OPERATIONAL REVIEW

IN 2018, KPJ DELIVERED ROBUST PERFORMANCE AS A RESULT OF SUSTAINED FOCUS ON OUR SEVEN STRATEGIC THRUSTS TO CREATE VALUE FOR OUR SHAREHOLDERS AND STAKEHOLDERS FOR THE SHORT, MEDIUM AND LONG-TERM.

Our resilient business model which is founded on strong fundamentals and value added propositions, has enabled the Group to retain our market position as the leading healthcare provider in Malaysia, whilst driving through our vision of being The Preferred Healthcare Provider. KPJ’s strong healthcare value proposition and relentless focus on providing the highest quality of patient centric healthcare services have been crucial factors in the Group’s continued success within our regional footprint of Indonesia, Bangladesh, Thailand and Australia.

Information on our healthcare value ecosystem can be found within the About KPJ section on pages 10 to 12 of this IR. For an overview of how we created value using our six capitals in 2018, please refer to our Value Creation Model in the How We Create Value section on pages 14 to 27 of this IR. Our activities within our different business segments for the year were conducted with the intent of driving through our seven strategic thrusts. Details of our strategic thrusts can be found within the Group Strategy section on pages 28 to 29 of this IR. Further information on all sustainability related developments within the Economic, Environmental and Social materiality are in our standalone Sustainability Report.

HOSPITAL NETWORK DEVELOPMENT

In 2018, we sustained our focus on the development of new hospitals to expand our market presence, as well as retrofitting and expanding our existing hospitals to cater to greater market demand. This approach ensures that we remain ahead of the curve in capturing opportunities within the private healthcare sector in Malaysia, leveraging on our brand recognition and high quality medical treatments and services rendered.

KPJ added two new hospitals to our healthcare network with the opening of KPJ Perlis in Kangar and KPJ Bandar Dato’ Onn in Johor Bahru bringing our total number of hospitals in Malaysia to 26 from 25 the previous year. This was due to the merger conducted between KPJ Sabah and KPJ Damai during the year.

We conducted a merging exercise between KPJ Sabah and KPJ Damai during the year, in line with our hospital operations restructuring plan to achieve greater efficiencies and maximise profitability of both hospitals. Following the merger, operations at KPJ Damai were transferred to KPJ Sabah with effect from 1 June 2018. Post-merger, KPJ Sabah is now operating with 103 beds, 40 resident consultants and 445 staff. With the merger, KPJ Damai’s brand name was changed to Damai Wellness Centre, in line with venturing into new niche segment of Senior & Assisted Living Care, Confinement Care and Rehabilitation Services.

We expanded capacities in terms of bed numbers at five hospitals namely KPJ Johor, KPJ Klang, KPJ Bandar Maharani, KPJ Pasir Gudang Specialist and KPJ Ampang Puteri to cater for more demand within these areas.

Moving into 2019, we plan to launch four new hospitals currently under development, namely KPJ Batu Pahat, KPJ Kluang Utama, KPJ Miri and KPJ Kuching, with further hospital developments slated for 2020 and beyond.
OPERATIONAL REVIEW

KEY HIGHLIGHTS

NEW HOSPITALS
- KPJ Perlis: 21 beds, 6 services, 9 specialist consultants
- KPJ Bandar Dato’ Onn, Johor Bahru: 30 beds, 9 services, 9 specialist consultants

EXPANDING EXISTING HOSPITALS
- KPJ Johor: increased 40 beds
- KPJ Klang: increased 12 beds
- KPJ Bandar Maharani: increased 7 beds
- KPJ Ampang Puteri: increased 8 beds
- KPJ Pasir Gudang: increased 15 beds

SEGMENTAL ANALYSIS

CLINICAL OPERATIONS

Performance Highlights 2018

Adding to our Group’s capacities, we expanded healthcare services at the following hospitals:
- Launched a comprehensive radiotherapy and oncology centre at KPJ Sabah.
- Expanded dialysis services by 6 chairs at KPJ Pasir Gudang.
- Started One-Stop Eye Clinic at KPJ Sibu.
- Offered orthopaedic care at KPJ Perdana.
- New oncology centre and new clinics at KPJ Johor.
- Geriatric psychiatrist and general psychiatrist service at KPJ Tawakkal Health Centre.

In order to enhance our customers and patients experience of our healthcare offerings, we conducted the following activities within our network of hospitals:
- Launched new special packages within different healthcare segments.
- Collaborated with corporates to offer special discounts.
- Collaborated with corporate clients and insurance agents to hold regular medical health talks with insurance agent and policy holders.
- To expand our corporate client base, we set up a one stop centre providing alternative options for the community to seek rehabilitation treatment locally in East Malaysia. In 2018, a total of 1,257 cases were registered.
- Commenced with renovation of outpatient and inpatient lobby at KPJ Johor to give it a facelift, as well as offered premier parking and concierge services and conducted patient education in diagnostic imaging.
- Collaborated with Grab Car to provide transport services at KPJ Sibu and KPJ Kuching.
- Enhanced digital marketing efforts through social media platforms.

In Corporate Client Management, we achieved the following in 2018:
- Embarked on an online portal for outpatient specialist guarantee letters (GL) and e-billing, to increase the efficiency of the admission workflow process, thus ensuring greater customer satisfaction. Online portals were initiated for Medkad Sdn Bhd and Healthmetrics at all KPJ hospitals.
- Collaborated with Prudential Assurance Malaysia Berhad (PAMB) on the Hospital Alliance Services (HAS) portal with an Electronic Pre-Authorisation Form (E-PAF), which is a web-based system designed with functions to assist doctors with the HAS processes. Since its inception, all front liners and doctors have been using the e-form to request pre-authorisation letters from PAMB. In 2018, total of 23 KPJ hospitals have been using the portal.
OPERATIONAL REVIEW

CLINICAL OPERATIONS

• With the launch of KPJ Perlis in 2018, we focused on building up a panel of major corporate clients for our new healthcare facility, and brought on board clients from the healthcare insurance sector and Managed Care Organisations (MCO).
• Formalised business relationships through Hospital Service Agreements between major corporate clients and KPJ Perlis.
• Launched the KPJ Baby Programme in our network of hospitals with the aim of increasing the number of deliveries and postnatal services, thus indirectly contributing to growing patient numbers at KPJ hospitals. The programme extends special benefits and privileges to all new-born babies and mothers nationwide upon registering with our KPJ Care Card. As at December 2018, 304 applications have been generated through this programme.

• Made our hospitals more baby friendly by creating a conducive environment for breast feeding new-borns. This is in tandem with Ministry of Health (MOH) campaigns promoting exclusive breastfeeding for new-borns till they are six months old, as well as growing trends amongst mothers to offer their children breast milk as a healthier alternative to formula milk. By engaging with our corporate clients on this programme, we can leverage on existing partnerships and strengthen our business relationships, as well as seek out new corporate customers.
• To remain on course with continuous improvements for our corporate clients, we developed a corporate clients’ feedback survey to measure corporate clients’ level of customer satisfaction towards our services. The implementation of the survey will commence in the first quarter of 2019.
• At KPJ Selangor, we extended rehabilitation services to sports injuries and a stroke centre.
• Developed new Acute Stroke Service to begin in KPJ hospitals in the Klang Valley within two subservices, namely the use of medical thrombolysis for acute embolic strike; and mechanical thrombectomy using interventional measures for lesions that cannot be medically thrombolyzed.

• Utilising 3D printing for orthopaedics surgery and Oral and Maxillofacial surgeries.
• Utilising IBM Watson for Oncology to facilitate faster comparative decision making for cancer treatment options.
• Introduced 3D laparoscopic surgery at KPJ Kuching.
• We introduced new niche segment offerings at Damai Wellness Centre following its merger and rebranding with the provision of after birth Confinement Services. A total of 9 bookings with deposits were received for the period of January till May 2019.
• The Group expanded KPJ Sentosa’s offerings with the following niche services:
  - Mobile Healthcare
  - Home Nursing in Post Operative and External Confinement Homes
  - Extended physiotherapy services to standalone Physio Centres, Private Nursing Homes and Sports Centre

• To ensure we have in place talented medical personnel who are able to provide the highest quality of healthcare services, we conducted a recruitment drive and hired new consultants. A total of 54 new resident consultants joined KPJ in 2018 from various specialities such as Anaesthesiology and Critical Care, Cardiothoracic, Clinical Oncology, Clinical Radiology, Internal Medicine, ENT, O&G, Orthopaedic, Prosthodontics, and Paediatric.
We enhanced our credit management process during the year with cash collection initiatives, and streamlined billing submission via e-billing to improve debtor turnover.

Cash Outstanding Improvement
- Close monitoring of outstanding amount on daily and weekly basis.
- Standard monitoring and reporting format has been introduced to enhance the efficiency and consistency in reporting.
- Key indicators include Cash Outstanding Report, excess and non-cover report, declined report, refund report, unallocated deposit and receipt report.
- Monthly report is tabled to Operational Committee by respective hospitals, and action plans and corrective measures are deliberated for further improvement.
- As at December 2018, total cash on outstanding cases dropped tremendously by between 46% and 47% compared to the same period in 2017.

Credit sale
- Commenced online billing through web-based e-billing.

This initiative integrates with major insurance companies and MCO for a web-based e-billing submission process where the patient’s bill can be uploaded and downloaded.
- Streamlined and expedited the existing bills submission and collection processes.
- As at December 2018, Group net DTO day reduced by 13% from 46 days to 40 days.

Cost containment
- Continuous efforts to reduce operating overhead cost and admin expenses.
- Embarked on energy saving programme to reduce printing and paper cost via digitisation. This included digitisation of marketing, e-report and an Internal Portal System for communications.
- Embarked on SQM Internal Online inter-department system.
- Sustained ongoing system implementations for Q Radar, BMS, PACS and SYShelp.
- Managed efficient equipment cost through central negotiations by Group’s Biomedical division.

Sustained efforts to enhance shareholders’ value through continuous improvements in our healthcare delivery system and quality of services for better clinical outcomes with full compliance towards Corporate and Clinical Governance.
- KPJ Tawakkal Health Centre achieved Dental Accreditation Certification by MSQH in December 2018, the first Dental Centre to do so.

OUTLOOK
- Develop Centres of Excellence in Neurology and Stroke Management, orthopaedic, gastroenterology, radiology, oncology and cardiology.
- Develop satellite hospitals.
- Expand ambulatory care, home services and house calls.
- Explore partnerships with public hospitals offering procedure packaging.
- Continuously introduce new technologies and procedures at par with international standards such as the Remote Healthcare Diagnostic and Monitoring Application Platform in collaboration with JCORP Digital SmartCare.
- Within corporate client management, to provide a unified client database, allowing for document control on clients common to hospitals within the KPJ Group and allow for multi-hospital programmes to be executed for large clients. The CCM division also plans to continue training programmes for the marketing personnel based at hospitals to ensure they are equipped with the best practices in client management.
OPERATIONAL REVIEW

HOME NURSING/ASSISTED LIVING CARE/KPJ WELLNESS AND LIFESTYLE

Performance Highlights 2018

Sibu Geriatric Health and Nursing Centre
- Revenue of RM0.9 million
- PAT of RM0.1 million
- Kuantan Wellness Centre recorded revenue of RM2.1 million in 2018
- Launched Damai Wellness Centre in 2018, with 52% occupancy as at end 2018

**Damai Wellness Centre**
- Launched Senior & Assisted Living Care (SALC) Services at Damai Wellness Centre with 21 beds. As at December 2018, average occupancy stood at 52%. A total of 39 residents have utilised the service with a mix of short to long-term stays.
- The provision of SALC services focuses on providing support for patients who are not bedridden, while also providing rehabilitation services for patients from other public and private hospitals in Sabah.

- Rebranded Senior Living Care as Senior & Assisted Living Care in line with changing lifestyle expectations and trends.

**Damai Wellness Centre**
- Landscaped gardens for SALC at Damai Wellness Centre.
- Conducted activities with residents such as playing cards, making crafts, gardening and tai chi exercises.

**Sibu Geriatric Health and Nursing Centre**
- Focused on initiatives aimed at improving client satisfaction and comfort during their admission via the following measures:
  - Improved room facilities
  - Organised more activities amongst residents
  - Organised spiritual prayer sessions as requested by family members

**Kuantan Wellness Centre**
- Kuantan Wellness Centre commenced with ALC services for the aged in February 2018 and recorded revenue of RM2.1 million as at December 2018.
  - Currently operating with 20 beds
  - Occupancy as at December 2018 is 57%
  - New wing ready to be open with additional 14 beds
  - At full operations, it will house 33 beds, to be launched in stages depending on demand

**Jeta Gardens (Australia)**
- Following a strategic review of the business model, in 2017 the Board of Directors had approved the divestment of aged care operations in Australia by disposing its shares in Jeta Gardens (Qld) Pty Ltd (Jeta Gardens). The results of Jeta Gardens was disclosed as a discontinued operation and the relevant assets and liabilities were classified as being held for sale in 2018. The negotiations with potential buyers are still undergoing, and the transactions are expected to be completed during the second half of 2019.

**OUTLOOK**
With the main objective to strategise the development and implementation of Integrated Aged Care and Senior Living Healthcare Business as a major core business of Johor Corporation by collaborating with our parent company as follows:
- To create an ecosystem in Senior & Assisted Living Business by establishing clear platform and path with the KPJ Senior & Assisted Living Care Committee.
- To identify the right business model by appointing an independent consultant to conduct a market assessment for senior living care.
- To develop a comprehensive Senior & Assisted Living Healthcare corporate and business plan for the Group.
- To review Senior Living Healthcare Business and Project Feasibility.
- To identify and engage with potential internal and external stakeholders as business partners.

**Damai Wellness Centre**
- To expand provision of services to Wellness Services.
- To provide a medi-lodge which is a hostel for outstation patients seeking treatment.

**Sibu Geriatric Health and Nursing Centre**
- To focus on expanding marketing presence in the vicinity of Sibu, Sarawak, as well as looking into renting or acquiring a new location for future expansions.

**KPJ Tawakkal Health Centre**
- To reward existing subscribers with enhanced loyalty programmes and greater engagement.
- To attract new subscribers from new business demographics and corporate collaborations.
- To establish a new package system based on business framework to ensure strategic positioning, market relevance and financial growth.
### Operational Review

#### Performance Highlights 2018

- Growth in patient numbers by 5%
- 7% revenue growth
- 13% increase in surgeries statistics

<table>
<thead>
<tr>
<th>Performance Highlights 2018</th>
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</thead>
<tbody>
<tr>
<td><strong>1.</strong> The first in KPJ Group to set up a complete Advanced Dry Eye Service that applies new therapies utilising laser to help alleviate the signs and symptoms of dry eye disease and, consequently.</td>
</tr>
</tbody>
</table>
| **2.** CFS continued to actively promoting Lasik surgeries via roadshows at popular shopping malls such as IOI City Mall, Empire Subang, Avenue K and Melawati Mall.  
  - We also participated in thematic expos such as Beauty Health, education, wedding fairs and investment conventions that drew in specific customer segments.  
  - All these activities resulted in an increase of 20% of customers that signed up for lasik services compared to the previous year.  
  - Had roadshows with optometrists and care counsellors who directly engaged with customers as a more effective means to influence customers’ behaviour in deciding to do ReLex® (Refractive Lenticule Extraction) SMILE (Small Incision Lenticule Extraction), a new eye surgery introduced during the year. |
| **3.** Introduced the latest eye surgery techniques to treat short-sightedness with ReLex® (Refractive Lenticule Extraction) SMILE (Small Incision Lenticule Extraction). This surgery technique is particularly useful for those with very high prescriptions, dry eyes, contact lens intolerance, and/or thinner corneas, with or without astigmatism. The treatment is only available in a few laser eye surgery centres in Malaysia. ReLex SMILE is a minimally invasive surgery which enables patients get all the benefits of LASIK - a flapless form of laser eye surgery, with faster, safer and gentle approach, rapid healing and very little discomfort compared to conventional LASIK. |
| **4.** Expanded into Advanced Dry Eye Service at KPJ Tawakkal Health Centre focusing on clinical benefits of E-Eye treatment using Intense-Regulated-Pulsed-Light (IRPL) therapy. This therapy is a new and ground breaking technology for the treatment of dry-eye disease that is caused by Meibomian gland dysfunction (MGD) a leading cause of cause of evaporative dry eye disease. |
| **5.** As responsible eye care professionals we believe in creating public awareness on the importance of managing Dry Eye Disease (DED), to help improve the quality of life of dry eye patients. In line with this, on 19 December 2018, we introduced the Advanced Dry Eye Service at KPJ Tawakkal Health Centre in conjunction with World Eyesight Day. |

#### Outlook

- To double the number of Lasik roadshows at shopping malls, and extend to commercial centres and boutique malls, by appointing an external event management team to handle and run the event.
- Establish telemarketing toll free call number to draw in patients.
- Increase social media engagements platforms.
- Enhance the role of optometrists as allied health professionals who promote eye health through corporate talks and personal counselling.
- Appoint celebrity spokesperson to be a social media influencer of Lasik.
- Expansion of facility to become an Ambulatory Care Centre (ACC).
## OPERATIONAL REVIEW

### REHABILITATIVE TREATMENTS

#### Performance Highlights 2018

- Physiotherapy and rehabilitative treatments increased by 10.9% to 842,400 treatments

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>01</td>
<td>Damai Wellness Centre expanded into rehabilitation treatments.</td>
</tr>
<tr>
<td>02</td>
<td>KPJ Tawakkal Health Centre refurbished activity room to promote transitional living apartments for stroke patients. The Rehabilitation Independent Living Unit (Rilu) was completed in September 2018.</td>
</tr>
<tr>
<td>03</td>
<td>Conducted remote patient monitoring and surveillance by embarking on Rainmaking project under MDEC’s Value Innovation Platform (VIP) programme. This was implemented via DoctorOnCall.com.my at KPJ Damansara, KPJ Rawang and KPJ Tawakkal Health Centre focusing on oncology, rheumatology, ophthalmology, gastroenterology, rehabilitation, dental and speech therapy.</td>
</tr>
<tr>
<td>07</td>
<td>Damai Wellness has been appointed as the panel to provide physiotherapy rehabilitation services to PERKESO as part of the Return to Work (RTW) programme. The contract between Damai Wellness and PERKESO is for a three year period from 17 May 2018 to 16 May 2021. Services offered are exercise therapy, stroke rehabilitation and chest physiotherapy.</td>
</tr>
</tbody>
</table>

#### OUTLOOK

- Damai Wellness Centre to explore extension of services for PERKESO by providing hostel facilities.
- Within our network of hospitals, to expand scope of healthcare services to rehabilitation treatments.
**OPERATIONAL REVIEW**

**STERILISATION OF SURGICAL INSTRUMENTS (STERILE SERVICES SDN BHD (SSSB))**

### Performance Highlights 2018

- Revenue of RM4.1 million
- Gross Profit of RM2.6 million
- EBITDA increased from RM0.1 million to RM0.9 million

<table>
<thead>
<tr>
<th>#</th>
<th>Activity</th>
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<tbody>
<tr>
<td>01</td>
<td>Increased participation from public hospitals through a long-term contract with their integrated facilities management company such as Radicare and Medivest.</td>
</tr>
<tr>
<td>02</td>
<td>Enhanced relationships with all KPJ Klang Valley Hospitals in order to get at least 80% of their surgical instruments to be sent to SSSB.</td>
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<tr>
<td>03</td>
<td>Expanded services to 2 medical centres.</td>
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<tr>
<td>04</td>
<td>Installation of CCTV within the entire building area for safety purposes.</td>
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<tr>
<td>05</td>
<td>Monitored staff performance as part of service quality improvement initiative.</td>
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<tr>
<td>06</td>
<td>Standardised surgical instruments among KPJ Klang Valley hospitals, with standardised sets rotated to all Klang Valley hospitals in order to resolve the issue of unavailable surgical sets when required by surgeons.</td>
</tr>
<tr>
<td>07</td>
<td>Purchased instruments from Pakistan and India in order to resolve the issue of a lack of back up instruments at KPJ Klang Valley hospitals.</td>
</tr>
<tr>
<td>08</td>
<td>Cost saving initiatives to target positive EBITDA in 2018.</td>
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</table>

### OUTLOOK

- Exploring factory needs for any services that can be provided such as washing or packing especially to manufacturers in the healthcare industry.
- Targeting new customers in East Malaysia.
OPERATIONAL REVIEW

PATHOLOGY AND DIAGNOSTIC (LABLINK (M) SDN BHD)

Performance Highlights 2018

- Revenue growth of 8% to RM87.7 million
- EBITDA of RM18.6 million
- Test volumes increased by 5% to 17 million

01 • Formalised joint venture between Lablink (M) Sdn Bhd with Quadria Capital to sustain long-term strategic growth plan in the region.

02 • Managed KPJ’s hospital network and external non-KPJ hospitals with a total of 25 hospital laboratories, referral testing with external general practitioners’ clinics, governments and university hospitals across Malaysia.
• Introduced 175 new tests in 2018, bringing total tests to 3,289.

03 • Lablink Laboratory Information System (LIS) facilitates seamless online viewing of results which allows timely reference and retrieval by doctors for their diagnosis and treatment of patients.

04 • Equipped with state of the art laboratory, skilled and well-trained manpower and qualified pathologists, Lablink has established multi-disciplined subspecialty laboratory testing in BSL 3 Tuberculosis Reference Laboratory (Mycobacteria culture, identification and sensitivity), Molecular Diagnostics, Autoimmunity & Allergy, Microbiology (aerobes & anaerobes), Mycology, Parasitology, Histopathology, Cytopathology and Integrated Diagnostics Laboratory testing.

05 • Consolidated and centralised KPJ hospital networks’ laboratory services to make tests affordable and standardised systems and methods, towards cost efficient purchasing, efficient comparison of results among the laboratories.

OUTLOOK

• To continue medical education and clinical correlation of results to improve and aid patient diagnosis and treatment outcomes.
• To promote quality excellence in laboratory testing and professional practice through quality standards.
• To obtain medical laboratory accreditation requirements for quality and competency: ISO 15189, CAP, JCI.
• To leverage on existing hospital laboratory management capabilities while continuing to explore and build partnerships with non-KPJ private secondary hospitals.
• Continuously scan the environment and explore inorganic growth opportunities, and seek market penetration in Southeast Asia.
• To expand laboratory testing menu.
OPERATIONAL REVIEW

WHOLESALE DISTRIBUTOR OF PHARMACEUTICAL PRODUCTS (PHARMASERV ALLIANCES)

Performance Highlights 2018

- Revenue increased by 1% to RM423.4 million
- Net profit increased by 10% to RM2.3 million

• Embarked into registration of medical devices and appointed as sole agent.

• Conducted training plan to strengthen staff morale, motivation and competencies.
  - Total of 80 employees.
  - Conducted activities organised by the management, Kelab Sukan dan Rekreasi (KSR) and Mutiara for employees.

• Focused on inventory efficiency by enhancing Purchase Order system to improve efficiency of stock management and order fulfilment. The Purchase Order module was enhanced, with full implementation of barcode scanning at warehouse, SST module, and improvement of reporting for data analysis.
  - Continuous improvement at warehouse and logistic functions by practising Lean warehousing as a way to gain competitive advantage and bring value-added to customer. As a result, we obtained the Gold recognition for the Lean Management Certificate.
  - Improved overall supply chain efficiency and maintained QMS.

• KPIs are visible to all employees and we communicate the status of our operations’ performance on a timely basis.

OUTLOOK

Business Process Improvement

- Improve the Procurement Strategy by focusing on efficiency of system, internal process and working with suppliers to combat frequently out of stock incidents, and measure and improve procurement and supplier performance.
- Obtain cost savings from Tender Exercise and Contract Negotiations for patients.
- Offer competitive pricing by working with suppliers and negotiate competitive prices on products and services, thus helping to lower costs for patients.
- Improve supply chain efficiency and deliver the best products at the best value and facilitation of communities of knowledge among healthcare providers and supply chain experts to share best practices.

To Embed Innovation

- Focus on data analysis and benchmarking, with the aim of following best practices adopted by competitors.
- Conduct pricing and market research.
- Compliance with regulations requires cost and is time consuming. Therefore, we will be expanding into new products and registering medical devices as a competitive advantage.
## OPERATIONAL REVIEW

### RETAIL PHARMACIES (KPJ HEALTHSHOPPE SDN BHD)

#### Performance Highlights 2018

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
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</table>
| 01 | KPJ Healthshoppe (KPJHS) now has 5 retail outlets located in:  
- KPJ Selangor  
- KPJ Damansara  
- KPJ Pahang | KPJ Tawakkal  
KPJ Johor  
One new JX Pharmacy outlet launched in 2018 at Bandar Baru Bangi. |
| 02 | To enhance customer offerings, KPJ Healthshoppe conducted the following activities:  
- Offered comprehensive product segmentations except for scheduled medicines. | Strategised its visibilities by revamping the existing PharmaCare Healthshoppe outlets into a new Scandinavian design with a fresh and welcoming ambience that differs from the existing retail pharmacies in the market. |
| 03 | Embarked upon a multi-channel shopping strategy that leverages on the brick-and-mortar outlet with an interactive online website www.kpjshoppe.com which has been publicly accessible since December 2017. This is the platform for the future electronic prescribing for the Group. | |
| 04 | Launched JX Pharmacy as a new brand for a full-fledge retail pharmacy. J represents Johor while X represents, prescription, exclusivity, and the X factor reflecting JX Pharmacy extraordinary commitment towards customers. JX Pharmacy is wholly owned by KPJ Healthshoppe Sdn Bhd.  
With the emergence of planned shopping centers and commercial areas that offers various retail formats, we selected a strategic location for JX Pharmacy as one of the critical decisions to be made. Among factors to be considered are connectivity, demographics, proximity to hospital and security. The first JX Pharmacy was opened Street Mall, Bandar Baru Bangi, nearby Bangi Gateway, An-Nur Specialist hospital and Lagenda Hotel.  
To enhance our competitiveness in the retail pharmacy industry and product categories, we focused on value differentiation in diversifying product offerings into exclusivity, research-based organic and vegan products on top of the standard OTC and supplementary products.  
Knowing the importance of having a digital presence and search engine optimisation in order to be relevant in today's business arena, we established content management and digital marketing strategies that include sponsored promotional campaigns in Facebook and Instagram, video platform and social media influencers to build initial and continuous momentum in generating traffic to the site which will eventually reflect in increased revenue. | |
| 05 | The new KPJHS structure has a faster and more effective administration and decision making capacities.  
Fundamental operational activities are monitored and coordinated centrally. | |

#### OUTLOOK

- To sustain efforts focusing on current strategic intents to drive growth.  
- Aim to have 20 outlets at strategic locations in major cities throughout Malaysia by 2023.
OPERATIONAL REVIEW

PHARMACEUTICALS (TERAJU FARMA SDN BHD)

- Revenue increased by 2% to RM72.7 million.
- Engaged the market by working closely with principals or product owners and dealing directly with downstream users to expand our customer base to ensure consistent, sustainable earnings growth and strong cash flow.
- Increased product segmentation and customer base.
- Gross profits reduced by 3% to RM 3.8 million in 2018, from RM 4.0 million in 2017 as a result of lower selling prices for products. This was primarily due to the competitive pressures resulting from the rapid changes in technology and introduction of substitute products during the year.
- Profit before zakat and tax (PBZT) decreased in 2018 by 11%, primarily due to lower selling prices and increased cost in operating segments.

OUTLOOK

- To continue to identify and pursue growth opportunities that includes skill development and retention, expansion into related business activities and strategic alliances with business partners.

STATIONERY AND PRINTING MATERIALS (SKOP YAKIN SDN BHD)

- Expanded into event planning and management services to expand its range beyond the Group to other third party clients.
- Continued to provide KPJ Group with cost-effective supplies of stationery and printing materials for marketing and promotional collaterals and hospital and office administrative documents.

OUTLOOK

- To boost revenue by aggressively seeking third party clients, as well as clients for event planning and management.
OPERATIONAL REVIEW

HEALTHCARE ENGINEERING SERVICES (PRIDE OUTLET SDN BHD)

- 22 corporate clients and hospitals with contracts valued at RM0.9 million.
- 6,867 planned preventive maintenance (PPM) activities in 2018 increased by 42% from last year.
- 7 engineers with 35 testers and analysers.
- Purchased new testers tools and analysers to improve PPM scheduling efficiency.
- Engaged external survey house to further understand clients requirements and expectations on third party maintenance company requirements.
- Distributed performance questionnaires to clients and evaluate responses towards improvements in service.
- Embarked on plans to perform maintenance and repair on high-ended biomedical equipment. This includes maintenance of endoscopy equipment and ultrasound.
- Identified gaps in skills amongst staff and sent them for skills enhancements training.
- Enrolled engineers with technical skills training to enhance specific skills currently lacking in the organisation.
- Advocated for Good Distribution Practice of Medical Devices. This is to improve the company’s operational practices in compliance with Malaysian Medical Device Authority standards.

OUTLOOK
- Introduce new biomed and radiology products to the Malaysian market.
- To issue and evaluate customer survey questionnaire to monitor service quality.
- Employ marketing staff to gather market intelligence and prepare aggressive marketing plan.

HOSPITAL CATERING (TOTAL MEAL SOLUTION (TMS))

- Revenue of RM10.0 million and net profit of RM0.3 million.
- 6,867 planned preventive maintenance (PPM) activities in 2018 increased by 42% from last year.
- 7 internal outlets and 1 external outlet.
- 910,311 meals served with 2,247 catering functions.
- 3 licensed outlets in Klang, Seremban and Pusrawi.
- Achieved 100% meals served within 1 hour.
- Moved to a new central kitchen to increase business capacities.
- Achieved customer satisfaction index of 80%.
- Achieved target of creating two new nutritious menus with TMS standard per year.
- Utilised IT system and facilities to reduce operation cost MDM (patient ordering) and FMH (purchasing ordering).
- Developed a strategic plan to expand market TMS in nutritious meal.
- 99% of TMS staff received trainings and skill development programmes.
- Achieved target an average training hours of 30 hours per employee.
- Secured reasonably priced and good quality of raw materials.
- Three TMS - TMS Klang, TMS Seremban and TMS Pusrawi certified halal by JAKIM.

OUTLOOK
- To extend facilities towards achieving full capacity.
- Introduce new and niche services via upgrading of technology to provide online services and delivery services.
- To enhance employees capabilities through improved training and development programmes.
- To ensure high levels of SQM through focused measures.
## OPERATIONAL REVIEW

### HOSPITAL LAUNDRY SERVICES (FABRICARE SDN BHD)

- Revenue increase by 17% to RM4.8 million from the previous year.
- Focused on laundry segment and secured service contracts with exclusive restaurant in Johor Bahru.
- Hiring strategies employment of youth in their 20’s.
- CBW system will increase our knowledge and efficiency in laundry management through access of production data in real-time.
- Long term plans include diversification of business.

### OUTLOOK

- Exploring opportunities to set up a Special Project Vehicle (SPV) company for laundry and linen services for government and specialist hospitals in South Johor.
- Focused strategy to increase our market share for hotel customers.
- To become a leading hospital’s laundry operator in Johor by 2025.
- Enhance processes laundry operations.
- To apply state-of-the-art equipment to increase production efficiency by 30%.
OPERATIONAL REVIEW

**KPJ UNIVERSITY COLLEGE**

**Performance Highlights 2018**

- Revenue of RM40.3 million
- Profit before zakat and tax of RM0.2 million
- 2,051 total students
- 32 total programmes

- Relocation of KPJIC Johor Bahru campus to the new premises in Bandar Dato Onn to compliment Malaysian College of Hospitality and Management and to maximise the usage of the building.
- Engaging potential clients, parents and students through social media, where more interactions and info can be delivered effectively.
- KPJUC Alumni was re-established to create networking opportunities among our 10,000 alumni throughout the country.
- Blended learning modules were developed to assist teaching and learning to be more interactive and online based to cater to full-time as well as part-time working professionals.
- KPJUC has embarked on Learning Management System (LMS) - an online based database for teaching and learning portal for students and lecturers to share and exchanges notes, assignments or homework, as well as tests. This eases communication with Millennials as well as saving paper utilisation.
- KPJUC currently conducts four specialty Master programmes, which differentiates it from other private education competitors. It is the only IPTS approved to conduct these programmes.
- In 2018, KPJUC obtained approval to run the Medical Specialty Training Programme in Internal Medicine, whereby the Medical Officer will sit for the MRCP examination. This is also the first time the programme is offered on a structured basis.
- New Post Basic Nursing programmes are also in the pipeline. These include Post Basic in Infection Control and Post Basic in Trauma.
- As part of the SETARA requirement, KPJUC needs to increase the number of lecturers’ qualifications by sending them to higher education programmes such as Masters and PhD. A number of staff have been sponsored for further studies for PhD and Masters as well as post basic programmes.
- Staff are encouraged to attend internal and external training as part of improving quality of services and increasing staff motivation.
- To attract more students, KPJUC diversified the fully accredited Bachelor programmes from full-time to part-time mode. Two programmes obtained approval to be offered on a part-time basis, namely the Bachelor of Medical Imaging and Bachelor of Nursing. Both will be offered in 2019.

**OUTLOOK**

- To focus on producing more specialists.
- Targeted recruitment drive for international students.
- To renovate facilities to cater to new programmes intakes.
- Introduce new programmes in high demand.
- Expand Continuous Professional Development trainings for external clients.
- Achieve good ratings on SETARA and MyQuest.
- Embark on aggressive marketing campaigns for new programmes introduced.
- Exploring potential partnerships and collaborations for bridging programmes and funding.
## MEDICAL TOURISM

### Performance Highlights 2018

- 158,711 health tourists
- Revenue of RM140.5 million

<p>| | |</p>
<table>
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| 1. | KPJ opened 3 new Health Tourism Info Centres in Dhaka Bangladesh, Batam Kumpulan Riau and Palembang Sumatera.  
   |   Group launched info centre in Dhaka, Bangladesh. |
| 2. | Introduced 5 competitively priced packages namely:  
   | - Health Screening with free hotel and transport  
   | - Total Knee Replacement and Total Hip Replacement  
   | - Bariatric surgery  
   | - CT Angio  
   | - Lasik surgery  
   |   Established 6 health tourism friendly hospitals where there was one dedicated staff to manage health tourists, namely at KPJ Selangor, KPJ Seremban, KPJ Klang, KPJ Rawang, KPJ Sentosa and KPJ Tawakkal Health Centre. |
| 3. | Offering healthcare services which feature technology advancements. |
| 4. | The Group expanded Health Tourism market to other countries namely Vietnam and Brunei.  
   |   Launch of KPJ Perlis has expanded market reach targeting health tourists from Langkawi Island in Malaysia and Thailand. |
| 5. | Trained staff to be dedicated health tourism managers for 6 KPJ hospitals. |

### OUTLOOK

- Expand market reach by opening more info centres in first and second tier cities in Indonesia, Somalia, Brunei, United Arab Emirates, Oman and Vietnam.  
- Conduct corporate collaborations with Takaful Africa, Daman Insurance, banks and corporates in Indonesia, Government Ministries in Bangladesh, and local and international associations and communities.  
- Leverage on social media influencers of Malaysian and Indonesian celebrities for marketing purposes.  
- Introduce mobile app to drive health tourism reach.  
- Targeted advertisement campaigns utilising airlines.
### INTERNATIONAL OPERATIONS

#### INDONESIA

<table>
<thead>
<tr>
<th>Performance Highlights 2018</th>
<th>RS MEDIKA BSD (RSMBSD)</th>
<th>RS MEDIKA PERMATA HIJAU (RSMPH)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2,993 inpatients</td>
<td>Gross Revenue of IDR75.6 billion as at year end</td>
</tr>
<tr>
<td></td>
<td>67,924 outpatients</td>
<td>Inpatient growth of 19.8%</td>
</tr>
<tr>
<td></td>
<td>Gross Revenue of IDR75.5 million</td>
<td>Outpatient growth of 9.5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bed occupancy of 55%</td>
</tr>
</tbody>
</table>

**RSMBSD**
- Added more specialists to the hospital, especially within the sub-specialties of Vascular Surgeon, Nephrologist, Neuro Surgeon and Neurologist.
- Increased operating beds from 56 to 72 beds, including 4 ICU beds.

**RSMPH**
- Started construction on a new block to provide a new outpatient clinic area and expanding support services.
- Added more type C hospitals as partners for BPJS referral purposes.

**RSMBSD**
- Built up KPJ brand name in Indonesia.
- Focus on adding prominent corporate and insurance companies in the panel such as Inhealth Mandiri and YANKESGA, and build up rapport with insurance agents and companies that has already collaborated with RSMBSD.
- Played a more active role in activities with insurance and corporate clients.
- Created a more visible presence in social media and the internet via active FB and Instagram accounts and collaboration with active online health providers – Halodoc and Alodokter.
- Dedicated its ward at Level 3 for BPJS patients only with 34 operating beds. This ward has a total capacity of 70 beds that can be utilised in future.
- The ward at Level 4 is dedicated for insurance / corporate and cash-paying patients only.

**RSMPH**
- Embarked on customer engagement activities such as the introduction of Halodoc, a service to dispatch medication to customers’ premises at no extra charge to reduce their waiting time.

**RSMPH**
- Invested a total of IDR10 million in medical equipment such as surgical power tools, anaesthetic machine, second OT table, instruments for TURP, Ultrasound Therapy, Electric Stimulator, Biometry and Spirometry, to enhance services.

**RSMPH**
- Focused on high margin cases such as orthopaedics, ophthalmology, dialysis and physiotherapy services through investments in equipment and offerings additional treatments and procedures.
- Appointed a medic acupuncture specialist to offer new range of treatments to capture opportunities in acupuncture services.
- Embarked on offering cardiothoracic services and cathlab services.
- Began providing installing equipment towards providing cardiac catheterization services in 2019.

**RSMPH**
- The provision of service in outpatient clinics still continues to be one of our challenges as most of our doctors are on a part time basis and there are times where services are unavailable. Therefore, we worked on getting more doctors on board and appointed 14 consultants working on a part-time basis in 2018, enabling us to offer extra hours for outpatient services.
- 80% of our staff attended training during the year.
The facility recorded a 17% reduction in sales and patients for 2018, mainly due to the following factors:

- BPJS tiered-referral system was fully enforced starting 2018, whereby patients have to seek treatment at first level health facilities such as government clinics and GP clinics before they can be referred to a hospital.
- BPJS also enforced the “system rujuk balik” whereby patients treated at hospitals have to be referred back to the clinics referring them for follow-ups. The same patient can be referred back to the hospital after 3 months of the first referral.
- Most outpatients are not covered by insurance, hence patients will convert to BPJS scheme for their follow-up visits.

Achieved 3 star ratings to maintain accreditation status.
- During the year, we recorded a decline in the insurance, corporate and cash paying segments, due to an increase in BPJS and the shifting of payments from insurance to the BPJS scheme. Therefore, our marketing division continued engagements with insurance and corporate segments through introduction of packages and also acceptance of joint benefits with BPJS.
- Obtained more referrals from BPJS through agreements with new referrals centre, which led to an increase in outpatients and inpatients of 25% and 94% respectively.

Recruit more Specialists to increase clinic utilisation and service availability within the areas of General / Digestive Surgeon, O&G, Urologist, Orthopaedic Surgeon, Gastroenterologist, Cardiologist, Cardiothoracic Surgeon and Oncology Surgeon.
- Increase capacity of Dialysis Services by an additional 7 machines.
- Upgrading MRI machine to enable more comprehensive investigations to be done for Neurology, Cardiology and Vascular and intervention radiology.
- To set up Chemotherapy Service with Oncology Surgeon.
- To start Cardiothoracic Surgery Service with a Cardiothoracic Surgeon on board.

Finalise arrangement with Inhealth Mandiri and Yayasan Kesehatan Garuda (YANKESGA).
- Continue to build rapport with insurance agents and insurance companies to promote specialists and hospital services.
- Collaborate with other hospitals and healthcare facilities to get referrals for insurance and BPJS cases.
- Continue with efforts to promote the KPJ brand, doctors and hospital services through public and private seminars, visibility in social media and collaboration with mass media.

To continue with the strategic plan pertaining to hiring consultants to fill the gap in clinic hours.
- To start offering cardiac catheterization services.
- To obtain 20 new dialysis patients in 2019.
- To expand physio services in the first quarter 2019.
- To explore the possibility of providing chemo services for lung cancer through working arrangements with other hospitals.
- Finalisation of agreement with RS Patria (Type C hospital) in Jakarta Barat to obtain more BPJS referrals.
### BANGLADESH

**Performance Highlights 2018**
- 43% increase in inpatients to 4,257
- 21% increase in outpatients to 110,567
- Revenue of BDT 313.6 million

- As at December 2018, the hospital had 50 operating beds, with an occupancy rate of 74%.
- The healthy increase in inpatients and outpatients were mainly due to an increase in the number of consultants, as well as greater number of activities conducted at the hospital.
- We expanded capacities by bringing in a total of 13 new resident consultants in 2018, bringing the total number of consultants to 31, from 24 the previous year.

**OUTLOOK**
- To continue with expanding capacities by hiring new consultants.

### THAILAND

**Performance Highlights 2018**
- 6.4% increase in inpatients to 9,255
- 6.0% increase in outpatients to 309,049
- Gross Revenue of THB 2.5 billion
- Net profit of THB 200.1 million

- Expanded hospital capacities by increasing number of operating beds to 193.
- Registered an occupancy rate as at 31 December 2018 of 44%.

**OUTLOOK**
- To continue to expand hospital capacities and ensure operational efficiencies.
Information and Communication Technology (ICT) continues to evolve in the Industry 4.0 Evolution focusing on several project initiatives as follows:

• Migrate into Cloud Computing by installing Hospital Information System with the core applications of HITS2 (Financial) and KCIS2 (Clinical).
• Despite the challenge of trying to try to achieve integration for 26 hospitals in 2018, we benefited from a learning curve where we changed from native to cloud computing applications for the platform to be ready for integration between KPJ hospitals to improve services engagement between Management, Care Providers and Customers (Patients).
• HITS2 and KCIS2 remain as secured applications to protect patients’ medical data whilst extending more efficient services to patients. Hence, migrating cloud computing require an improved and centralised managed private cloud services to reduce system downtime to less than one hour to have better engagement for doctors and nurses who are using the core applications to serve patients.
• Enabled further value creation of services through payment kiosks to improve payment using credit card facilities as faster turnaround in waiting time to improve patient experience.
• Big Data Analytics and Artificial Intelligence will help achieve a more in-depth understanding of our patients needs, and improve on hospital settings and performance for better quality of care.

By moving into cloud and cloud computing, enabled the platform as shared services in compiling medical data to initiate Big Data Analytics and improve the use of Artificial Intelligence as the next move.

Explored Industry 4.0 innovations such as wearable technologies utilising IoT, and expanded the pilot project to several other hospitals for early detection and warning capabilities.

Standardised processes and policies as follows:

• Procurement – standardised purchase order format and authorisation limit
• Review of supplier selection criteria and processes
• User Access Matrix – reviewed and standardised for integrated system HITS2 and KCIS2
• Inventory Management – reviewed and standardised unit of measurement and charging unit, deactivate unutilised old or non-standard codes from the system
• Standard coding system – reduced leakages

Corporate Information Technology Services is part of KPJ’s success story to achieve ISO 9001 to comply with quality and governance to ensure standardisation and best practice in the entire KPJ Group of hospitals and companies.
• Corporate IT Services continued to prepare for ISO 27001 to ensure Cybersecurity and Data Protection compliance to reduce Cyber Security and IT risks, with a target to achieve ISO 27001 certification in 2019.
• Centralised monitoring system and behavioural analytics to identify unknown intrusion and cyber-attack internal and external and establish internal control policy to ensure there are proper actions to be carried out when there are emergency situations.
OUTLOOK

To further build our capacities:
• Continue with implementation of HITS2 and KCIS2 Cloud Computing Group-wide
• Managed Private Cloud
• ISO 9001 and ISO 27001
• KPJHQ, Hospitals and Companies Assets Hygiene
• Cyber Security Risk Points
• Assessment and Check Point

For enhanced customer relationship management:
• HITS2 and KCIS2
• Customer Relationship Management (CRM)
• Internet of Things (IoT)
• Electronic Master Data Management (Initial Assessment)

Mesiniaga Berhad has been engaged to conduct a security risk assessment on our IT infrastructure. Their findings and recommendations will be reviewed and implemented in 2019.

To continue exploring new MedTech and Industry 4.0 technology applications in the healthcare sector via:
• Artificial Intelligence
• Telemedicine
• Wearable Devices (IoT)
OPERATIONAL REVIEW

ACCREDITATIONS, QUALITY ASSURANCE AND CERTIFICATIONS

Performance Highlights 2018

<table>
<thead>
<tr>
<th>Type of accreditation</th>
<th>Number of hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>JCI</td>
<td>4</td>
</tr>
<tr>
<td>MSQH</td>
<td>19</td>
</tr>
<tr>
<td>Medical Clinic (KWAN)</td>
<td>8</td>
</tr>
<tr>
<td>MSQH - Dental Clinic</td>
<td>1</td>
</tr>
<tr>
<td>Planetree</td>
<td>2</td>
</tr>
<tr>
<td>IMS</td>
<td>21</td>
</tr>
<tr>
<td>BFHI</td>
<td>14</td>
</tr>
</tbody>
</table>

- KPJ’s hospital network continued monitoring and renewing current certifications for Quality Management System namely, Joint Commissioning International (JCI), Malaysia Society in Quality Healthcare (MSQH), Integrated Management System (IMS) - ISO 9001, ISO 14001 and OHSAS 18001, Baby Friendly Hospital Initiatives (BFHI) and Quality Environment/5S.

- Conducted Planetree certification process focusing on patient centred care to upgrade certification level. KPJ Ampang and KPJ Damansara have been certified with the Gold Level Excellence in Person-Centred Care from Planetree International, USA. Both hospitals were the first to receive this award in Malaysia and Asia Pacific.

- KPJ Dental the first dental facility in Malaysia to receive MSQH accreditation.

- Lablink Medical Laboratory has been certified by the Department of Standards Malaysia with ISO 15189:2012.

- KPJ Healthcare Berhad has been certified for ISO 9001:2015 by TUV Rheinland. A quality management system certified according to ISO 9001 defines who is responsible for which quality-relevant activities and which procedures must be followed. The standard requires a control loop, which requires constant internal re-evaluation of the system that promotes a continuous improvement process (CIP). This ensures that quality orientation is lived by each of our employees on a daily basis.

- KPJ Seremban was awarded 1 star for the Energy Management Gold Standard under ASEAN Energy Management Scheme (EMGS AEMAS).

- KPJ Sabah was awarded with the Accredited Quit Smoking Service location by the Ministry of Health, Malaysia.

OUTLOOK

- Continuously monitoring and reviewing current Quality Management System certifications to ensure our compliance.
- Based on reviews, to identify new measures and initiatives to ensure we are constantly upgrading and improving our hospital networks to obtain new and credible international and local certifications and accreditations which will add to the Group’s brand value.