathology	Preparation Room	Autotissue Processor	1
1334	2	Clinical Laboratory	Pathology	Preparation Room	Pretreatment System, Immunological Tissue Chemical Staining	1
1335	2	Clinical Laboratory	Pathology	Preparation Room	Ventilation System	1
1336	2	Clinical Laboratory	Pathology	Preparation Room	Crystall for Disinfection	1
1337	2	Clinical Laboratory	Pathology	Preparation Room	Safety Cabinet	1
1338	2	Clinical Laboratory	Pathology	Preparation Room	Rapid Sample Treatment Device	1
1339	2	Clinical Laboratory	Pathology	Preparation Room	Pathological Autotissue Processor	1
1340	2	Clinical Laboratory	Pathology	Preparation Room	Embedding Center	1
1341	2	Clinical Laboratory	Pathology	Preparation Room	Embedding Center	1
1342	2	Clinical Laboratory	Pathology	Preparation Room	Embedding Center	1
1343	2	Clinical Laboratory	Pathology	Preparation Room	Antigen / Antibody Reaction Detection Device	1
1344	2	Clinical Laboratory	Pathology	Preparation Room	pH meter	1
1345	2	Clinical Laboratory	Pathology	Preparation Room	Decloaking Chamber	1
1346	2	Clinical Laboratory	Pathology	Examination Room	Optical Microscope	1
1347	2	Clinical Laboratory	Pathology	Examination Room	System Microscope	1
1348	2	Clinical Laboratory	Pathology	Examination Room	Microscope with Monitor	1
1349	2	Clinical Laboratory	Pathology	Examination Room	Microplate Washer	1
1350	2	Clinical Laboratory	Pathology	Examination Room	Medical Photograph Developing Equipment	1
1351	2	Clinical Laboratory	Pathology	Examination Room	Organ Sample Storage Vacuum Packing Machine	1
1352	2	Clinical Laboratory	Pathology	Examination Room	Vertical Slide Scan	1
1353	2	Clinical Laboratory	Pathology	Examination Room	CCD Camera	1
1354	2	Clinical Laboratory	Pathology	Sample Storage	Refrigerator for Sample	1
1355	2	Clinical Laboratory	Pathology	Sample Storage	Freezer for Sample	1
1356	2	Clinical Laboratory	Pathology	Sample Storage	Deep Freezer for Sample	1
1357	2	Clinical Laboratory	Pathology	Sample Storage	CO2 Incubator	1
1358	2	Clinical Laboratory	Pathology	Cleaning Room	Autoclave	1
1359	2	Clinical Laboratory	Pathology	Cleaning Room	Dryer	1
1360	2	Clinical Laboratory	Pathology	Cleaning Room	Washer for Instrument	1

1361	2	Clinical Laboratory	Pathology	Cleaning Room	Ventilation System	1
1362	2	Clinical Laboratory	Pathology	Dissecting Room	Organ Photograph System	1
1363	2	Clinical Laboratory	Pathology	Dissecting Room	Dissecting Table, Anti-Biohazard	1
1364	2	Clinical Laboratory	Pathology	Dissecting Room	Monitor, Large Size	1
1365	2	Clinical Laboratory	Pathology	Dissecting Room	Automatic Saw	1
1366	2	Clinical Laboratory	Pathology	Dissecting Room	Histolysis Volume Reduction Device	1
1367	2	Clinical Laboratory	Pathology	Dissecting Room	Automatic Lift with Caster	1
1368	2	Clinical Laboratory	Pathology	Dissecting Room	Dissecting Table	1
1369	2	Clinical Laboratory	Pathology	Dissecting Room	Ceiling (Shadowless Lamp)	1
1370	2	Clinical Laboratory	Pathology	Dissecting Room	Organ Dryer	1
1371	2	Clinical Laboratory	Pathology	Preparation Room	Automatic Glass Insert Machine	1
1372	2	Clinical Laboratory	Pathology	Preparation Room	Microtome	1
1373	2	Clinical Laboratory	Pathology	Preparation Room	Microtome	1
1374	2	Clinical Laboratory	Pathology	Preparation Room	Microtome	1
1375	2	Clinical Laboratory	Pathology	Morgue	Refrerator for Dead Body	1
1376	3	Clinical Laboratory	Blood Bank	Blood Bank Work Room	Blood Collection, Urine Collection Supporting System	1
1377	3	Clinical Laboratory	Blood Bank	Blood Bank Storage	Refrigerator for Blood	1
1378	3	Clinical Laboratory	Blood Bank	Blood Bank Storage	Refrigerator for Blood	1
1379	3	Clinical Laboratory	Blood Bank	Blood Bank Storage	Freezer for Blood	1
1380	3	Clinical Laboratory	Blood Bank	Blood Bank Storage	Freezer for Blood	1
1381	3	Clinical Laboratory	Blood Bank	Blood Bank Storage	Deep Freezer for Blood	1
1382	3	Clinical Laboratory	Blood Bank	Blood Bank Storage	Deep Freezer for Blood	1
1383	3	Clinical Laboratory	Blood Bank	Blood Collection Room	Blood Collecting Device	1
1384	3	Clinical Laboratory	Blood Bank	Blood Collection Room	Blood Collecting Device	1
1385	3	Clinical Laboratory	Blood Bank	Blood Collection Room	Bed for Blood Collecting	1
1386	3	Clinical Laboratory	Blood Bank	Blood Collection Room	Bed for Blood Collecting	1
1387	3	Clinical Laboratory	Blood Bank	Blood Collection Room	Patient Monitor	1
1388	3	Clinical Laboratory	Blood Bank	Blood Collection Room	Patient Monitor	1
1389	3	Clinical Laboratory	Blood Bank	Blood Collection Room	Defibrillator	1

1390	3	Clinical Laboratory	Blood Bank	Blood Bank	Blood Collection Room	Defibrillator	1
1391	3	Clinical Laboratory	Blood Bank	Blood Bank	Blood Bank	Blood Component Separation Device	1
1392	3	Clinical Laboratory	Blood Bank	Blood Bank	Work Room	Platelet Incubator	1
1393	3	Clinical Laboratory	Blood Bank	Blood Bank	Work Room	Shaker	1
1394	3	Clinical Laboratory	Blood Bank	Blood Bank	Work Room	Tube Sealer	1
1395	3	Clinical Laboratory	Blood Bank	Blood Bank	Work Room	Sterile Connecting Device	1
1396	3	Clinical Laboratory	Blood Bank	Blood Bank	Work Room	Balance	1
1397	3	Clinical Laboratory	Blood Bank	Blood Bank	Work Room	Blood Centrifuge, large capacity	1
1398	3	Clinical Laboratory	Blood Bank	Blood Bank	Work Room	Automatic Blood Component Extractor	1
1399	3	Clinical Laboratory	Blood Bank	Blood Bank	Work Room	Ultra-rapid Plasma Freezing System	1
1400	3	Clinical Laboratory	Blood Bank	Blood Bank	Blood Examination	Chemiluminescence Testing Analyzer	1
1401	3	Clinical Laboratory	Blood Bank	Blood Bank	Blood Examination	Fully Automated Microtiter Plate Analyzer	1
1402	3	Clinical Laboratory	Blood Bank	Blood Bank	Blood Examination	Self-contained Microplate Processor	1
1403	3	Clinical Laboratory	Blood Bank	Blood Bank	Blood Examination	Atomic Absorption Photometer	1
1404	3	Clinical Laboratory	Blood Bank	Blood Bank	Blood Examination	Clean Bench	1
1405	3	Clinical Laboratory	Blood Bank	Blood Bank	Blood Examination	Microplate Washer	1
1406	3	Clinical Laboratory	Blood Bank	Blood Bank	Blood Examination	Incubator	1
1407	3	Clinical Laboratory	Blood Bank	Blood Bank	Blood Examination	Shaker	1
1408	3	Clinical Laboratory	Blood Bank	Blood Bank	Blood Examination	Refrigerator for medicine	1
1409	3	Clinical Laboratory	Blood Bank	Blood Bank	Blood Examination	Refrigerator for Blood	1
1410	3	Clinical Laboratory	Blood Bank	Blood Bank	Blood Examination	Freezer for medicine	1
1411	3	Clinical Laboratory	Blood Bank	Blood Bank	Blood Examination	Freezer for Blood	1
1412	3	Clinical Laboratory	Blood Bank	Blood Bank	Blood Examination	Deep Freezer for medicine	1
1413	3	Clinical Laboratory	Blood Bank	Blood Bank	Blood Examination	Deep Freezer for Blood	1
1414	3	Clinical Laboratory	Blood Bank	Blood Bank	Blood Examination	Tube Sealer	1
1415	3	Clinical Laboratory	Blood Bank	Blood Bank	Blood Examination	Autoclave	1
1416	3	Clinical Laboratory	Blood Bank	Blood Bank	Blood Examination	Diluter	1
1417	3	Clinical Laboratory	Blood Bank	Blood Bank	Blood Examination	Optical Microscope	1
1418	3	Clinical Laboratory	Blood Bank	Blood Bank	Blood Examination	Automated Blood Cell Washer	1

1419	3	Clinical Laboratory	Blood Bank	Blood Bank Examination	Blood Bank	Centrifuge	1
1420	3	Clinical Laboratory	Blood Bank	Blood Examination	Blood Bank	Thermal Circuler	1
1421	3	Clinical Laboratory	Blood Bank	Blood Examination	Blood Bank	Vortex	1
1422	3	Clinical Laboratory	Blood Bank	Blood Examination	Blood Bank	Discussion Microscope	1
1423	3	Clinical Laboratory	Blood Bank	Blood Examination	Blood Bank	Blood Product Irradiation Equipment	1
1424	3	Clinical Laboratory	Blood Bank	Blood Examination	Blood Bank	Fluorescence Microscope	1
1425	3	Clinical Laboratory	Blood Bank	Blood Examination	Blood Bank	Thermo Box	1
1426	3	Clinical Laboratory	Blood Bank	Blood Examination	Blood Bank	Blood Collection Device for Blood Pack	1
1427	3	Clinical Laboratory	Blood Bank	Blood Examination	Blood Bank	Automatic Blood Transfusion Examination Unit	1
1428	1	Endoscopy		Endoscopy/		Endoscopy system	1
1429	1	Endoscopy		Endoscopy/		Suction Unit	1
1430	1	Endoscopy		Endoscopy/		Treatment Table	1
1431	1	Endoscopy		Endoscopy/		Automatic Endoscopy Reprocessor	1
1432	1	Endoscopy		Endoscopy/		Electrosurgery unit	1
1433	1	Endoscopy		Endoscopy/		X-Ray Illuminator	1
1434	1	Endoscopy		Endoscopy/		Lithotriptor	1
1435	1	Endoscopy		Endoscopy/		Central Monitor	1
1436	1	Endoscopy		Endoscopy/		Patient Monitor	1
1437	1	Endoscopy		Endoscopy/		Argon Beam Coagulator	1
1438	1	Endoscopy		Endoscopy/		pH monitor; larygology	1
1439	1	Endoscopy		Endoscopy/		Treatment Table, electorical	1
1440	1	Endoscopy		Endoscopy/		Ultrasound endoscope system	1
1441	1	Endoscopy		Endoscopy/		Endoscope storage cabinet	1
1442	1	Endoscopy		Endoscopy/		Probe (bronchoscopy), endoscopy	1
1443	1	Endoscopy		Endoscopy/		Probe (upper abdominal), endoscopy	1
1444	1	Endoscopy		Endoscopy/		Probe (Colon), endoscopy	1
1445	1	Endoscopy		Endoscopy/		Probe (duodenoscopy), endoscopy	1
1446	1	Endoscopy		Endoscopy/		Probe (nasal), endoscopy	1
1447	1	Endoscopy		Endoscopy/		Ultrasound endoscope probe	1

1448	1	Endoscopy	Endoscopy 1	Endoscopy 1	Biopsy	1
1449	1	Endoscopy	Endoscopy 1	Endoscopy 1	Endoscopy image Reader	1
1450	1	Endoscopy	Endoscopy 2	Endoscopy 2	Endoscopy system	1
1451	1	Endoscopy	Endoscopy 2	Endoscopy 2	Suction Unit	1
1452	1	Endoscopy	Endoscopy 2	Endoscopy 2	Treatment Table	1
1453	1	Endoscopy	Endoscopy 2	Endoscopy 2	Automatic Endoscopy Reprocessor	1
1454	1	Endoscopy	Endoscopy 2	Endoscopy 2	Electrosurgery unit	1
1455	1	Endoscopy	Endoscopy 2	Endoscopy 2	X-Ray Illuminator	1
1456	1	Endoscopy	Endoscopy 2	Endoscopy 2	Lithotripter	1
1457	1	Endoscopy	Endoscopy 2	Endoscopy 2	Patient Monitor	1
1458	1	Endoscopy	Endoscopy 2	Endoscopy 2	Argon Beam Coagulator	1
1459	1	Endoscopy	Endoscopy 2	Endoscopy 2	pH monitor, laryngology	1
1460	1	Endoscopy	Endoscopy 2	Endoscopy 2	Treatment Table, electorcal	1
1461	1	Endoscopy	Endoscopy 2	Endoscopy 2	Ultrasound endoscope system	1
1462	1	Endoscopy	Endoscopy 2	Endoscopy 2	Endoscope storage cabinet	1
1463	1	Endoscopy	Endoscopy 2	Endoscopy 2	Probe (bronchoscopy), endoscopy	1
1464	1	Endoscopy	Endoscopy 2	Endoscopy 2	Probe (upper abdominal), endoscopy	1
1465	1	Endoscopy	Endoscopy 2	Endoscopy 2	Probe (Colon), endoscopy	1
1466	1	Endoscopy	Endoscopy 2	Endoscopy 2	Probe (duodenoscopy), endoscopy	1
1467	1	Endoscopy	Endoscopy 2	Endoscopy 2	Probe (nasal), endoscopy	1
1468	1	Endoscopy	Endoscopy 2	Endoscopy 2	Ultrasound endoscope probe	1
1469	1	Endoscopy	Endoscopy 2	Endoscopy 2	Biopsy	1
1470	1	Endoscopy	Endoscopy 2	Endoscopy 2	Endoscopy image Reader	1
1471	1	Endoscopy	Endoscopy 3	Endoscopy 3	Endoscopy system	1
1472	1	Endoscopy	Endoscopy 3	Endoscopy 3	Suction Unit	1
1473	1	Endoscopy	Endoscopy 3	Endoscopy 3	Treatment Table	1
1474	1	Endoscopy	Endoscopy 3	Endoscopy 3	Automatic Endoscopy Reprocessor	1
1475	1	Endoscopy	Endoscopy 3	Endoscopy 3	Electrosurgery unit	1
1476	1	Endoscopy	Endoscopy 3	Endoscopy 3	X-Ray Illuminator	1

1477	1	Endoscopy			Endoscopy 3	Patient Monitor	1
1478	1	Endoscopy			Endoscopy 3	Argon Beam Coagulator	1
1479	1	Endoscopy			Endoscopy 3	pH monitor, laryngology	1
1480	1	Endoscopy			Endoscopy 3	Treatment Table, electorcal	1
1481	1	Endoscopy			Endoscopy 3	Ultrasound endoscope system	1
1482	1	Endoscopy			Endoscopy 3	Endoscope storage cabinet	1
1483	1	Endoscopy			Endoscopy 3	Probe (bronchoscopy), endoscopy	1
1484	1	Endoscopy			Endoscopy 3	Probe (upper abdominal), endoscopy	1
1485	1	Endoscopy			Endoscopy 3	Probe (Colon), endoscopy	1
1486	1	Endoscopy			Endoscopy 3	Probe (duodenoscopy), endoscopy	1
1487	1	Endoscopy			Endoscopy 3	Probe (nasal), endoscopy	1
1488	1	Endoscopy			Endoscopy 3	Ultrasound endoscope probe	1
1489	1	Endoscopy			Endoscopy 3	Biopsy	1
1490	1	Endoscopy			Endoscopy 3	Endoscopy image Reader	1
1491	1	Endoscopy			Endoscopy 4	Endoscopy system	1
1492	1	Endoscopy			Endoscopy 4	Suction Unit	1
1493	1	Endoscopy			Endoscopy 4	Treatment Table	1
1494	1	Endoscopy			Endoscopy 4	Automatic Endoscopy Repressor	1
1495	1	Endoscopy			Endoscopy 4	Electrosurgery unit	1
1496	1	Endoscopy			Endoscopy 4	X-Ray Illuminator	1
1497	1	Endoscopy			Endoscopy 4	Patient Monitor	1
1498	1	Endoscopy			Endoscopy 4	Argon Beam Coagulator	1
1499	1	Endoscopy			Endoscopy 4	pH monitor, laryngology	1
1500	1	Endoscopy			Endoscopy 4	Treatment Table, electorcal	1
1501	1	Endoscopy			Endoscopy 4	Ultrasound endoscope system	1
1502	1	Endoscopy			Endoscopy 4	Endoscope storage cabinet	1
1503	1	Endoscopy			Endoscopy 4	Probe (upper abdominal), endoscopy	1
1504	1	Endoscopy			Endoscopy 4	Ultrasound endoscope probe	1
1505	1	Endoscopy			Endoscopy 4	Biopsy	1

1506	1	Endoscopy			Endoscopy 4	Endoscopy image Reader	1
1507	1	Endoscopy			Endoscopy 5	Endoscopy system	1
1508	1	Endoscopy			Endoscopy 5	Suction Unit	1
1509	1	Endoscopy			Endoscopy 5	Treatment Table	1
1510	1	Endoscopy			Endoscopy 5	Automatic Endoscopy Reprocessor	1
1511	1	Endoscopy			Endoscopy 5	Electrosurgery unit	1
1512	1	Endoscopy			Endoscopy 5	X-Ray Illuminator	1
1513	1	Endoscopy			Endoscopy 5	Patient Monitor	1
1514	1	Endoscopy			Endoscopy 5	Argon Beam Coagulator	1
1515	1	Endoscopy			Endoscopy 5	pH monitor, laryngology	1
1516	1	Endoscopy			Endoscopy 5	Treatment Table, electorical	1
1517	1	Endoscopy			Endoscopy 5	Ultrasound endoscope system	1
1518	1	Endoscopy			Endoscopy 5	Endoscope storage cabinet	1
1519	1	Endoscopy			Endoscopy 5	Probe (upper abdominal), endoscopy	1
1520	1	Endoscopy			Endoscopy 5	Ultrasound endoscope probe	1
1521	1	Endoscopy			Endoscopy 5	Biopsy	1
1522	1	Endoscopy			Endoscopy 5	Endoscopy image Reader	1
1523	1	Endoscopy			Endoscopy 5	Endoscopy system	1
1524	1	Endoscopy			Endoscopy 5	Suction Unit	1
1525	1	Endoscopy			Endoscopy 5	Treatment Table	1
1526	1	Endoscopy			Endoscopy 5	Automatic Endoscopy Reprocessor	1
1527	1	Endoscopy			Endoscopy 5	Electrosurgery unit	1
1528	1	Endoscopy			Endoscopy 5	X-Ray Illuminator	1
1529	1	Endoscopy			Endoscopy 5	Patient Monitor	1
1530	1	Endoscopy			Endoscopy 5	Argon Beam Coagulator	1
1531	1	Endoscopy			Endoscopy 5	pH monitor, laryngology	1
1532	1	Endoscopy			Endoscopy 5	Treatment Table, electorical	1
1533	1	Endoscopy			Endoscopy 5	Ultrasound endoscope system	1
1534	1	Endoscopy			Endoscopy 5	Endoscope storage cabinet	1



1535	1	Endoscopy	Endoscopy 5	Probe (upper abdominal), endoscopy	1
1536	1	Endoscopy	Endoscopy 5	Ultrasound endoscope probe	1
1537	1	Endoscopy	Endoscopy 5	Biopsy	1
1538	1	Endoscopy	Endoscopy 5	Endoscopy image Reader	1
1539	1	Endoscopy	Endoscopy 6	Endoscopy system	1
1540	1	Endoscopy	Endoscopy 6	Suction Unit	1
1541	1	Endoscopy	Endoscopy 6	Treatment Table	1
1542	1	Endoscopy	Endoscopy 6	Automatic Endoscopy Repressor	1
1543	1	Endoscopy	Endoscopy 6	Electrosurgery unit	1
1544	1	Endoscopy	Endoscopy 6	X-Ray Illuminator	1
1545	1	Endoscopy	Endoscopy 6	Patient Monitor	1
1546	1	Endoscopy	Endoscopy 6	Argon Beam Coagulator	1
1547	1	Endoscopy	Endoscopy 6	pH monitor, laryngology	1
1548	1	Endoscopy	Endoscopy 6	Treatment Table, electrical	1
1549	1	Endoscopy	Endoscopy 6	Ultrasound endoscope system	1
1550	1	Endoscopy	Endoscopy 6	Endoscope storage cabinet	1
1551	1	Endoscopy	Endoscopy 6	Probe (upper abdominal), endoscopy	1
1552	1	Endoscopy	Endoscopy 6	Ultrasound endoscope probe	1
1553	1	Endoscopy	Endoscopy 6	Biopsy	1
1554	1	Endoscopy	Endoscopy 6	Endoscopy image Reader	1
1555	1	Endoscopy	Endoscopy 7	Endoscopy system	1
1556	1	Endoscopy	Endoscopy 7	Suction Unit	1
1557	1	Endoscopy	Endoscopy 7	Treatment Table	1
1558	1	Endoscopy	Endoscopy 7	Automatic Endoscopy Repressor	1
1559	1	Endoscopy	Endoscopy 7	Electrosurgery unit	1
1560	1	Endoscopy	Endoscopy 7	X-Ray Illuminator	1
1561	1	Endoscopy	Endoscopy 7	Patient Monitor	1
1562	1	Endoscopy	Endoscopy 7	Argon Beam Coagulator	1
1563	1	Endoscopy	Endoscopy 7	pH monitor, laryngology	1

1564	1	Endoscopy			Endoscopy 7	Treatment Table, electorcal	1
1565	1	Endoscopy			Endoscopy 7	Ultrasound endoscope system	1
1566	1	Endoscopy			Endoscopy 7	Endoscope storage cabinet	1
1567	1	Endoscopy			Endoscopy 7	Probe (upper abdominal), endoscopy	1
1568	1	Endoscopy			Endoscopy 7	Ultrasound endoscope probe	1
1569	1	Endoscopy			Endoscopy 7	Biopsy	1
1570	1	Endoscopy			Endoscopy 7	Endoscopy image Reader	1
1571	3	Hemodialysis			Exermination room	Warmer	1
1572	3	Hemodialysis			Exermination room	Electric examination table	1
1573	3	Hemodialysis			Exermination room	Ultraviolet curing unit for peritoneal dialysis (PD)	1
1574	3	Hemodialysis			Exermination room	Heating and melting device for peritoneal dialysis (PD) circuit	1
1575	3	Hemodialysis			Treatment room	Treatment Bed	1
1576	3	Hemodialysis			Treatment room	Patient Monitor	1
1577	3	Hemodialysis			Treatment room	Suction Unit	1
1578	3	Hemodialysis			Treatment room	Refrigerator, for Medicine	1
1579	3	Hemodialysis			Treatment room	Dialyzer Reprocessing Station	1
1580	3	Hemodialysis			Preperation room	Dialysis information system	1
1581	3	Hemodialysis			Preperation room	ALS training system	1
1582	3	Hemodialysis			Staff station	Suction Unit	1
1583	3	Hemodialysis			Staff station	Defibrilator	1
1584	3	Hemodialysis			Staff station	Syringe Pump	2
1585	3	Hemodialysis			Staff station	Central Monitor	1
1586	3	Hemodialysis			Staff station	Pulse Oximeter	1
1587	3	Hemodialysis			Staff station	ECG	1
1588	3	Hemodialysis			Hemodialysis	Scale, Weight	1
1589	3	Hemodialysis			Hemodialysis	Hemodialysis Unit	60
1590	3	Hemodialysis			Hemodialysis	Hemotocrit Monitor	1
1591	3	Hemodialysis			Hemodialysis	Sodium hypochlorite activation device	1
1592	3	Hemodialysis			Hemodialysis	Automated Osmometer	1

1593	3	Hemodialysis	Hemodialysis	Hemodialysis	Electric bed with scale	1
1594	3	Hemodialysis	Hemodialysis	Hemodialysis	Electric bed	1
1595	3	Hemodialysis	Hemodialysis	Hemodialysis	Dialysis device for person	1
1596	3	Hemodialysis	Hemodialysis	Hemodialysis	Hanging-type weight scale	1
1597	3	Hemodialysis	Hemodialysis	Hemodialysis	Electrolyte analyzer	1
1598	3	Hemodialysis	Hemodialysis	Hemodialysis	Optical noninvasive hematocrit monitor	1
1599	3	Hemodialysis	Hemodialysis	Hemodialysis	Optical noninvasive continuous hematocrit monitor	1
1600	3	Hemodialysis	Hemodialysis	Hemodialysis	Body water measuring device	1
1601	3	Hemodialysis	Hemodialysis	Hemodialysis	Diagnostic ultrasound imaging system	1
1602	3	Hemodialysis	Hemodialysis	Hemodialysis	Automatic electrolyte analyzer	1
1603	3	Hemodialysis	Hemodialysis	Hemodialysis	Electronic-sector probe for diagnostic ultrasound imaging system	1
1604	3	Hemodialysis	Hemodialysis	Hemodialysis	Medical telemeter for 4 patients	1
1605	3	Hemodialysis	Hemodialysis	Hemodialysis	Blood gas analyzer, portable	1
1606	3	Hemodialysis	Hemodialysis	Hemodialysis	Blood coagulometer	1
1607	3	Hemodialysis	Hemodialysis	Hemodialysis	Patient monitor	1
1608	3	Hemodialysis	Hemodialysis	Hemodialysis	Ultrasound diagnostic imaging system	1
1609	3	Hemodialysis	Hemodialysis	Hemodialysis	ECG	1
1610	3	Hemodialysis	Mechanical room	Mechanical room	A agent automatic melting apparatus	1
1611	3	Hemodialysis	Mechanical room	Mechanical room	Powder dialysate automatic melting apparatus (B agent)	1
1612	3	Hemodialysis	Mechanical room	Mechanical room	Endotoxin measuring device	1
1613	3	Hemodialysis	Mechanical room	Mechanical room	Neutralizing treatment device	1
1614	3	Hemodialysis	Mechanical room	Mechanical room	RO Water Storage Tank	1
1615	3	Hemodialysis	Mechanical room	Mechanical room	RO Water supply system	1
1616	3	Hemodialysis	Mechanical room	Mechanical room	Dialysate feeding apparatus	1
1617	3	Hemodialysis	Mechanical room	Mechanical room	Reverse osmosis equipment	1
1618	3	Hemodialysis	Mechanical room	Mechanical room	Single-patient RO system	1
1619	3	Hemodialysis	Mechanical room	Mechanical room	Ascites filtration concentration re-infection device	1
1620	3	Hemodialysis	Mechanical room	Mechanical room	Hemocuron-less pump	1
1621	3	Hemodialysis	Mechanical room	Mechanical room	Bicarbonate automatic melting apparatus	1

1622	3	Hemodialysis			Mechanical room	Dialysis fluid supply device for multiperson	1
1623	3	Hemodialysis			Mechanical room	Osmometer	1
1624	2	Rehabilitation			Physical therapy room	Traction Unit	1
1625	2	Rehabilitation			Physical therapy room	Treatment Table	1
1626	2	Rehabilitation			Physical therapy room	Microwave Therapy Unit	1
1627	2	Rehabilitation			Physical therapy room	X-ray illuminator	1
1628	2	Rehabilitation			Physical therapy room	Ultraviolet Treatment Machine	1
1629	2	Rehabilitation			Physical therapy room	Ultrasound Therapy Unit	1
1630	2	Rehabilitation			Physical therapy room	Shockwave Machine	1
1631	2	Rehabilitation			Physical therapy room	Infrared Lamp	1
1632	2	Rehabilitation			Physical therapy room	Electro therapy Unit	1
1633	2	Rehabilitation			Physical therapy room	Aerobike	1
1634	2	Rehabilitation			Physical therapy room	Massage Table	1
1635	2	Rehabilitation			Physical therapy room	Hot Pack Machine	1
1636	2	Rehabilitation			Physical therapy room	Exercise Ball	1
1637	2	Rehabilitation			Physical therapy room	Steps for Exercise	1
1638	2	Rehabilitation			Physical therapy room	Dum Bells Set	1
1639	2	Rehabilitation			Physical therapy room	Overhead frame	1
1640	2	Rehabilitation			Physical therapy room	Pulley Exercise Unit	1
1641	2	Rehabilitation			Physical therapy room	wall bars	1
1642	2	Rehabilitation			Physical therapy room	Leg Car	1
1643	2	Rehabilitation			Physical therapy room	Pararrel Bar	1
1644	2	Rehabilitation			Physical therapy room	Tilt Table	1
1645	2	Rehabilitation			Physical therapy room	Reaching Exercise	1
1646	2	Rehabilitation			Physical therapy room	Airex Mat	1
1647	2	Rehabilitation			Physical therapy room	Mirror	1
1648	2	Rehabilitation			Physical therapy room	Multipurpose myofunction evaluation knomatic device	1
1649	2	Rehabilitation			Physical therapy room	EMG	1
1650	2	Rehabilitation			Physical therapy room	Xeon Treatment Device	1

1651	2	Rehabilitation		Physical therapy room	Stabilo meter	1
1652	2	Rehabilitation		Physical therapy room	Treadmill	1
1653	2	Rehabilitation		Physical therapy room	Stabiloscope	1
1654	2	Rehabilitation		Physical therapy room	Vertical Ability measuring Device	1
1655	2	Rehabilitation		Physical therapy room	Sole Pressure Analyze system	1
1656	2	Rehabilitation		Physical therapy room	Shoulder wheel	1
1657	2	Rehabilitation		Physical therapy room	Rotary wrist Exercise machine	1
1658	2	Rehabilitation		Physical therapy room	Wrist Roll Exercise	1
1659	2	Rehabilitation		Physical therapy room	Sthenometry training machine for knee joint	1
1660	2	Rehabilitation		Physio therapy room	Pratfin Bath	1
1661	2	Rehabilitation		Physio therapy room	Reciprocator	1
1662	2	Rehabilitation		Occupational Therapy Room	Portable spring balancer	1
1663	2	Rehabilitation		Occupational Therapy Room	Occupational Therapy Device Set	1
1664	2	Rehabilitation		Occupational Therapy Room	Refrigerator	1
1665	2	Rehabilitation		Occupational Therapy Room	Electro therapy Unit	1
1666	2	Rehabilitation		Occupational Therapy Room	Visual perception training Unit	1
1667	2	Rehabilitation		Occupational Therapy Room	Hydraulic training table	1
1668	2	Rehabilitation		Occupational Therapy Room	Hydrolic Table	1
1669	2	Rehabilitation		ALD	ADL Traing Unit	1
1670	2	Rehabilitation		ALD	ADL Bathing Unit	1
1671	2	Rehabilitation		ALD	ADL Kitchen Unit	1
1672	2	Rehabilitation		Aqua therapy Room	Whirpool Bath for Arms and Legs	1
1673	2	Rehabilitation		Aqua therapy Room	Babble Bath Unit	1
1674	2	Rehabilitation		Aqua therapy Room	Electric Knetherapeutic bath lifting device	1
1675	2	Rehabilitation		Speaking Therapy Room	Aphasia rehabilitation support system	1
1676	2	Rehabilitation		Speaking Therapy Room	IC recorder	1
1677	3	CSSD		Sterilizing Room	Autoclave	6
1678	3	CSSD		Sterilizing Room	EOG Sterilizer	1
1679	3	CSSD		Sterilizing Room	Plasma Sterilizer	2

1680	3	CSSD			Sterilizing Room	Autoclave, low temperature	2
1681	3	CSSD			Sterilizing Room	Washing Sterilizer	4
1682	3	CSSD			Washing Room	Dryer	2
1683	3	CSSD			Washing Room	Ultrasound Washer	1
1684	3	CSSD			Washing Room	Washing Disinfectant for Endoscope	2
1685	3	CSSD			Washing Room	Tube Washing Dryer	2
1686	3	CSSD			Washing Room	Dryer, tube	2
1687	3	CSSD			Washing Room	Automated Endoscope Reprocessor	4
1688	3	CSSD			Washing Room	Cart Washer	2
1689	3	CSSD			Washing Room	System Sink	5
1690	3	CSSD			Washing Room	RO Water Supply System	1
1691	3	CSSD			Washing Room	RO Tank	1
1692	3	CSSD			Packing Room	Pack Sealer	10
1693	3	CSSD			Packing Room	Pass Box	3
1694	2	Pharmacy			Cart Pool	Medicine distribution Trolley,	20
1695	2	Pharmacy			Dispensary	Packing machine	2
1696	2	Pharmacy			Dispensary	Dose Packing Machine	2
1697	2	Pharmacy			Dispensary	Dust Collecting Machine	1
1698	2	Pharmacy			Dispensary	Balance	1
1699	2	Pharmacy			Dispensary	Balance,	2
1700	2	Pharmacy			Dispensary	Packing Table, Fluorescent Lamp	4
1701	2	Pharmacy			Dispensary	Packing Table, Fluorescent Lamp	2
1702	2	Pharmacy			Dispensary	Packing Table, Fluorescent Lamp	2
1703	2	Pharmacy			Dispensary	Packing Table, Fluorescent Lamp	1
1704	2	Pharmacy			Dispensary	Packing Table, Fluorescent Lamp	1
1705	2	Pharmacy			Dispensary	Packing Table, Fluorescent Lamp	1
1706	2	Pharmacy			Dispensary	Inspection Table	1
1707	2	Pharmacy			Dispensary	Cooling Unit	2
1708	2	Pharmacy			Dispensary	Bile Packer	1

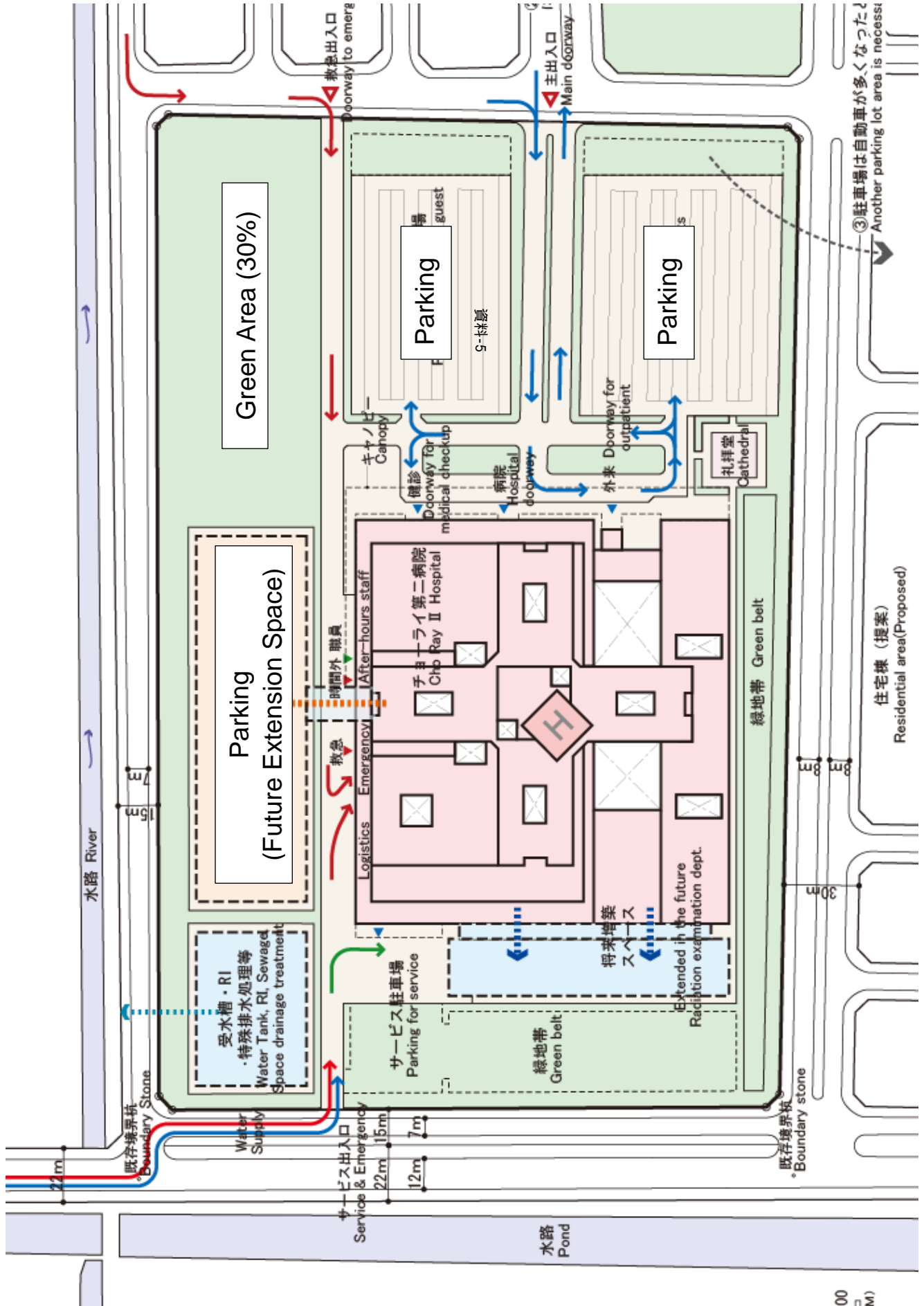
1709	2	Pharmacy	Dispensary	table grinder	1
1710	2	Pharmacy	Dispensary	Packing Machine for Cleaner FOR CLEANER	1
1711	2	Pharmacy	Dispensary	Ointment Mixer	1
1712	2	Pharmacy	Dispensary	Medication display System	2
1713	2	Pharmacy	Dispensary	Dispensing	1
1714	2	Pharmacy	Dispensary	Desiccator	1
1715	2	Pharmacy	Dispensary	Sterilizer, Air	1
1716	2	Pharmacy	Dispensary	Refrigerator, for Medicine	1
1717	2	Pharmacy	Dispensary	Clean Bench	1
1718	2	Pharmacy	Dispensary	Dyer	1
1719	2	Pharmacy	Dispensary	Bottle washer	1
1720	2	Pharmacy	Dispensary	Sterilizer, High Pressure	1
1721	2	Pharmacy	Dispensary	Full automatic Packing Machine for dispeng with grinding Machine	1
1722	2	Pharmacy	Dispensary	Draft Chamber	1
1723	2	Pharmacy	Dispensary	Ointment Mixer	1
1724	2	Pharmacy	IV Preparation Area	Distribution Lifter	1
1725	2	Pharmacy	IV Preparation Area	Injection discharge Unit	2
1726	2	Pharmacy	IV Preparation Area	discharge Lifter	1
1727	2	Pharmacy	Clean Room	super clean Bench	1
1728	2	Pharmacy	Clean Room	Instrument Cabinet	1
1729	2	Pharmacy	Clean Room	Passbox,	1
1730	2	Pharmacy	Clean Room	Passbox,	1
1731	2	Pharmacy	Clean Room	pass Box, Cooling	1
1732	2	Pharmacy	Clean Room	super clean Bench	2
1733	2	Pharmacy	Washing, Dressing, Rocker Area	UV Sterile Rocker	1
1734	2	Pharmacy	Washing, Dressing, Rocker Area	Hand Wash Unit, Aseptic	1
1735	2	Pharmacy	Washing, Dressing, Rocker Area	Air shower Unit	1
1736	2	Pharmacy	Cart Pool, Ward	Medicine Trolley	20
1737	2	Pharmacy	Drug Storage	Cold Room	1

1738	2	Pharmacy		Drug Storage	Storage, dangerous	3
1739	2	Pharmacy		Drug Storage	drug Cabinet	10
1740	2	Pharmacy		Temperature controlled Storage	Medical Freezer, Vertical, 290~350 L	5
1741	2	Pharmacy		Temperature controlled Storage	Medical Freezer, Cooling Storage:200L, Freezer:80L	5
1742	2	Pharmacy		Temperature controlled Storage	Blood Refrigerator, with Recorder, 4~6°C:625~758L	5
1743	2	Pharmacy		General Storage	Cabinet, medicine	10
1744	1	Laundry		Laundry	Equipment for Laundry	1
1745	4	Skills Laboratory		Training Center	Equipment for Medical Training	1
1746	4	Administration		-	Ambulance	4
1747	1	Morgue		Morgue	Refrigerator for corpse	12
1748	4	Reserch		Examination Room	Examination Table	3
1749	4	Reserch		Examination Room	Refrigerator for Medicine	3
1750	4	Reserch		Ward	Syringe pump	4
1751	4	Reserch		Ward	Refrigerator for Medicine	4
1752	4	Reserch		Ward	Ventilator	4
1753	4	Reserch		Ward	Patient monitor	4
1754	4	Reserch		Ward	Syringe pump	4
1755	4	Reserch		Ward	Oximeter	4
1756	4	Reserch		Ward	Suction Unit	4
1757	4	Reserch		Laboratory	Voltex	1
1758	4	Reserch		Laboratory	Centrifuge	1
1759	4	Reserch		Laboratory	Deep Freezer	1
1760	4	Reserch		Laboratory	Full Automatic pH / Blood Gas / Electrolyte Gullucose Hematocrit / CO Oximeter Analyzer	1
1761	4	Reserch		Drug Storage	Refrigerator for medicine	2





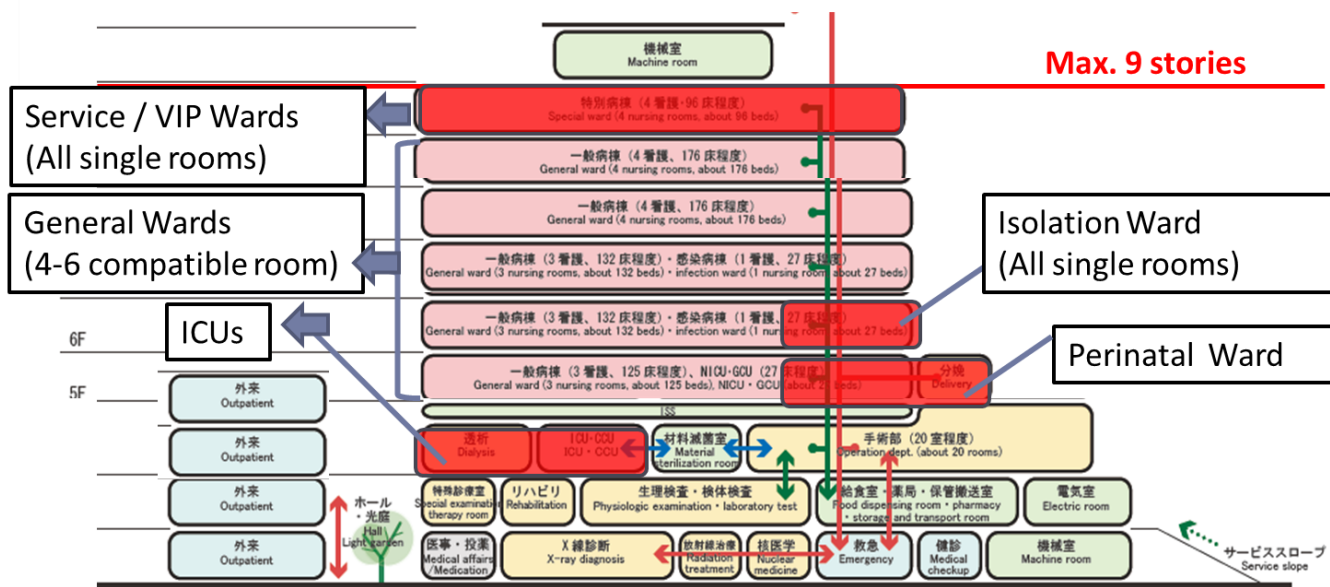
Appendix 5-2



Appendix 5-3

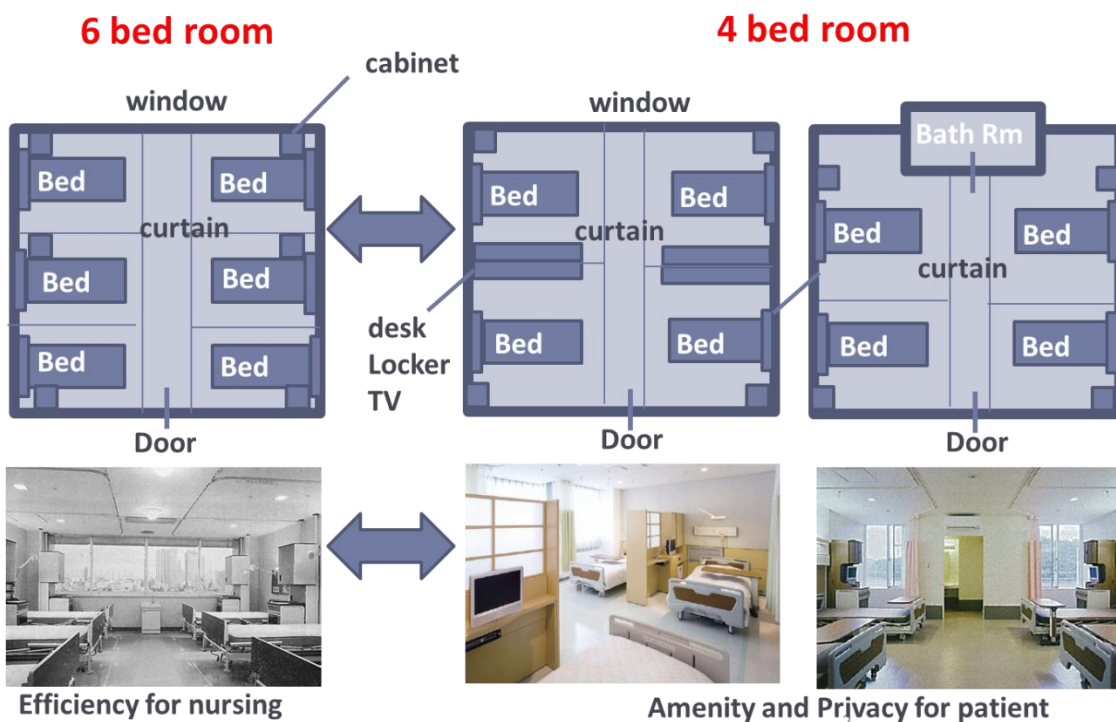
Proposed Plan of Wards

- **Maximum 9 story**
- **Total number of bed is 1000 when the standard bedroom of general ward is 4 bed room**

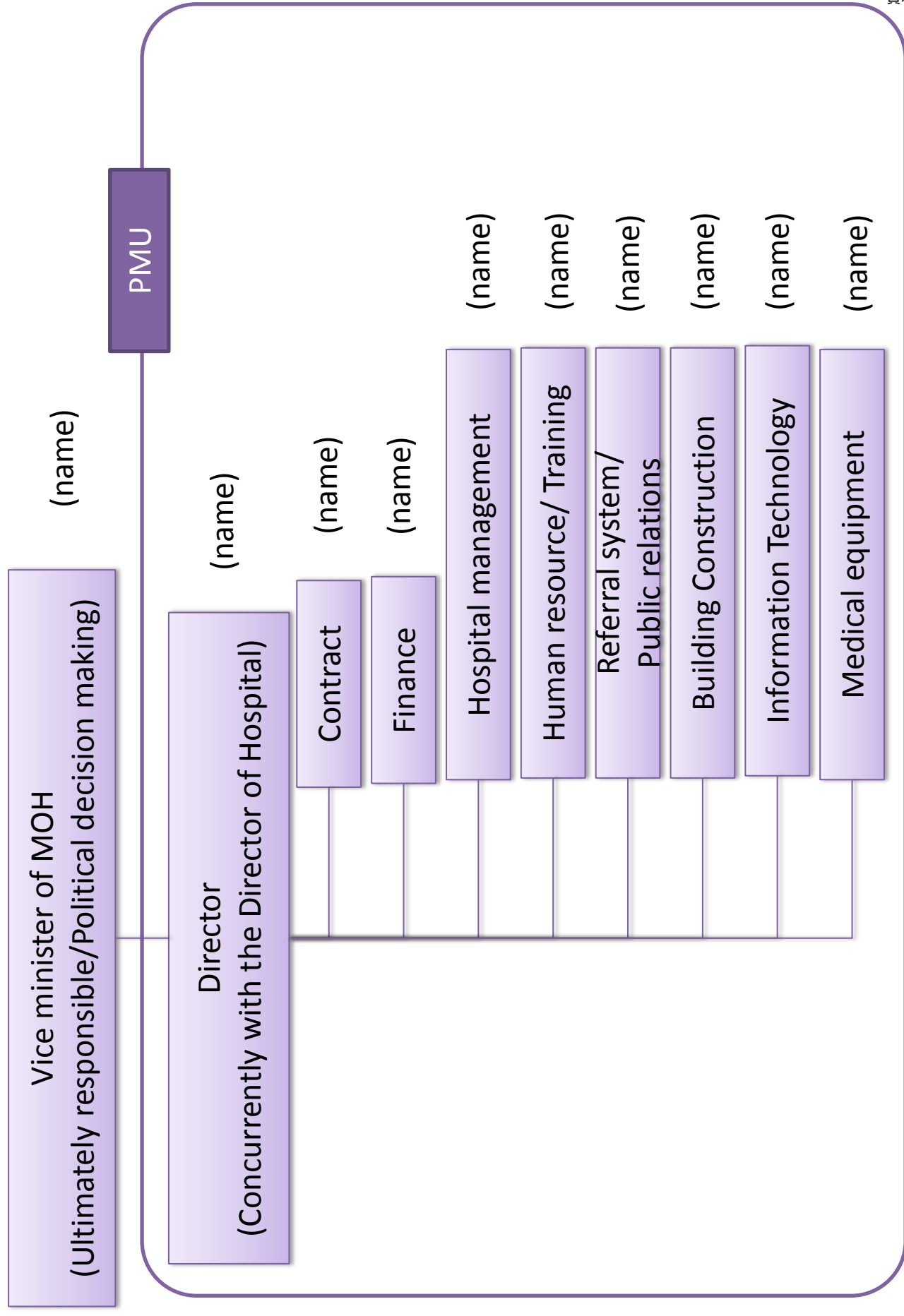


Appendix 5-4

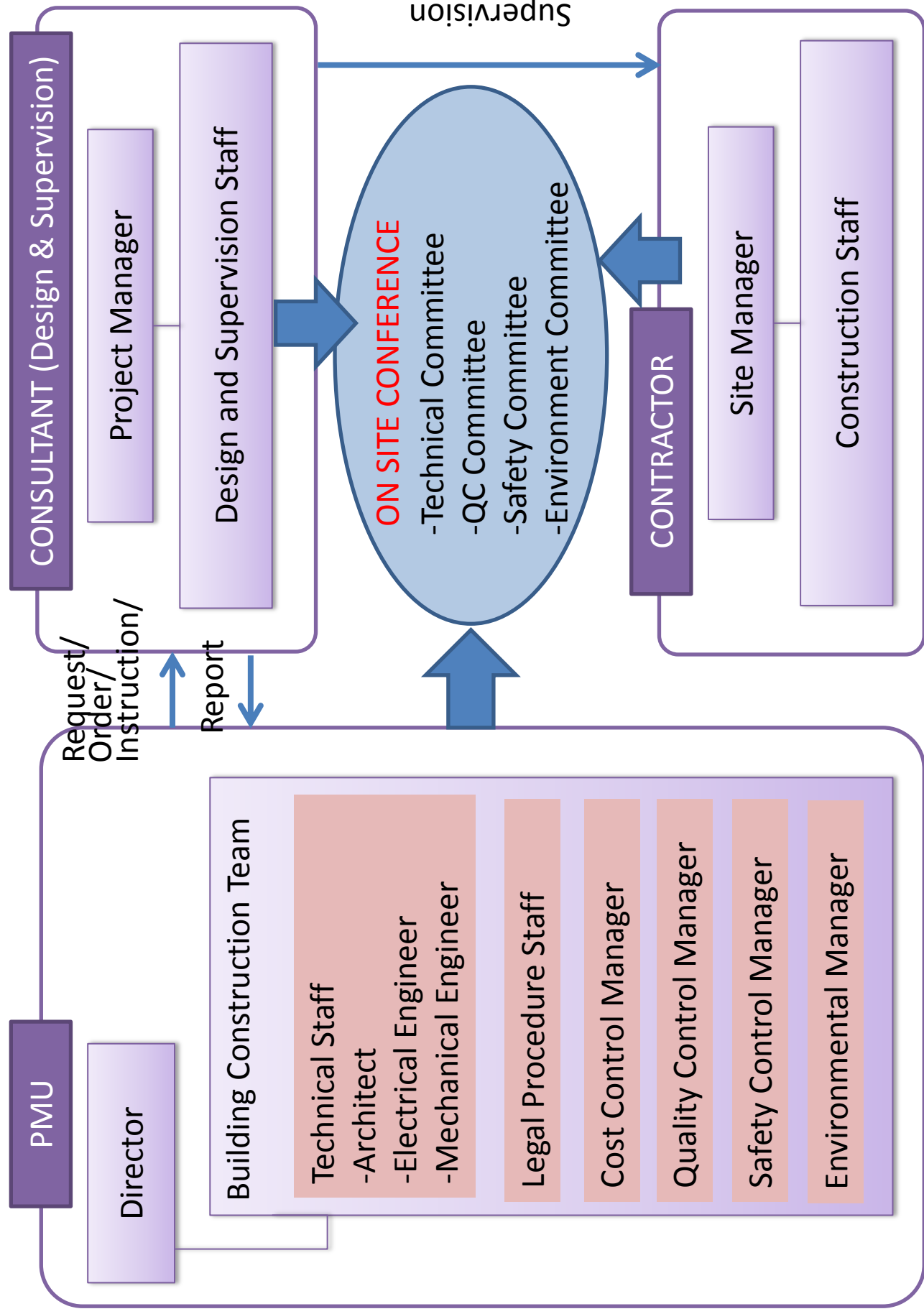
Flexibility for the Future **Changeable Inpatient Room**



# The organization of PMU(Draft)



# The detail organization of Building Construction Team of PMU(Draft)



# Structure & TOR of Consulting Services

Project manager  
 -Overall management of the project  
 -Time management -Quality management  
 -Cost management -Contract administration

Management Consultant  
 -Feasibility Study  
 -Operation manual  
 -Supervision /Monitoring of Pilot study.  
 -Logistic management

IT Consultant  
 -IT Function plan  
 -Preparation of specification & Documentation for tender.  
 -Evaluation of tender.  
 -Supervision of development

ME Consultant  
 -ME list  
 -Preparation of specification & Documentation for tender  
 -Evaluation of tender.  
 -Supervision of setting.

Architect  
 -Basic design  
 -Detail Design  
 -Evaluation of tender  
 -Construction Supervision

Structural Engineer  
 -Basic design  
 -Detail Design  
 -Evaluation of tender  
 -Construction Supervision

Mechanical Engineer  
 -Basic design  
 -Detail Design  
 -Evaluation of tender  
 -Construction Supervision

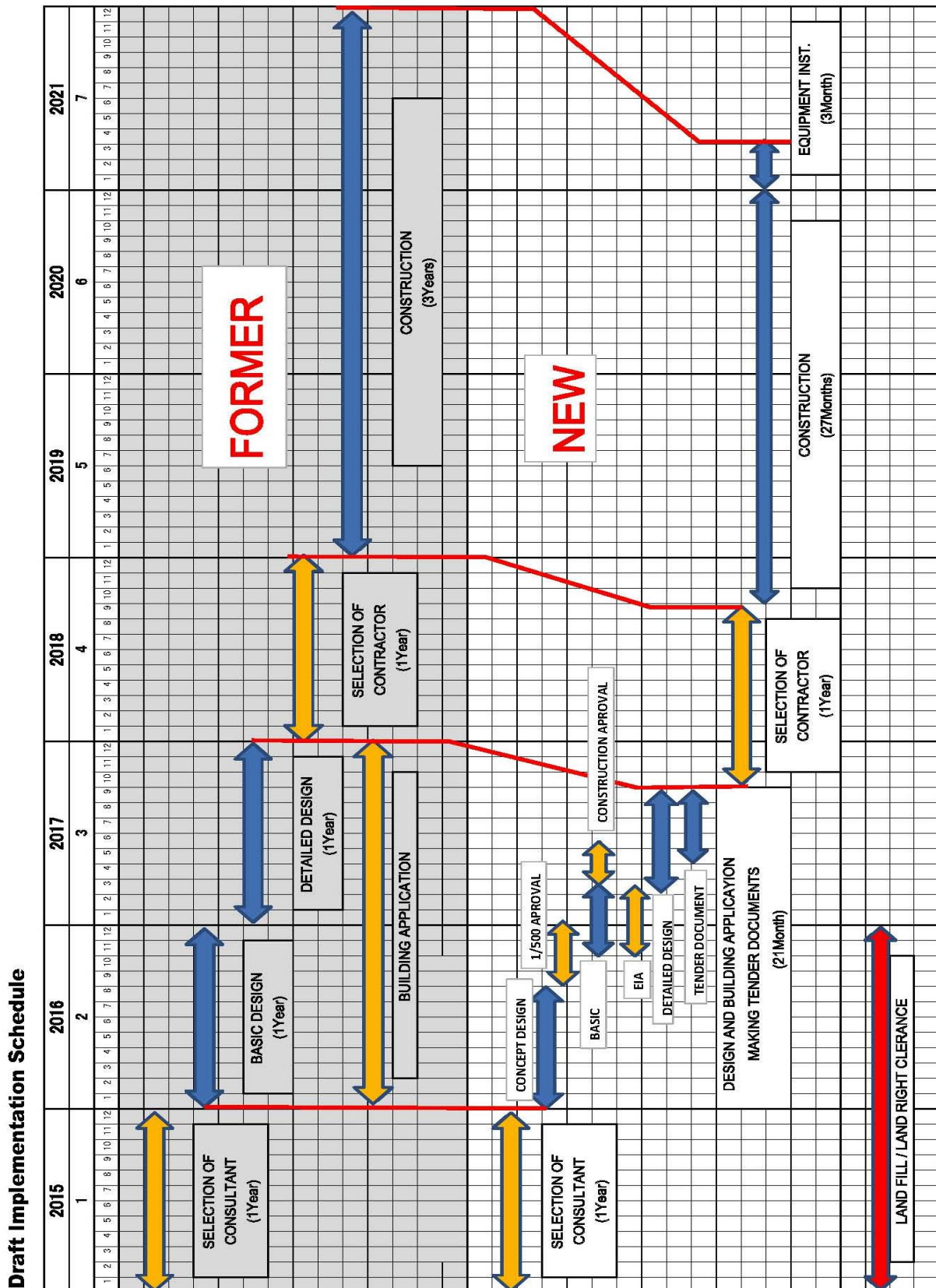
Electrical Engineer  
 -Basic design  
 -Detail Design  
 -Evaluation of tender  
 -Construction Supervision

Quantity Surveyor/Cost planner  
 -Evaluation of tender  
 -Preparation of estimates

Tender Documentation Specialist  
 -Preparation of tender document  
 -Evaluation of tender

Construction manager  
 -Quality control  
 -Safety control  
 -Time management

## Appendix 6-3



Note: usual period of tender procedure (Japanese loan project)

- Tender period (3 months)
- Evaluation of bids (2 months)
- JICA approval of Bid Evaluation (1 month)
- Contract Negotiation (2 months)
- JICA Approval of Contract (1 month)
- Opening of Letter of Credit and Issuance of Letter of Commitment (1 month)
- Pre-qualification (8 month: Overlapping on detail design is possible)

## Draft Operation/Effect Indicators and Qualitative Assessment Indicators for Cho Ray Second Hospital Development Project

## Operation Indicator

Name	Policy and method of establishing the indicator	Target	Purpose
Bed occupancy rate (%)	(Number of beds occupied during a specific period)/(total number of beds during the same period) × 100	Cho Ray 2 <sup>nd</sup> Hospital	To assess the function of provided Cho Ray 2 <sup>nd</sup> Hospital
Number of Inpatients, Outpatients, and Emergency Patients (Persons)	Number of inpatients, outpatients, or emergency patients during a year	Cho Ray 2 <sup>nd</sup> Hospital	To assess the function of provided Cho Ray 2 <sup>nd</sup> Hospital
Number of Examinations	Number of clinical examinations that makes use of facilities and appliances of Cho Ray 2 <sup>nd</sup> Hospital during a year	Cho Ray 2 <sup>nd</sup> Hospital	To assess the function of provided facilities and appliances of Cho Ray 2 <sup>nd</sup> Hospital
Number of Operations	Number of operations that makes use of facilities and appliances of Cho Ray 2 <sup>nd</sup> Hospital during a year	Cho Ray 2 <sup>nd</sup> Hospital	To assess the function of provided facilities and appliances of Cho Ray 2 <sup>nd</sup> Hospital
Number of Inpatients and Outpatients per Hospital Personnel	Daily number of inpatients and outpatients per hospital personnel in Cho Ray 2 <sup>nd</sup> Hospital during specified period	Cho Ray 2 <sup>nd</sup> Hospital	To assess the function of provided Cho Ray 2 <sup>nd</sup> Hospital



**Effect Indicator**

Name	Policy and method of establishing the indicator	Target	Purpose
Birth Rate and Mortality Rate	Birth rate and mortality rate per 1,000 of the population in the target area	Medical Care Zone of Cho Ray 2 <sup>nd</sup> Hospital	To evaluate effect on the improvement of the healthcare/medical level in the target area
Mortality Rate by Diseases	Mortality rate by disease per 100,000 of the population in the target area	Medical Care Zone of Cho Ray 2 <sup>nd</sup> Hospital	To evaluate effect on the improvement of the healthcare/medical level in the target area
Life Expectancy	Life expectancy in the target area	Medical Care Zone of Cho Ray 2 <sup>nd</sup> Hospital	To evaluate effect on the improvement of the healthcare/medical level in the target area
Prevalence Rate	Prevalence rate for a certain period of time per 1,000 of the population in the target area	Medical Care Zone of Cho Ray 2 <sup>nd</sup> Hospital	To evaluate effect on the improvement of the healthcare/medical level in the target area

**Qualitative Assessment Indicators**

- Achievement of “Advanced medical service and regional network”
- Achievement of “Respect of the will of patients”
- Achievement of “Hospitality”
- Achievement of “Safety and security”
- Contribution to lower level hospitals in the south part of Viet Nam as a training hospital.
- Being a model of the hospital management system in Viet Nam though the introduction of Japanese style management system

資料－6 類似サンプル病院別施設規模・機能比較分析表

# Comparative Analysis Table of hospital facilities by size and function at similar sample

## 類似サンプル病院別施設規模・機能比較分析表

施設名称 Establishment name	チョーライ病院 Chorai Hospital	東海大学医学部付属病院 Tokai University Hospital	帝京大学医学部附属病院 Teikyo University Hospital	金沢大学医学部附属病院 Kanazawa University Hospital	三星メディカルセンター Samsung Medical Center	大阪市立総合医療センター Osaka City General Hospital
総病床数 Total number of beds	1800床 1800 beds	803床 803 beds	1154床 1154 beds	838床 838 beds	1099床 1099 beds	1063床 1063 beds
病院機能総面積当りの m <sup>2</sup> /床(駐車場他除く)※ Area m <sup>2</sup> /floor per total functional area of hospital (excluding parking lots or other areas)※	32.01	97.99	84.26	103.68	133.73	83.86
病棟の標準看護単位※ Standard nursing unit of a ward ※	52床/1U、2U/1フロア 52 beds/1 U, 2 U/1 floor	45床/1U、2U/1フロア 45 beds/1 U, 2 U/1 floor	46床/1U、2U/1フロア 46 beds/1 U, 2 U/1 floor	50床/1U、2U/1フロア 50 beds/1 U, 2 U/1 floor	36床/1U、2U/1フロア 36 beds/1 U, 2 U/1 floor	46床/1U、2U/1フロア 46 beds/1 U, 2 U/1 floor
特床階の有無・床数※ W/WO special bed floors/number of beds※	あり(3U)・72床 With (3 U)/ 72 beds	あり(1U)・20床 With (1 U)/20 beds	あり(1U)・24床 With (1U)/24 beds	なし Without	あり(1U)・8床 With (1 U)/8 beds	あり(1U)・25床 With (1 U)/25 beds
病棟基準階の面積※ Area of the standard floor of the ward※	2,108.84m <sup>2</sup> (4U)	2,940.46m <sup>2</sup> (2U)	3,045.72m <sup>2</sup> (2U)	3,530.23m <sup>2</sup> (2U)	2,715.72m <sup>2</sup> (2U)	3,050.09m <sup>2</sup> (2U)
m <sup>2</sup> /床(標準看護単位)※ m <sup>2</sup> /floor (standard nursing unit)	25.47	32.67	33.11	35.30	37.72	33.15
標準病室の病床数※ Number of beds of the standard patient room※	6床室 6-bed room	4床室 4-bed room	4床室 4-bed room	4床室 4-bed room	6床室 6-bed room	4床室 4-bed room
付属トイレの有無※ W/WO adjunct bathrooms※	トイレなし、洗面なし Without a bathroom or a washroom	トイレなし、洗面あり Without a bathroom, with a washroom	トイレなし、洗面あり Without a bathroom, with a washroom	トイレあり、洗面あり With a bathroom and a washroom	トイレあり、洗面あり With a bathroom and a washroom	トイレあり、洗面あり With a bathroom and a washroom
全体病棟個室率※ Rate of private rooms to the whole ward※	8.0%(144/1800床) 8.0%(144/1800 beds)	20.2%(163/803床) 20.2%(163/803 beds)	19.1%(221/1154床) 19.1%(221/1154 beds)	30.1%(253/838床) 30.1%(253/838 beds)	16.0%(176/1099床) 16.0%(176/1099 beds)	18.8%(179/1063床) 18.8%(179/1063 beds)
特別看護単位病床数※ Number of beds for special nursing units※ [ICU・CCU・HCU等] [ICU・CCU・HCU, etc.]	ICU × -, SCU × -	EICU・EHCU × 58, ICU・CCU × 32(90) NICU × 11, GCU × 12, MFICU × 9(32)	ICU × 16, CCU × 12(28)	ICU × 22(22)	ICU × 58(58)	ICU × 9, HCU × 23, CCU × 4(36)
[NICU・GCU・MFICU等] [NICU・GCU・MFICU, etc.]			NICU × 12, GCU × 24(36), PICU × 10	NICU × 6, GCU × 12, MFICU × 3(21)	NICU × 10, GCU × 10(20)	
手術室数※ Number of operation rooms※	35室 35 rooms	20室 20 rooms	20室 20 rooms	14室 14 rooms	23室 23 rooms	14室 14 rooms
レイアウト Layout	中央ホール型 Central hall type	中央ホール型 Central hall type	中央ホール型 Central hall type	回収廊下型 Collection passage type	清潔ホール型 Sanitary hall type	清潔ホール型 Sanitary hall type
放射線検査室数※ Number of radiation examination room※	X線診断 × -, 血管造影 × -, X-ray diagnosis X-, angiography X-, 放射線治療 × -, RI × - Radiation treatment X-, RIX-	X線診断 × 21, 血管造影 × 4, X-ray diagnosis X21, angiography X4, 放射線治療 × 2, RI × 4 Radiation treatment X2, RIX4	X線診断 × 18, 血管造影 × 5, X-ray diagnosis X18, angiography X5, 放射線治療 × 2, RI × 1 Radiation treatment X-, RIX-	X線診断 × 18, 血管造影 × 3, X-ray diagnosis X18, angiography X3, 放射線治療 × 3, RI × 5 Radiation treatment X3, RIX5	X線診断 × 17, 血管造影 × 3, X-ray diagnosis X17, angiography X3, 放射線治療 × 3, RI × 4 Radiation treatment X3, RIX4	X線診断 × 19, 血管造影 × 3, X-ray diagnosis X19, angiography X3, 放射線治療 × 3, RI × 4 Radiation treatment X3, RIX4
外来診察室数※ Number of outpatient examination rooms※	-	124室(1~4階) 124 rooms (1st to 4th floors)	129室(1~3階) 129 rooms(1st to 3rd floors)	135室(1~3階) 135 rooms (1st to 3rd floors)	56室(1~4階) 56 rooms (1st to 4th floors)	57室(1~2階) 57 rooms (1st and 2nd floors)
講堂の有無※ W/WO a hall※	大講堂 × 1 Large hall X1	中会議室 × 1 Middle hall X1	大講堂 × 1 Large hall X1	大講堂 × 1 Large hall X1	大講堂 × 1, 中講堂 × 2 Large hall X1, middle hall X2	大講堂 × 1 Large hall X1
面積※ Area※	480m <sup>2</sup>	110m <sup>2</sup>	520m <sup>2</sup>	310m <sup>2</sup>	440m <sup>2</sup> , 110m <sup>2</sup>	580m <sup>2</sup>
竣工年 Completion year	1975年、1995年 1975 and 1995	2005年 2005	2008年 2008	2008年 2008	1994年 1994	1993年 1993
構造 Construction	SRC造 SRC construction	RC造 RC construction	RC造一部S造、免震構造 RC construction with partly S construction, seismicproof structure	RC・SRC・S造、免震構造 RC, SRC, and S construction, seismicproof structure	RC・SRC・S造 RC, SRC, and S construction	SRC・S造 SRC and S construction
規模 Scale	地上11階 11 floors above the ground	地下1階、地上14階、塔屋3階 1 floor in the basement, 14 floors above the ground, 3 floors of the tower	地下2階、地上19階、塔屋1階 2 floors in the basement, 19 floors above the ground, 1 floor of the tower	地下1階、地上10階、塔屋2階 1 floor in the basement, 10 floors above the ground, 2 floors of the tower	地下5階、地上20階 5 floors in the basement, 20 floors above the ground	地下4階、地上19階、塔屋2階 4 floors in the basement, 19 floors above the ground, 2 floors of the tower
基本スパン Basic span	6.0m × 6.0m	6.0m × 9.0m	6.0m × 9.0m	6.2m 外来診療棟8.4m × 8.75m、病棟 6.2m Outpatient examination ward: 8.4mX8.75m, ward: 6.2m	6.6m × 6.6m	7.5m × 6.0m
エレベーター数 Number of elevators	病棟EV × 11台 Ward EV x 11	病棟EV × 13台 Ward EV x 13	病棟EV × 12台 Ward EV x 12	病棟EV × 13 Ward EV x 13	病棟EV × 17台 Ward EV x 17	病棟EV × 18台 Ward EV x 18
手術件数/年 Number of operations/year	40,316	11,686	8,000件超 Over 8,000	7,146	44,487	9,585
外来延患者数/日 Total number of outpatients/day	166,119	2,735	1,756	1,581	8,073	1,885

※ 上記、面積及び室数等は別紙図面より確認し、積み上げて算定。

The areas and the numbers of rooms are calculated by checking on the separate documents and accumulating data.

チョーライ第二病院 概略設計条件案 Chorai No.2 Hospital, Rough design plan (draft)	備考 Remarks	概略設計条件 Rough design plan
1000床 1000 beds		1000床 1000 beds
100.00m <sup>2</sup>	平均95.25m <sup>2</sup> Average: 95.25m <sup>2</sup> ⇒ピロティ・駐車場等を考慮し100m <sup>2</sup> /床と想定する。 ⇒Estimated to be 100m <sup>2</sup> /beds considering the piloty and the parking lot.	100.00m <sup>2</sup>
40~44床/1U、4U/1フロア 40~44 beds/1 U, 4U/1 floor	[病床]44 × 19U=836床程度 [Patient bed] 44 x 19U=approx.836beds	44床/1U、4U/1フロア、132床/1フロア 44 beds/1 U, 4U/1 floor,132 beds/1 floor
あり(2U)・24床程度 With (2U)/about 24 beds	[特床]24 × 4U=96床程度 [Special bed]24 x 4U=approx.96beds	あり(2U)・24床、96床/1フロア With (2U)/24 beds, 96 beds/1 floor
33~34m <sup>2</sup> /床 33~34m <sup>2</sup> /beds	*類似3施設平均33.85m <sup>2</sup> *Average for similar 3 establishments: 33.85m <sup>2</sup>	33~34m <sup>2</sup> /床 33~34m <sup>2</sup> /beds
4床 4 beds	将来対応として6床に増床可能なタイプとする。 The rooms shall be designed to allow future expansion to a 6-bed room.	4床 4 beds
トイレ付、シャワー付 With a bathroom and a shower		トイレ付、シャワー付 With a bathroom and a shower
20% (標準病棟) 20% (Standard ward)	*類似3施設平均18.7% *Average for 3 similar establishments:18.7% ⇒20%程度とする。 ⇒Shall be about 20%.	20% (標準病棟) 20% (Standard ward)
[ICU・CCU・HCU]50床程度 Approx.[ICU・CCU・HCU]50 beds [NICU・GCU・MFICU等]18床程度 [NICU・GCU・MFICU, etc.]Approx. 18 beds		[ICU・HCU・SCU・EICU]79床 [ICU・HCU・SCU・EICU]Approx. 79 beds [NICU・GCU・MFICU]27床 [NICU・GCU・MFICU]Approx. 27 beds
20室 20 rooms		20室 20 rooms
中央ホール型 Central hall type		回収廊下型 Collection passage type
X線診断 × 18、血管造影 × 4、 X-ray diagnosis X18, angiography X4.		X線診断 × 18、血管造影 × 4 X-ray diagnosis X18, angiography X4
治療 × 3, RI × 4 Treatment X3, RIX4		治療 × 2, RI × 2 Treatment X2, RIX2
130室 130 rooms		130室程度(付属室含む) about 130 rooms(with Included rooms)
大講堂 × 1 Large hall X1		大講堂 × 1 Large hall X1
500m <sup>2</sup>		500m <sup>2</sup>
地上10階 10 floors above the ground		地上10階 10 floors above the ground
間口6.0m Front width: 6.0m		間口6.0m Front width: 6.0m
病棟 × 18台 Ward X18		病棟 × 18台 Ward X18
10,000	*類似3施設平均9,757 *Average for 3 similar establishments: 9,757 ⇒10,000件とする。 ⇒Shall be 10,000.	14,762
2,100	*類似3施設平均2,125 *Average for 3 similar establishments: 2,125 ⇒2,100件とする。 ⇒Shall be 2,100.	2,100

\* 類似3施設平均は、類似5施設の上下限値各1を除いた3施設の平均値とする。

The average for 3 similar establishments shall the average of 3 establishments excluding each upper and lower limits from results for 5 similar establishments.

資料－7 類似サンプル病院別施設規模・面積比較分析表

Comparative Analysis Table of hospital by Category area at similar sample  
類似サンプル病院別部門面積比較分析表

施設名称 Establishment name	チョーライ病院 Chorai Hospital		東海大学医学部付属病院 Tokai University Hospital		帝京大学医学部付属病院 Teikyo University Hospital		金沢大学医学部付属病院 Kanazawa University Hospital		三星メディカルセンター Samsung Medical Center		大阪市立総合医療センター Osaka City General Hospital		チョーライ第二病院 概略設計条件案 Chorai No.2 Hospital, Rough design plan (draft)			概略設計条件 Rough design plan										
	面積(m <sup>2</sup> ) Area (m <sup>2</sup> )		割合(%) Ratio (%)	面積(m <sup>2</sup> ) Area (m <sup>2</sup> )		割合(%) Ratio (%)	面積(m <sup>2</sup> ) Area (m <sup>2</sup> )		割合(%) Ratio (%)	面積(m <sup>2</sup> ) Area (m <sup>2</sup> )		割合(%) Ratio (%)	面積(m <sup>2</sup> ) Area (m <sup>2</sup> )		割合(%) Ratio (%)	面積(m <sup>2</sup> ) Area (m <sup>2</sup> )		割合(%) Ratio (%)								
	大分類 Large class.	中分類 Middle class.		大分類 Large class.	中分類 Middle class.		大分類 Large class.	中分類 Middle class.		大分類 Large class.	中分類 Middle class.		大分類 Large class.	中分類 Middle class.		大分類 Large class.	中分類 Middle class.		大分類 Large class.	中分類 Middle class.	大分類 Large class.	中分類 Middle class.				
病棟部 Ward dept.	27,097.06		47.03%	30,432.11		38.68%	41,133.85		42.30%	33,605.82		38.68%	37,668.87		25.63%	40,014.88		44.89%	40,980.14		38.9%	41.0%※7	40,800.00		40.8%	
一般病棟 General ward	25,491.95		44.24%	25,374.27		32.25%	38,060.42		39.14%	31,801.68		36.60%	36,889.27		25.10%	37,014.08		41.52%	37,956.29		36.0%	38.0%※10	37,000.00		37.0%	
ICU・CCU	1,605.11		2.79%	5,057.84		6.43%	3,073.43		3.16%	1,804.14		2.08%	779.60		0.53%	3,000.80		3.37%	3,023.85		2.9%	3.0%※10	3,800.00		3.8%	
外来部 Outpatient dept.	7,163.53		12.43%	12,127.43		15.41%	8,576.76		8.82%	10,356.27		11.92%	10,851.27		7.38%	6,565.17		7.36%	5,960.00		10.34%	10.9%	5,730.04		6.43%	
一般外来部 General outpatient dept.	5,960.00		10.34%	10,924.09		13.88%	8,055.33		8.28%	9,182.22		10.57%	9,436.40		6.42%	5,730.04		6.43%	552.99		0.96%	0.8%	0.00		0.00%	
リクエスト外来 Requested outpatient	552.99		0.96%	0.00		0.00%	0.00		0.00%	0.00		0.00%	0.00		0.00%	0.00		0.00%	650.54		1.13%	1.1%	843.53		0.8%	
救急部 Emergency dept.	650.54		1.13%	1,203.34		1.53%	521.43		0.54%	1,174.05		1.35%	1,414.87		0.96%	835.13		0.94%	1,142.53		1.1%	1.1%※10	1,200.00		1.2%	
診療部 Examination dept.	10,230.01		17.75%	16,499.11		20.97%	13,441.47		13.82%	17,599.34		20.26%	18,472.71		12.57%	15,247.94		17.10%	1,148.00		1.99%	1.7%	3,282.32		3.68%	
検体検査 Laboratory test	1,148.00		1.99%	1,566.40		1.99%	2,367.29		2.43%	3,274.11		3.77%	3,192.35		2.17%	3,282.32		3.68%	543.29		0.94%	0.8%	1,260.87		1.41%	
生理検査 Physiologic examination	543.29		0.94%	1,471.92		1.87%	607.38		0.62%	948.44		1.09%	1,209.52		0.82%	1,260.87		1.41%	407.89		0.71%	1.2%	748.96		0.84%	
内視鏡 Endoscope	407.89		0.71%	1,010.96		1.28%	580.12		0.60%	878.80		1.01%	523.58		0.36%	748.96		0.84%	放射線部(X線診断・血管造影) Radiation dept.(X-ray diagnosis/angiography)	2,570.39		4.46%	4.6%	3,626.53		4.07%
放射線治療 Radiation treatment	1,400.20		2.43%	998.11		1.27%	1,046.56		1.08%	697.38		0.80%	1,821.10		1.24%	920.53		1.03%	核医学検査・PET Nuclear medicine/PET	1,200.60		2.08%	2.0%	652.58		0.73%
手術部 Operation dept.	1,622.23		2.82%	4,704.64		5.98%	2,792.97		2.87%	4,119.13		4.74%	3,800.60		2.59%	3,302.13		3.70%	手術部 Operation dept.	1,622.23		2.82%	2.8%	4,704.64		5.98%
分娩部 Delivery dept.	0.00		0.00%	130.02		0.17%	272.63		0.28%	213.78		0.25%	568.55		0.39%	249.65		0.28%	分娩部 Delivery dept.	0.00		0.00%	0.3%	249.65		0.28%
リハビリ Rehabilitation	485.41		0.84%	665.99		0.85%	773.95		0.80%	2,153.61		2.48%	1,714.67		1.17%	902.38		1.01%	リハビリ Rehabilitation	485.41		0.84%	1.1%	902.38		1.01%
血液透析 Dialysis	852.00		1.48%	414.26		0.53%	581.69		0.60%	540.26		0.62%	523.10		0.36%	260.62		0.29%	血液透析 Dialysis	852.00		1.48%	0.5%	260.62		0.29%
特殊診療室 Special treatment room	0.00		0.00%	262.54		0.33%	224.02		0.23%	433.71		0.50%	429.30		0.29%	41.37		0.05%	特殊診療室 Special treatment room	0.00		0.00%	0.9%	41.37		0.05%
供給部 Supply dept.	4,397.79		7.63%	10,296.62		13.09%	12,792.62		13.16%	14,212.11		16.36%	29,577.21		20.12%	13,614.12		15.27%	薬局 Pharmacy	532.53		0.92%	1.3%	1,048.83		1.18%
薬局 Pharmacy	532.53		0.92%	1,134.20		1.44%	1,005.71		1.03%	1,135.61		1.31%	2,298.85		1.56%	1,048.83		1.18%	材料滅菌室 Material sterilization room	370.56		0.64%	1.0%	927.17		1.04%
材料滅菌室 Material sterilization room	370.56		0.64%	944.07		1.20%	715.83		0.74%	924.81		1.06%	1,167.96		0.79%	927.17		1.04%	輸血部 Blood transfusion dept.	0.00		0.00%	0.2%	127.39		0.14%
輸血部 Blood transfusion dept.	0.00		0.00%	263.55		0.33%	0.00		0.00%	423.67		0.49%	268.80		0.18%	127.39		0.14%	給食室 Food dispensing room	988.96		1.72%	1.6%	1,442.64		1.62%
給食室 Food dispensing room	988.96		1.72%	1,254.81		1.59%	2,149.40		2.21%	1,474.41		1.70%	2,261.39		1.54%	1,442.64		1.62%	洗濯室 Laundry room	465.25		0.81%	0.3%	208.59		0.23%
洗濯室 Laundry room	465.25		0.81%	0.00		0.00%	440.65		0.45%	308.00		0.35%	770.00		0.52%	208.59		0.23%	保管搬送室 Storage and transport room	0.00		0.00%	1.7%	3,339.71		3.75%
保管搬送室 Storage and transport room	0.00		0.00%	419.99		0.53%	1,361.84		1.40%	848.44		0.98%	4,089.05		2.78%	3,339.71		3.75%	機械室 Machine room	2,040.49		3.54%	8.6%	6,519.79		7.31%
機械室 Machine room	2,040.49		3.54%	6,280.00		7.98%	7,119.19		7.32%	9,097.17		10.47%	18,721.16		12.74%	6,519.79		7.31%	管理部 Functional dept.	8,729.69		15.15%	14.3%	13,704.89		15.37%
管理部 Functional dept.	8,729.69		15.15%	9,329.09		11.86%	21,289.40		21.89%	11,112.57		12.79%	21,980.82		14.96%	13,704.89		15.37%	運営関係 Management	7,163.74		12.43%	10.0%	9,187.12		10.31%
運営関係 Management	7,163.74		12.43%	6,189.09		7.87%	17,978.29		18.49%	7,637.57		8.79%	15,901.15		10.82%	9,187.12		10.31%	厚生関係 Welfare	1,565.95		2.72%	4.4%	4,517.77		5.07%
厚生関係 Welfare	1,565.95		2.72%	3,140.00		3.99%	3,311.11		3.41%	3,475.00		4.00%	6,079.67		4.14%	4,517.77		5.07%	病院機能総面積 Total area of hospital functions	57,618.08		100.00%	100.00%	89,147.00		100.00%
病院機能総面積 Total area of hospital functions	57,618.08		100.00%	78,684.36		100.00%	97,234.10		100.00%	86,886.11		100.00%	146,974.12		100.00%	89,147.00		100.00%	その他 Other	-		-	-	51,155.88		-
その他 Other	-		-	-		-	14,713.90		-	-		-	51,155.88		-	-		-	公表合計面積※6 Published total area *6	-		-	(69,244.39)		-	
公表合計面積※6 Published total area *6	-		-	(69,244.39)		-	111,948.00		-	(84,510.62)		-	198,130.00		-	89,147.00		-								

- 2 東海大学医学部付属病院の機械室は、病院機能総面積の8% (『病院の建築面積とその部門別配分・1980年代。病院1992年8月、伊藤他より)と見込み、別棟にある機械室(エネルギーセンター)の面積を算入。(1,315 6,280m<sup>2</sup>)  
The machine room of the Tokai University Hospital is estimated to be 8% (from "Construction area and its departmental distribution of a hospital: 1980s", "Hospital August 1992, Ito et al) and includes the area of the machine room (energy center) in the separate ward. (1,315=6,280m<sup>2</sup>)
- 3 東海大学医学部付属病院の厚生関係は、病院機能総面積の4% (『病院の建築面積とその部門別配分・1980年代。病院1992年8月、伊藤他より)と見込み、別棟にある厚生関係の面積を算入。(1,501 3,140m<sup>2</sup>)  
The welfare related area of the Tokai University Hospital is estimated to be 4% (from "Construction area and its departmental distribution of a hospital: 1980s", "Hospital August 1992, Ito et al) and includes the welfare related area in the separate ward. (1,501=3,140m<sup>2</sup>)
- 4 金沢大学医学部付属病院の厚生関係は、病院機能総面積の4% (『病院の建築面積とその部門別配分・1980年代。病院1992年8月、伊藤他より)と見込み、別棟にある厚生関係の面積を算入。(1,099 3,475m<sup>2</sup>)  
The welfare related area of the Kanazawa University Hospital is estimated to be 4% (from "Construction area and its departmental distribution of a hospital: 1980s", "Hospital August 1992, Ito et al) and includes the welfare related area in the separate ward. (1,099=3,475m<sup>2</sup>)
- 5 帝京大学医学部付属病院の輸血部は、平面図に表記がないが検体検査に含まれると考えられる。  
The blood transfusion department of the Teikyo University hospital is considered to be part of the laboratory test although not indicated in the plane view.
- 6 公表合計面積は実際の病院機能面積。東海大学医学部付属病院及び金沢大学医学部付属病院については、別棟にあると考えられる機能面積を加算しているため、各合計値を超える。  
The published total area is actual functional area of the hospitals. The results for the Tokai University Hospital and the Kanazawa University Hospital exceed the total of their simple total because they include the functional area considered to belong to the separate wards.

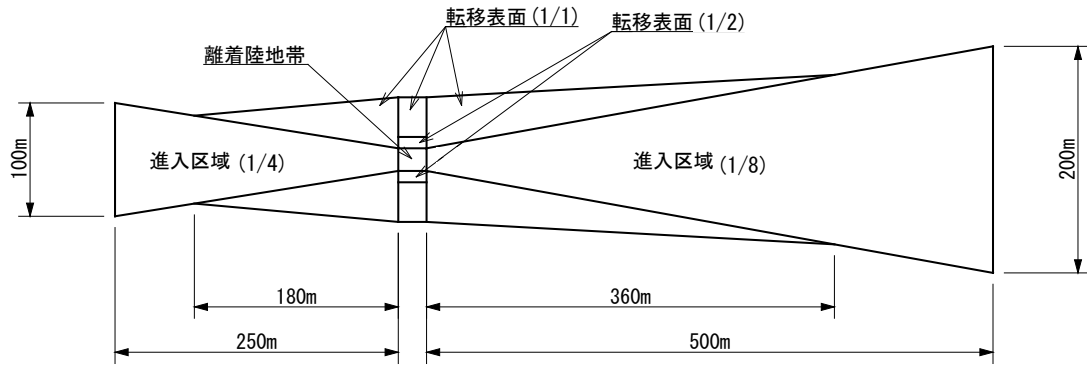
- 7 中分類の面積割合は、類似3施設(上下限値各1を除く)の平均値とする。また、大分類の面積割合は中分類の面積割合の積上げ値とする。  
The area ratio for the middle classification shall be the average of the 3 similar establishments (excluding each of upper and lower limits). And the area ratio for the large classification shall be the accumulative value of those for the middle classification.
- 8 リクエスト外来は実態に合わせ全体面積の0.8%と想定する。  
Requested outpatients are estimated to be 0.8% of the total area to be consistent with the actual state.
- 9 特殊診療室(外来化学療法室)は実態に合わせ全体面積の0.9%と想定する。  
Special treatment rooms (chemical therapy room for outpatients) are estimated to be 0.9% of the total area to be consistent with the actual state.
- ※10 部門面積割合の類似3施設(上下限値各1を除く)の平均値の合計が94.8%となるため、100%となるように補正係数(1.05倍)を乗じた割合とする。  
The sum of the average departmental area ratio for the 3 similar establishments (excluding each of upper and lower limits) is 94.8% and the result shall be multiplied with a compensation coefficient (1.05) to make to result 100%.

## 資料-8 日本におけるヘリポートの制限表面規制資料

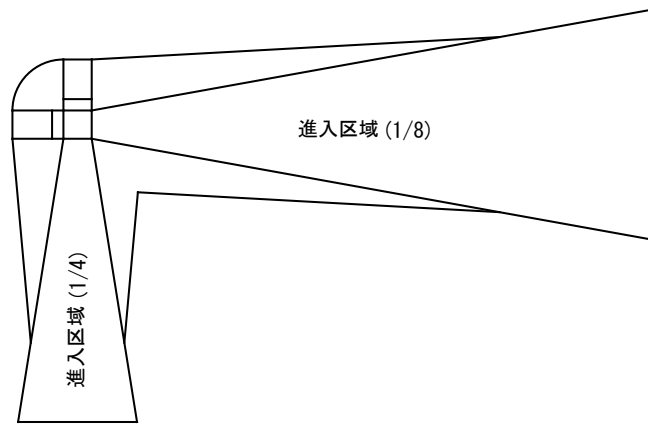
## ●ヘリポート（場外離着陸場（制限表面））

注：進入表面の勾配は、可能な場合は両側 1/8 とする

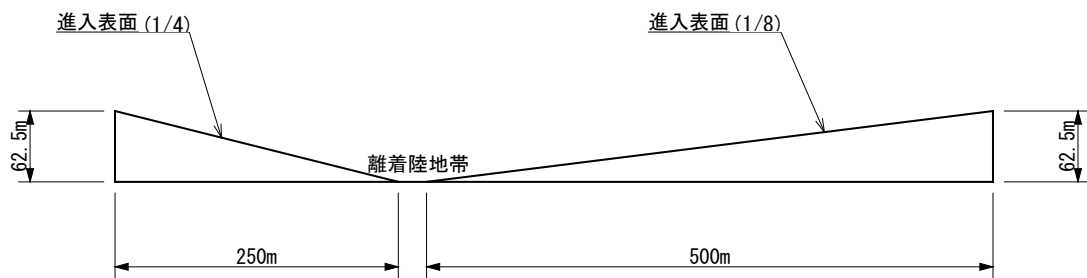
## 平面図



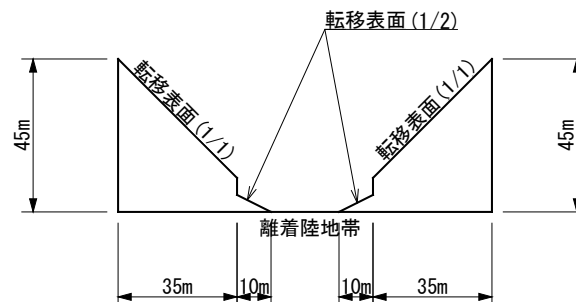
※進入区域は90度回転することが可能。



## 進入表面断面図

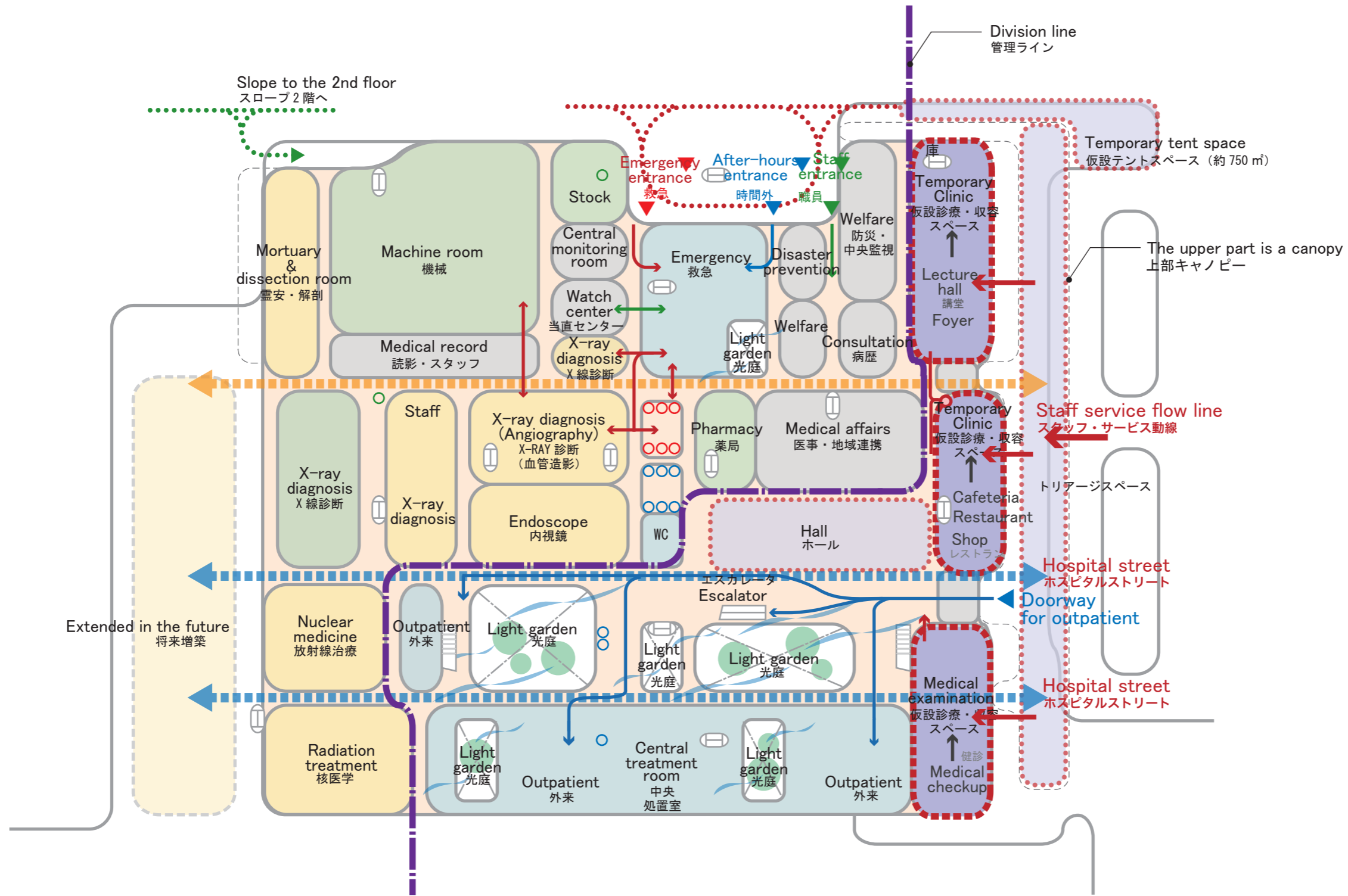


## 転移表面断面図



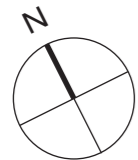


## 資料-9 災害時およびパンデミック時における施設対応



In the case of a catastrophic disaster  
大災害における施設対応

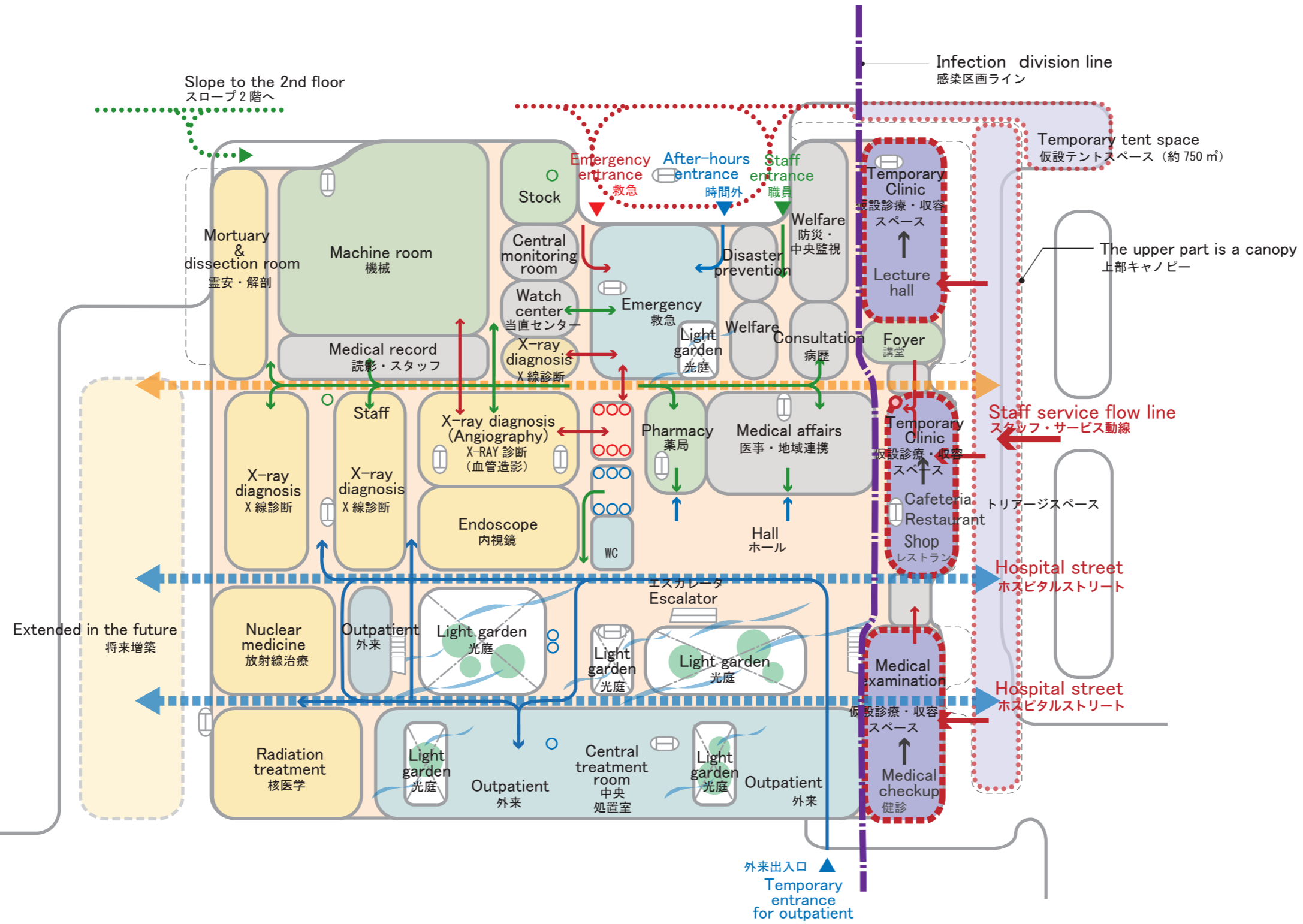
Legend  
凡例



- |  |   |  |  |
|--|---|--|--|
| <span style="display:inline-block; width:15px; height:15px; background-color:#f08080; border:1px solid black;"></span> Ward<br>病棟                | <span style="display:inline-block; width:15px; height:15px; background-color:#90ee90; border:1px solid black;"></span> Supply dept.<br>供給部門     | <span style="display:inline-block; width:15px; height:15px; border-bottom:2px solid red;"></span> Emergency flow line<br>救急動線              | <span style="display:inline-block; width:15px; height:15px; border:1px solid red; border-radius:50%;"></span> Cargo EV<br>搬送 EV                  |
| <span style="display:inline-block; width:15px; height:15px; background-color:#add8e6; border:1px solid black;"></span> Outpatient dept.<br>外来部門  | <span style="display:inline-block; width:15px; height:15px; background-color:#d3d3d3; border:1px solid black;"></span> Functional dept.<br>管理部門 | <span style="display:inline-block; width:15px; height:15px; border-bottom:2px solid blue;"></span> Outpatient flow line<br>外来者動線           | <span style="display:inline-block; width:15px; height:15px; border:1px solid blue; border-radius:50%;"></span> Outpatient EV<br>外来者 EV           |
| <span style="display:inline-block; width:15px; height:15px; background-color:#ffdab9; border:1px solid black;"></span> Examination dept.<br>診療部門 | <span style="display:inline-block; width:15px; height:15px; border-bottom:2px solid gray;"></span> Stairway<br>階段                               | <span style="display:inline-block; width:15px; height:15px; border-bottom:2px solid green;"></span> Staff and goods flow line<br>スタッフ・物品動線 | <span style="display:inline-block; width:15px; height:15px; border:1px solid green; border-radius:50%;"></span> Staff and goods EV<br>スタッフ・物品 EV |

Ground floor plan  
GF平面図

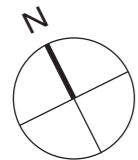
# パンデミックの場合



## Correspondance to the case of Pandemic

パンデミック時における施設対応

Legend  
凡例



- Ward  
病棟
- Outpatient dept.  
外来部門
- Examination dept.  
診療部門

- Supply dept.  
供給部門
- Functional dept.  
管理部門
- Stairway  
階段

- Emergency flow line  
救急動線
- Outpatient flow line  
外来者動線
- Staff and goods flow line  
スタッフ・物品動線

- Cargo EV  
搬送EV
- Outpatient EV  
外来者EV
- Staff and goods EV  
スタッフ・物品EV

Ground floor plan  
GF平面図