INNOVATIVE HEALTHCARE

SUSTAINABILITY REPORT 2023

Member of
Dow Jones Sustainability Indices
Powered by the S&P Global CSA

BDMS Bangkok Dusit Medical Services | SUSTAINABLE DEVELOPMENT GOALS

BDMS supports the Sustainable Development Goals

Content

02 President's Message

04 BDMS Performance Overview 2023

06 Award and Recognitions 2023

11 BDMS Sustainability Development

16 Sustainability Materiality Assessment

21 Governance and Economic Dimension

21 Corporate Governance
51 Information Security and Privacy
62 Service Quality and Patient Safety
72 Innovation and Technology of Sustainability
83 Supply Chain Management

91 Social Dimension

91 Human Capital Development and Retention
110 Customer Relationship Management
117 Communities Engagement
131 Occupational Health and Safety
140 Respecting Human Rights

148 Environment Dimension

148 Energy and Climate Change Management
157 Circular Economy
163 Water Stewardship

170 Appendix

170 About BDMS
175 About this Report
177 Assurance Statement

President's Message

"BDMS is firmly committed to delivering excellent quality by moving forward the innovation to generate new values for the society while simultaneously creating equality, minimizing discrimination in health services accessibility. The company strongly determines to promote environmental management in gearing toward a low carbon society as well as adheres to becoming a leader in healthcare service provider for the well-being of all people under the sustainability concept."

Committed to Sustainability Principle

Over our 50 years of business operations, BDMS has emphasized the mission and aspiration in delivering good health to the society and community in a sustainable manner, coupled with complete health services which provide patient treatment at the international standards, together with advanced medical technology. As a result of our commitment to sustainability culture in every business activity of the organization, BDMS was selected to rank 1st in Health Care Providers & Services of Dow Jones Sustainability Indices (DJSI) in which BDMS is the first medical and healthcare business organization in Thailand and Asia to become a member of the World Index for the first time and in the Emerging Markets Index for 3th consecutive years. Besides, the company has passed the evaluation criteria of SET ESG Rating at AA level in Market Cap: SET 1 (>10,000 million baht) for 4th consecutive years.

Signes by *Poramaporn Prasarttong-Osoth*

(Poramaporn Prasarttong-Osoth), M.D.
President

Deliver Value to the Society

BDMS constantly develops medical innovation and implements the plan in becoming the smart hospital and a leader in complete healthcare service provider. Thus, the company has taken into consideration the changing expectations of the customers over time and acted in line with sustainable development of healthcare business. Examples of such innovations include Direct Anterior Approach Hip Replacement (DAA), the medical innovation which delivers health benefits to Thai citizens, helps minimize the recovery period, enables speedy recovery while significantly reducing pain. This in turn, results in higher satisfaction rate of patients and relatives, rendering BDMS with the Best Innovative Company, Business Excellent sector at the SET Awards 2023 and the Best Investor Relation Awards from the Stock Exchange of Thailand.

Gear toward Net Zero

BDMS strives to become the ESG leader in the Healthcare Services and Providers Sector. In the area of environment, BDMS announced the determination since 2022 to proceed with such determination in a concrete manner of net zero emission by 2050. To achieve this end, BDMS introduced BDMS Green Healthcare Project to manage environmental issues and promote every stakeholder group to minimize the greenhouse gas emission from business operation. Moreover, the company consistently encourages the use of renewable energy with the objective to become a net zero organization through the evaluation criteria of environmental-friendly operation of the BDMS Hospital Group and subsidiaries. This BDMS project of "Green Healthcare" has been conducted for 2nd consecutive years.

Promote Equality, Minimize Discrimination

As for society, BDMS recognizes the significance of human capital management as well as foster Employee well-being and respect of human rights in a comprehensive manner throughout the supply chain. Moreover, BDMS has applied the knowledge of the organization in organizing various projects such as "BDMS Life-Saving Project", the project which provides training to all stakeholders throughout the entire country. In addition, the "Imm Boon" project in collaboration with Vejdusit Foundation consistently promotes health services accessibility while providing opportunity for education. Additional projects include "Knee Replacement for the Underprivileged" and "Vejdusit, Plant a seed and Build a Nurse" (Nurse Scholarship) etc.

Adhere to Governance Principle with the Determination of Medical Professionals

In terms of governance, BDMS strongly values good corporate governance and management, transparent and verifiable operations. Consequently, BDMS was chosen as the company with good corporate governance at an excellent level from Thai Institute of Directors. BDMS is committed to operating the business following the Sustainable Development Goals (SDGs) set forth by the United Nations of which the results can be concretely assessed in line with the international standards.

Lastly, I would like to extend our appreciation to all doctors, dentists and employees for their continued devotion and collaboration for the organization during the past year. All of us in this organization is a crucial part in providing healthcare to the patients and their relatives, resulting in the company's sustainable growth and development. I believe that all employees will continue to make good deeds and achieve our aspiration.

BDMS Performance Overview 2023

ECONOMICS GROWTH

Total Revenues
102,153.79
million Baht

Employee-related Expenses
24,030.06
million Baht

Tax
3,754.55
million Baht

RATIO OF REVENUE BY TYPES

Hospitals
95.07%

Others
4.93%

GOVERNANCE AND ECONOMIC

Centers of Exellence (COE)
154 Centers
48 hospitals

Hospitals and Subsidiaries Certified by ISO27001
6 hospitals

Innovative Initiatives
657 Projects

SOCIAL

Total Employees

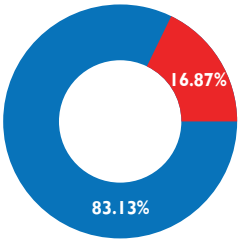
36,339 people

Safety

Employees **0.63**

Contractors **0.15**

Lost-time Injury Frequency Rate (LTIFR)
(cases per 1,000,000 Work Hours)



Ratio of Employees by Gender

Male **16.87%**

Female **83.13%**

Male
Female

Human Capital Development

Average Employee Training

57 Hours / Person / Year

Employee **5.10**

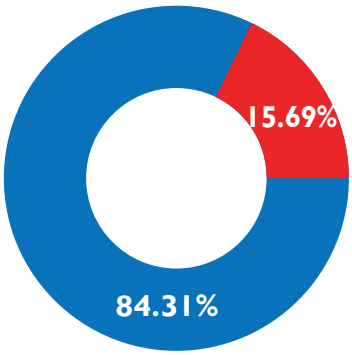
Contractor **1.36**

Work-Related Injury Rate
(cases per 1,000,000 Work Hours)

ENVIRONMENT

Greenhouse Gas Emissions (Scope 1 + Scope 2)

184,209.73 Tons CO_2eq



Ratio of Greenhouse Gas Emission Per Scope

Scope 1 **15.69%**

Scope 2 **84.31%**

Scope1
Scope2

Reduce GHG Emissions (Scope1+Scope2)

24.05%

from the Base Year 2022

Total Energy Consumption

1.33 Million GJ

Renewable Energy Ratio

2.32 %

Tatal Waste Generated

16,209.82 Tons

Waste Recycling

24.46%

Water Consumption

810,169.39 m^3

More information available in Sustainability Performance Report 2023

Award and Recognitions 2023

BDMS ranks 1st both globally (DJSI World) in Sustainable Health Care Providers and Services 2023 and in the DJSI Emerging Markets leading in the social dimension according to the assessment of S&P Global.

BDMS
Bangkok Dusit Medical Services

Member of
Dow Jones
Sustainability Indices
Powered by the S&P Global CSA

BDMS ครองอันดับ 1

ผู้นำด้านความยั่งยืนของโลก ปี 2566 ในกลุ่มการบริการทางการแพทย์

ทั้งในระดับโลก (DJSI World)
เป็นปีแรก และกลุ่มตลาดเกิดใหม่
(DJSI Emerging Markets)
ต่อเนื่องเป็นปีที่ 3
ด้วยคะแนนอันดับ 1
มิติด้านสังคมของ
กลุ่มธุรกิจการบริการ
ทางการแพทย์

ด้วยปณิธานสูงสุดขององค์กร
"ผู้นำด้านสุขภาพ ยกระดับความเป็นอยู่ที่ดี
บนวิธีแห่งความยั่งยืน"

With the highest aspirations of our organization
Healthcare Leader - Elevate the quality of life
through sustainable practices

BDMS Ranks 1st

Globally in Sustainable Health Care Providers and Services 2023

1st year for the DJSI World Ranking and **3rd consecutive year** in the DJSI Emerging Markets Leading in the Social Dimension

BANGKOK HOSPITAL | สมิติเวช SAMITIVEJ | BNH HOSPITAL โรงพยาบาลบีเอ็นเอช | พญาไท PHYATHAI | เปาโล PAOLO | ROYAL BANGKOK HOSPITAL | BDMS WELLNESS CLINIC

BDMS was selected in SET ESG Ratings 2023 in the service category for 4th consecutive years and received "AA" level in SET ESG Ratings 2023 in the service category from the Stock Exchange of Thailand.

MSCI ESG RATINGS AA

CCC | B | BB | BBB | A | AA | AAA

MSCI Bangkok Dusit Medical Services Public Company Limited received the 2023 MSCI ESG Rating at the "AA" level.

Thai Institute of Directors

Bangkok Dusit Medical Services Public Company Limited was selected as the Company with Corporate Governance(5-star) with the excellent level from Thai Institute of Directors.

BDMS received 2 awards in Business Excellence from SET awards 2023 in Best Innovative Company Awards and Best Investor Relations Awards.

BDMS was granted 3 IAA awards: Awards for Listed Companies 2022-2023 in the service category, held by the Investment Analysists Association (IAA). These awards consist of the "Outstanding CEO", "Best CEO" and "Best Investor Relations" awards.

BDMS was awarded "Thailand's Best CEO" and "Special Award in Leadership in Organizational Engagement 2023" from Kincentric, the world's leading company in human resources management, in collaboration with Sasin School of Management, Chulalongkorn University.

Bangkok Hospital Headquarter has been certified with ISO/IEC 27001 and ISO 27799 (Evaluation of IT security management system and patient information standards) by the British Standards Institution incorporated by Royal Charter.

Bangkok Hospital Headquarter has been certified with the standards of occupational health and environmental management with the excellent level, for private hospitals from the Department of Disease Control, Ministry of Public Health.

Bangkok Hospital Headquarter received the excellent award for the organization fostering energy conservation in controlled building category, hospital group, from the Department of Alternative Energy Development and Efficiency.

Bangkok Hospital Headquarter was awarded the "Asianparent Thailand's Awards 2023" in the Most Proudly Local category; namely, "Best Hospital for Comprehensive Maternal and Child Health Care Thailand", the trusted hospital for complete health care of mothers and children.

The Samitivej Hospital Group was granted 2 awards, the "GlobalHealth Asia-Pacific Awards 2023"; namely, Thailand's excellent hospital award and the "Excellent Service Provider of Genomic Medicine and Lifestyle in Asia-Pacific".

Samitivej Sukhumvit Hospital was awarded "Clinic Service Initiative of the Year – Thailand" under the topic of "Samitivej Pre-Team Prevention Program by Samitivej Sukhumvit Hospital" from Health Care Asia Award 2023 in Singapore.

Bangkok Hospital Pattaya was the first hospital in Thailand to be certified with International Consortium for Health Outcomes Measurement (ICHOM) (a non-profit organization founded with the purpose to transform health care systems worldwide by measuring and reporting patient outcomes in a standardized way).

Bangkok Hospital Rayong was awarded the EIA Monitoring Award 2023, in building category, with the excellence level. This award is granted to the enterprises conforming to the stipulated measures regarding assessment report of the environmental impact.

BDMS was granted the excellent enterprise award in labor relations and welfare 2023 from the Ministry of Labor
Bangkok Hospital Phitsanulok
"National level 4th year"
Bangkok Hospital Chantaburi
"National level 11th year"

Excellent enterprise model award in safety, occupational health and workplace environment from the Department of Labor Protection and Welfare.Bangkok Hospital Khon Kaen
"National level (Diamond level) 5th year"
Bangkok Hospital Siriroj
"Provincial level"
Phyathai Sriracha Hospital
"Provincial level"

Phayathai 3 Hospital passed the assessment criteria on energy and environment sustainability management, gold level
(GSEE – Global Sustainable Energy and Environment) from the Provincial Electricity Authority (PEA) in 2023.

The award granted to the organization promoting the employment of the disabled 2023 from the Ministry of Social Development and Human Security.

Bangkok Hospital Trat	"Excellent level"
Bangkok Hospital Udon	"Excellent level"
Bangkok Hospital Chantaburi	"Outstanding level"
Bangkok Hospital Phitsanulok	"Good level"

Bangkok Hospital Udon was granted the "Model organization in road safety and the next step of collaboration" award in "Zero Accident 2023" event held by WHO Global Status Report (RSWGS) on Road Safety whereby Bangkok Hospital Udon is the only hospital in the northeast to receive such award.

BDMS Sustainability Development

BDMS Sustainability Management Framework

Leading Sustainable Healthcare Provider

BDMS Sustainability Vision

Becoming the leader in innovative healthcare excellence accredited under international standards, coupled with highly efficient personnel, delivering the best values and experiences to the customers based on corporate governance and sustainable development covering responsibilities towards society, community, and environment.

BDMS Sustainability Development Guidelines

Create engagement with the stakeholders throughout the value chain.

Identify and evaluate sustainability material topics.

Respond to and manage sustainability material topics.

Publish the sustainability performance.

BDMS Sustainability Elements

Environment	Social	Governance and Economic
Energy and climate change management	Human capital development and retention	Corporate governance
Circular economy	Customer relationship management	Information security and privacy
Water stewardship	Community engagement	Service quality and patient safety
	Occupational health and safety	Innovation and technology of sustainability
	Respecting human rights	Supply chain management

BDMS Sustainability Development Work Scope

Beyond Excellence

Complete cyber and information security system while delivering services and developing sustainability following the sustainability materiality topics

Developmental Innovation

Foster innovation culture while seeking alliances in innovative healthcare

Meaningful Sustainable Engagement

Adjust the guidelines and evaluate the environmental data collection for international standards to lessen the climate change impact while establishing the human rights guidelines

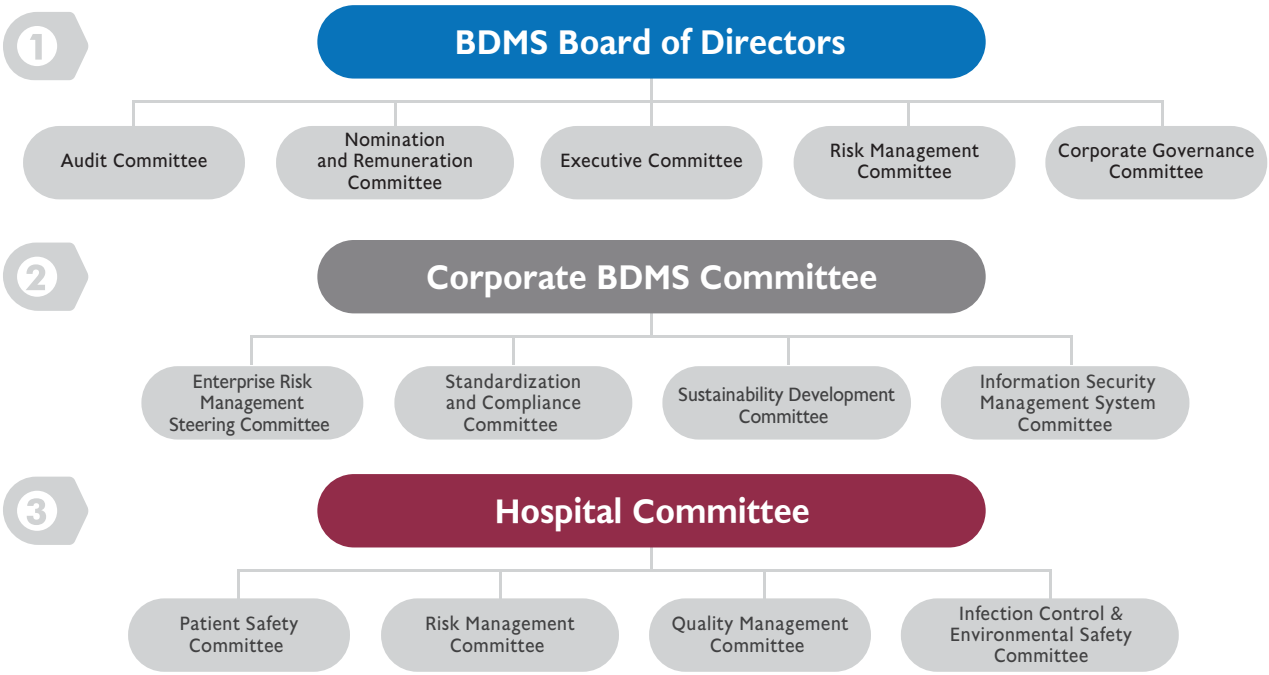
Social Contribution

Access to healthcare while organizing training on healthcare in general and basic life support. Collaborate with partners for social services to achieve sustainable health and well-being.

Sustainability Management Structure

BDMS establishes sustainability management under the development framework and includes sustainable operations into the BDMS Committee structure as follows:

BDMS COMMITTEE STRUCTURE



Perform by the BDMS Sustainability Development Committee which consists of the Board of Directors with knowledge and expertise as well as possess specialized skills necessary for the business operations according to BDMS Board Matrix, including the executives of each business group. The objectives are to drive forward and supervise the organization's sustainable development. Details are indicated next page:

Skills Matrix of BDMS Board of Directors

List of Director as of 31 December 2023	Independence			Skills, Knowledge, Expertise									
	Independent Director	Non-executive Director	Executive Director	Medical and Health	Direct Consumer Market	Sustainability Management of the Organization	Finance and Accounting	Internal Control	Digital Network Management & IT Security	International Business Administration	Law & Government Policy	IT & Innovation	Risk Management
1. Professor Emeritus Santasiri Sornmani, M.D.	•			•				•					
2. Mr. Chuladej Yossundharakul, M.D.			•	•						•			
3. Miss Poramaporn Prasarttong-Osoth, M.D.			•	•	•	•				•		•	•
4. Mrs. Narumol Noi-am			•	•		•	•						•
5. Mr. Pradit Theekakul			•								•		•
6. Mr. Sripop Sarasas			•	•			•	•					•
7. Mr. Chavalit Sethameteekul	•						•	•			•		•
8. Mr. Thongchai Jira-alongkorn		•			•		•			•			
9. Mr. Puttipong Prasarttong-Osoth		•			•		•			•			•
10. Mr. Att Thongtang			•	•	•		•	•					
11. Mr. Kan Trakulhoon	•				•		•		•	•		•	
12. Mr. Chairat Panthuraamphorn, M.D.			•	•	•	•						•	•
13. Mr. Subhak Siwaraksa, Ph.D.	•				•	•	•	•		•			•
14. Mr. Veerathai Santiprabhob, Ph.D.	•					•	•	•	•			•	•
15. Mr. Predee Daochai	•				•	•	•	•		•	•	•	•
Total	**6**	**2**	**7**										

BDMS Towards Sustainable Healthcare

2023
Toward SD Corporate for Value Based Healthcare

2024
Embrace ESG for Sustain business growth

2026
Transform new core value for green growth

Optimize resource utilization & Environmental adaptation → Low carbon business with circular economy concept

Well being & Human rights programs & Training program for talented staff → Co-create value among stakeholder with BDMS professional

Innovation implementation & Risk assessment
ESG supplier assessment & Green procurement program → Establish innovation organization with green value chain for business competitiveness professional

BDMS Sustainability Goals 2050

		Sustainabilty Goal
Corporate Governance	100% of business with an excellence level in corporate governance at a national or international level	12, 16
Information Security and Privacy	100% of business networks operate according to international privacy and information security standards	4, 9, 16, 17
Service Quality and Patient Safety	Service quality and patient safety 100% of hospitals certified by Thailand and International Healthcare Standard	3, 8
Innovation and Technology of Sustainbility	Launch 5,600 innovation development project	8, 9, 17
Supply Chain Management	100% of Critical Tier1 Suppliers assess the ESG risk	4, 5, 8, 9, 12
Human Capital Development and Retention	Achieve 85% of employees engagement	4, 5, 8, 17
Customer Relationship Management	Reach a customer satisfaction rate of no less than 90%	16
Community Engagement	Organize 15,000 initiatives for healthcare access for the communities nationwide	3
Occupational Health and Sefety	Achieve zero lost time injury	3, 4, 8
Respecting Human Rights	100% of comprehensive inspection of human rights to encompass every business unit	5, 8, 10, 16
Energy and Climate Change Management	Net zero greenhouse gas emissions (Scope1 and Scope2)	7, 12, 13
Circular Economy	50% of all non-hazardous waste for recycling	12
Water Stewardship	Reduce water withdrawal by 10% per Baht revenue, compared with the base year 2022	6, 12

Sustainability Materiality Assessment

BDMS annually conduct the materiality assessment to identify the key areas of focus and incorporate the results into our business priorities to ascertain the social, environmental, and governance issues that are most important to our stakeholders and, consequently, to the long-term success of our company.

This year, as required by the latest international sustainability reporting framework, BDMS's material sustainability topics were identified following 'Double Materiality' principle, which consider both impact materiality (the impact of BDMS on the economy, environment, and society) as well as financial materiality (the impact of environmental and social issues on BDMS's financial performance and business value). This comprehensive view gave a complete understanding of the role and responsibilities of BDMS in addressing sustainability issues and contributing our long-term value creation for the environment and stakeholder groups

As a result, BDMS assigns the high executives of Corporate Sustainability Development and Innovation Management to assess primary sustainability materiality before acquiring approval from the BDMS Sustainability Development Committee.

Materiality Integration in Risk Management

To make the processes of risk identification and risk management more extensive, BDMS integrates the evaluation of critical materiality issues into its Enterprise Risk Management process such as service quality & patient safety, cybersecurity, occupational, health and safety, human capital development and retention, energy and climate change management. By assessing financial materiality, BDMS has adopted financial risk criteria in determining the severity level of financial impact each materiality topics has on the company. As a result of double materiality assessment, BDMS can cross-check the significant corporate risks and implement effective Enterprise Risk Management strategies, to the point where the resources for mitigation measures are properly allocated.

Assessment Process and Procedure

The sustainability materiality process and procedure are listed as follows:

1 Identification

- Review sustainability materiality topics from the last fiscal year.
- Study and compare the sustainability materiality referring to the national and global criteria such as the Global Reporting Initiative (GRI), Sustainable Development Goals (SDGs), Dow Jones Sustainability Indices (DJSI), The Stock Exchange of Thailand (SET), and European Sustainability Reporting Standard (ESRS).
- Study and compare the sustainability materiality with leading peers in healthcare industry in Thailand and abroad.
- Study and compare the effects on the sustainability goals in the healthcare business.
- Review the sustainability materiality topics and receive feedback and opinions from the stakeholders for further process.

2 Prioritization

- Identify actual and potential positive/negative impacts and risk/opportunity through engaging with relevant stakeholders and experts.
- Assess the materiality of actual and potential positive/negative impacts and risk/opportunity for own operations and the (throughout) value chain.
- Prioritize material sustainability matters based on severity (scale of impact, scope of impact, remediability of impact) and likelihood (frequency/probability of impact).
- Develop survey/questionnaire for assessing impact materiality and financial materiality by having both internal and external stakeholders involved.
- Organize the meeting for the BDMS Sustainability Development Committee about sustainability materiality in each category of stakeholders, survey data and BDMS critical topics.
- Conduct online feedback surveys for internal stakeholder e.g., employee representatives, executives in each business group and stakeholder representatives.
- Consolidate the results and derived into double materiality matrix.

3 Verification and Credibility

- Verify and report the prioritization of sustainability materiality to the Committee for review and approval, and submit the materiality issues to the Board of Director for final revision and approval.

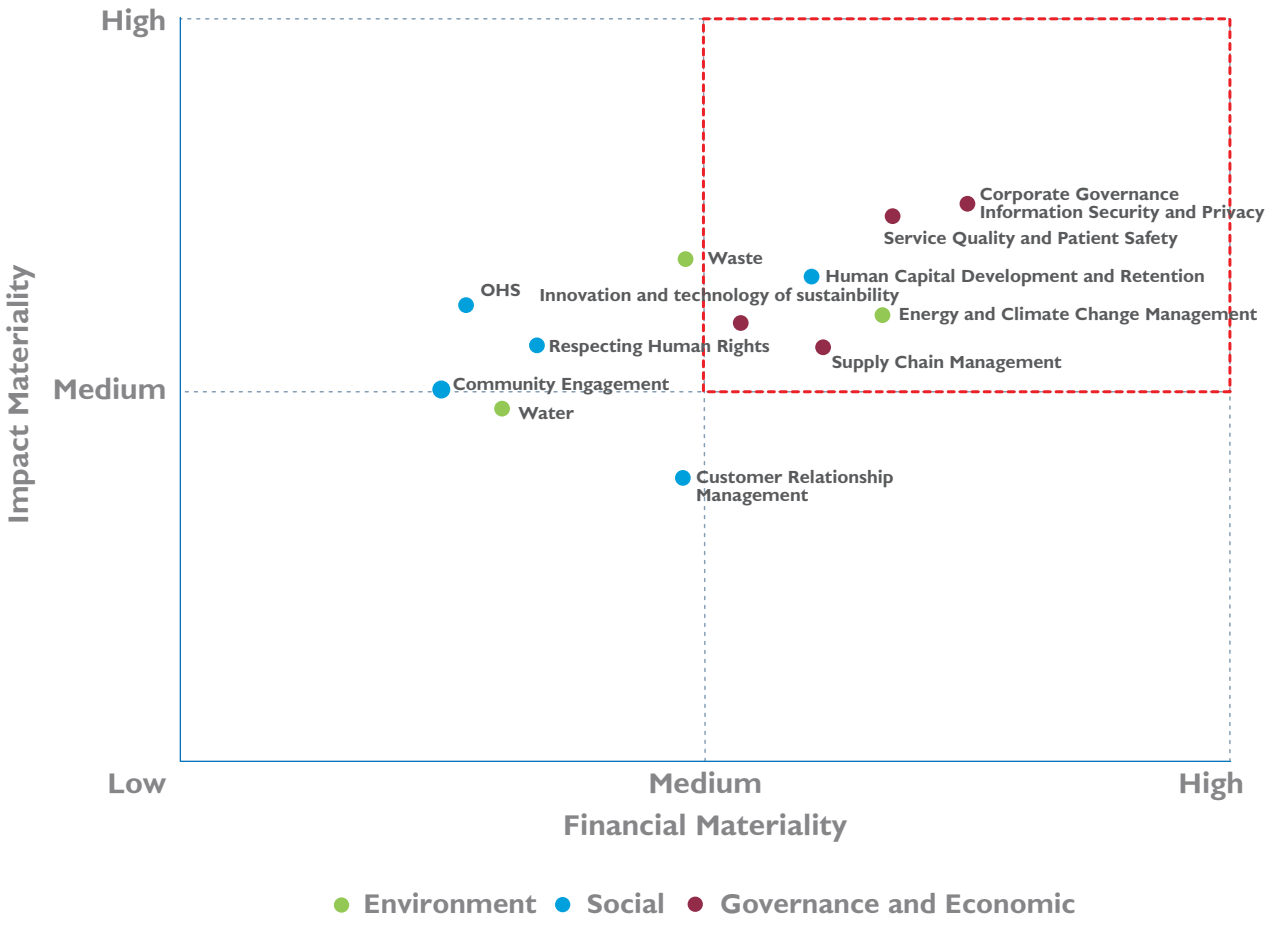
4 Continuous Development

- Receive feedback and suggestions from stakeholders through various reporting channels for future improvement in sustainability development.

Double Materiality Assessment

In 2023, BDMS materiality consisted of 13 material issues. For the current period, Sales and Labelling Practices and Access to Healthcare has been merged into Service Quality and Patient Safety and Innovation and technology of sustainability, respectively. Moreover, one new material issues have been added, which are Corporate Governance. As a result of the double materiality analysis, BDMS key material issues are presented in the following materiality matrix

BDMS Double Materiality Matrix 2023



In 2023, the company has assessed the key sustainability issues which can be divided into 3 categories and 13 fundamental material issues. The impacted stakeholders from these issues include 1) Customer and Patient 2) Employee 3) Doctor and Dentist 4) Supplier 5) Bank/Creditor 6) Investor and Shareholder 7) Community and Society. The details of each issue including description of risks and opportunities, financial impact, strategy and performance, and relevant framework are as follows:

Significance Material Issues	Fundamental Material Issues
1. Corporate Governance	8. Customer Relationship Management
2. Information Security and Privacy	9. Communities Engagement
3. Service Quality and Patient Safety	10. Occupational Health and Safety
4. Human Capital Development and Retention	11. Respecting Human Rights
5. Energy and Climate Change Management	12. Circular Economy
6. Innovation and Technology of Sustainability	13. Water Stewardship
7. Supply Chain Management	

Highly Critical Material Topics	Stakeholders	Page	Relevant global sustainability framework
Corporate Governance	All Stakeholders	21	GRI 2 SDG 12.6, 16.3, 16.5, 16.7
Information Security and Privacy	Customer and Patient, Employee, Doctor and Dentist, Investor and Shareholder	51	GRI 418-1 SDG 4.4, 9.1, 16.10, 17.14
Service Quality and Patient Safety	Customer and Patient, Employee, Doctor and Dentist	62	GRI 416-1, 417-1, 417-2, 417-3, 418-1 SDG 3.2, 3.4, 3.6, 3.8, 3.d, 8.2
Human Capital Development and Retention	Employee, Doctor and Dentist	91	GRI 401-1, 401-2, 404-1, 404-2, 404-3, 405-1 SDG 4.4, 4.7, 5.5, 8.5, 17.6
Energy and Climate Change Management	All Stakeholders	148	GRI 302-1, 302-3, 305-1, 305-2, 305-3, 305-4 SDG 7.2, 7.3, 12.2, 13.1, 13.2
Innovation and Technology of Sustainability	All Stakeholders	72	GRI 418-1 SDG 8.2, 9.5, 9.b, 17.14, 17.17
Supply Chain Management	Supplier, Investor and Shareholder	83	GRI 308-1, 414-1 SDG 4.4, 5.1, 8.3, 8.7, 9.4, 12.7
Customer Relationship Management	Customer and Patient, Employee, Doctor and Dentist	110	GRI 418-1 SDG 16.7
Communities Engagement	All Stakeholders	117	GRI 201-1 SDG 3.2, 3.3, 3.4, 3.5, 3.6
Occupational Health and Safety	Employee, Doctor and Dentist	131	GRI 403 SDG 3.4, 3.6, 3.8, 4.4, 16.3
Respecting Human Rights	All Stakeholders	140	GRI 405-1, 412 SDG 5.1, 5.2, 8.5, 8.8, 10.3 ,16.3
Circular Economy	All Stakeholders	157	GRI 306-3, 306-4, 306-5 SDG 12.3, 12.4, 12.5
Water Stewardship	All Stakeholders	163	GRI 303-3, 303-4, 303-5 SDG 6.3, 6.4, 12.2

AMBULANCE

Governance and Economic

Corporate Governance

BDMS strives to operate the business under good corporate governance principles, coupled with a transparent, honest, verifiable, and ethical manner. BDMS also emphasizes efficient risk management which is deemed a key factor of business operation while ensuring competitiveness and self-adaptation under constant changes, all of which are foundations of sustainable growth of the organization, foster competitiveness, and trust for all shareholders, create value and added value to enable the organization to achieve the established missions and sustainability to every stakeholder group.

Supporting the UN SDGs

12.6, 16.3, 16.5 and 16.7

Target and Performance

2023

Target

Awarded a 5-star or "Excellent" on the Corporate Governance Rating from the Thai Institute of Directors (IOD).

Performance

Awarded a 5-star or "Excellent" on the Corporate Governance Rating from the Thai Institute of Directors (IOD).

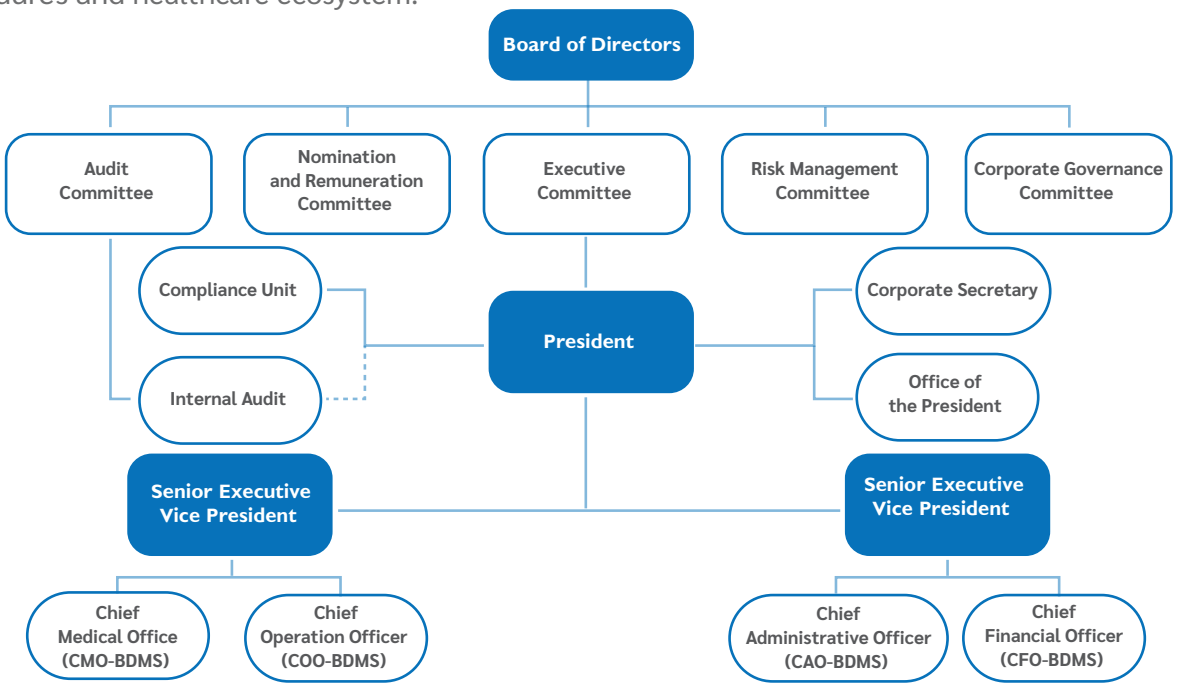
Management Approach

BDMS Corporate Governance

BDMS adheres to conducting business operations responsibly on the basis of corporate governance and transparency principles within the Codes of Conduct, the company establishes for the compliance of every executive and employees. Business supervision determines the organizational structure and management procedures. In addition, BDMS deploys out a clear, well-balanced, and verifiable management structure that consists of a group of employees with a major role in driving business toward the organization's goals while being in line with relevant laws, rules, regulations, treatment standards, and patient safety, medical resources management, innovation promotion, social and environmental responsibility. Besides, BDMS proceeds into consideration the benefits of every stakeholder group which in turn, promotes the business's continual and sustainable growth.

Corporate Governance Structure

BDMS determines the BDMS Corporate Governance Structure, consisting of the Board of Directors and the Sub-Committees with the management responsibility that encompasses every dimension of operation procedures and healthcare ecosystem.



* Corporate Governance Structure as of 31 December 2023

Responsibility of the Board of Directors

The Board assigned shall perform their respective duties and independently express opinions on the basis of quality information which are in line with related laws and standards, which in turn will lead to the specification of policy and operation plan. Besides, the Board shall monitor the work system to ensure its consistency with the established objectives, goals, and key indicators as well as supervise the company's business operations according to relevant laws, regulations, and resolutions of the shareholders with the aim of creating suitable benefits for all shareholders while taking into consideration every stakeholder group. The company's Board of Directors, as the leader of the organization, has the responsibility to supervise the effective management which encompasses the identification of objectives, major goals, strategies, and operation policies of the organization as well as monitor the management to act according to the specified policies. Furthermore, the Board of Directors shall encourage the internal operation to ensure its consistency with BDMS's sustainability goal and conformity with the international principle concerning sustainable development. The Board also approves the policy and supports the sustainability management of the organization that promotes the stakeholders' involvement.

- Oversight the internal control system and inspect suitable risk management procedures.
- Oversight and certify materiality assessment process and approve of the result.
- Oversight and verify enterprise risk management to ensure the systematic operation of the organization and compliance with the company's business operation strategies.
- Oversight supply chain management procedures in a responsible manner to ensure consistent efficiency, transparency, fairness, and responsibility for every stakeholder group.
- Oversight the implementation of the Environmental Management Policy and strategies relating to climate to ensure their compliance as well as minimize the environmental impact arising from the business operations. This, in turn, will minimize the impact of climate change to achieve the objective of net zero emissions
- Oversight the implementation of the compliance of safety, occupational health, and environmental policy to ensure the utmost operation efficiency and effectiveness. conformity and constantly improve the safety, occupational health, and environment with the aim to achieve Zero Fatality and Zero Lost Time Injury

The Board of Directors strives to evaluate and oversight operational reports as well as enforces all directors and executives to perform their duty with caution and honesty. Besides, the Board shall ensure that the business operations are in line with laws, regulations and corporate governance principles. Thus, the Board appointed 5 Sub-Committees; namely, the Audit Committee, the Nomination and Remuneration Committee, the Executive Committee, the Corporate Governance Committee and the Risk Management Committee to be responsible for the specification of operational policy, the internal control and monitoring guidelines which are consistent with the specifications and international standards. In addition, the Board shall disseminate the policy and determine operation guidelines through the company's senior executives to communicate and follow up on the performance progress to the executives and every employees of the organization.

In addition, the Board of Directors assigns the Nomination and Remuneration Committee to screen the candidates to further propose to the Board. The criteria and procedures for such nomination shall be transparent and clear whereby the candidate shall possess knowledge, ability and experience while having specific expertise necessary for business operation or "Board Skill Matrix".

Professor Emeritus Santasiri Sornmani, M.D., Ph.D.

Independent Director / Chairman of the Board of Directors

Experience and Qualifications of Particular Relevance to BDMS

- Vice President for Administration, Mahidol University
- Dean, Faculty of Tropical Medicine, Mahidol University
- Member, Expert Committee on Food Borne Parasitic Diseases, WHO

Their clinical experience, along with their expertise in health management and insights on the national healthcare industry across various sectors, contributes significantly to supporting the organization's medical services and business management in both the public and private sectors.

Mr. Kan Trakulhoon

Independent Director

Experience and Qualifications of Particular Relevance to BDMS

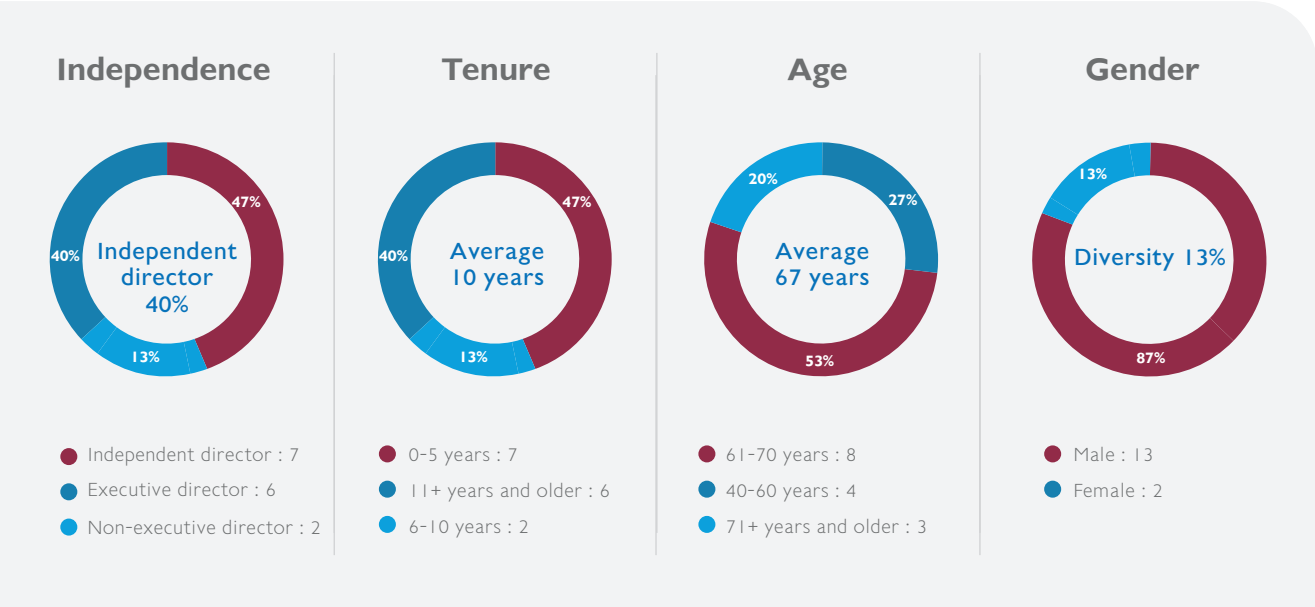
- Director, National Science and Technology Office
- Member, Nation Development and enhancing Competitiveness Committee
- Director, National Innovation System Development Committee
- Member, National Strategy Preparation Committee for Thailand 4.0

In addition, their experiences are directly relevant and crucial to all sectors, including public healthcare and the overall healthcare industry. The directors can provide valuable advice on health innovation development, marketing, technology management, and transitioning to the digital age.

Additional information on experience please refer to
https://investor.bdms.co.th/storage/downloads/one-report/2023/20230305-bdms-one-report-2023-attachment-03-en.pdf

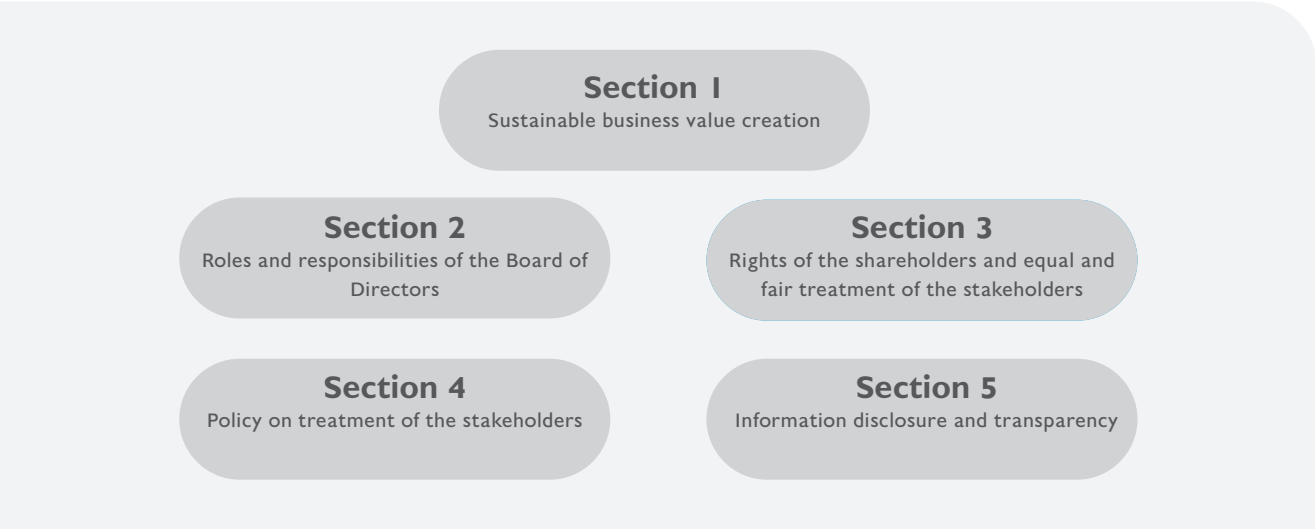
The candidate shall possess maturity, leadership and have qualifications as set forth by the Committee's charter and the specifications of the regulatory body and relevant laws. Furthermore, the candidate shall have the diversity components as the director, whether in terms of education, profession, age, gender, diversity of perspective, experience, and knowledge concerning the organization's industry.

Diversity Components of the Board of Directors



BDMS Corporate Governance Policy

BDMS sets forth that an effective internal management mechanism of the organization will generate suitable benefits for the shareholders while taking into consideration every stakeholder group; therefore, BDMS determines a corporate governance framework so that all directors, executives, and employees of the company group shall adhere to the operational guidelines which shall be as follows:



For more details of the Policy on Anti-Corruption, please refer to the Company's website at:
https://investor.bdms.co.th/en/sustainability/corporate-governance

BDMS Corporate Governance

With our strong intention and dedication to operate business transparently, fairly, verifiably and ethically, BDMS; therefore, has been granted with a 5-star or "Excellent" level on the Corporate Governance Rating in 2023 from Corporate Governance Report of Thai Listed Companies (CGR) of Thai Institute of Directors (IOD), a non-profit organization supported by the Office of the Securities and Exchange Commission (SEC), the Stock Exchange of Thailand (SET), Bank of Thailand, the capital Market Development Fund Foundation (CMDF) and the World Bank.

Anti-Corruption and Complaints Management

BDMS strives to act in accordance with the anti-corruption principle; thus, the company announced the Anti-Corruption Policy which shall be effective for all directors, executives and employees of every level of the company and such policy must be strictly complied with accordingly throughout the company to prevent and solve potential frauds or corruptions. Besides, the Board announced, promoted and communicated the Anti-Corruption Policy to both internal and external stakeholders via every channel.

Complaints Channels and Report of Corruptions

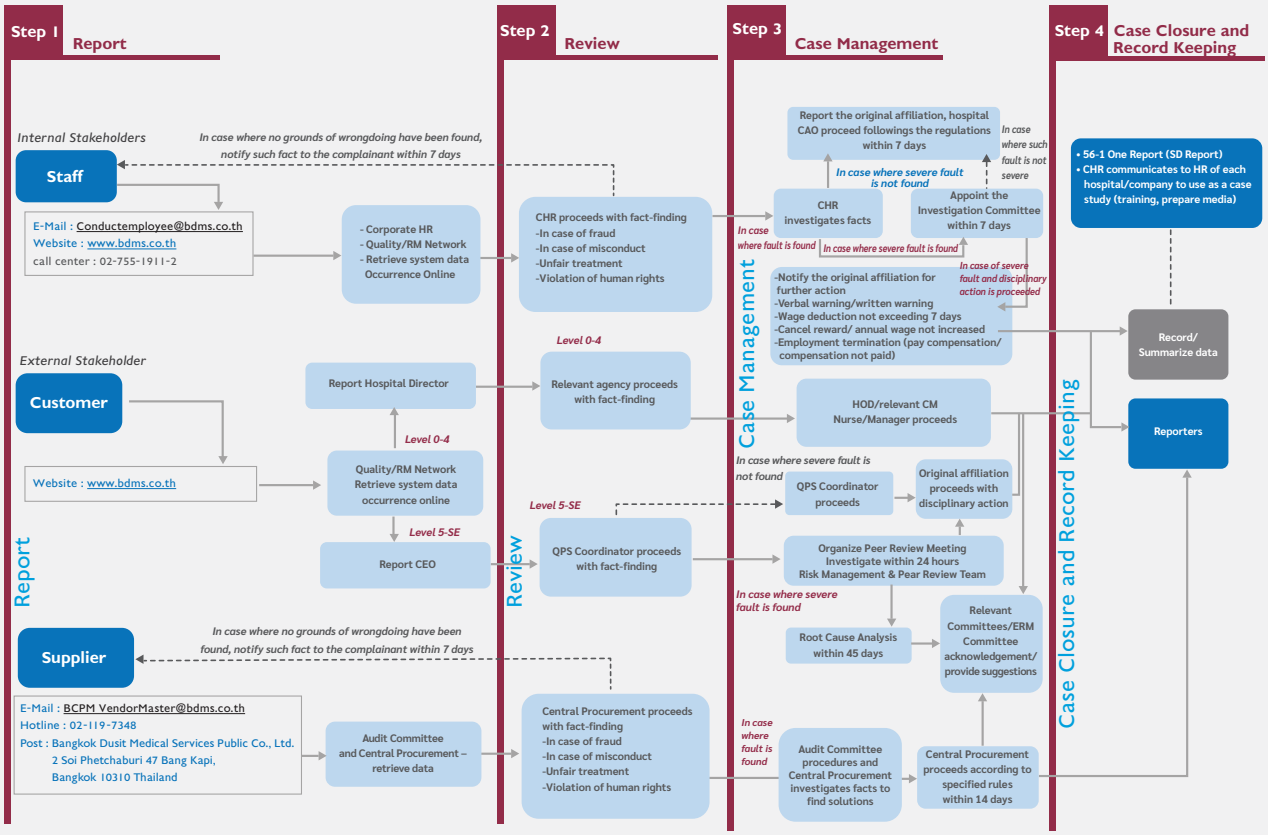
Type of Report	Responsible Person	E-mail
Breach of Employee Code of Conduct	Head of Central Human Resources Division	ConductEmployee@bdms.co.th
Breach of Executive Code of Conduct	• Chairman or • Chairman of the Audit Committee, or • Company Secretary	ConductDirector@bdms.co.th
Breach of Medical Professional Code of Conduct	• Chief Operating Officer, or • Chief of Medical Affairs, or • Chief of Doctors	ConductDoctor@bdms.co.th
Accounting Anomalies	Chairman of the Audit Committee	ConductAudit@bdms.co.th
Concerns Related to Corporate Reputation and Image	President	Conduct@bdms.co.th

BDMS determines the whistleblower protection mechanism whereby the company will keep confidential the personal data (name-last name) of the whistleblower as well as establishes the protection and mitigation measures for the whistleblower or complainant to prevent potential impacts and for the utmost benefit of the company and every stakeholder group.

BDMS Grievance Procedures for Stakeholders

BDMS provides channels for complaints and suggestions for every stakeholder group, both inside and outside the organization, to report any violations or non-compliance of rules, regulations or any actions against the ethical conduct or corporate governance principle. BDMS grievance procedures are as follows:

BDMS Grievance Mechanism Flow Cover all Stakeholders



Anti-Corruption Training Program

Anti-Corruption and Informed Consent Program

BDMS emphasizes and realizes the significance of corruption prevention in which the employees will regularly attend the orientation and training programs as well as prepares electronic media and specifies the hospitals and subsidiaries to establish internal communication. Besides, in the case of fraud in the organization, communication is also required to ensure the personnel acknowledgment and prevent the repetition of such incidents. BDMS specifies the assessment of employees awareness on an annual basis and employs the result to be used as a performance indicator for the executives of all BDMS subsidiaries.

In 2023, BDMS organized the anti-corruption program and informed consent with the aim to elevate knowledge, and accurate understanding via online learning for employees of all levels whereby 100% of the employees passed the program in 2023.

Codes of Conduct

Employee Code of Conduct

BDMS commits to conducting business to achieve the objectives set forth by Bangkok Dusit Medical Services PCL., and subsidiaries. In 2023, the company revised and established the Codes of Conduct for every employee level of the organization to be employed as criteria and operational framework. BDMS recognizes the importance of ethical conduct, morality and integrity and strongly adheres to the corporate governance principle in business operations. Thus, BDMS determines the guidelines as follows:

Employee Code of Conduct

- Observing the Law
- Confidentiality and Use of Internal Information
- Conflicts of the Interest
- Personal Conduct and Conduct towards other Employees
- Political Action
- Maintaining Corporate Assets
- Giving and Receiving Gifts
- Safe, Health, and Environment
- Fairness

Doctor's Codes of Conduct

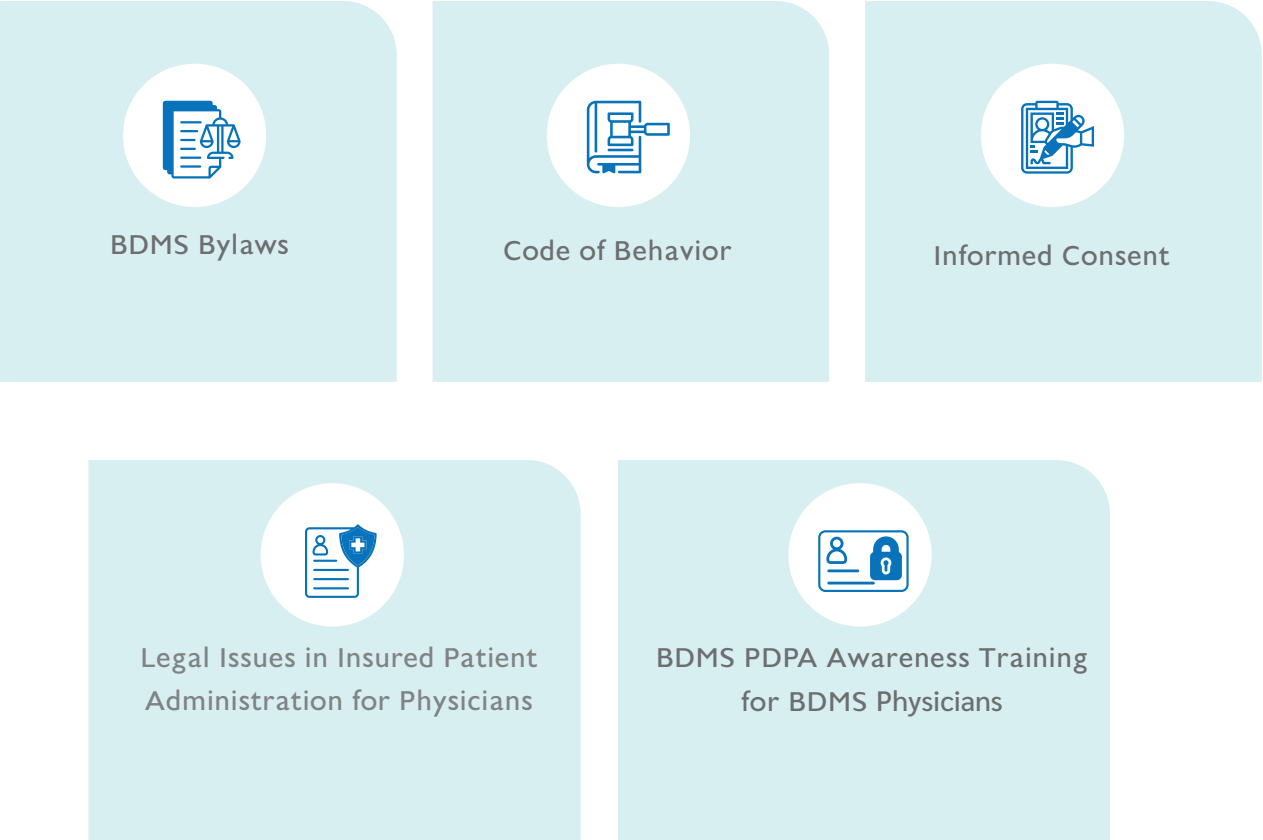
BDMS determines the Medical Staff Organization of each hospital to supervise the medical doctors and dentists to act in accordance with the regulations set forth by the Medical Council of Thailand regarding ethical conduct of the medical profession and BDMS Codes of Conduct. Thus, BDMS establishes forth BDMS Medical & Dental Staff Bylaws, identifying all relevant and necessary details; for example, qualifications and types of the members of medical doctors and dentists organization, appointment and membership extension, clinical services, appointment and duties of the Committee, audit, and evaluation of medical doctors and dentists, the confidentiality of information, appropriate codes of behavior, inappropriate codes of behavior, etc. Besides, BDMS constantly monitors the efficiency of medical doctors' ethical conduct and behavior through online complaints in the case of any misconduct, the company will conduct a fact-finding to determine actions, starting from giving a warning, probation, and employment termination respectively, all of which are in line with the regulations stipulated in BDMS Bylaws.

Medical Ethics and Code of Behavior Mandatory Training for Doctors and Dentists

In 2023, BDMS Medical Affairs Office has granted the policy to establish BDMS Mandatory Courses with a total of 5 courses as follows:

1. BDMS Bylaws
2. Code of Behavior
3. Informed Consent
4. Legal Issues in Insured Patient Administration for Physicians
5. BDMS PDPA Awareness Training for BDMS Physicians

These courses encompass the Code of Conduct and good practices for doctors and dentists, including PDPA, informed consent, and other relevant laws to ensure doctors' awareness of insured patients as well as to communicate and foster an understanding of correct medical practices which shall be in line with BDMS Bylaws. These 5 courses are mandatory courses for all BDMS doctors and dentists to attend via the BDMS MSO Training.



In 2023, 100 percent of doctors and dentists attended the BDMS Mandatory Course via the online system. This online system enables the improvement of training via an application that integrates the modern and easily accessible online training system and replaces the existing training format. This newly introduced system allows doctors and dentists to attend training from anywhere and at any time.

Patient Care Guidelines for Medical Staff, Doctors, Dentists and Clinical Staff

BDMS determines the Code of Conduct and regulations, and supervises the operations performed by clinical staff following the Medical Ethics Prevention while ensuring their compliance with the established laws governing services provided by medical facilities and related medical personnel. Examples of details for patient care, patient transfer, discharge and treatment are as follows:

Admission

- Doctors or relevant personnel must provide information regarding sickness, diagnosis, treatment, and positive and negative outcomes while allowing the patients to inquire before signing or refusing consent unless in emergency and life-threatening situations.
- Evaluate the necessity and emergency for patient admission following the patient's health conditions.
- Assign the patient beds per treatment necessity and convenience.
- In case of denied admission due to the inability to provide treatment or patient care suitable for the sickness, the hospital can initiate the patient transfer to network hospitals or other hospitals requested by the patient, coupled with the consideration of the receiving hospital's capacity and suitability for the patient's conditions.

Patient Transfer

- Prioritize intra-patient transfer according to the patient's conditions and emergencies such as transfer to the operating room, delivery room, critical care ward, including transfer for diagnosis.
- Facilitate intra-patient transfer when the treating doctor approves. In the case of air transfer, the treating doctor must evaluate the Fit-to-Fly, together with the aviation doctor.

Patient Discharge

- Approve patient discharge only after consent of the treating doctor and ensure the diagnosis report is recorded and delivered to the patients to enable them with continual self-care appropriate to their disease conditions.
- Inform necessary information, including benefits, alternatives, risks, side effects, and/or potential outcomes in case the patients call for discharge without the consent of treating doctors or refuse medical treatment. Record such information in the medical record before the patients or their authorized person or legal representative signs the refusal of medical treatment form.
- Announce the cause of death appropriately by the responsible doctor in case of death in the hospital and ensure the transfer of the deceased in compliance with local regulations.

Treatment

- Medical professionals provide treatment according to Privileges and maintain their professional standards within their capability and limited conditions and behaviors.
- Medical professionals must be responsible for patient treatment, filling the patient records accurately and completely. Besides, their responsibilities encompass the delivery of patients' reports to the treating doctors and patients' relatives.
- Submit details of treatment records to other responsible personnel in case of patient transfer.
- The treating doctors shall ensure regular visits to the patients to monitor and evaluate the treatment progress. If unavailable, the treating doctors must assign other doctors for replacement in advance.

Treatment of Patients with Suicidal Ideation

- The treating doctors must inform preventive measures for self-harm in patients with suicidal ideation and prevent hazards to other patients.
- Medical professionals and employees of the hospital must establish dedicated measures for patients with suicidal ideation to ensure the safety of other patients such as arranging a dedicated treatment area for close monitoring, providing treatment in collaboration with a psychologist, ensuring proper treatment records, encouraging extra patient care and immediately alerting the responsible doctor in case of any irregular symptoms.

Prescription

- All prescriptions must be recorded, written, or printed in a clear and concise manner. The date and time of an individual entitled to issue treatment such as medical staff and authorized personnel must be clearly recorded.
- Medical prescription must be clear, concise, and complete. If the prescription is unclear, nurses or pharmacists must immediately contact the doctor issuing such prescription and no further actions shall proceed unless a new prescription of which the nurses can understand its content is being issued.
- The treating doctor must review and issue new medical prescriptions to ensure their conformity if the patient requires operation, receives treatment in the ICU, or is discharged from the ICU.

Medication

- All medications or medication groups used by the patients must be certified by the Food and Drug Administration Thailand and drug usage must be complied with the established conditions.
- All medications must be provided and passed the procurement process by the hospital's Pharmacy Department and assigned Committee only.
- Medication groups used in the research for the benefit of all humanities must be approved by the Executive Medical Staff and must pass the standards set forth by the Office of the Food and Drug Administration.
- Doctors must monitor daily dose consumption to avoid overmedication.
- Any medication intake must be restricted and in line with the doctor's prescription.
- Doctors or patients are prohibited from bringing intoxicating substances, antidepressants, and sleeping pills into the hospital and are forbidden to make any drugs in whatsoever circumstances.

Consent

- Doctors and dentists must provide health-related information for patients' acknowledgment in an adequate manner. The information shall encompass sickness, examination, treatment, and positive and negative treatment outcomes to enable patients to grant their consent or allow the medical professionals to provide treatment, except in case of emergency, or life-threatening cases. Patients must sign the consent form as well as request specific consent for any risky diagnoses, treatments, surgeries, or operations. This is to inform patients to be aware of the treatment, including other alternatives, advantages, disadvantages, and treatment procedures. Then, the doctors shall sign the consent form before any diagnoses and treatments can be proceeded.
- Patients of legal age can grant their consent in writing to surgery; however, should the patients be under conditions that prevent them from giving consent such as physical disability and/or mental disability or patients under the legal age, the legal representative or relatives can sign the consent form on their behalf.
- Ask for consent in writing from the patients or legal representatives before taking photographic or video evidence while explaining its necessity, procedures, storage duration, and data usage.

Consultation

- The responsible doctor reserves the right to decide concerning the disease severity and inquire or raise concerns to clarify the diagnosis or the treatment. The responsible doctor must ensure consultation with specialist doctors only when necessary.
- Good consultation requires the patient's condition interview and record such condition on the patient's medical record. The responsible doctor must always provide his/her opinion in the patient's medical record.
- When the patients require consultation, the responsible doctor must submit the request for a consultation and declare all related information stating the reasons for the consultation request, record opinion and treatment result for further diagnosis and/or treatment according to the opinion of the responsible doctor and record all medical records.

Whistleblowing
BDMS Code of Conduct Reporting and Performance

BDMS establishes reporting mechanisms, channels, and processes in case of malpractice, misconduct of the Code of Conduct, regulations, and policies or behaviors leading to corruption or improper advantages. In addition, the company enforces the Whistleblower Policy to protect and alleviate the damage to complainants or whistleblowers according to the Fraud Prevention and Anti-Corruption Policy. The Corporate Human Resources Department and Human Resources Department of BDMS hospitals and subsidiaries are in charge of launching contact channels for all stakeholders in case of any queries or reporting concerns. The reporting channels are disclosed in the BDMS Code of Conduct, the Whistleblower Policy, and the Fraud Prevention and Anti-Corruption Policy. Reports can be submitted by letter or e-mail to the responsible person who will proceed with the investigation and continuously monitor the results. Further rectification regarding the complaints will be communicated to the complainant within the specified time frame.

Ethics Reporting Channels

Post

Send the letter to
Corporate Human Resources Department
Bangkok Dusit Medical Services
Public Company Limited
2 Soi Soonvijai 7, Bangkapi, Huai Khwang,
Bangkok 10310

Social Media

Found by the hospital.

Internal Channels

For example, BDMS People Connect or an online incident reporting system.

E-mail

According to types of reports.

Process Flow Diagram of Compliant Management for Ethical-Related Issues

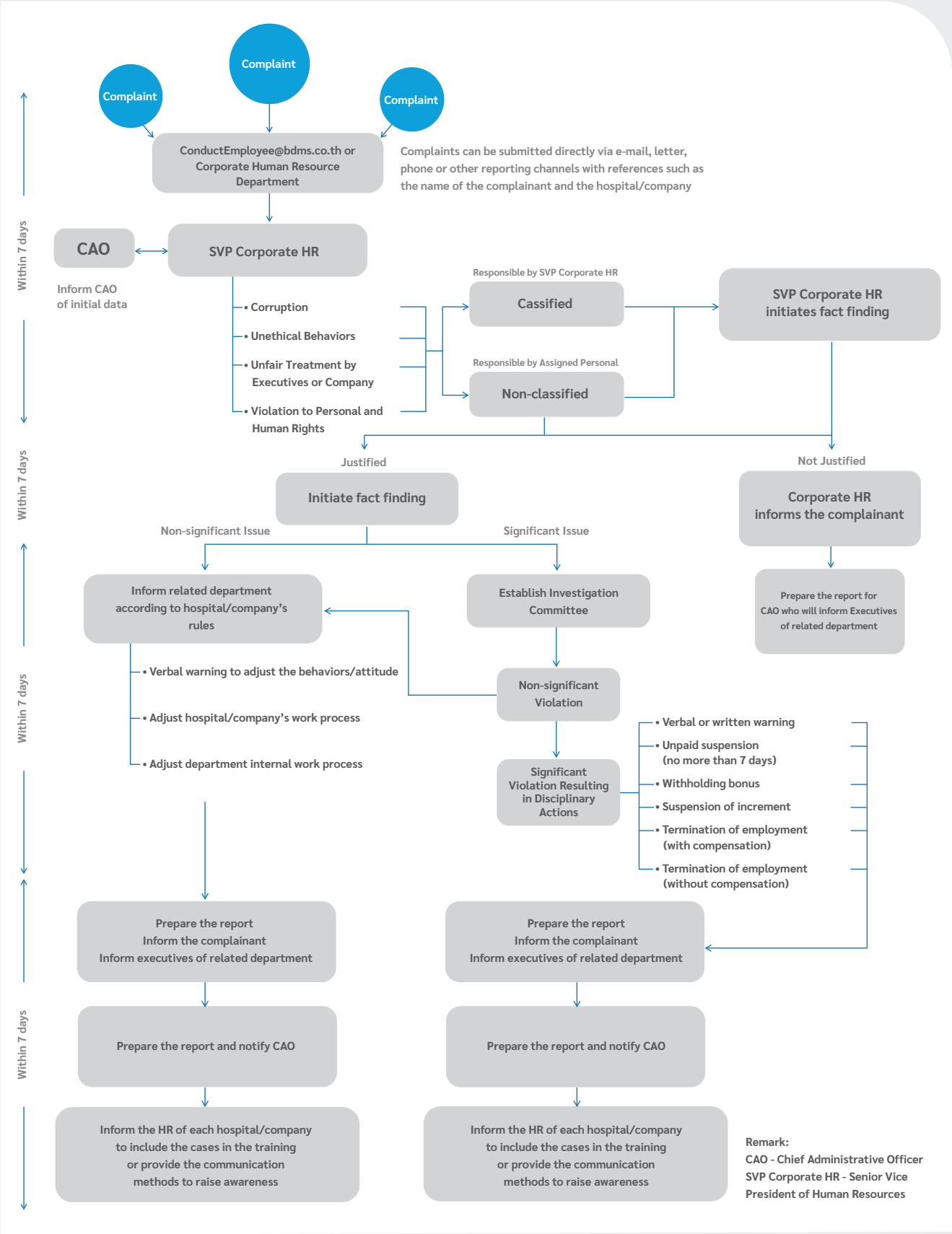


Diagram for Ethics-Related Task Management

BDMS manages ethics reporting channels via the corporation's corporate e-mail for reporting any wrongdoings. The responsibilities of Corporate Human Resources Management and the Ethics Committee at the corporate level are as follows

Manage and monitor the performance related to employee's corporate ethics while supporting fact-finding, appointing the Committee in case of Code of Conduct Violation, and imposing appropriate measures.

Review and revise ethical issues in healthcare. Foster understanding of the Code of Conduct and policy through relevant platforms.

Encourage learning about ethics and support good behaviors. Testing awareness regarding the Code of Conduct and policy for employees of the hospitals and subsidiaries.

Appoint an appropriate committee to attend the bi-monthly meeting or when urgent concerns arise. Review and encourage learning courses about the Employee Code of Conduct while fostering the employee's positive behaviors through training and initiatives.

The report on the results has been communicated to the Quality Management Committee and Human Resources Department of every hospital and company within the group about the case involving an employee's ethical misconduct, with the aim of raising awareness, exercising caution, and preventing the recurrence of such incidents.

In a case where ethical violations take place, the complainant can report via corporate e-mail regarding such misconduct. The management executives are responsible for contacting the complainant and investigating the issues. If found guilty, the Committee will be appointed for further fact-finding and implementing appropriate penalties. Factors to be considered include the intention for wrongdoings, whether such wrongdoing is intentional or negligent, the outcome of such wrongdoing, severity, repetition, and offering of second chances, etc.

BDMS Code of Conduct Performance

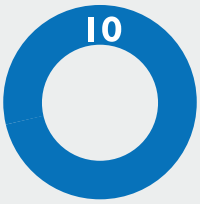
In 2023, 10 cases were brought about for disciplinary actions. BDMS integrated and rectified all cases while sharing detailed reports with the complainant via corporate e-mail as well as informing the Investigation Committee for acknowledgment.

10 cases
concerning the BDMS Code of Conduct malpractice and corruption cases were reported.

100%
concerning cases of BDMS's Code of Conduct malpractice and corruption were investigated and rectified.

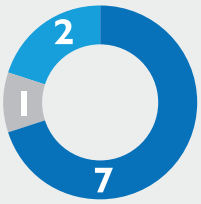
0
cases of violation of laws and regulations in 2021- 2023 have been rectified.

Number of Status of breach reported



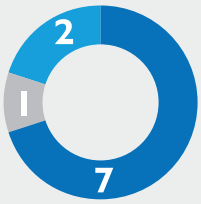
- Resolved
- Investigated

Number of Breaches in reporting areas



- Corruption or Bribery
- Others
- Conflicts of interest

Number of Corrective action taken against the substantiated cases



- Dismissial
- Others
- Verbal Warning

* Non-compliance to the Code of Conduct in which the cases have not been entered into lawsuit or cause any damage to corporate reputation.

Risk and Crisis Management

Effective risk management is key in support of long-term operation plan and the organization's flexibility. Owing to current risks and potential risks in the future, BDMS realizes the significance of risk management and proceeds into consideration 3 aspects of sustainability: namely, environmental, social and governance (ESG). These three aspects are deemed crucial components of good corporate governance and a key mechanism of any decision making and operation plans to minimize business risks. The process also helps lessen obstacles and unpredictable factors in terms of profits and operation while building trust among investors and every stakeholder group.

Management Approach

Risk Management Guidelines

BDMS operates in line with the Risk Management Policy where the Board of Directors appoints the Enterprise Risk Management Steering Committee, comprising of independent representatives from relevant departments as members of the Committee. Their responsibilities are to review and screen the risk management policy and guidelines in business operation, starting from risk identification and assessment, guideline establishment and integrated management throughout every organizational activity. The risk management performance is quarterly reported to the Risk Management Committee. Simultaneously, any emerging risks related to medical service business in line with global trends, population structure and business operation technologies must also be assessed.

Furthermore, BDMS emphasizes proactive risk management approach as well as encourages the incident search procedure that may incur risks and prevent them from affecting any patients. Besides, BDMS promotes all employees, medical doctors, nurses, multidisciplinary professionals, including employees of the hospitals and of the business groups to collaboratively participate in quality activities to consistently improve medical treatment processes to deliver the utmost safety to all patients by taking into consideration the environmental, social and governance sustainability.

In 2023, BDMS also emphasized the safety of surgical and obstetric patients to ensure the quality management and development of pregnant women and obstetric patients in line with the standards of the company groups while performing into consideration the utmost safety of all patients. Consequently, BDMS reconsider "BDMS Safe pregnancy and Delivery Working Committee" and appoint the OB and GYN Safety Working Team as"BDMS Safe pregnancy and Delivery OB and GYN Working Committee" with the responsibility to determine treatment guidelines for pregnant women and child delivery, obstetrics and gynecology, including improvement of quality, knowledge, capabilities and skills in patient care as well as improve the operating results for mother and newborns according to the international standards.

BDMS Risk Factors

According to the 2023 risk factor analysis, BDMS categorized risks from the business operations as follows

Clinical Risk & Quality

Disease diagnosis, treatment by surgery or operation, manage high-risk and highly complex pregnancy and surgical patients.

Operational Risk

Maintain the standards on patient information management and communication between patients, their families and medical staff.

Human Capital Risk

Manage adequate human resources, knowledge development, employee capability, succession planning and suitable remunerations.

Financial Risk

Assess financial risks, liquidity, investment and budget risks.

Technological Risk

Review the information security procedure, website's security and legal risks related to information security.

Regulatory & Legal Risk

Monitor online products and services that fail to register with e-commerce, direct marketing, consent prior to operation or providing any services, license extension, compliance with environmental laws and taxes of the industrial sector or carbon dioxide.

Environment and Hazard Risk

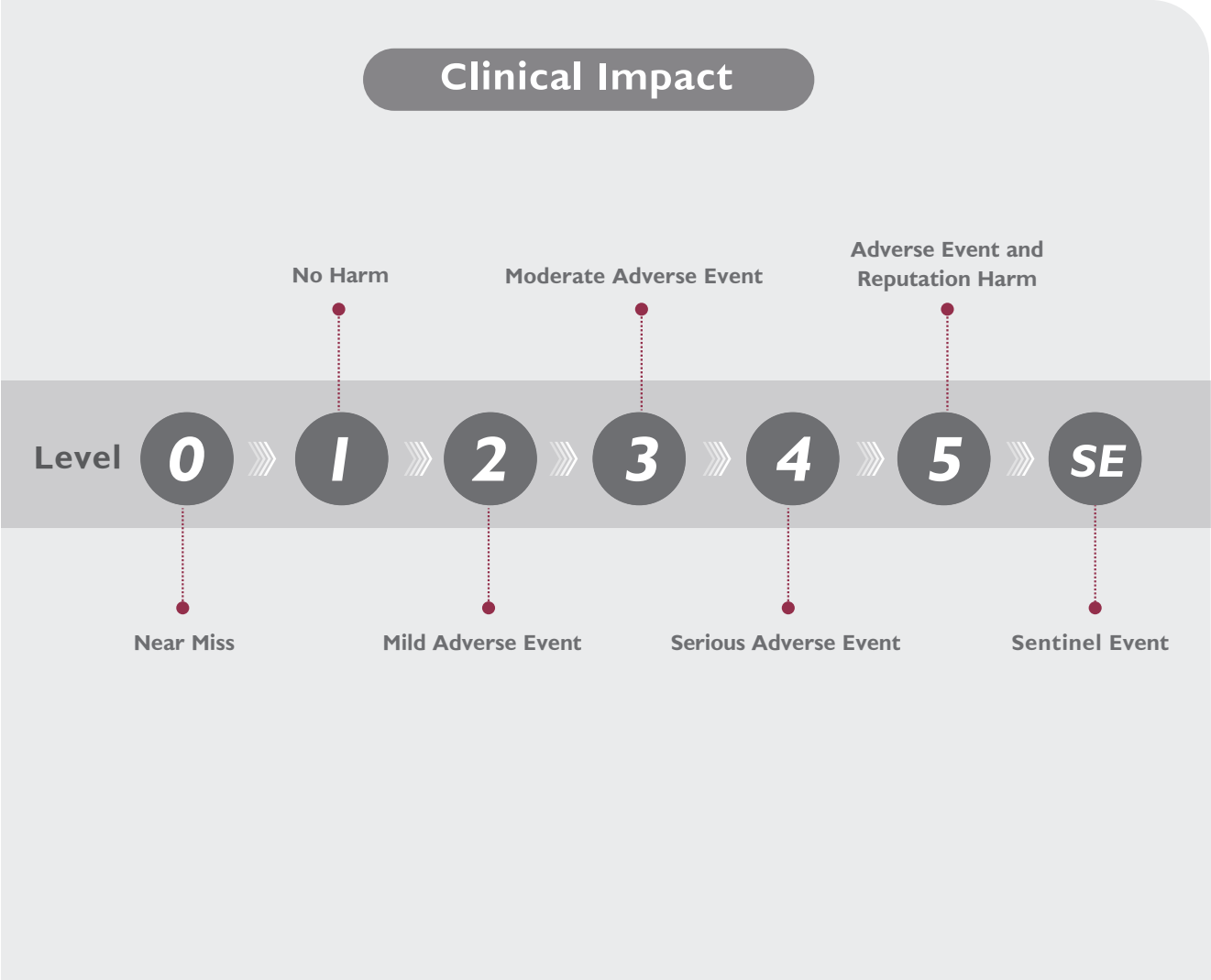
Handle with climate change and natural disaster, reduced or deficient natural resources, pollution from treatment procedures, chemical contamination, storage, removal of hazardous waste and infectious waste, compliance with laws and regulations concerning the environment.

Reputation Risk

Manage reputation risks on branding or public perception.

BDMS Occurrence Reporting

BDMS sets forth the occurrence reporting system for employees and related internal and external personnel in case of any risks or incidents in the business operations. All personnel have the responsibility to manage such incident in a timely manner and must report the incident through the specified channels, both online and regular, within 8 hours after such incident occur, with the aim of investigation and data analysis on the impact level. The impacts can be categorized in clinical aspects, including other aspects as follows



Each impact level results in different internal investigation methods. The occurrence will be reported to the executives on a monthly and quarterly basis.

Safety Culture

BDMS recognizes the importance of patient safety as first priority and strives to ensure that every hospital and organization under BDMS network will consistently develop and improve their medical treatment quality and services to ensure the utmost benefit and satisfaction of the customers which ultimately leads to sustainable business growth. Thus, the development of the organization is deemed significant in which the business must systematically integrate.

"Enhancing BDMS Safety Culture Project"

BDMS is committed to building the safety culture for every employee of the organization under "BDMS — Enhancing BDMS Safety Culture Project", with the objectives to instill workplace safety culture of the organization as well as promotes employees awareness of safety issues. Therefore, the company encourages teamwork to ensure safety of all patients, employees and every stakeholder groups to foster learning from the incidents, prevent the incident repetition, extend the preventive measures to encompass other BDMS network hospitals.

In 2023, BDMS organized the project to build safety awareness under "Stop the Line for Safety" project to instill safety culture within the organization and to communicate the proactive safety policy and guidelines in a case where the employees or doctors witness any incidents which may incur an impact of safety; for example, clinical safety, information security, IT security, human rights, transparency and violent act or harassment etc. The employees witnessing such incident must not hesitate to report the incident in order to stop such risks whereby the person being told of the issue must

listen attentively to avoid prejudice as well as analyze information and correctly rectify before resuming any services or operations. For this activity, there were a total of 147 VDO clips regarding the awareness of "Stop the Line for Safety" project, submitted for contest by the network hospitals and subsidaries. All the works submitted came from various units of the organization, including direct patient care unit and service support unit etc. Such works illustrated the engagement of the executives, doctors, nurses, employees, mechanics division, drivers and security guards, to name a few as the project reflected the promotion and engagement of the executives, coupled with the collaboration of employees of every division. This is because everyone has the same goal; that is, to foster safety in the organization, patient safety and safety of all doctors and employees, every stakeholder group and organization to enable the project's proactive safety operation in a consistent manner. To achieve this end, BDMS network hospitals organized activities to encourage employees awareness and acknowledgement of any risky procedures through the reporting system. BDMS also granted the awards to compliment employee reporting any risky issues via "Stop the Line Champion" and BDMS ERMA Award

(Enterprise Risk Management Awards) in 2023 with the aim to praise the employees and organization with the outstanding performance of safety culture. In addition, BDMS granted 3 awards to the safety coordinator at an individual level and 3 awards at an international level to encourage sustainable development of all BDMS organizations.

In 2023, these 2 projects helped increase the survey rating of patient safety to reach 74% whereas the percentage of reporting patient safety events in 2023 has increased to 61% moreover these 2 projects achieved 100% of the target of Y2022.

Innovation Quality Project

BDMS continuously promotes quality development to offer high quality service and utmost safety of all patients. BDMS emphasizes the safety of surgical patients while encouraging the network hospitals to implement quality activities relating to surgical patient care to ensure their utmost safety. Therefore, in 2023, BDMS launched the quality innovation project under the title "Smart Trigger", the development procedures in surgical patient care. This project was the collaboration between Samitivej Hospital Group; namely, Samitivej Sukhumvit Hospital, Samitivej Srinakarin Hospital, Samitivej Sriracha Hospital and Samitivej Chonburi Hospital. Such project was also a part in BDMS Awards 2023 event which has been held annually and the project was granted the second runner-up prize in "Valued Health Care" category whereby this project reflects the efficiency enhancement in patient care and treatment to foster value while taking into consideration appropriate resource management according to the notion of "Value Quality Morality".

Safety Culture Development Project of the Organization

"BDMS Risk Management Certification Program"

BDMS consistently organizes training to enhance risk management skills to patient safety coordinators as well as build the safety culture within the organization. In 2023, BDMS arranged **"BDMS Risk Management Certification Program"** class 1 which was the training in a form of presentation and simulation training via online and on-site, with a total of 38 hours. This training was a mandatory course for patient safety coordinators and complaint handling officers of the organization. The program is divided into the theoretical part of 15 topics in total such as risk management system, hospital quality system, complaint and crisis management system and safety culture in the organization etc. The participants will acquire knowledge and exchange experiences with expertise speakers. The practical part of the program is to apply the theory into practice by providing workshops and simulations such as use of tools to search for the root cause of the problem and complaint handling skills and practices in which the participants can practice via 2 different simulations. Besides, the training stressed the reflection of notion and work experience to be employed as the lesson in real life. Approximately

60 patient safety coordinators or complaint handling officers attended this program and all participants passes the theoretical examination which was accounted for 100% of the participants and 100% of these participant also passed the simulation training criteria (from the established goal of 70%, the actual operation was reported at 76%). However, such program will be held to the personnel who have not attended and plans to cover other employees responsible for clinical patient care in the future with the objective to enhance knowledge and provide simulation training on risk management.

New Physician Orientation

BDMS determines training programs to foster safety culture among newly recruited doctors and dentists working for BDMS and subsidiaries. The company reviewed knowledge to the doctors and dentists already worked at the hospital and arranged for the "Doctor and Dentist Orientation" program via online platform on a quarterly basis. The objective is to enable the doctors and dentists to acknowledge policies and practices accurately. Topics of the training programs are as follows:

- Welcome to BDMS – Greeting and introduction to BDMS by the Chief Medical Officer.
- How to be a Happy Doctor – BDMS believes that happiness at the workplace helps deliver the best and high-quality services to patients.
- Healthcare and Standard of Care – Fundamental for all new doctors for acknowledgement and practice.
- BDMS Risk Management – Focus on proactive prevention prior to any adverse events arise. In a case where the adverse event does take place, the doctor must submit an additional report for more accurate and appropriate management while ensuring the utmost safety of patients.
- Medical Law – Laws, medical ethics of which every doctor must be aware. Presentation of the case study regarding legal issues to foster learning and prevent incident repetition.
- Do and Don't for BDMS Doctor – Fundamental for all doctors of BDMS and subsidiaries must acknowledge and comply with.
- Empathy Communication – Communication with sympathy to others, patients under treatment, including colleagues.

In 2023, newly recruited doctors and dentists attended training 100%.

Risk Management with Happiness Program

BDMS emphasizes quality and safety and sets forth these issues as proactive management since the happiness of employee is considered a key leading to their efficient operation while delivering quality services to the customers. Thus, BDMS implemented the "Risk Management with Happiness" program for doctors, nurses and employees by employing various case studies, encompassing quality and patient safety, risk management, medical laws and empathy communication. The company encouraged the participants to express their opinions and share experiences to build situation awareness and avoid repetition of any dangerous incidents. In addition, the participants had the opportunity to learn from 5 different simulation situations regarding communication during difficult situation in a hope that the participants could be trained in various skills and used them as operational guidelines to ensure the patients' utmost safety while stressing collaboration between network hospitals to foster employees and

doctors happiness, all of which will render the organization with safety and sustainability in the long run. There were 109 doctors and 170 nurses and employees participating in this program. This project supports Doctor Engagement Score 2023 at 84.29% increase from Year 2022 at 84.14%.

"A Road to Lifelong Well-Being" Academic Annual Meeting 2023

In 2023, BDMS organized the academic annual meeting under the notion of "A Road to Lifelong Well-Being", to indicate the company's vision of sustainability in economic, social and environmental dimensions as well as to exchange knowledge and academic experiences to medical staff in various fields, including other interested parties. The 2023 academic annual meeting was arranged in a hybrid form in which such conference emphasized the dissemination of medical knowledge and expertise. Owing to the structure of Thai population and those of other nations which has significantly changed recently, coupled with lower birth rate contradictory to the population's longevity, resulting in the increased number of the elderly. As a complete health and medical service provider, BDMS strongly recognizes the importance of building a foundation for the population of every age group, especially the elderly group to ensure their well-being. To achieve such objective, BDMS has applied knowledge and medical technology advancement to the utmost efficiency as BDMS believes that the elderly group can bring about their experience to strengthen their potential, including other people and nation. Therefore, this academic conference was a part in applying knowledge and ability while being a forum in exchange of health care technology and advance innovation at an internationally level which will lead to better outcome for the society and country in the future.

During this conference, BDMS Safe OB & GYN working committee participated in the presentation of the trend in taking care of pregnant patients as well as proposed 2 case studies of high-risk pregnant women. The presentation was held by skillful obstetrician with experiences in taking care of high-risk pregnant women, coupled with learning from medical care and treatment of high-risk pregnant women. Besides, the committee emphasized the situation awareness of the medical team to enable the participants, including doctors and medical personnel of BDMS network hospitals to gain knowledge and apply such knowledge for the improvement of medical care procedures for pregnant women, with the aim to foster safety of all customers and the organization's sustainability.

BDMS Risk Management Procedure

BDMS establishes risk assessment and analysis procedure for clinical and critical risks considering the likelihood and severity to determine the risk appetite and rank the importance before making decisions on improvement of operation procedures throughout the organization. Details of risk management procedure are as follows:

1 Risk identification: The department head and the committee responsible for critical systems are responsible for reviewing the working process, risks and factors from the occurrence or incidence report in the passing years, statistical indicators and experience from the external parties to determine potential impacts. The Committees are listed below:

Committee of Pharmacotherapy and Blood Transfusion	**Committee of Disease Prevention and Control in Hospital**	**Committee of Safety Occupational Health and Environment**
Committee of Patient in Anesthesiology and Surgery	**Committee of Medical Records Standards**	**Committee of Medical Information**
Committee of Critical Care Standards	**Committee of Disease-Specific Care**	**Committee of Quality Development and Clinical Safety**

2 Risk analysis: The risk analysis process is as follows:

- Evaluation of impact on the organization such as likelihood, frequency or probability.
- Evaluation of impact on relevant sectors consists of:

Patient and Staff Safety		**Financial**
Reputation	**Strategic and Operational**	
	Compliance to Laws and Regulations	

- Risk Scoring or Risk Prioritization is considered from the probability and impact to establish the risk assessment matrix. The evaluated risk must be within the risk appetite level of low risk or moderate risk only.

Consequence	Likelyhood				
	1	2	3	4	5
	Rare	Unlikely	Possible	Likely	Amost certain
5 Catastrophic	5 Moderate	10 High	15 Extreme	20 Extreme	25 Extreme
4 Major	4 Moderate	8 High	12 High	16 Extreme	20 Extreme
3 Moderate	3 Low	6 Moderate	9 High	12 High	15 Extreme
2 Mild	2 Low	4 Moderate	6 Moderate	8 Moderate	10 Moderate
1 Negligible	1 Low	2 Low	3 Low	4 Moderate	5 Moderate

3 Crisis risk assessment of natural hazard, technological hazard, human hazard and hazardous materials performed by the Environment Committee. The Committee is responsible for reviewing potential risks in the hospitals to identify and evaluate risks as detailed below:

Probability or Likelihood

Human Impact

Property Impact

Business Impact

Preparedness

Internal and External Resources Status

Risk Relative Threat Score

4 Risk management: The risk management plan or project is launched to prevent or lessen the risk level, depending on its priority. The responsible party must report and present the plan to the executives for suggestions and supporting resources.

5 Risk management execution, including the establishment of related policies, knowledge communication to relevant personnel, progress report and report of project indicator to the supervisor or concerned committees on a quarterly basis.

6 Performance review: Supervisor or concerned committees must be notified of the results and operational performance evaluation. The Director of Medical Treatment Quality and Innovation, as the top executive, shall monitor and assess risk management performance of the organization.

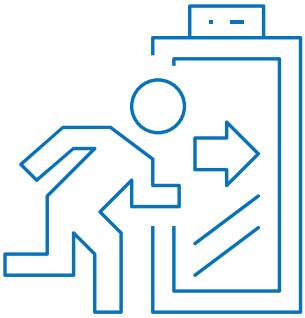
Crisis Management

BDMS Board of Directors appoints the Risk Management Committee to establish the guidelines and assigns responsible personnel for crisis management such as emergency, pandemic or natural disaster to ensure its compliance with the quality and safety standards. The objectives of such guidelines are to set an efficient and systematic response plan for both internal and external crises together with the response and recovery plans for all scenarios in collaboration with the stakeholders.

Code 5 Fire Drill Training 2023

In 2023, Bangkok Hospital, Wattanosoth Hospital, Wattanosoth International Hospital, Bangkok International Hospital and Bangkok Heart Hospital under Bangkok Hospital Headquarter conducted fire drill (Code 5) according to regulations and practices which encompass details as follows:

1. **Assess and screen patients for appropriate transportation methods.**
2. **Report Code 5 to the call center and activate the fire alarm.**
3. **Transport patients (if any) out of the hazardous area.**
4. **Close the doors and windows at the fires source (if applicable).**
5. **Put out fire with the fire extinguisher correctly (pull-release-squeeze-sweep).**
6. **Ensure the situation is under control and delegate tasks while waiting for the support team.**
7. **Report to the incharge nurse upon arrival.**
8. **Taks delegation with the support team in patient transfer.**



As for the situation control and task delegation while waiting for the support team, the incharge nurse is responsible for patient check and switching off the oxygen valve in the department. In addition, the incharge nurse will delegate tasks to internal staff such as patient transportation, medical record preparation, medical supplies and flashlights for patient transportation, alerting fire emergency to other patients and controlling the situation to prevent any commotions. The tasks also include the specification of patient transfer area to ensure their continued treatment. Nonetheless, the fire drill training was 94% completed, compared to the established procedures. Besides, feedback was communicated to relevant units for future improvements such as the sound quality of the internal broadcast, fire alarm equipment testing, clarity of task delegation etc.

Contingency Plan to Cope with Computer Failure (Code 7) 2023

Bangkok Dusit Medical Services Public Company Limited determines that every subsidiary must test their business continuity plan at least once a year by emphasizing the readiness of core hospital system and add-on system required to ensure the readiness of main activities of each department under emergency situation. In 2023, Bangkok Hospital and Bangkok International Hospital under Bangkok Hospital Headquarter tested the contingency plan in a case where major data processing center fails to operate and must use the DR Data Center instead. Guidelines of major activities of each department under emergency situations have details as indicated below:

Call Center Department

Announcement through internal broadcast and messaging to the relevant personnel.

Registration Department

Customer personal identification, confirmation, documentation.

Outpatient Department (OPD)

Preparedness of documents, documentation system, backup system, drug inspection and record and drug management process.

OPD Cashier Department

Preparedness of the backup system and cost calculation.

Inpatient Department (IPD)

Preparedness of documents, documentation system, backup system, laboratory results, drug management procedures.

Inpatient Cashier Department (IPD Cashier)

Preparedness of the backup system, cost calculation.

Medical Record Department

Preparedness of the backup system, backup manpower, medical record delivery management.

IT By Greenline Synergy

Specification of roles and duties of IT Department, coordination or communication procedures with relevant parties, progress report, testing of the backup system and system preparedness upon backup completion.

Results of the contingency plan training to cope with computer failure were succeeded at 97 percent according to the established processes. Communication of suggestions for training improvement to relevant agencies were also proceeded for further improvement.

Crisis Management Performance 2023

100%

of crisis management plan testing compared to the target of no less than 90%

100%

of after-action review (AAR) to follow up compared to the target of 100%

Information Security and Privacy

At present, the digital system, Internet of Things (IOT) and IT system are playing a crucial role in business operations. To efficiently to continuously operate the business, BDMS requires the information technology systems with constantly efficient operation. At the same time, cyber security and personal data risks must be managed these may lead to damage to the reputation and finance of the company's business. Consequently, BDMS determines policies, rules and the infrastructure of information security and system as wall as personal data protection in line with ISO 27001 to ensure the security of personal data of both customers and personnel of the organization.

Supporting the UN SDGs

4.4, 9.1, 16.10, and 17.14

Target and Performance

2023

Target

100% of businesses operated according to international standard of data security and data privacy.

Performance

85% of businesses operated according to international standard of data security and data privacy.

Key Performance Dashboard

0 cases
number
of data security complaints

0 confirmed cases
number of information leakage,
theft or loss

Management Approach

BDMS determines the IT security structure, including policies, guidelines and operation standards for its subsidiaries to ensure appropriate use of IT system while preventing potential risks.

Patient safety and high service standards are BDMS paradigm. To achieve such purpose, many factors and components are involved and one of the key components is effective information security systems adopted by BDMS and subsidiaries; namely, ISO 27001 Information Security System Management and ISO 27799 Information Security System in Health Data since 2020 with three main principles as follows:

1. **Confidentiality:** **means the information is not disclosed to unauthorized people.**
2. **Integrity:** **means the information has not been subject to unauthorized modification.**
3. **Availability:** **means the information is always available.**

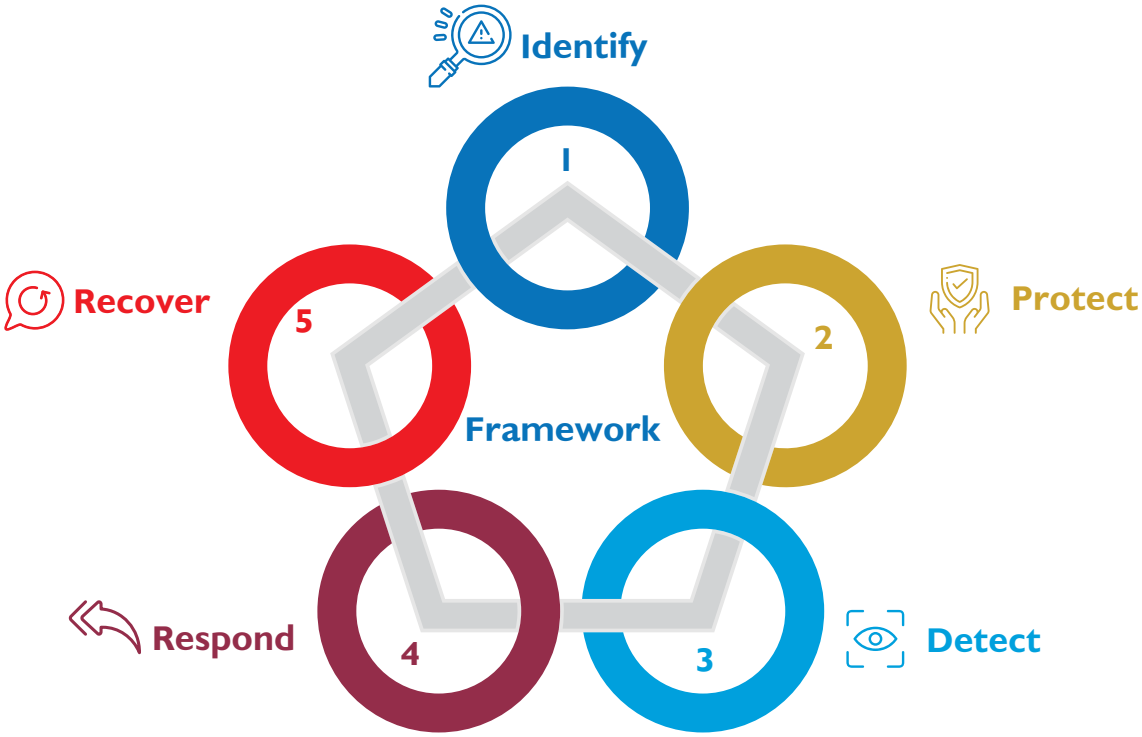
BDMS cybersecurity and data protection management guidelines are as follows:

- Implementing international principles and standards such as ISO 27001 and ISO 27799 as framework in health data security management, cybersecurity and data protection management.
- Governing cybersecurity operations through the Information Security Management Policy Committee.
- Organizing regular training on cybersecurity, IT and data protection for executives and employees of all levels.

Information Security Management

BDMS has elevated cybersecurity standards by announcing BDMS Information Security Basic Requirements for all subsidiaries to manage their information security in accordance with the requirements from the most widely used cybersecurity framework or National Institute of Standards and Technology Cybersecurity Framework (NIST CSF) and related laws; for example, the Cybersecurity Act B.E. 2019 and the Personal Data Protection Act B.E. 2019.

With NIST CSF cybersecurity framework, BDMS performs 5 main functions as follows:



1. Identify: Develop the organization's understanding to manage cybersecurity risks to systems, assets, data and capabilities.

- Business environment: Establish the organization's missions, objectives, activities and stakeholders.
- Governance: Announce the policy, procedures, processes to manage and monitor the company's risks, legal issues, operations and company's regulations.
- Asset management: Identify and manage information, personnel, equipment, systems in accordance with the organization's objectives.
- Risk assessment: Understand cybersecurity risks associated with operations and employees.
- Risk management strategy : Establish the organization's acceptable risk priorities and using data to support critical or make decisions.

2. **Protect:** Develop and implement appropriate safeguards to ensure critical infrastructure services delivery and to contain the impact of a potential cybersecurity event.

- Access control: Define access according to their duties and responsibilities.
- Awareness and training: Arrange sufficient training and cybersecurity awareness to empower the team members to perform their respective duties in line with the company's information security policies and procedures.
- Data security: Manage data and records in accordance with corporate risk strategy to protect the confidentiality, integrity and availability of information.
- Maintenance: Establish the system maintenance and repairment.
- Protective technology: Provide protection and security systems to enhance security management.

3. **Detect:** Enable timely discovery of cybersecurity events that requires the implementation of appropriate activities.

- Detection of any anomalies: Ensure that all events or anomalies are quickly detected.
- Continuous monitoring: Track information and assets to detect cybersecurity events in a timely manner.
- Detection processes: Maintain and test detection processes and procedures to ensure ability to detect any anomalies.

4. **Respond:** Determine processes and procedures to handle any cybersecurity incident.

- Response planning: Response processes and procedures used to respond when any cybersecurity incidents are detected.
- Analysis: Perform to ensure an effective response and support recovery activities.
- Mitigation : Limit the scope and reduce the impact of cybersecurity events.
- Improvement: Review the lessons learned and making improvements.

5. **Recover:** Determine processes and procedures to achieve business continuity and to restore the system to resume its previous state.

- Recovery planning: Organize recovery procedures based on priority.
- Improvement: Review events and respond to update the recovery strategy.
- Communication: Coordinate communication with all stakeholders to ensure successful restoration of services.

Off-Site Data Backup

3-2-1 Backup Rule

Maintain at least **3** copies of your data

Keep **2** copies stores at 2 separate locations

Store at least **1** copy at an off site location

In recent years, the digital world has been confronted with more ransomware attacks and security breaches than ever before. Moreover, system failure and malfunction can damage and interrupt business operations in the same manner.

The 3-2-1 backup rule has been the most effective approach in data protection for decades. This can be achieved by keeping 3 different copies of data, stored on two storage media with one kept off-site. BDMS has employed 3-2-1 backup rules as the company's standards to prevent data loss. From the above reason, off-site data backup is becoming the standard of BDMS IT operations.

Application Performance Monitoring: APM

As today's applications are evolved and expanded such as mobile application and web application which may seem simple from the outside but actually very complex. These applications consist of hundreds of thousands of lines of code linked to dozens of applications. Since the application with good performance is deemed key to the users' expectation, BDMS brings about the Application Performance Monitoring (APM) to ensure that significant applications are performing as the established objectives as well as data security management and data privacy must include the organization's measures, technical measures and physical measures.

Physical Measures

At present, physical measures are considered one of the processes BDMS and all subsidiaries must take into consideration risk levels and adverse events.

Privacy Management

BDMS enforces the policy and guidelines on privacy management covering all details stated in the Personal Data Protection Act (PDPA) B.E. 2019, which has been enforced since June 2022. BDMS also enforces the notification of the Personal Data Protection Committee on the criteria and methods of the establishment and storage of personal data processing activities for data processors B.E. 2022, including the criteria and methods of report on personal data violation B.E. 2022. Besides, BDMS implements regulations related to the BDMS PDPA program and prepares measures to respond to violations of personal data to ensure immediate action and trust of all stakeholders.

BDMS PDPA Data Governance Policy

Following the Personal Data Protection Act B.E. 2019, BDMS enforces the policy on Personal Data Protection Act B.E. 2019 compliance to set the principles and practices on information management, covering the board of directors, top executives, employees, contractors and other parties working with BDMS. The objectives are to illustrate the company's responsibility for data and IT system protection while protecting the organization from personal data breaches. BDMS determines all business units to be responsible for information management and compliance with new laws or changing regulations. The Information Security Management Committee (ISMC), appointed by BDMS' board of directors, is directly in charge of supervising such policy and assigning responsibilities to all BDMS business units for strict compliance.

Type of Personal Data

Highly Sensitive Data

Highly sensitive data is confidential information that requires restrictions on access and protection in accordance with the regulations. Breaches of highly sensitive data will violate applicable law and regulations and may incur significant impact on any individuals or legal entities in case of improper disclosure.

Examples of highly sensitive data are identification card numbers related to protected health information, medical record revealing the individual's identity, biometrics data, genetic data, nationality and religious belief etc.

Sensitive Data

Sensitive data is personal information protected against unauthorized copy, disclosure and deletion. Such data require restrictions on access in accordance with the regulations. Breaches of sensitive data may harm the individuals or legal entities in case of data loss, damage, improper disclosure or access by unauthorized personnel or illegal access.

Examples of sensitive data are name and identification card number, address, phone number, credit card number, bank account number, financial record etc. The sensitive data are protected by contracts and intellectual property rights.

Personal Data

Personal data is internal data, excluding sensitive and highly sensitive data. Such data require approval before publication as they are essential for business operations.

Examples of personal data are internal communication, meeting reports, system specification, record files, basic structure plan and internal project report.

Public Data

Public data is information that can be distributed to the public after approval. Such data is not considered confidential or personal and does not require any legal actions in data protection. Nonetheless, disclosure of public data must not lead to copyright infringement.

BDMS Privacy and Security Working Group

BDMS has established the Privacy and Security Working Group (PSWG) which performs the following duties:

1. Set guidelines about personal data protection and IT security to submit to ISMC Committee for approval.
2. Provide opinions for development and improvement of personal data protection and IT security of BDMS and BDMS network to meet the international standards.
3. Follow up operations of personal data protection and IT security of each company to comply with BDMS policies and relevant laws.
4. Act as a representative for communication about personal data protection and IT security of BDMS to senior executives of each company for acknowledgement.
5. Give suggestions about breach of personal data and IT security incidents.
6. Assess the impact and report incidents of personal data and IT security breaches of each company to the ISMC Committee for immediate acknowledgement.
7. Take action in accordance with the resolution of the working group as appropriate to suppress the incidents or support the smooth operation and maximize the company's benefits, including reporting the matter to the ISMC Committee for acknowledgement.

Patient Privacy Notice

BDMS processes personal data according to the Personal Data Protection Act B.E. 2019 by adhering to lawful basis of processing or after receiving consent from all customers in disclosing personal data to the doctors, nurses and/or other personnel within the medical facilities. Personal data shall be kept according to relevant specifications not exceeding 10 years after the last treatment date. Both paper and electronic documents will be destroyed unless any conflicts arise or extension of the retention period is required by the government agency.

Objectives of Patient Privacy Notice

To enable medical diagnosis, treatment and health services within the network hospitals and other medical facilities.

To study and analyze the quality improvement of medical facilities using confidential data.

To proceed claims to the insurance companies or reimbursement of medical expenses.

To disclose information to the person assigned for health checkup or paying the medical fees (consent required).

To connect database of electronic medical record between medical facilities through applications (consent required).

To establish marketing objectives for healthcare or publication of medical newsletter as well as offer products and services (consent required).

To comply with contracts as customers and company or as being requested for contract signing.

BDMS Data Subject Rights According to PDPA

Data subjects have the right to manage personal data following BDMS Data Subject Rights in compliance with the Personal Data Protection Act B.E. 2019 by submitting request in writing, by phone or email which shall be completed within 30 days. BDMS Data Subject Rights consist of:

- **Right to Withdraw Consent**
- **Right of Access**
- **Right to Rectification**
- **Right to Erasure**
- **Right to Restriction of Processing**
- **Right to Data Portability**
- **Right to Object**

Data Protection Officer - DPO

The Personal Data Protection Act B.E. 2019 set forth roles and duties of all related parties to personal data. One of these individuals includes the Data Protection Officer (DPO). The DPO is a person assigned to supervise, provide suggestions or inspect personal data protection in the organization to ensure its compliance with the established law.

BDMS appoints the DPO in accordance with Section 42 of the stipulated law and the DPO can gain access and report directly to the executive in case of data leakage or loophole which may be risky or inconsistent with the legal specifications can be directly reported to the authorized executive.

Selection 42 of the stipulated law, The data protection officer has the duties as follows:

1. Provide suggestions to the data controller or data processor, including employee or contractor of the data controller or data processor concerning the compliance according to such act.

2. Supervise the performance of the data controller or data processor, including the employees or contractors of the data controller or data processor concerning the collection, use or disclosure of personal data to ensure strict compliance with such act.

3. Coordinate with the agency in case of any problems regarding the collection, use or disclosure of personal data of the data controller or data processor, including employees or contractors of the data controller or data processor concerning the compliance according to such act.

4. Maintain confidentiality of personal data of the person the DPO acknowledges or acquired from his/her performance of duty in accordance with such act.

Employee Awareness Training

BDMS emphasizes skills and knowledge development of personnel to foster their potential in operation. BDMS staffs can attend training or learning programs via the company's learning system. In 2023, BDMS organized PDPA training under the topic of "PDPA for Healthcare Business" and "Personal Data Management under PDPA".

Control of the Data Processor for Data Safety

BDMS employs other business partners to achieve the company's business objectives; therefore, as a data controller, BDMS realizes the significance of personal data controller with business partners acting as the data processor. This is to ensure the utmost safety of personal data and must be in strict compliance with the established law.

BDMS determines the data processing agreement with the data processor. The data processing agreement specifies the duties of the data processor as follows:

1. Gather, use or disclose personal data only as being authorized by the company.
2. Provide appropriate security measures to prevent losses, access, uses, changes, restrictions or disclosures of personal data without authorization or improper act.
3. Report any personal data breaches for the company's acknowledgement without delay.
4. Prepare and maintain the records of personal data processing activities according to the criteria and methods stipulated by the committee for further inspection of the company.

Service Quality and Patient Safety

Nowadays, healthcare providers must realize the significance of patient safety which is a key to the development of standardized service quality. Owing to risks concerning patient rights and protection have consistently changed, including the standards of medical treatment and safety are crucial in providing patients with health-related services therefore, the organization aims to establish and elevate the safety culture in patient care, resulting in the requirement of standardized public health services to ensure trust of all customers and patients, all of which are deemed crucial to sustainable success and growth of the organization.

Supporting the UN SDGs

3.2, 3.4, 3.6, 3.8, 3.d and 8.2

Target and Performance

2023

Target

100% of Hospitals Certified by Thailand or International Healthcare Standard.

Performance

100% of Hospitals Certified by Thailand or International Healthcare Standard.

Management Approach

Service Quality Management

BDMS enforces service quality policy and operation guidelines within the organization while delivering medical services and healthcare, emphasizing equality principle and minimizing the inequality of medical treatment access to be in line with both national and international standards. The objective is to deliver value to the society at large according to BDMS vision and mission of dedicated healthcare provider that delivers internationally standardized services while taking into consideration patients and the use of advanced medical technology. BDMS determines the hospital subsidiaries to establish their quality policy and operation plan to improve medical service quality and ensure similar standards by taking into consideration the principle, regulations and relevant standards. Thus, BDMS establishes the quality handbook and initiates the service quality initiative to support the operations while ensuring the utmost safety of all patients. Moreover, the hospital subsidiaries are to ascertain that medical service standards are certified at local and international levels and with an operational scope, covering all aspects from patient care to international management.

Quality Improvement and Patient Safety Plan Procedure: QPS Plan Procedure

BDMS establishes the QPS Plan Procedure to enhance the satisfaction and convenience of the customers, employees and doctors, ensuring the happiness and trust of patients, including their family members. Besides, this handbook encompasses the assessment and adjustment to the corporate governance structure and management according to JCI, HA standards and other related regulations. The performance must be reported at least on a quarterly basis to the relevant committee. Details in the QPS Plan Procedure are as follows:

Priorities

Assign the Board of Directors to evaluate, prioritize and set quality and patient safety measures by risk assessment, type of issues, regulations, standards and issues from patients etc.

Methodology

Apply the Plan-Do-Study-Act (PDSA) in developing the process, project design and patient safety incident analysis to systematically improve and manage the issues in the organization.

Reporting Systems and Confidentiality

Communicate issues regarding quality and related measures to the Quality Management Committee, which will analyze and submit the report to the Board of Directors and other related committees regarding to apply the results to patient quality standard guidelines. The evaluation results must be confidential and reserved for authorized personnel only.

Annual Review of Patient Safety and Quality Improvement Plan

Use the annual review to indicate the operation's success in terms of quality and budget aspects. Submit the report to the related committee to devise service quality development for the following year.

Patient Safety Culture Survey

Evaluate the safety culture for the patients by launching a survey of employees of all levels. Process, analyze and provide data to the executives who can accurately apply the results in the corporate development planning and safety culture.

BDMS National and International Standards

Hospital Accreditation Thailand: HA and Advanced HA	Joint Commission International: JCI	Clinical Care Program Certificate: JCI CCPC	Electronic Medical Record Adoption Model: EMRAM by HIMSS Analytics (Healthcare Information and Management Systems Society) (HIMSS)
Commission on Accreditation of Medical Transport Systems Global: CAMTS Global (US & EU)	Laboratory Accreditation Program, College of American Pathologists (CAP)	ISO/IEC 27001 Information Security ISO/IEC 27001	ISO 27799 Health Informatics ISO 27799
ISO 15189 Medical Laboratory Quality for Accurate Results, Research, Treatment and Disease Prevention ISO 15189	ISO 15190 Medical Laboratory Quality on Environment Management, Hazard Prevention, Biosecurity and Waste Management ISO 15190	ISO 9001 Quality Management System ISO 9001	Quality Assurance in Production, Installation and Servicing ISO 9002
ISO 17025 Testing and Calibration Laboratories ISO 17025	Hemodialysis Standards by The Royal College of Physicians Thailand (RCPT)	Quality Audit of the Ethic Committee on Human Research by The Strategic Initiative for Developing Capacity of Ethical Review (SIDCER)[1]	Society for Simulation in Healthcare (SSH) for BDMS Simulation Center
Thai Labor Standards (TLS) by Department of Labor Protection and Welfare of the Ministry of Labor	Service Standards on Assisted Reproductive Technology by the Protection of a Child Born by Medically Assisted reproductive Technology Act B.E. 2015	Geriatric Emergency Department Accreditation Geriatric Emergency Department Accreditation – American College of Emergency Physicians (ACEP)	Trauma Center by The Royal College of Surgeons of Thailand (RCST)
International Consortium for Health Outcomes Measurement Non-profit organization that develops health indicators, particularly for patients with medical conditions to measure the patients' health result.	GMP Good Manufacturing Practice Quality assurance that ensures the consumers' safety and internationally standardized products	Good Storage and Distribution Practice for Pharmaceutical Quality management system that guarantees the quality of pharmaceutical products throughout the supply chain, starting from the manufacturer, wholesaler, warehouse, distributor and transportation	

[1] SIDCER together with the Forum for Ethical Review Committees in Asia and Western Pacific (FERCAP) under the World Health Organization (TDR/WHO) and the National Ethics Committee Accreditation System of Thailand (NECAST).

Commission on Accreditation of Medical Transport Systems: CAMTS[2]

BDMS Emergency Services (BES) transfers patients in accordance with the Commission of Medical Transport Systems (CAMTS), U.S.A and the Commission on Accreditation of Medical Transport Systems (CAMTS GLOBAL), focusing on quality and safety standards for emergency medical transport by land, air and sea. CAMTS provides patients transfer services under the concept of "One number, All access", with 24-hour emergency services. Besides, CAMTS requirements consist of corporate vision and mission, operational direction and guidelines, treatment guidelines for specific diseases, safety standards of aircraft and other transport vehicles, aircraft maintenance, communication standards and coordination by adhering to safe transfer of severely injured patients to get treatment at the hospital network and patients transfer to the nearest hospital or hospital network while ensuring the utmost safety of patients.

Healthcare Accreditation: HA[3]

BDMS subsidiary hospitals are certified by Healthcare Accreditation (HA) and Advanced HA (A-HA) of the Healthcare Accreditation Institute (Public Organization), emphasizing quality and safety in patient care according to international standards as well as driving toward sustainable development to achieve the established vision and excellence.

Quality Assurance Procedures

Quality Development

Healthcare facilities develop systems suitable for their requirements and in compliance with the standards.

Quality Evaluation

Medical facilities assign the consulting committee and HA surveyors to evaluate the hospital's quality development.

Quality Accreditation

Once the medical facilities comply with quality criteria, the institution will issue accreditation with a three-year validity.

[2] See further details on CAMTS at https://www.camts.org
and BDMS Emergency Services at https://www.bangkokhospital.com/en/center-clinic/trauma/bdms-emergency-services-bes?info=overview)

[3] See further details on HA at https://www.ha.or.th/

Quality Assurance Criteria

Organizational Management Overview
For example, vision, strategy, leadership, data analysis, evaluation of results, knowledge management, workforce, operations etc.

Key Hospital Management Systems
For example, risk management, safety and quality, professional governance, patient care environment, infection prevention and control, hospital management system etc.

Patient Care Processes
For example, service accessibility, patient assessment, planning, patient care, information provision, patient and family support, continuity of care etc.

Results
For example, results from healthcare, patient care, human resources management, leadership, effectiveness of process in critical works, financial performance etc.

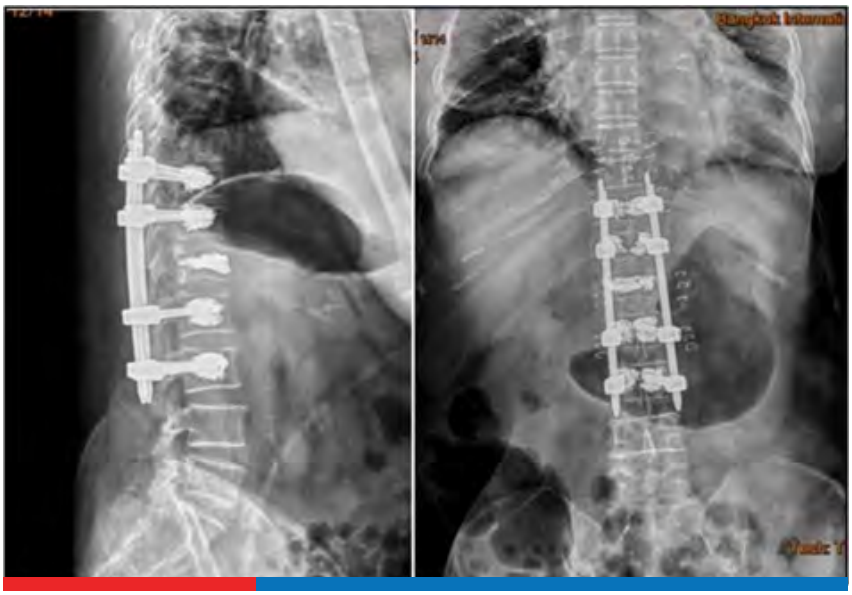
BDMS Accreditation Results 2023

BDMS complies with the policy and healthcare standards, covering impact assessment on health and safety to ensure continuing development. BDMS accreditations are listed below:

11 hospitals under BDMS
participated in the JCI evaluation. All hospitals were accredited with safety standards.

13 hospitals under BDMS with BDMS Emergency Services (BES)
were accredited by CAMTS Global (US & EU)

100% of the hospitals accredited by JCI and/or HA/Advanced HA
passed the evaluation and under development for utmost patient safety.



Service Quality Initiatives

BDMS Awards Initiative for Service Quality Development – Valued Healthcare

BDMS strives to constantly improve healthcare services at an international level by introducing new innovations that respond to the utmost satisfaction of all customers as well as exchange patient care experiences with a holistic approach, under the initiative called "Innovative Sustainable Healthcare". Such initiative encompasses the "Valued Healthcare" section while enhancing the efficiency of patient treatment processes to ensure appropriate resources management in line with the notion of "Value, Quality and Morality". BDMS creates value to all customers which can be seen in the Year 2023 projects that deliver both service quality and utmost safety to the hospital's customers. Some of the noteworthy projects are:

Minimally Invasive Screw Cement Augmentation in Pedicle Technique

Introduced by Bangkok International Hospital. The Hospital was granted the first prize in minimally invasive screw cement augmentation in pedicle technique which is the treatment of spinal osteoporosis in elderly people. This initiative was furthered by inserting the equipment and pedicle screw through the skin with minimally invasive technique, coupled with the use of cement injected by 2-layered and side-opened needle, all of which will lead to the advance surgery. The most outstanding feature of such technique lies in the fact that it can be performed with every type of small wound, with cement covered 360° around the screw, enabling more adhesion between the screw and bone. With this technique, patients recover more speedily and can resume their normal lifestyle within 24 hours while minimizing any side effects from the surgery to become net zero. Besides, this innovation is minimally invasive operation, so the patients lose only a small amount of blood, coupled with short operation time that ultimately render less expenditures than existing technique.

> "Project to develop innovative techniques for storing external data with minimal software to complement the official internal control system."

Smart Knee Rehab

Phyathai 3 Hospital introduced the innovation for rehabilitation of patients with knee replacement. This enables the patients to perform their own knee exercise at home in accordance with the medical principle, resulting in more efficient recovery after surgery.

N Health Novogene Genomics

BDMS strongly adheres to the National Plan of Genomics Development, following the National Strategic Plan Year 2024-2040. Therefore, BDMS established the Genomics Center and has employed the Illumina technology, an advanced innovation of genetic sequencing for medical treatment widely used in many leading laboratories. Such innovation also supports the operation of BDMS Genomics Center with the aim to elevate Thailand's medical competency and becomes one of the treatment alternatives for each patient. In addition, BDMS collaborates with various medical institutions to develop personnel in response with this innovation as well as promotes Thailand to become the South East Asia's Genomics Center while enabling the customers to gain access of modern and efficient treatment in a more comprehensive manner.

Aspirations and Business Objectives

NNG provides a genetic test encompassing every healthcare dimension and every age group. It also includes the prevention, diagnosis and individual treatment.

NNG Provides a Genetic Test

- Screen any abnormalities of the infant's chromosome from the mother's blood.
- Examine the mutation of hundreds of cancer cells to plan for more accurate treatment.
- Examine genes relating to health and exercising for general health check up.
- Examine genes affecting drug response to enhance safety and efficiency in drug use.
- Examine gene affecting disease occurrence and calculate risks of possible disease in the future.

The customers can be ensured of the quality and standard of genetic testing called the "Next-Generation Sequence", introduced in the U.S.A. This Next-Generation Sequence is advanced innovation used in many leading laboratories around the world. It is also highly efficient, accurate and the results will be translated by the geneticist and genetics doctor whereby the computer system is employed in every inspection procedure and the database is always updated in accordance with the international level to ensure speedy test results.

BDMS Network Patients Safety Culture Survey

BDMS determines the BDMS network patients safety culture survey for medical personnel; comprising, doctors, nurses, patients' assistant, physical therapist, including all front-line staff; for example, hospital porter concerige, registration officer etc., to evaluate quality development performance as well as foster the safety culture in a case where any adverse events arise. This survey is a mechanism driving these medical personnel to be aware of, minimize or prevent any potential damages which may arise. The survey will be conducted once a year and the questionnaire is referred from the Agency for Healthcare Research and Quality (AHRQ), U.S.A. which can be categorized into 9 sections as follows:

Teamwork

Reporting Patient Safety Events

Organization Learning-Continuous Improvement

Communication Openness

Response to Error

Handoffs and Information Exchange

Communication about Error

Staffing and Work Pace

Supervisor, Manager and Hospital Management Support for Patient Safety

The results from the BDMS network patients safety culture survey help assess the current status of patient safety culture and identify its strengths and areas of improvement. Besides, the survey sets out the trust in communication and mutual understanding of the essence of safety. In 2023, BDMS network patient safety culture survey reported 74% of medical personnel positive feedback on the workplace environment considering safety culture, exceeding the AHRQ of 70%.

AI
O-arm
AMBULANCE

Innovation and Technology of Sustainability

Amidst dramatically changes nowadays, such as technology, ratio of population, medical expectation, including the epidemic of new diseases which occur consistently, BDMS; thus, recognizes the significance of innovation and innovative culture with the aim of becoming the genius hospital and the leader in complete medical service provider, rendering the utmost satisfaction of service experience while constantly developing efficiency in business operation. BDMS has set forth the guidelines on innovation culture in various forms through innovative activities. This can be seen from BDMS Awards which was held to provide the opportunity for personnel to show their innovative capability via many contests and such award is also considered the cultivation of knowledge and innovation, including skills in different aspects relating to innovation management. The objective is to enable the personnel of BDMS network to efficiently improve the innovation which will ultimately lead to the continuation of business opportunity in the future.

Supporting the UN SDGs

8.2, 9.5, 9.b, 17.14 and 17.17

Target and Performance

2023

Target

BDMS has over **400** innovative projects participating in BDMS Awards.

Performance

BDMS has over **657** innovative projects participating in BDMS Awards.

Innovation Development Strategy

BDMS has implemented innovation management by implementing cooperative guidelines for innovation development in response with organizational and innovative development strategies by collaborating with both national and international organizations in order to become honsive the smart hospital and the leader of comprehensive medical service provider in 2023. Besides, the company has delivered medical service experiences and ultimate health care which in turn will lead to continued efficiency development of the business operation.

BDMS Infinite Innovative Healthcare

Seamless Process	Product & Service Innovation	A Holistic Approach	Innovative Mindset	Friendly Atmosphere
Emphasize innovation to facilitate access of medical services and healthcare anywhere, anytime via application to deliver services to customers in a timely and seamless manner.	Emphasize innovation development, product and service development by collaborating with business alliances in treating complicated diseases, emerging diseases and severe diseases, coupled with complete treatment procedure to build excellent experience for the customers and every stakeholder group.	Emphasize innovation concerning medical services and complete healthcare through integration of multidisciplinary medicines responding to new lifestyles, including treatment of illness and preventive healthcare.	Emphasize personnel awareness by elevating skills and perceptions significant for innovation development while creatively responding to the customers' requirements.	Emphasize innovation that fosters environmental-friendliness and facilities in support of services provided in the hospital and virtual hospital.

Management Approach

The innovation management approach within BDMS has the objectives to build innovative culture in every dimensions through manpower, organization structure and support of innovation resources. Guidelines on innovation development start from the analysis of operation procedures (Empathize & Define) in order to understand the requirements and issues to be improved from existing operation procedures. Next is the innovation design procedures to solve existing procedures (Ideate) to ensure that such developed innovation will respond and actually solve problem through the engagement of the stakeholders of such operation procedure before moving to the prototype phase. This can be accomplished by the cooperation of users and experts from inside and outside the organization, together with testing in the experimental area (Test) to ensure innovation efficiency. Lastly, such developed innovations will be employed in the operation procedures and operation efficiency within BDMS will be evaluated. Activities supporting innovation development of the organization include the following:

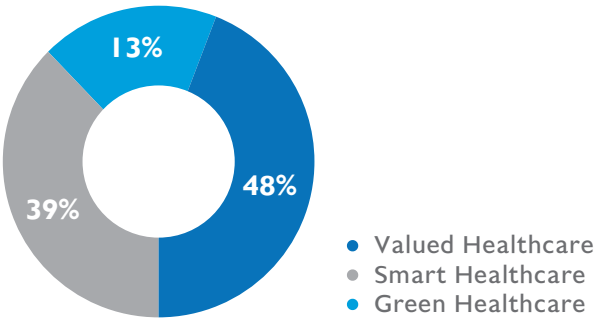
- Investment to foster learning which builds or enhances skills of innovation development.
- Specification of the meeting area and the study area to become the innovative learning center of the employees.
- Allocation of manpower and level of task burden to promote personnel's innovation.
- Honor announcement of personnel with capability in innovation while promoting and encouraging their innovative ability.

BDMS Awards

BDMS Awards 2023 has been held for 8 consecutive years with the objectives to instill knowledge and show innovation potential under the notion of "Innovative Sustainable Healthcare" of digital hospital with integrated IT system, coupled with medical services and operation procedures within the hospital to enhance efficiency by taking into consideration the benefits of all patients. In addition, the company has provided facilities and safety while ensuring positive experience of the customers for their utmost benefits and also took into consideration the sustainability covering 3 dimensions; that is, economy, society and environment. BDMS awards is categorized into 3 sections as follows:

Smart Healthcare | **Valued Healthcare** | **Green Healthcare**

In 2023, BDMS staff and departments submitted a total of 657 innovative projects with a ratio as indicated below:



The winning prizes of this innovative project in each category consists of:

Smart Healthcare: To create medical innovation by applying smart healthcare technology and system for efficient medical care and to enhance the patients' utmost satisfaction.

The first prize in **Smart Healthcare** category such as **Paperless Health Information Exchange** project by Bangkok Hospital Headquarter, is the innovation in sending the data digital analysis to facilitate patients and medical staff to access x-ray data by themselves as well as to enhance data accuracy and safety.

Waiting time was reduced to 70 percent.
Report budget was reduced to 24 percent.
Data safety increased to 100 percent.

Green Healthcare: is the innovative project to sustainably develop medical organization by creating environmental management process for business with the determination to minimize environmental problem and to ensure sustainability in economic, social and environmental dimensions.

The first prize in **Green Healthcare** category is **Sustainable Water Management** project by Dibuk Hospital. This innovation involves with efficient rainwater management to circulate water into the system and then used within the organization. This enables the organization to minimize groundwater consumption while reducing risk from water shortage.

Amount of tap water consumption was reduced to 6,000 litre.
Tap water expenditures were reduced to 500,000 Baht/year.
Communities receiving the benefits 10 communities.

Valued Healthcare: To enhance customers' experience by elevating the efficiency of patient care procedure for quality and value under appropriate resource management in line with the notion **" Value, Quality, Morality"**.

The first prize in **Valued Healthcare** category and also the winning prize at the **President Award 2023** was **Minimally Invasive Screws Cement Augmentation in Pedicle Technique (MIS CAPT)** by Bangkok International Hospital. This innovation has combined the standard of surgery by inserting screw pedicle through the skin, coupled with injecting bone-fortified cement; therefore, patients will benefit from minimal invasive surgery which minimizes blood loss and risk of any complications. The cement will add more adhesive strength between screw and bone, ending the problem arising from loosened screw. This innovation introduced a new standard in surgery for elderly people which brought about satisfactory outcome, particularly for spine osteoporosis and those with degenerative spines. Such innovation enables the patients with spine osteoporosis in need of surgery to feel less pain and recover in a speedy manner, including less expenditures compared to the existing surgery since there will be no complications and less probability of repeated surgery. Besides, when combining this technique with other minimal invasive surgeries, the result has shown that the minimal invasive surgery is more efficient **which can be seen from 47 patients with the surgery duration between 2-3 hours and recovery time of approximately 16-24 hours**.

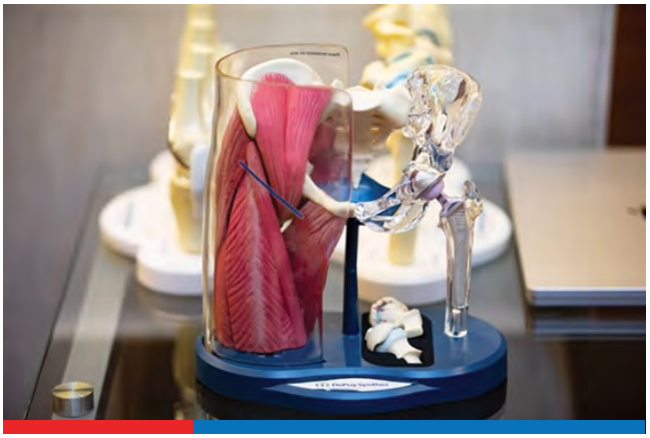
Nonetheless, the innovative projects being granted the awards of different levels have been supported for its continuation, result extension and implementation inside and outside BDMS network which ultimately will bring sustainability to the organization and Thailand's public health system in the future.

SET Awards 2023 "Best Innovative Company Awards"

BDMS received the **Best Innovative Company Awards** from the **"SET Awards 2023"** under the collaboration of the Stock Exchange of Thailand and Money and Banking Magazine, together with many allied organizations. This award reflects BDMS's strength in innovation.

During this event, Mrs. Narumol Noi-am, Senior Executive Vice President and Chief Financial Officer, together with Mr. Suthorn Bovornrattanavej, M.D., Chief Faculty of Orthopedic Center of Excellence, and Mr. Pontakorn Panichkul, M.D., Orthopedic Surgeon of Bangkok International Hospital, collaboratively granted the award held by the Stock Exchange of Thailand and Money and Banking Magazine, with the aim to show the admiration for the outstanding business with potential of sustainable business operation.

The **Best Innovative Company Awards**, granted to the excellent company with an outstanding innovation which setting a new standard of innovation beneficial to Thai economy and society. This innovative project involves bone and joint disease and has been considered as a new operation technique in Asia Pacific and well-accepted at an international level. This innovation is called Direct Anterior Approach Hip Replacement or DAA which enhances the efficiency in medical treatment for patients with hip osteoarthritis or patients with broken hip bones. At present, there is a tendency of increasing disease diagnosis and patients are younger than previously, making it more difficult to have a normal lifestyle which in turn, will result in lower quality of life and more burden in patient care of the country. This innovation introducing new surgery technique is deemed highly efficient since the wound will be smaller (3-4 inches), shorter hospitalization period, more speedy recovery (2-8 weeks), very low chance of hip dislocation (0-0.5%), including fewer blood loss, less tissue pain and more accurate control of the length of legs. In addition, patients can have two hips replacement at the same time which is the treatment result they have already expected and have been impressed tremendously.



Such hip replacement innovation was introduced from the research conducted in 2016 by expert bone surgeons, anesthesiologists, nurses and physical therapists, all of whom are medical staff collaboratively providing treatment to patient with hip osteoarthritis. This innovation was supported by the Hip and Knee Center of Bangkok Hospital and subsequently developed a new form of surgery by experimenting with the robot and then compared the result with the existing method. This new method has yielded more efficiency while patients can recover more speedily. Therefore, the research team has furthered the study to consistently improve such surgery procedures for utmost efficiency.

In 2020, BDMS initiated new hip replacement surgery with Non-Invasive Hip Navigation technique to plan for a more accurate surgery. The company also gathered information that affected treatment procedure more effectively while creating good experience for the patients as follows:

	Existing Hip Replacement Surgery	New Hip Replacement Surgery
Method of Surgery	Wound opened from the back and muscles must be cut	Surgery done by cutting through tissue without muscles being cut
Required Equipment	Special operating table imported from abroad (Hana fracture table)	Regular operating table manufactured domestically (Regular operating table)
Wound Size	10 – 12 inches	3 – 4 inches
Days Hospitalized	7 – 10 day	4 – 5 day
Days Recovered	8 – 16 weeks	2 – 8 weeks
Side Effect	Blood loss condition possibility of dislocated hip after surgery unequal leg's length after surgery	Less tissue pain, few blood loss 2 knees can go under surgery at the same time accurately control leg's length

From the beginning of the research till a new method of hip replacement surgery was introduced, there have been 4-5 times more patients getting treatment since they are less concerned about potential side effects. The research has evidently shown that this innovation is highly efficient medical treatment while enabling patients to save money and reduce their hospitalization and recovery period, so they can resume their normal life in a timely manner. Besides, the result has shown that patients have been more satisfied with this new innovation.

In addition to the success in innovative patient treatment, the medical personnel and multidisciplinary teams can exchange knowledge and patient care while demonstrating the procedure to hospital alliances, medical schools and international medical committees. Anterior hip replacement project won the award in the Patient Experience category and was granted the President Award by BDMS Award 2021.

Nonetheless, there will be new techniques of hip replacement surgery in the next phase, including an improvement of hip osteoarthritis, lower risk of hip dislocation after surgery and fewer side effects from hip replacement surgery.

BDMS Innovation Group Contest

BDMS Innovation Group Contest was held for the first time among BDMS Network Hospital Groups and Subsidiaries with the objectives to encourage and instill innovation for BDMS personnel as well as provide the opportunity for employees and various departments to show their innovative ability and direction in guiding the organization toward the new dimension to respond to changing global requirements. Moreover, this project helps foster relationship and network of innovation within the hospital groups, which will lead to exchange of knowledge and innovative information and the development of operation procedures of the organization beneficial for every stakeholder groups. In 2023, the activity was held for the first time whereby each network groups have different initiatives and themes of the event based on the groups' direction and policy. This will lead to the diversity of innovative projects and collaboration between different departments of BDMS network hospitals and subsidiaries.

For BDMS Network Hospital Group 1, the event was organized under "Group 1 Ideas Sharing Contest" activity, with the aim to become the "Smart Hospital for Sustainability". Bangkok Hospital Headquarter has won the first prize for the innovative project called "Paperless Health Information Exchange (Diagnosis Image Sharing)".

BDMS Network Hospital Group 2 was held under the activity called “Wisdom Flea Market” to search for patient care innovation and the winning prize was “HermioNurse” project by Samitivej Children’s Hospital.

BDMS Network Hospital Group 3 was held under the activity called “Group 3 Legend of the SEAs” with the aim to become a medical leader in Southeast Asia and the winning prize was “BCH iSearch” project by Bangkok Hospital Chanthaburi.

BDMS Network Hospital Group 5 was organized under the activity called “The PPitch Awards 2023” to search and encourage employees potential in innovation development and the winning prize was “Smart Knee Rehab” project by Phyathai 3 Hospital.

BDMS Network Hospital Group 6 was held under the activity called “BDMS Group 6 Innovation Contest” with the aim to extend the innovative competency of the organization and the winning prize was “Sandbox Care+” project by Bangkok Hospital Hat Yai.

For Non-Hospital business group, there were some innovation contests held by BDMS Network Hospital Group 7.1 under the activity called “Innovation Contest BDMS Group 7.1” with the aim to promote sustainable innovation development in the organization. The winning prize was “N AI Sterile Process Innovation for Patient Safety” project by National Healthcare Systems Company Limited.

In addition, BDMS Network Non-Hospital Group 7.2 was held under the activity called “BDMS Innovation Group 7.2 Contest 2023” with the objective of becoming the Smart Manufacturing Organization and the winning prize was “Centralized Warehouse” project by Save Drug Center Company Limited.

Such activities were considered the creation of innovative culture in every sector of the BDMS network hospitals and subsidiariesto promote involvement of all employees and every sector of the organization in inventing new innovation in order for the company to become the “Innovative Sustainable Healthcare”. The team winning the first prize from “BDMS Group Contest 2023” from BDMS network hospitals and subsidiaries would be entitled to “BDMS Innovation Fast Track” and entered into the round of “Semi-final BDMS Awards 2023” whereby BDMS will support to continue more project efficiency.

BDMS Innovator

BDMS has realized the significance of building employees efficiency as well as promoted their innovative ability; therefore, the company has organized the innovation network to gather employees relating to innovation development within the organization or "BDMS Innovator" to exchange experiences and opinions concerning innovation development.

As employees and the representative of each department possess different skills, knowledge, strengths and weaknesses; thus, exchange of information and knowledge is beneficial for every network member. Moreover, such innovative network is considered as a way to promote news, activities and BDMS development opportunities from business unit level to corporate level, resulting in more efficient and sustainable communication of innovation development. In addition, in 2023, there were 42 innovators chosen which would be classified into the "Innovator Level 1 Centaur" through BDMS innovator promotion. The 32 innovators submitted their work and participated in BDMS Awards for 2 consecutive years and there were 10 innovators in "Innovator Level 2 Unicorn" who submitted their works in BDMS Awards for 3 consecutive years through BDMS innovator promotion as well. However, the objective is to extend the competency in innovation development and to instill innovative ideas for these groups of staff, who are deemed key resources in moving the organization forward. BDMS; therefore, has designed the activities in line with the established objectives of innovator development program which consists of:

BDMS Innovation Hybrid Dinner: To build morale for personnel with innovative capability as well as to exchange ideas and foster networks and relationship among personnel of different departments of BDMS which will bring about the exchange of innovation within the organization in a sustainable manner.

BDMS Innovator Meeting: To move the organization toward the procedures instilling the model innovator through networks and skills training of these innovators as well as organize activities to instill knowledge to the innovators to become the model in innovation development of the organization.

BDMS Innovator Outing, this activity is considered a part of instilling the innovators within BDMS network through training programs and exchange of information regarding innovation development to the innovators and personnel. Besides, such activities help strengthen the relationship between the innovators and staff from different departments, which will lead to efficiency enhancement in sustainably developing the innovation. BDMS Innovator Outing also has the objective to elevate the communication skills or "Effective Communication" to increase "Teamwork and Collaboration" and to ensure happiness and positive energy in the workplace. There were 40 innovators attending this activity.

BDMS Silver Wellness & Residence

Amidst global changes of the 21st century which are fast-paced in every dimension and caused by various factors such as healthcare business expansion globally, especially health-related tourism in which Thailand is one of the favorite destinations and aging society, all of which leads to people's health awareness, particularly for the silver age group or people with over 50 years of age. This silver age group are interested in health issues and are capable of spending. For Thailand, it was expected that the country will become the "Super-Aged Society" in 2029; therefore, this will be the business opportunity in public health administration to be in consistent with such changes and be able to respond to the population to gain more access to Thailand's public health system. The social changes have incurred a new form of economy or "Ageing economy" or "Silver economy" which is an emerging market potentially brings about significant revenues for Thai economy in the next few years. This silver age group has the tendency to spend their money on relaxation, beauty, healthcare services, including purchase of premium products and services. From the study concerning the requirements of this silver age group, there have been 3 major areas with an increasing growth in response with these consumers in the silver age group.

1. Food for Elderly: Food and restaurant business for the elderly healthcare which seems promising as the country is moving toward the aging society. This is because people are more concerned about their health and nutrition. Thus, BDMS has emphasized the healthcare of all patients and Thai population in every detail, including "Healthy food" which is deemed a key factor affecting health condition and treatment procedures. In terms of medicine, "food is medicine"; consequently, there has been an initiative to develop nutrition-related products and innovations within BDMS. This can be seen from the initiative called "Imm by BDMS". Health information of the patients or the elderly attending this program will be analyzed to specifically determine food recipe for each individual whereas the raw materials and ingredients employed will be calculated for accurate nutrients according to the nutrition and diet, under the supervision of doctors and nutritionists of BDMS network hospitals. There are 3 types of food provided in this program as follows:

- Food for disease condition (heart disease, diabetes and kidney disease)
- Health Balance, Body Booster and Weight Control
- Blenderized Diet

Besides, during the manufacturing process, chefs and renowned food experts will help design food recipes which shall be standardized, have good flavor, hygiene and in line with the nutrition and diet. Food will be delivered right to the customers' homes.

2. Travel and Hospitality for the Silver group: The silver age group are potential tourists and have the tendency to grow both in terms of the duration of stay and expenditures. Thailand is the favorite destination of foreign tourists, including the elderly people from around the world. The business with the most promising growth is health-related tourism which includes travelling to many magnificent places amidst beautiful nature and culture. The objective is

to learn the way of life of local people and for pleasure. BDMS Wellness Clinic, with the expertise in preventive and individualized healthcare has collaborated with Minor Hotel Group, hotel business expert, organized the activity called "BDMS Wellness Clinic Retreat at Anantara Riverside Bangkok Resort" which is one of the Wellness Destinations in Thailand and famous for its preventive healthcare services, health check-up, individualized health program design performed by expert doctors. Apart from direct healthcare services mentioned above, the resort also offers various services representing traditional Thai wisdom such as Thai traditional massage, cooking with Thai herbs and medicine which can be furthered to other health-related events and activities to disseminate knowledge and health initiatives amidst beautiful nature and environment along the Chao Phraya River. The resort is the perfect place for relaxation and health recovery.

3. Preventive Medicine: Preventive medicine emphasizes the prevention before the occurrence of any diseases for a longer life and this preventive medicine is a holistic approach specifically designed for each individual, starting from eating habits, exercising, resting and detailed diagnosis that enables the doctors to predict the tendency of a particular disease. BDMS Wellness Clinic is also the Center of Excellence with expertise in providing preventive healthcare services. The center is also a model for research and the most modern center offering preventive healthcare and knowledge to respond to specific requirements of the customers. In addition, the center has extended its competency by building an alliance with the world's renowned medical institutions in many countries and personal health management team have participated to collaboratively provide complete healthcare services.

Furthermore, BDMS has strengthened its medical technology advancement by cooperating with National Healthcare Systems Company Limited (N Health) and Novogene AIT Company Limited in founding N Health Novogene Genomics Company Limited (NNG) to become the medical diagnostic center providing genomics treatment. The center has employed Illumina, an advanced technology for DNA sequencing to find the best treatment solution. This technology has been used widespread in many leading laboratories and has been employed in Thailand for the first time to support BDMS Genomic Center with the aim to elevate medical competency in providing healthcare services to Thai population. This genomics technology is in line with BDMS visions and missions in becoming the dedicated healthcare services provider and leader. Genomics medicine is medical service innovation employing individualized genetics, coupled with other health information in the diagnosis, treatment and predict risk factors causing specific disease. With the genomics medicine, doctors can provide medical treatment to patients more accurately and appropriately and this is considered a turning point in the medical world since this technology helps foster good health for the population, starting from pre-pregnancy till death as well as helps further Thailand's medical industry.

The establishment of NNG not only provides individualized healthcare and treatment more efficiently, but also facilitates more accurate diagnosis and treatment plan for individual patients. Such technology also enables an easy access of healthcare services and with a speedy and comprehensive manner, all of which help develop Thailand's medical competency while simultaneously encouraging the public sector to gather genetic information of Thai people to be employed as the database for the development of genetic diagnosis and to enhance medical treatment efficiency, both in terms of prevention and treatment. Moreover, BDMS has collaborated with leading pharmaceutical companies to manufacture vaccines for severe and emerging diseases in the future to be more compatible with Thai people and as a way to support proactive medical advancement while responding to medical services at an international standard.

Supply Chain Management

Supply chain management is an essential process that contributes to the organizations' business operations. At present, BDMS integrates the sustainability issue as part of the business operation throughout the supply chain as well as manages impacts on the environment, social and governance. The company also promotes good governance, elevates operational efficiency and responds to the customers' requirements, resulting in sustainable products and services while creating new innovation in consistent with changing conditions. The supply chain management process helps minimize interrupted business operations due to an impact on sustainability as well as protect the company's reputation and generates the organizational value.

Supporting the UN SDGs

4.4, 5.1, 8.3, 8.7, 9.4 and 12.7

Target and Performance

2023

Target

100%

of critical tier 1 suppliers assessed for ESG risks.

Performance

100%

of critical tier 1 suppliers assessed for ESG risks.

Management Approach

BDMS establish the policy and guidelines on supply chain management by integrating the sustainability issues in the procurement practices while emphasizing fair, honest, transparent and ethical business operations. Besides, the company avoids purchasing products and services from the business partners violating human rights or intellectual property or those operating business illegally. The company also acts in accordance with international standards and regulations related of product and service quality while preventing any environmental and social risks to ensure compliance with the Supplier Code of Conduct. In addition, the company strives to strengthen the relationship with all suppliers to concurrently prosper.

Product and Service Procurement

BDMS appoints the BDMS Central Procurement Department for medical and non-medical product and service procurement for BDMS subsidiary hospitals in Thailand. Another responsibility of the department is to arrange Share Services in information technology. National Healthcare Systems Company Limited (N Health) under BDMS is in charge of medical and non-medical product and service procurement for BDMS subsidiary hospitals abroad.

Type of Products and Services by BDMS Central Procurement for BDMS

Procurement Policy and Supplier Code of Conduct

BDMS Central Procurement Department is responsible for procurement of products and services following the procurement policy as well as communicating the Supplier Code of Conduct to all suppliers. Furthermore, the department emphasizes continued development throughout the supply chain to support and improve the collaboration with the suppliers to act in accordance with sustainable development policy throughout the supply chain.

BDMS Procurement Policy

BDMS enforces the Procurement Policy to ensure integrity and confidentiality in the procurement process which shall be in line with the regulations to enhance procurement efficiency while fostering Green Procurement. BDMS Central Procurement Department has the responsibilities as follows:

Supplier Selection

Performed by the Integrated Buying Team in case the purchase value exceeds Baht 1 million. The team consists of procurement officers and experts in related products and services through competitive bidding and value analysis.

Registration of New Supplier

Register new supplier on Approved Vendor List (AVL) which shall be regularly reviewed and updated.

Green Procurement

Emphasis green procurement and green label products. Ensure domestic procurement while communicating and promoting the suppliers to conserve natural resources throughout the manufacturing process and services.

Supplier Evaluation

Implement the supplier audit and supplier evaluation. Regularly support the evaluation and monitoring the performance to evaluate performance efficiency, respond to the customers' needs and minimize risks of business operations.

BDMS Supplier Code of Conduct

BDMS enforces the Supplier Code of Conduct to determine the principle of sustainable business operations and to enhance the relationship with the suppliers and create sustainable value for BDMS's internal and external stakeholders, encompassing the economy, society, environment and corporate governance with transparency, fairness and verifiability. In 2023, BDMS reviewed the Supplier Code of Conduct in the area of labor practices, non-discrimination and anti-harassment in the organization. In addition, BDMS operates business integrity as well as ensure green procurement and management to enable continued development throughout the supply chain. Besides, the company follows up the suppliers' performance through the evaluation system to ensure the compliance with the Supplier Code of Conduct. In a case of violation of the Supplier Code of Conduct which impacts BDMS business operations, the suppliers will be revoked from the Approved Vendor List (AVL) in the procurement system.

Business Ethics

Labor Practice and Human Rights

Occupational Health and Safety

Environment

Social Development Participation

Supplier Code of Conduct

Report, Complaints and Suggestions on Supplier Code of Conduct

The Supplier Code of Conduct states the suppliers' rights to inquire, report any wrongdoings or file complaints about any violations of regulations, business ethics and corporate governance policy. Please submit the report via the following channels:

Post

Process Excellence
(Central Procurement Department)
Bangkok Dusit Medical Services
Public Company Limited
2 Soi Soonvijai 7, New Petchburi Rd.,
Bangkapi, Huai Khwang,
Bangkok 10310

Website

www.bdms.co.th

Email

BCPM_VenderMaster@bdms.co.th

Phone Number

0-2119-7348

Supplier Engagement

Supplier Engagement	Unit	Total
Were covered and acknowledged the Supplier Code of Conduct	Suppliers	5,022
		100%
Signed the Code of Conduct (compared with total tier 1 suppliers)	Suppliers	5,022
		100%
Were registered on the Approved Vender List following the criteria and passed the sustainability criteria in quality, environmental, and occupational health aspects	Suppliers	712

Supply Chain Sustainability Management

BDMS implement a strategy and guidelines for supply chain sustainability with suppliers covering the Approved Vendor List (AVL) and sustainability risk assessment, particularly for the identified critical suppliers. In addition, BDMS devises a performance development plan for sustainability throughout the supply chain.

Supply Chain Management Strategy

Strategy	Key Performance Indicators
Risk management and supplier sustainability development Manage the supplier's sustainability risks in line with the Supplier Code of Conduct and monitor the performance through evaluation and collaborative projects with the suppliers.	All tier 1 suppliers must sign the acknowledgement and comply with BDMS Supplier Code of Conduct
Digital transformation in supply chain Implement e-procurement to improve the operation efficiency and data analysis to ascertain a competitive advantage.	Paperless purchase order, terms of reference, quotation
Achieving excellence in cost control Apply effective cost control throughout the product and service procurement of each type.	Present the cost-saving performance on products and services
Develop new products, services and innovations Encourage the suppliers to develop new innovations and create mutual value. Enhance efficiency and effectiveness to combine with sustainable operation.	Develop "Clear, label-free, small cap bottle" used in 12 BDMS hospital subsidiaries nationwide

Critical Supplier

BDMS identifies the critical supplier by considering the essential products, services, spending volume, support of products and services of over 10 hospitals and more or essential products and services. This also includes the suppliers with collaboration in innovation development. BDMS also assesses the risks and devises further development projects to improve collaborative capability.

Critical Supplier According to Product or Service Group

Strategy Level

Essential products or services and/or necessary for long-term business operations such as control medicine items, medical equipment posing risks to patients.

Critical Level

Necessary and specific products and services for patient care such as medicines and medical supplies.

Important Level

Products or services supporting the operations of the medical personnel such as information technology and construction.

BDMS Sustainability Criteria in Supplier Screening and Assessment

BDMS procures products and services from new and current suppliers registered in the Approved Vendor List (AVL). All suppliers must undergo competitive bidding procurement and evaluation in line with the sustainability criteria and the Supplier Code of Conduct. Besides, BDMS will categorize the suppliers based on their significance via the supplier system and such suppliers must have business relation with the organization. The company also assesses references documents by using sustainability criteria according to the company's established policy or considering the suppliers with high-risk on negative sustainability, including industrial risks and specific risks regarding the location of the country and spending volume (80% of annual expenditures) and suppliers supporting products and services of over 10 hospitals or more or products and services which are irreplaceable. Nonetheless, BDMS has followed up the sustainability performance of the suppliers and in 2023, the company also conducted the ESG evaluation of all suppliers and the results have shown that 100% of the suppliers passed the self-evaluation.

Supplier Evaluation Criteria

Quality

Certified by manufacturing and related standards such as FDA, GMP, PIC/S, ISO 9001, ISO 13485, TIS or CE Mark.

Society

Conform to labor laws and human rights principle. Acquire safety standards certification such as ISO 18001 or ISO 45001.

Corporate governance

Comply with regulations, ensure non-disclosure of data without consent and apply the Supplier Code of Conduct for sustainable procurement.

Environment

Operate in conformity with the environmental policy to lessen the environmental impact. Accurate environmental standards certification such as ISO 14001 or Green Procurement to ensure that the products and services are environmental-friendly such as papers, uniforms from recycled materials, systematic environmental management etc.

In 2023, BDMS screened the suppliers and the results were as follows:

Screening results of suppliers and BDMS supplier assessment in 2023

Supplier screening	Unit	Total
Total tier 1 suppliers	Suppliers	4,892
Total critical tier 1 suppliers	Suppliers	174
Total product and service procurement value	Million Baht	24,203
Total product and service procurement value of critical tier 1 suppliers	Million Baht	8,433
Ratio of purchase value from critical tier 1 suppliers	%	34.84
Total critical non tier 1 suppliers	Suppliers	49
Total critical suppliers (tier 1 and non tier 1)	Suppliers	223

Supplier Assessment

BDMS conducts the risk assessment of suppliers in accordance with international standards, covering the area of quality, service delivery, technology and innovation, good corporate governance, social status, both internal and external, including environmental management. Besides, the company performs the assessment of critical suppliers to enable the company to evaluate their performance following the established criteria and the assessment ratings vary from A-F. The suppliers with D-F ratings must perform the self-assessment whereby the suppliers with negative assessment result that actually take place or potentially take place or high-risk suppliers will be supported and BDMS will establish the corrective action plan, together with BDMS Central Procurement and the suppliers, to find the solution and prepares the plan accordingly. Then, BDMS Central Procurement will follow up and provide suggestions on the suppliers' operation to ensure its compliance with the plan within 1 year. BDMS will also inspect additional ESG efficiency and offers advice for further development in a sustainable manner.

In 2023, BDMS conducted the supplier assessment and the results will be as follows:

Supplier assessment	Unit	Total	Goal 2023
Total number of suppliers assessed via desk assessments /on-site assessments	Suppliers	223	
Ratio of critical supplier assessment	%	100	100
Number of suppliers assessed with substantial actual/potential negative impacts	Suppliers	2	
Ratio of Suppliers with substantial actual/potential negative impacts with agreed corrective action/ improvement plan	%	100	100
Number of suppliers with substantial actual/potential negative impacts that were terminated	Suppliers	0	
Total number of suppliers supported in corrcective action plan implementation	Suppliers	2*	
Ratio of Suppliers assessed with substantial actual/potential negative impacts supported in corrective action plan implementation	%	100	100

*Note: 2 suppliers assessed with substantial actual/potential negative impact. BDMS will report the operation according to BDMS Corrective Action Plan in 2024.

Building Supplier Engagement and Competency of Sustainable Supply Chain

BDMS Central Procurement Department organizes the activities to promote the supplier engagement in 2023 with the objectives to provide 100% training to tier 1 suppliers. Apart from the suppliers, the department also provides knowledge to their procurement officers in the area of environmental sustainability and under the topic of "Upcycling in Healthcare". In this event, the company fostered the awareness of waste management and waste reduction by employing the Upcycling technique with pieces of materials, coupled with the green design and experiences in waste management in the organization. The results of this activity enabled the suppliers and the company's procurement officers to gain knowledge regarding sustainability and international standards relating to the supply chain while being able to integrate the knowledge with their operation and supply chain business management and building good relations between the organization and suppliers in a sustainable manner.

In 2023, the development performance can be seen below:

Supplier development	Unit	Total	Goal 2023
Total number of suppliers in capacity building programs	Suppliers	223	
Ratio of critical supplier in capacity building programs	%	100	100

Significant Project in 2023

Suppliers Local Vender

BDMS Central Procurement Department promotes product procurement domestically such as original to generic and local product in the medicine group. The criteria is to select medicine with similar qualifications or quality to minimize procedures and transportation cost while simultaneously stressing the minimization of carbon footprint to achieve the carbon offset or carbon neutral as established. Moreover, the department also encourages job positions for local laborers to enhance operational efficiency for the organization. Such issue is recognized for its significance and has been specified as the performance indicator or successful operation of all related executives.

BDMS Standardize Stock Keeping Unit

BDMS Central Procurement Department develops BDMS Standardize SKU whereby the pharmacists will inspect the specific nature of various medicines which must be referred from Clinical Practice Guidelines (CPG), Lexicomp, Medscape etc. before proposing suitable medicines for each treatment level to the consulting physician and then communicates to CMO. Afterwards, the doctors and pharmacists will consider the medicines to be approved as BDMS pharmacopoeia to minimize the operation cost and enable efficient supplier management while elevating the supervision standard of the use of medicines and medical supplies.

Product and Service Innovation Development Initiative with the Supplier

BDMS Central Procurement Department, in collaboration with Water AP Company Limited developed the "Clear, Label-free, small cap bottles" innovation by producing label-free water bottles for the hospital's customers with the aim to minimize garbage, package use and garbage area. These label-free water bottles can be put in the "Recycle Bin" and in 2023, this initiative was successfully implemented in 12 BDMS hospital subsidiaries where plastic use was reduced to 5.74 million pieces per year and the amount of carbon dioxide was reduced to 6,800 kilograms CO_2eq per year.

Social

Human Capital Development and Retention

Nowadays, challenges in Organization challenge related to employee retention and attraction are deemed crucial since the requirement rate of labor in medical service industry has been increasing, resulting in higher turnover rate of employee. Therefore, the organization must revise the human resourse management strategy to consistently drive forward the organization, including employees incentives and retention and efficiency enhancement of all employees. BDMS strongly believes that by ensuring employee engagement with the organization as well as enhancing their quality of life and work happiness while promoting employee's life balance will enable the organization to retain high-potential employees, including the organization's future and effectiveness, promoting sustainable competitiveness and leading the organization towards excellence and encouraging the employee to bring about their highest potential for the benefits of the organization.

Supporting the UN SDGs

4.4, 4.7, 5.5, 8.5 and 17.6

Target and Performance

2023

Target

Achieve an employee engagement rate of over **80%** compared to all employees.

Performance

Achieve an employee engagement rate of **84%** compared to all employees.

Management Approach

Human Resources Management Policy

BDMS strives to improve Human Resources Management by recruiting potential employees, strengthening the organization's image, emphasizing appropriate welfare and benefits to ensure legal compliance. Besides, the company constantly and systematically develops employees competency and efficiency while strengthening clear career advancement to achieve the company's established goals. The company also takes into consideration employees well-being, quality of life as well as encourages and promotes their morale, build good workplace environment which helps render mental and physical happiness and safety. Furthermore, the company fosters the organizational culture of respect for diversity.

Human Capital Development

Human capital development is essential to drive BDMS's strategy in delivering top-notch healthcare services. As a consequence, BDMS enforces the policy to develop and train employees, emphasizing their knowledge and skills in line with changing technology to ensure innovation and sustainability. The company also encourages learning of various technique beneficial for employees operation as well as provides career advancement and promote employees to work collaboratively with others, all of which will foster good workplace environment and organizational culture.

Human Capital Development and Training

BDMS organizes training and development policy for both clinical and non-clinical employees, including newly recruited, contractual and part-time employees. The objectives are to ensure their understanding of corporate direction and the hospital's quality system as well as knowledge and skills under their responsibilities. This is to ensure that these trainings and developments will be appropriately adjusted with the organizational value and strategies while encouraging new skills, knowledge and expertise in line with the changes in economy, technology and environment affecting the medical professionals and staff.

BDMS Human Capital Training and Development

General Orientation

To acknowledge BDMS's vision, mission, core values, service principles, operational safety and hospital quality systems.

Unit Orientation

To acknowledge the department's mission, scope of services, operational policies and guidelines.

Mandatory Training

Organize training on BDMS strategy, corporate direction, quality management system, patient safety goals, basic fire training, basic life support, IT system and other courses related to relevant rules and regulations for professional employees.

Quality Improvement Training

Prevent incidents, monitor quality and safety information from the incidents and attend to patient's complaints. Change the operational procedures or introduce new technologies while developing English proficiency. Organize training and theoretical and practical test of patient care for employees of each level and position to enable their career advancement and efficient medical treatment in a consistent manner.

ESG Training and Upskill

Provide knowledge of governance, social and environmental areas.

Related Training

Grant scholarships to employees to continue their study and enhance business skills suitable for the departments. Improve patient care skills to create value for the patients.

Employee Training on Sustainability

BDMS presents a policy related to employee development training in accordance with corporate strategy focusing on sustainability. The objectives are to promote and support the good health and well-being of the employees while creating environmental innovation for sustainability. BDMS organizes significant training programs as follows:

Awareness of Anti-Corruption by Bangkok Hospital Khon Kaen

Bangkok Hospital Khon Kaen organized the "Anti-Corruption" program via "Application B4 Together" to encourage the employees learning and understanding of ethical conduct at the workplace and anti-corruption in the organization. The hospital also assessed the understanding from the examination scores installed in the application. This application supports develop the employees knowledge while instilling the anti-corruption culture within the organization

Employee Potential Development in Sustainability, Human Rights, Governance and Anti-Corruption by Bangkok Hospital Phitsanulok

Bangkok Hospital Phitsanulok implemented sustainability training on human rights, governance and anti-corruption to enable the personnel's awareness of employee code of conduct, BDMS human rights policy as well as promote and create the organizational culture of self-learning and lessens the employees' complaints on breaches of human rights policy.

BDMS Innovative Culture

BDMS Innovative Culture is operational practices and guidelines on innovation development to enhance the organization's efficiency to respond to changing needs of the stakeholders. BDMS emphasizes the significance of innovative culture through 3 main activities:

1

BDMS Innovative Network: To include all relevant personnel for the development and exchange of experiences and opinions regarding innovation development within the organization.

2

BDMS Innovation Acceleration: To instill innovative thought process for BDMS personnel working for the hospitals and nursing support organizations.

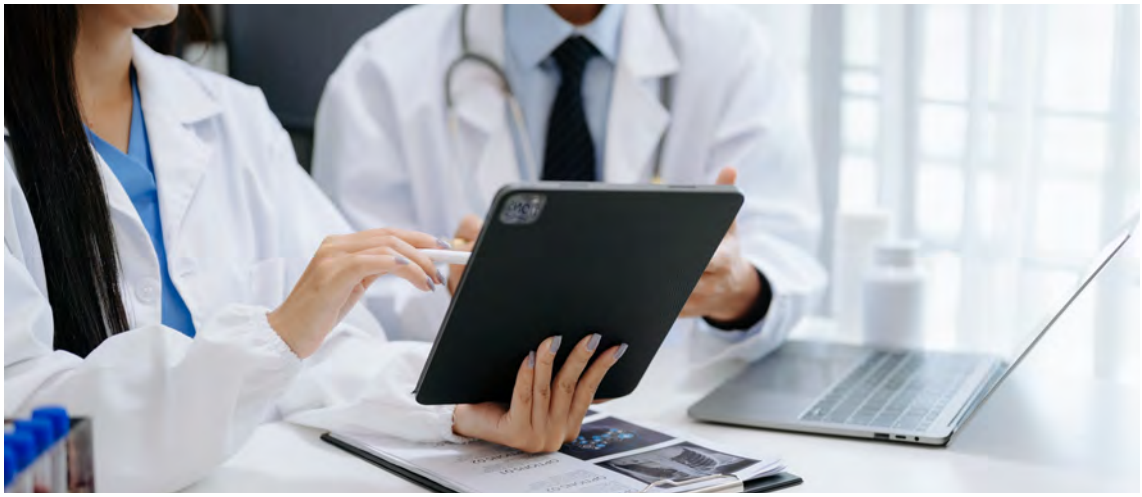
3

BDMS Innovation Knowledge Management: To foster initiative and relay knowledge on procedure management and tools required for innovation development of employees.

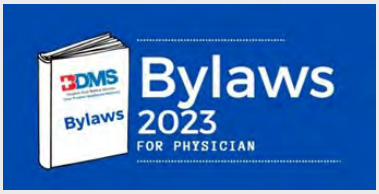
These initiatives can encourage and support over 16,000 employees to become the project innovator and also continued BDMS success in delivering the service value to the patients. The company was able to enhance the service efficiency of over 5 times or equivalent to more than 860 patients, compared to 2020. At the same time, the company successfully reducing costs and gaining more revenues for the organization.

Training for Doctors and Dentists

Realizing the importance of being a Good Doctor, BDMS ensures treatment according to medical and dental standards with sincerity and politeness while building trust of the patients and their relatives in the doctors, nurses, medical practitioners of the hospitals and organization. All BDMS doctors and dentists must strictly conform to BDMS Bylaws and Code of Behavior whereby these principles must be applied to the patients, relatives and colleagues.



Mandatory Training for Doctors and Dentists

BDMS Bylaws	Code of Behavior	Informed Consent
		
Ensure compliance with BDMS Bylaws of all doctors and dentists of the company.	Emphasize good behavior of all doctors and dentists.	Ensure accurate and complete communication of information and treatment guidelines before the patients' consent.

Legal Issues in Insured Patient Administration for Physicians	BDMS PDPA Awareness Training for BDMS Physician
Focus on laws relating to insured patients of which the doctors must be aware.	Raise awareness on personal data protection.

The results of these projects enable BDMS network hospitals to have good and expertise doctors and dentists which are a key factor of being well-accepted by the patients, relatives and colleagues. Besides, doctors and dentists are contented at work while simultaneously helping patients to get standardized and highest quality treatment.

Good Doctor Initiative

BDMS MAO operates the Good Doctor initiative to find out and select qualified and talented doctors and dentists for each professional field in the subsidiary hospitals. The Good Doctor must be capable of providing comprehensive medical services while maintaining their ethical behavior. Doctors and dentists from every hospital under BDMS network participated in this project and in 2023, there were 33 candidates from 33 hospitals who passed the qualifications and criteria. Such qualifications include the following:

Doctors or dentists working at BDMS network hospitals	Complete all mandatory trainings such as: 1 BDMS Bylaws 2 Code of Behavior 3 Informed Consent 4 Legal Issues in Insured Patient Administration for Physicians 5 BDMS PDPA Awareness Training for BDMS Physician	Complete the CPR training as stipulated	Acquire over 50 credits in continuing medical education for doctors and dentists
Does not get involved in any incidents above risk level 4	Entitled for a valid professional liability insurance with coverage no less than the preliminary damage value of the hospital	Achieve the annual performance in the clinical outcome of over 80%	Pass the consideration process for Good Doctor by the Hospital Director

The project performance responds to the corporate strategy in knowledge development in becoming Good Doctor. This is to create a corporate culture and role model for new generation doctors while strengthening pride and engagement between doctors and dentists and the organization. The project also ensures that doctors of all network hospitals are well-accepted by patients, relatives and colleagues which ultimately leads BDMS to sustainable development in the long run.

BDMS Human Capital Development Performance

Summary of BDMS Human Capital Development Performance 2023

57 Hours	44.76 Average Credits	100%
of average training hours per person per year for non-clinical staff	in the CME[1] for doctors per person per year	of internal employment rate on high potential employees for career advancement

[1]Continuing Medical Education

Talent Attraction and Retention

Talent attraction and retention offer competitive advantages and increase the business opportunity for success. Consequently, BDMS announces policies and guidelines on human capital retention by implementing clear performance evaluation criteria, ensuring the employees' suitable, fair and worthy benefits. Besides, the company develops a survey of remunerations provided in the labor market to compare with existing remuneration structure to be competitive with the labor market. Such information will be used for the review and consideration of employees' remuneration to be in line with the corporate performance. Moreover, the company shall retain potential employees and prepare a succession plan as well as monitor the level of employee engagement regularly.

Performance Management System

BDMS presents the performance management system with similar standard for equality and fairness throughout the entire organization.

Performance Management Procedure

- Communicate goals and details of strategic indicators of the company, starting from top executives to department heads.
- Review the performance with the employees quarterly and report the results to the top executives to propose guidelines to the Human Resources Department for further practice.
- The supervisor must complete the performance evaluation of each department at the end of year to consider the remunerations and provide guidelines for the Human Resources Department to achieve the established objectives.
- The Human Resources Department evaluates results, compared with the established objectives and subsequently allocates annual remuneration and salary adjustment together with the supervisor.

By determining individual competency guidelines as follows:

- Guidelines on performance evaluation of employees in the organization
- Consideration on job promotion/ transfer/ appointment/ adjustment
- Consideration on remuneration in line with the performance
- Use of results to develop employees' performance competency

BDMS Management by Objectives

Multidimensional Performance Appraisal

BDMS initiates the performance management system as well as presents the standardized and fair system for all employees and organization. The 360° competency evaluation has the objectives to assess the rewards offered, promote competency development of the employees, specify performance evaluation criteria, job promotion and remuneration payment. Apart from

the consideration of core competencies, leadership and responsibility are also taken into account. The objectives are to deliver excellent services and value to all customers. To achieve this end, Key Performance Indicator (KPI), core competencies and leadership competencies must be considered. The core competencies and excellence in ethical behavior, following the organization's philosophy, business code of conduct and professional integrity must be adhered to and conformed by every employees. Moreover, BDMS promotes professional culture under the governance principle and provides the services with the utmost safety according to international standards.

Team-Based Performance

BDMS intiates team-based performance appraisal of various departments in the organization such as the Digital Innovation team, to enhance employee's performance as a team and promote team goals. Besides, the company emphasizes teamwork by determining Key Performance Indicators (KPI) of each department to ensure the team's incentives in innovation development as well as specifies performance evaluation of employees on a quarterly or annual basis, depending on the project duration.

Agile conversations

Bangkok Hospital Headquarter implements the performance evaluation through real-time agile conversations, starting from the senior executives to the unit level. The hospital organized the "Huddle Policy for Nurse" project to enable the executives and representatives of related units to attend in daily morning brief in exchange of information. The project covers 4 perspectives as follows:

1. Reflection of issues
2. Readiness of actions
3. Recognition of employees
4. Return of solution

The Huddle can be structured into 3 levels; namely, Unit Huddle, Hospital Huddle and Administration Huddle. This activity supports enhance communication efficiency and cross-functional management, including downward communication and upward communication more effectively.

Talent Management Program

Emphasizing talent management to ensure excellent performance and business advancement, BDMS launches the Talent Management Program to ascertain leadership and assignment of significant corporate missions, all of which assist foster effective performance and the organization's growth to respond to constant changes while enabling competitiveness. The program comprises of the following:

Talent Attraction and Retention

The supervisors are responsible for sourcing and assessing the candidate's competency for criteria before submitting the results to the Human Resources Department to summarize rating and present to the senior executives.

Talent Development

1) Individual Development Plan Coaching: Perform 360° feedback to identify strengths and weaknesses of each individual for a tailored development plan

2) Project Management: Assign missions to the talented team to finalize results or alternatives to develop teamwork skills within the provided duration and limitations.

Talent Management Program

Acquisition and retention of high potential, enabling long-term competitiveness	Organizational culture and value succeeded from the leader to the next level executive	Management of limited resources to gain the utmost benefits

Succession Plan

BDMS selects and develops talented employees to ensure their career advancement in the organization. The supervisors are responsible for talent assessment, planning competency building and performance monitoring. The successor evaluation and planning are performed annually to ensure successor readiness in case of retirement of executives, business expansion or resignation. The competency building guidelines for each individual are as follows:

- Evaluation and planning of competency of each successor
- Leadership training
- Job rotation to learn from related departments
- Special assignments
- Site visits in Thailand and abroad
- Competency planning for employees at all levels to identify necessary knowledge and skills while supporting learning sessions and evaluation to progress in their career path with adequate knowledge and skills.

Welfares and Benefits of Employees and their Family

BDMS determines health and financial benefits for full-time employees as well as promotes their well-being to ensure fair and proper treatment. Examples of such benefits include:

- Healthcare welfare
- Dental welfare
- Maternity Leave
- Annual health check-up
- Vaccine and immunization, including Covid-19 vaccine
- Fitness
- Provident fund
- Diligence allowance
- Employee leave
- Uniform allowance
- Funeral allowance
- Dormitory
- ATK test kit
- Subsidies for occupational transmission of HIV to healthcare workers
- Canteen and other discounts in the hospitals
- Staff transportation services
- Mental health consultation center
- Day care center
- Pre-kindergarten child support fee of not exceeding 3,000 baht/year
- Coworking space
- Lactation room and provision of breastfeeding storage bags

Leave entitlement	Legal entitlements	Rights granted by BDMS
Maternity leave for pregnant employees: By encouraging pregnant employees and 3-month pregnant employees to be able to work from home or adjust the employment condition to be part-time regardless of their employment duration	98 days	100 days (receive normal wage throughout the 45-day maternity leave)
Paid paternity leave	Not specified	15 days (receive normal wage throughout the paternity leave)
Paid family leave due to physical or mental health issue	Not specified	3 days (receive normal wage throughout the family leave)
Public holidays	No less than 13 days per year	14 days
Annual leave	No less than 6 days per year	Not exceeding 10 days
Business Leave	3 days	15 days

Apart from the above leave entitlement, BDMS also implements flexible working hours, work-from-home policy and part-time working to promote life and work balance as well as enhances work efficiency and effectiveness. These entitlements only apply to the employees in a specialized field who are not required to work at the office or can work extra hours such as teams of digital marketing, innovation, technology development and call center, etc.

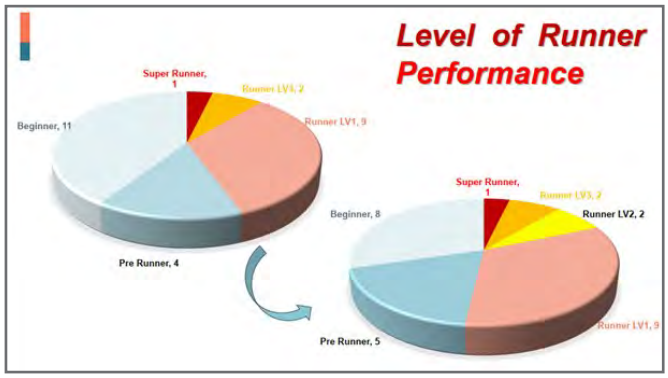
Employee Well-Being, Employee and Family Engagement Initiatives

BDMS Mental Health Consultation Program - Care Giver Burden

BDMS, together with BeDee, organized the Mental Health Consultation Program – Care Giver Burden, to provide mental healthcare for employees under stressful conditions due to their family or work. These employees can access tele-consultation service free of charge for a total of 5 times, anytime and anywhere. The consultation will be performed by certified medical professionals.

BPL Walk and Run for Health Application and Program

Bangkok Hospital Phitsanuloke organized the "BPL Walk and Run for Health Application and Program" to support BDMS's policy of "Let's Get Healthy". For this initiative, the hospital provided the opportunity for personnel to organize the "Walk & Run BPL Club" to promote good health for employees interested in walking and running as their exercise. The hospital also specifically designed the Club's program for elderly members, members with health problems or those without any exercising or running experiences to improve their capability step by step. Furthermore, the hospital developed the application and program for walk and run data collection and processing, including step counting for personnel attending "Walk for Health, Step Counting" activity. The results have shown that 100% of the participants have better physical fitness and 100% satisfaction of the "Application BPL Walk and Run" for data collection and processing.



Employee Engagement

To understand the needs and opportunities for improvement in employee engagement, BDMS Human Resources Department establishes the guidelines for employee engagement. The key factors related to employee engagement are used to manage and develop the internal human resources management system monitored annually through surveys and initiatives to continuously improve employee engagement.

Employee Engagement Survey 2023[3]

BDMS initiates the employee engagement survey annually. In 2023, details of the evaluation and employee engagement survey are as follows:

Data analysis in survey

- Gender
- Age group
- Work position
- Type of work
- Years of experience

Survey topics

- Leadership
- Positive relationship
- Salary, welfare and benefits
- Acknowledgement of corporate target and core values
- Positive impression
- Organizational pride
- Economic security and conditions
- Physical and mental health
- Career opportunity and advancement
- Performance
- Transparency

Employee engagement survey results

84%

of BDMS employee engagement rate compared with the target of 80%

Organizational pride
is an essential topic for employee engagement, followed by performance and acknowledgement of corporate target and core values

100%

of employees responding to the employee engagement survey

Salary, welfare and benefits
are the potential topics for improving employee engagement, followed by physical and mental health and career opportunity and advancement. BDMS devises guidelines to improve employee engagement in three topics in the future.

[3]Excluded doctors and dentists in the BDMS network.

Employee Engagement Initiative

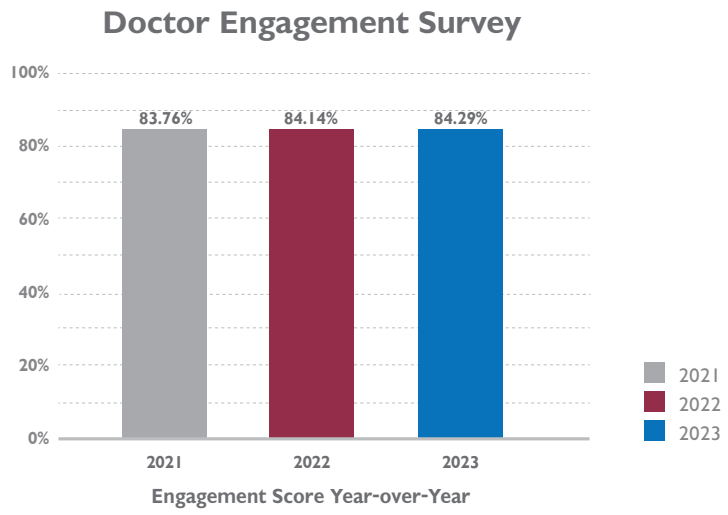
BDMS provides happiness to welcome the New Year through **"BDMS Metaverse Party 2023"**. Employee of every business unit entered this event and dressed for a "Theme Party" as well as participated in the competitions and games whereby the organization helped support the prizes. The objectives are to elevate employee engagement with the organization and to foster work culture in line with the corporate value.

Corporate Culture Initiative

Bangkok Hospital Khon Kaen implemented **"BKN Team Building Learning to Become No.1 with the Organization"**, a special project to promote and build corporate culture facilitating learning and teamwork. This project enabled the employees to realize the importance of collaboration, relaxation from work and unity among employees and supervisors with the objective to drive the organization to achieve the established objectives, coupled with excellent services. The result assessment from all 4 sessions illustrated the satisfaction rate of approximately 93.67%.

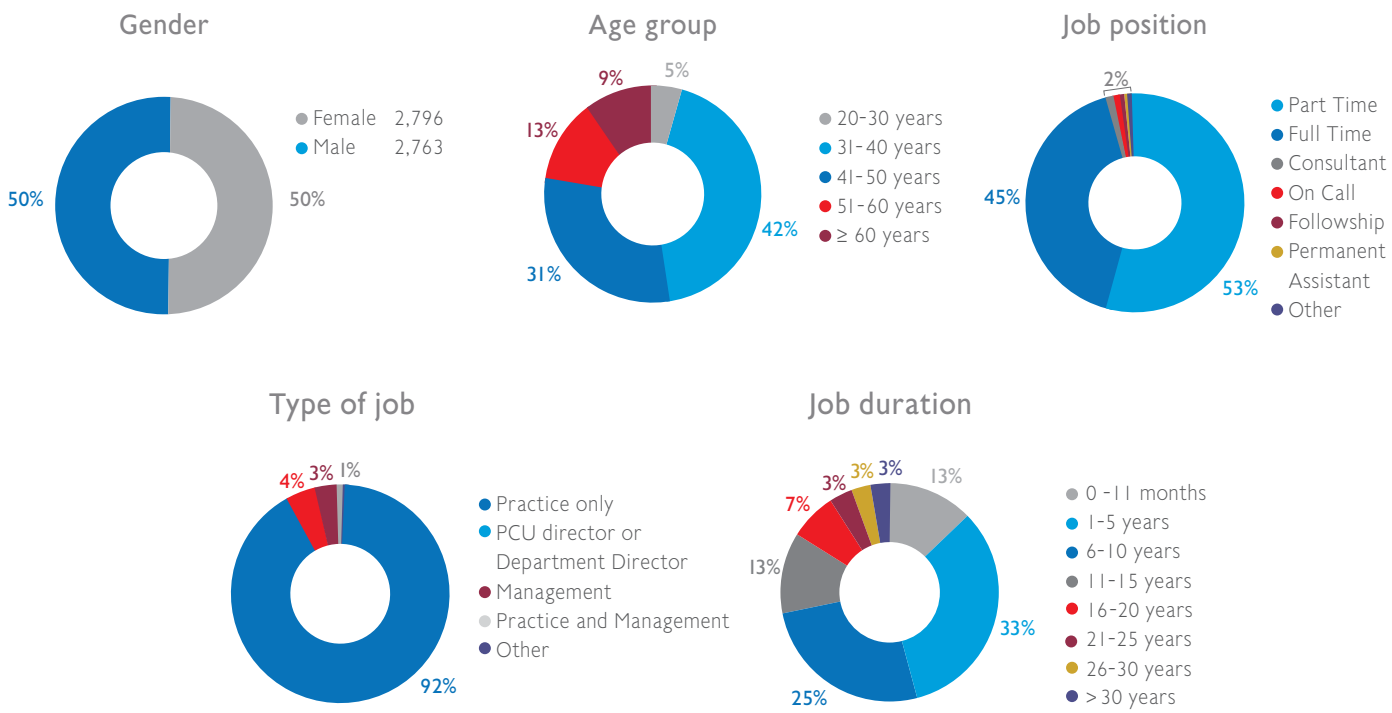
Physician Engagement Survey 2023

BDMS Medical Affairs Committee and executives enforce the policy and support the excellent services from doctors. To ensure doctor and dentist retention, BDMS launches activities such as reviewing suggestions and positive and negative perspectives of these doctors and dentists toward the organization, derived from the annual engagement survey, equipment required for medical treatment, workplace environment etc. The objectives are to ensure safety, security and happiness at work. In addition, BDMS arranges initiatives to foster doctor and dentist engagement such as Good Doctor which encourages efficient, ethical and fair doctors and dentists. The project also creates incentives to strengthen their morale, organizational pride and corporate engagement with the ultimate goal of becoming a sustainable organization.



BDMS implemented a survey on doctor engagement with the organization by referring to relevant theories and then asked for the opinion of the Chief Medical Officer before actually employing the survey. BDMS will review the survey questions every 3 years as well as specify the target value every year. At present, the survey is divided into 2 parts: The first part is an overall processing regarding doctors, dentists and the satisfaction level of doctors and dentists in each section with a total of 38 topics and 5 Likert Rating Scales have been used in the processing. The second part is the prioritization of issues to be improved in the next 12 months which has been done under 5 Likert Rating Scales as well. In 2023, the survey was designed by taking into consideration the medical record system to which every doctor must enter. The objective of such system is to ensure usage satisfaction and efficient patient system, patient transfer for the utmost safety of all patients.

Doctor Engagement Survey Analysis



Survey Points from Highest to Lowest Request for Improvement

1.Facility = **66%**

2.Doctor Fee = **65%**

3.Marketing = **64%**

4.Knowledge & Competency of Staff = **64%**

5.Communication = **63%**

6.Doctor Accommodation, Doctor Lounge = **66%**

7. Price = **61%**

8. Management = **60%**

Doctor Engagement Survey Results

84.29%

of doctor engagement rate compared with the target of 80%[4]

73.84%

of doctors respond to the doctor engagement survey

"Scheduling process responsive and appropriate" is an essential topic for doctor engagement

followed by "Pharmacy Services" and "I am proud to work with hospital and I am part of this organization"

Doctor Lounge

is the potential topic for improving doctor engagement followed by "opportunity for giving opinions in hospital work" BDMS devises to improve the doctor engagement in these topics in the future.

[4]Reference from DSS Health care Engagement Index (HCEI)

Doctors' Well-Being

Phyathai 2 Hospital implemented the initiative called Doctor Engagement, Burnout Survey and Internal Leadership Survey and then analyzed such survey results to determine guidelines for the improvement of doctors' well-being; for example, food quality, to enable doctors to propose food menu. Besides, the hospital provided snack boxes for doctors of the evening ward round, changed beds and beddings for the night-shift doctors, promoted doctors' recreational activities such as dancing class, coffee club and site visits to foster good relationship. Besides, the hospital promoted the doctors' health by giving Check Up Birthday Card on their birthday while organizing the activities to build morale for both extinguishing doctors and BDMS Good Doctor. The hospital also implemented knowledge training in search of new medical treatment guidelines as well as provided more communication channels between doctors and the Hospital Director via Line Official to facilitate communication.

Bangkok Hospital Sanamchan has recognized the importance of the doctors' well-being within the organization by implementing the Physician Engagement Survey and then improved, rectified and developed the survey results for more appropriateness to ensure the utmost efficiency of patient care, minimize the doctors' resignation rate and foster co-working environment. The hospital arranged some activities; for example, promote and encourage doctors to enhance their academic skills whereby the doctors can take a business leave to attend training without being deprived of guarantee and working days 5 days per year. Moreover, various academic meetings were also held such as interesting cases hosted by full-time doctors while providing common funds for mutual assistance which ultimately led to unity, collaboration, better communication and teamwork between doctors. The Chairman of the Medical Association acted as a representative in expressing opinions regarding the hospital's operations.

Customer Relationship Management

BDMS strives to establish effective customer relationship management with the determination to create impression and positive experience of the customers which in turn, will lead the organization to achieve the established objectives while fostering the relationship with the hospital's customers. Thus, the organization emphasizes the development of service quality to enhance the organizational value as well as to expand the customer base while simultaneously maintaining good relationship with the customers in the long run.In addition, BDMS emphasizes the importance to customer relationship management and establishes a governance structure to analyze customer feedback and demand to ensure continual customer satisfaction improvement. Respond to the utmost satisfaction of all customers therefore sustainable business operations.

Supporting the UN SDGs

16.7

Target and Performance

2023

Target

The customer satisfaction rate of **85%**

Performance

The customer satisfaction rate of **93.81%**

Management Approach

Customer Relationship Management Approach

BDMS assigns the Customer Relationship Management Working Team to systematically manage the customer relationship. Their responsibilities include ensuring customer relationship management in all aspects of service quality according to the strategy and continuously reporting the performance to the Healthcare Quality Department and Innovation. In addition, the team must monitor outpatients' and inpatients' satisfaction by consistently evaluating their service perception with Top Box Score monthly, quarterly, and annually to analyze development opportunities and design-related initiatives.

Customer Satisfaction Strategy

To achieve customer satisfaction, BDMS establishes 6 service quality models as follows:

Responsiveness

Provide the services with politeness, respect privacy, understand the patients' needs, offer sincere assistance and simplify the explanation.

Clarify

Explain and communicate information correctly, completely and clealy.

Promise

Commit to delivering the best treatment and services by professionals.

Physical

Manage service areas by taking into consideration the amenities, environment, products, innovation and user data flow.

Sustainability

Promote of sustainable and high standard services.

Delight

Provide attentive service seamlessly, flexibly and consistently.

Customer Touch Points

BDMS determines Customer Touch Points, starting from the access to the hospital, registration and discharge, covering all service details as follows:

1. Airport & Entrance

Arrange airport transfer, limousine service, valet parking and interpretation services to create first impression.

2. Registration, Visa & Customer Service

Facilitate online registration, arrange products and services introduction and visa services to ensure fast and smooth services.

3. Doctor Consultation

Ensure polite communication from doctors and nurses, respect patients' privacy, listen attentively and provide clear explanations to patients and relatives.

4. Blood & Diagnostic Test

Perform efficient services and explain the work process to the patients with politeness and respect.

5. Medication Collection

Provide services with politeness while completely and accurately informing the medication information, including its properties and usage results.

6. Discharge

Offer ticket reservation service, airport transfer and personal data collection shall be kept in the database in a safe and secure manner.

Reporting or Feedback Channels

BDMS determines customer feedback through various channels such as phone calls, hospital's website, letters or customer satisfaction forms available at the service points in the hospital. For the utmost safety and satisfaction of the customers, the hospital staff are ready to assist in case any issues arise. All feedbacks are stored in the hospital's database for further development.

Feedback Channels through BDMS Websites

Bangkok Hospital | Samitivej Hospital | BNH Hospital | Phyathai Hospital | Paolo Hospital

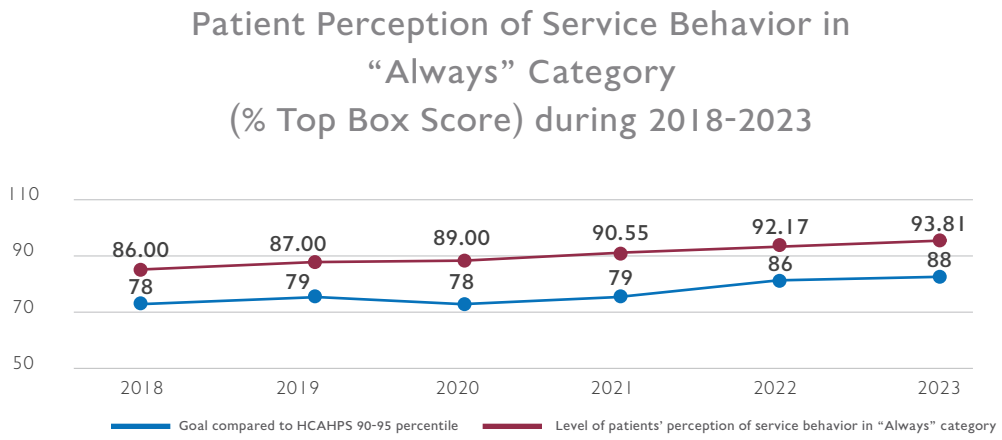
Patients' Perceptions of Service Behavior 2023

The most crucial and necessary factor of customer service is the service quality in which the service providers must offer to their customers to ensure excellent services and customers' utmost satisfaction. Besides, service quality supports strengthen long-term customer relationships, encourage customer retention, including customer loyalty. Consequently, BDMS assigns the hospital subsidiaries to perform the patient satisfaction survey in accordance with the HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) developed by the Centers for Medicare & Medicaid Services (CMS) in collaboration with the Agency for Healthcare Research and Quality (AHRQ), which are the officially certified by National Quality Forum, U.S.A.

The objective is to assess patients' perspective on service behavior of medical personnel and service system. This survey which studies and analyzes with the aim to improve treatment quality and to compart results among hospital subsidiaries was conducted without identifying the identity of the data owner as well as strictly maintain the confidentiality of personal information.

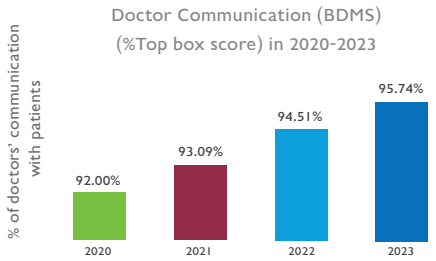
The scores are calculated from the percentage of the customers giving the highest score or "Top Box Score". The survey questions ask about the consistency of services provided in each section to foster service culture which stresses positive experiences of the customers.

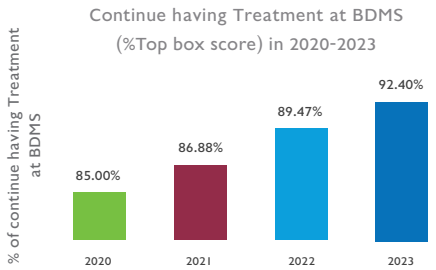
BDMS has brought about some technologies such as Telemedicine, Telepharmacy, home healthcare services, delivery of medicines and medical supplies to minimize direct contact between people etc. This result is consistently in increasing satisfaction scores on healthcare services. In 2023, the overall score increased to 93.81 percent, compared to the HCAHPS score of 95th percentile of 4,457 US hospitals which was reported at 88 percent.

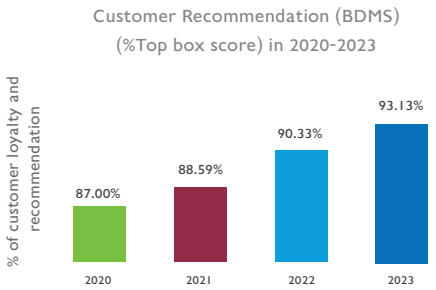


At the same time, BDMS also emphasizes the communication between personal medical and provider with the aim that effective communication process will change their health-related behavior to act in accordance with the doctor's advice and participate more in the self-care procedures to ensure better quality of life. According to the evaluation criteria of communication efficiency of doctors consisting of respect of individuality, sympathy, explanation of treatment details and patients' participation in self-care, the evaluation results indicated higher score in a consistent manner. In 2023, the overall score was reported at 95.74 percent, compared to the 95th percentile HCAHPS which was reported at 92 percent.

BDMS also assessed products and services loyalty in that if the customers possess positive attitude towards the products or services, whether such attitudes derive from their confidence, awareness or satisfaction, this will ultimately result in repeated purchases, repeated uses of service and recommendations to other people. The evaluation results showed that the percentage of patients to continue having treatment at BDMS increased from 89.47 percent to 92.40 percent and the percentage of patients' recommendations increased from 90.33 percent to 93.13 percent.







The 2023 survey results will be used in the 2024 project consideration and BDMS will conduct patients' awareness survey on the service behavior in "Always" category to improve the service quality for the utmost satisfaction of BDMS customers.

Community Engagement

At present, there are many underprivileged people and patients in both developed and developing countries being confronted with financial restrictions that limit their healthcare and medicine accessibility. BDMS, as the leader in healthcare services, realizes the significance of such issue; therefore, the company has combined medical human resources with advanced medical innovation and technology in integrating and expanding its services to become a part of society in providing help and support to ensure that these underprivileged people can thoroughly access healthcare services.

Supporting the UN SDGs

3.2, 3.3, 3.4, 3.5 and 3.6

Target and Performance

2023

Target

500 initiatives on preventive healthcare and health literacy for communities in Thailand.

Performance

931 initiatives on preventive healthcare and health literacy for communities in Thailand.

Management Approach

BDMS realizes the importance of the business operations' impacts on the communities surrounding the hospital and subsidiaries. Consequently, BDMS assigns related departments to collaborate in building community engagement through data surveys and understanding the community's expectations. The scope of operations is then established to solve the issues and improve the relationships in line with the community's needs. This can be achieved by combining expertise, experiences, technical skills and abilities of all employees to improve the society both in the short-term and long-term.

Community Engagement and Corporate Social Responsibility Initiatives

BDMS Corporate Social Responsibility Initiatives

Sharing Hands

Encourage donations to support healthcare accessibility for the underprivileged, community and society.

Caring Heart

Communicate preventive healthcare knowledge for the community and society while providing first aid and basic life support training.

Collaborating Health

Collaborate with the stakeholders to enhance healthcare accessibility for the community and society through corporate products or services.

Sharing Hands – Donation and Supporting for Healthcare Accessibility

BDMS launches an initiative for donation and supporting healthcare accessibility for the underprivileged in the community and society by supplying medical equipment and health checkups to improve their safety and well-being. Examples of "Sharing Hands" initiatives in 2023 are listed below:

Donation of Medicines, Medical Supplies, Medical Equipment and Consumables in Support of Healthcare Accessibility

Professor Emeritus Chanika Toochinda, M.D., Executive Advisor of Samitivej Children's Hospital, Mrs. Somsiri Sakolsattayathorn, M.D., Advisor to the Managing Director of Samitivej Public Company Limited, Mrs. Surangkana Techapaitoon, M.D., Executive Vice President of the Samitivej Hospital Group, together with the hospital team, donated the ultrasound lower abdomen machine to Mrs. Mayura Kusum, M.D., President of the Thai Medical Women's Association Under the Royal Patronage of Her Majesty the Queen, and the team of obstetricians, to be used for cervical cancer screening at the Association's clinic. The objective is to emphasize the idea of Agile Organization of Value where no one shall get ill.

Bangkok Hospital Trad recognizes the importance of pre-hospital care prior to referring patients to the hospital; thus, the hospital organizes the project to provide preliminary first aid supplies to support the rescue teams in giving preliminary care to those injured as the hospital realizes that every single minute is valuable. Speedy rescue and timely arrival at the scene of accident is deemed crucial since every minute means the life of those injured. #Wecareforeveryofyoursafety.

The Medicpharma Company Limited realizes the shortage of medicines and medical supplies at Baan Sundarb School, located near the factory's plant. Thus, the company initiated the medical project with the aim of providing medicines and medical supplies to aid and alleviate such problems in a timely manner. In addition, the company, in collaboration with Sinsakorn Industrial Estate, offers health literacy to the community, performed by knowledgeable and expertise pharmacists who are also key employee of the company's drug manufacturing plant. The project's objective is to foster knowledge and understanding of correct use of medicine for their utmost safety.

New Life Fund

Samitivej Hospital established the Samitivej New Life Fund Project to help the underprivileged in healthcare area to resume their better life and well-being. This project is a long-term project which was started since 2010 by Vajiravej College Foundation under the Royal Patronage of His Majesty the King. The intention is to provide medical treatment for underprivileged children for better health as they are the nation's future. Samitivej Hospital has gathered fundings to help these children in various occasions as follows:

1. Samitivej Children's Hospital was granted funding of Baht 1,800,000 from Thai Life Insurance Public Company Limited for children with congenital heart disease for 7 consecutive years.
2. Funding granted by Tisco Bank at the amount of Baht 50,000.
3. Funding granted by Kob Sanam at the amount of Baht 12,000.
4. Organized activities such as sales of products; for example, scarves, bags and water bottles for fund raising at the amount of Baht 50,000.

Revenues from these fundraising activities will be used to help children with congenital heart disease who need surgery, including children requiring bone marrow transplant and scoliosis surgery but deprived of money for such operations. Since its foundation, Samitivej New Life Fund has helped over 200 children to start a new life.

Blood Donation Campaign

BDMS hospitals and subsidiaries understand the importance of blood donation in saving lives and ensuring adequate supply of blood in the blood bank for patients undergone treatment in the hospitals, particularly those suffering from accidents or surgery. The examples of blood donation campaigns are as follows:

Bangkok Hospital Khon Kaen, in collaboration with Boon Rawd Brewery Company Limited, donated blood in the "900,000 cc. for 90 Years of Boon Rawd Brewery Co., Ltd. Project", in which blood donated will be forwarded to the Blood Bank of the Thai Red Cross Society and used for critical patients or patients requiring blood for medical treatment at various medical facilities. In this event, 47 hospital personnel and general public attended the blood donation and the total volume of blood donated was reported at 18,800 cc.

Bangkok Hospital Rayong, together with the Thai Red Cross Society Rayong, launched a blood donation campaign to alleviate blood shortage. The campaign received good attention from hospital staff and general public whereby 120 participants collaboratively helped and donated 51,300 cc. of blood to help other patients in need.

Bangkok Hospital Samui, together with the Blood Bank and Red Cross District Branch of Amphoe Koh Samui, organized a blood donation project as the amount of donated blood each day is still inadequate for people in need. The objectives are to make good deeds for society and ensure speedy treatment for patients. For this project, 192 hospital staff and general public attended and 76,800 cc. of blood successfully donated to Thai Red Cross Society.

Samitivej Sriracha Hospital arranged blood donation campaign through “Thai Nurses Blood Donation to Save Lives Project 2 consective years, contributed to a charity fund on the occasion of Her Royal Highness Princess Srinagarindra, the Princess Mother’s Birthday and the National Nurse Day on 21 October 2023. All blood donated will be given to the Blood Bank of the Thai Red Cross Society as a blood reserve for critical patients or patients requiring blood for medical treatment at various medical facilities. For this event, a total of 155 hospital staff and general public participated and 54,250 cc. of blood were successfully donated to the Thai Red Cross Society.

Caring Heart – Preventive Healthcare Knowledge for Better Life Quality

BDMS organizes initiatives educating preventive healthcare to the communities surrounding the hospital. The objectives are to enhance people's knowledge and skills in self-care, promote good health and lessen health hazards from accidents or chronic diseases. In addition, the sessions support the fundamental structure of vaccination for better health and life quality in the long run.

"Community Bonding for Soi Soonvijai Neighborhood" Initiative

Bangkok Hospital Headquarter realizes the importance of good health and well-being of all stakeholders living near the hospital. Thus, the hospital organized activities to provide healthcare knowledge to people living in such vicinity on an annual basis.

In 2023, the hospital repeatedly organized the "Community Bonding for Soi Soonvijai Neighborhood" initiative in which the activity called "Soonvijai Neighborhood Bonding for Better Health with Bangkok Hospital was also introduced to encourage the neighborhood's get-together and listening to health-related knowledge from the hospital's medical staff. Such activity can be divided into 2 formats as follows:

1.Training activity to provide health-related information called "Knowledge of Chemical Hazards and Daily Life Safety" by Mrs. Saengdao Upara, M.D., Director of Occupational Health Center, Bangkok Hospital Headquarter. The training also provides knowledge on waste separation and including knowledge on planting of decoration trees for air filtering, held by Ms. Suvikran Arsawang, Manager of Housekeeping Division of Bangkok Hospital Headquarter, Besides, the hospital invited people to help plant trees to add more green area for Soonvijai community as well as offered vaccines that prevent 4 types of influenza to the community to boost their immunity during rainy season.

2.Healthy food cooking demonstration from "Imm by BDMS" by Ms. Yaninee Jerdrangsri, a dietitian of the Dietetics Department at Bangkok Hospital Headquarter. The objective of the activity called "How to Eat Smartly and Not Get Fat 2:1:1" is to provide knowledge on healthy diet according to nutrition principle. The activity also offered special event to invite people living in Soonvijai neighborhood to actually cook healthy food as well as demonstrated how to prepare healthy food and plate decoration to promote more appetite under "Fully Stuffed but not Getting Fat 2:1:1 by BDMS", held by highly experienced chef and dietitians from "Fully Stuffed by BDMS".

100% participants as targeted
100% satisfaction of the staff and organizer good – very good level

BDMS CPR Training

Accidents and serious incidents are unpredictable, particularly serious illnesses and emergencies that may occur to the family, relatives and anyone or even yourself. Consequently, CPR training is deemed crucial to save those experiencing cardiac arrest or unconsciousness. However, to save lives during such critical condition, the rescuers must possess knowledge and skills to lessen the risks during the crisis. Throughout BDMS business operations, BDMS employees have witnessed many incidents and realized the importance of assisting patients during the crisis. BDMS believes anybody can save other people's lives

even though they are not medical staff. Nonetheless, proper knowledge, training and confidence are required before real-life practice. As a result, BDMS organized the CPR training to communicate the life support and build self-confidence of the participants who passed the training and practice sessions under the international principles led by the specialist speakers.

According to BDMS CPR training performance, BDMS hospital subsidiaries organized over 931 first aid and CPR training to enhance life support safety and efficiency. Participants include family of the company's employee, community people, schools and academic institutions, police stations, companies, hotels, embassies, contractual business groups, motorcyclists, food delivery entrepreneurs, riders, including both government and private agencies. Over 66,192 participants passed both theoretical and practical training sessions which accounted for 100% of the organization's target in building capable people who possess life-saving skills throughout the country. From 2023 training, the result has shown that 3 participants can utilize knowledge and skills to perform CPR (Cardiopulmonary Resuscitation) for the patients as well as able to rescue 2 airplane victims at Bangkok Hospital Hat Yai.

Colonoscopy Program in Collaboration with Phitsanuloke Provincial Public Health Office

Bangkok Hospital Phitsanuloke recognizes the importance of good health, particularly cancer which is considered one of the major health problems in Thailand. According to the Thailand's statistics of cancer in February 2023 conducted by National Cancer Institute, the report has shown that there are approximately 140,000 new cancer patients each year or equivalent to 400 patients per day. Five most frequently found cancers among Thai population consist of 1. Liver and cholangiocarcinoma cancer 2. Lung cancer 3. Breast cancer 4. Colon and colorectal cancer and 5. Cervical cancer. Phitsanuloke province found out that colon cancer screening requires a long waiting time; thus, Bangkok Hospital Phitsanuloke collaborates with Phitsanuloke Provincial Public Health Office in arranging for colon cancer screening with colonoscopy for patients with government officer's right. This program's objective was to screen 100 patients of the community hospital in Phitsanuloke and the result had shown that 70 patients passed the screening process. These patients came from 6 community hospitals; namely, Wat Bote Hospital, Bang Rakum Hospital, Bang Kratum Hospital, Phrompiram Hospital, Charttrakarn Hospital and Wang Thong Hospital. This program achieved its established target objectives (30 patients had the screening at 3 subdistrict hospitals and did not attend as these hospitals can perform their own screening). The result had shown that among 70 patients attending the screening, 31 patients whose tissue were examined, 6 patients are considered high-risk patients and require follow-up every 6 month. This program can help patients during their screening process while minimizing the waiting time and promoting healthcare accessibility. Besides, the hospitals can attract new customers as well as increase their opportunity to get medical services at the hospital.

Collaborating Health – for the Community and Society

BDMS subsidiary hospitals initiate social activities together with the stakeholders to improve the good health of the community and society while driving organizational growth. The examples of "Collaborating Health" initiatives in 2023 are as follows:

Beauty Plus Mercy Project – Underprivileged Breast Cancer Health Checkup

Provided Knowledge on Preliminary Breast Cancer Screening to Female Patients

14,880 persons

Achieved Target

100%

Bangkok Hospital Hat Yai realizes that sustainable growth and social sustainability must concurrently exist to foster the community's strength and minimize social gap. As a consequence, Bangkok Hospital Hat Yai and the patient care department at the Breast Care, Obstetric Clinic and Women's Health Club launched a quality of life development training session to promote learning, understanding and skills regarding healthcare. The hospital also provided knowledge on preliminary breast cancer screening to 14,880 female patients and achieved 100% as the established plan in minimizing breast cancer risks. For every checkup, the hospital will support Baht 100 as a donation to the Yen Sira Foundation in Songklanagarind hospital, where underprivileged cancer patients are under treatment. In addition, a part of the donation is shared for the future cancer screening test for disadvantaged female patients.

As for the 2023 performance, Bangkok Hospital Hat Yai launched 2 campaigns for 602 females to undergo the cancer screening test, generating Baht 1,046,119 in revenue and including the donation of Baht 52,628 for acquiring medicines, medical supplies and medical food for female cancer patients at Yen Sira Foundation in Songklanagarind Hospital. According to Bangkok Hospital Hat Yai's performance in 2018-2023, approximately 14,880 female members joined the campaign of 9-session health checkups, selling over 1,302 checkup programs and generating more than Baht 3.31 million. In addition, the hospital collected donations of Baht 112,628 for underprivileged cancer patients according to its established goal.

Im Boon Initiative

BDMS and Vejdusit Foundation collaborate the "Im Boon Initiative" to encourage employees and customers to donate for the underprivileged to gain access to quality healthcare. The initiative raised donations from the inpatients and outpatients completing their treatment and paying for the medical fees, following specific criteria during a certain period. Subsequently, the payment fees per receipt were reduced to equal to BDMS's years of operation and donated to the underprivileged for their healthcare and education accessibility. In 2023, BDMS had a total of 31 hospital subsidiaries generating 31 Million Baht to the society. The examples of the initiatives are as follows:

Helping the Remote Area Initiative

Vejdusit Foundation emphasizes on helping flood victims, including those being affected by cold weather, PM 2.5 and drought. Ayutthaya is one province being impacted by flood; therefore, the foundation initiated the program to offer over 1,000 survival kits to people in the flood area. For people confronted with cold weather, vulnerable groups, ethnic groups living in Chiang Mai and Chiang Rai, the foundation also offered more than 500 items of clothing such as jackets, gloves and socks to survive during cold season. Besides, the foundation, in collaboration with Research Institute for Health Sciences, Chiang Mai University, helped people confronted with PM 2.5 and aimed to offer dust-free breath to people living in the vulnerable areas such as Chiang Mai and Chiang Rai. As a result, the foundation and the Institute jointly invented the equipment which helps reduce PM 2.5 and improved the classrooms to be dust-free classrooms by installing air filter at the child development center as well as installed the aerators to give fresh air to those people. In addition, the survey results also indicated water shortage problem of schools in remote area; thus the foundation initiated the clean drinking water project and provided these schools with 57 water filter machines to schools in remote area. In summary, all projects initiated can help and alleviate over 20,000 victims in the area, resulting in a more sustainable and stronger community.

Foundation Tour Initiative

Vejdusit Foundation organized the Foundation Tour Initiative to encourage healthcare accessibility by providing a preliminary health checkup, influenza vaccines, medicines, medical supplies as well as providing lunch to vulnerable children living in 4 slum areas, which are under the responsibility of the foundation for Slum Child Care Under the Patronage of Her Royal Highness Princess Galyani Vadhana Krom Luang Naradhiwas Rajanagarindra, including Thanyaporn Reception Home for Girls, Pathumthani. This initiative was held in collaboration with pediatrician and volunteer staff from Bangkok Hospital Headquarter and Samitivej Children's Hospital. The doctors will regularly monitor health condition and development of targeted children on an annual basis, provide suggestion on children's healthcare, educate and recommend physical development technique as well as teach the teachers at the center and parents how to use drugs. In a case, where children get sick and need urgent medical treatment, that children will get a diagnosis and treatment at Bangkok Hospital Headquarter in a timely manner. In 2023, there were 5 children receiving treatment due to ear infection and growth development problem.

Vejdusit Foundation "Nursing Educational Scholarship"

Vejdusit Foundation established Vejdusit Initiative of "Nursing Educational Scholarship" to provide opportunity to Grade 12 students who love to study and wish to continue their undergraduate degree in nursing and midwifery but lack of money to achieve their objective. These students prefer to further their study with the aim of helping society and becoming good citizens of the country. Vejdusit Foundation collaborated with colleges of medicine of the government sector to select students whose qualifications are in line with the specifications and criteria set forth by the Foundation. In 2023, the foundation granted over 102 scholarships for 24 academic institutions nationwide.

Knee Replacement Initiative for Better Quality of Life

Vejdusit Foundation organized Knee Replacement Initiative for better quality of life as nowadays there are many underprivileged patients, patients with critical condition who are unable to wait for medical treatment, lack of liquidity and cannot bear the cost but require instant treatment. Therefore, Vejdusit Foundation collaborated with hospitals under the government sector in selecting patients with urgent need for medical treatment to get instant surgery at one of BDMS hospital subsidiaries. In 2023, there were 170 knee replacement cases reported and the funding was equivalent to Baht 17,500,000.

"

Knee Replacement Initiative for Better Quality of Life

"

Green Health

Vejdusit Foundation arranged "Green Health Initiative" to help the underprivileged throughout the country to receive medical treatment opportunity and healthcare accessibility. The examples of the initiatives are as follows:

1. Green Health Care & Share Initiative

BDMS and Vejdusit Foundation arranged "Green Health Care & Share" to help coordinate the donors with vulnerable children, patients, the elderly and people with disabilities inaccessible to medical supplies throughout the country to gain access to medical equipment such as oxygen concentrators, suction, wheelchair, inflatable mattress, hospital bed and second-handed medical equipment in good and ready-to-use conditions. In 2023, Vejdusit Foundation successfully delivered a total of 2,577 pieces of medical equipment to 2,566 underprivileged population.

2. Green Health @ School Initiative

"Green Health @ School" is an initiative established by Vejdusit Foundation and BDMS hospital subsidiaries with the objectives to enhance child and youth development, including physical and mental healthcare, as well as expressing proper emotions and enhancing socialization. This initiative raised funds to renovate and repair medical room, playground and building located at underprivileged and remote schools nationwide so that they will be in a cleaner and safer state. The initiative also fostered the development of children and youths by providing medical cabinets, medicines, necessary medical supplies and quality first aid equipment. Apart from the donations, the children were trained on health literacy, educated on household medicine instructions and childcare during sickness, first aid and how to wash hands properly etc. Besides, the objective was to foster their sustainable health and well-being.

The 2023 performance supported appropriate healthcare accessibility for children and young people whereby the project delivered the improvement of medical room of 20 schools, playgrounds of 27 schools, canteens of 7 schools and lavatory of 10 schools.

3. Green Health for Well-Being Initiative to help the society as indicated below:

- Cancer screening with PET-CT held by Vejdusit Foundation, Wattanosoth Hospital and National Cancer Institute which collaboratively organized cancer screening with PET-CT during Voice of Care event. The program provided the opportunity for cancer patients with urgent condition but have to wait for diagnosis at the public hospital so that they can get their examination in a timely manner with PET-CT at Wattanosoth Hospital. In 2023, 52 patients were diagnosed and this initiative achieved 100%, as the established objective which was equivalent to Baht 2,340,000 in social donations. The initiative is still under operation and set its goal at 53 patients in Y2024.

- Mental health screening initiative for university and college students: A collaboration between Vejdusit Foundation and Health Plaza Company Limited, an online health service provider, coupled with universities in Thailand, which organized mental health screening program for university and college students. The objectives were to provide them with the opportunity to consult with the psychologist and psychotherapist via online application Bedee and without any costs. In 2023, university and college students consulted psychologists and psychotherapists for a total of 1,389 times or equivalent to Baht 1,103,900 in social donations. Every consultation was protected according to the Personal Data Protection Act B.E. 2019.

Vejdusit Foundation Facebook Fanpage

Occupational Health and Safety

Handling of occupational health and well-being of the employees arising from improper workplace may negatively affect health care expenditures of these employees as well as potentially impact their performance, morale, satisfaction, and attitude toward the organization. This will ultimately affect the overall operational expenditures of the organization or may incur lawsuits that in turn, potentially affect the organization's reputation. BDMS strongly realizes the importance of employees occupational health and well-being, including such impacts; thus, BDMS establishes the management guidelines to promote occupational health and well-being of the employees and subcontracts to ensure their work efficiency while encouraging their awareness of potential impact which may arise from the company's business operations throughout the supply chain.

Supporting the UN SDGs

3.4, 3.6, 3.8, 4.4 and 16.3

Target and Performance

2023

Target	Performance
Lost Time Injury **rate = 0**	Lost Time Injury **rate = 0.63**

Management Approach

Occupational Health and Safety Policy and Guidelines

BDMS implements the systems and guidelines for occupational health and safety following Hospital Accreditation (HA) and Joint Commission International (JCI) and concerned regulations covering all business activities. In addition, BDMS appoints the Occupational Health, Safety, and Environment Committee to assess risks and establish measures for all business activities, related and non-related to the health care services and ensure continual operations.

The Safety, Health, and Environment Policy established by BDMS, strives to adhere to the well-being and safety of all employees, business partners, suppliers and every stakeholder group. In 2023, BDMS reviewed this Policy and consistently promoted a holistic health of the employees through various health initiatives as well as fostered and built the workplace environment which minimizes work-related injury and illness. This will ultimately lead the company to achieve Zero Fatality and Zero Lost Time Injury.

In addition, the company constantly communicates the occupational health and workplace environment and ensures employee acknowledgment of the established policies and guidelines. The company also publicizes news and information via the organization's e-mail and online channels such as YouTube on the BDMS People channel. Besides, the company recognizes the significance of the compliance of all business partners and contractors regarding safety and occupational health and safety management by employing the criteria and specifications in the procurement process. These criteria may include the compliance with rules and regulations concerning safety training and procurement of personnel safety equipment, all of which help minimize risks potentially arising from workplace accidents while strengthening a safer workplace environment throughout the supply chain.

For more details on Safety, Health, and Environment Policy, please refer to:

Occupational Health and Safety Risk Management

BDMS announces risk assessment guidelines regarding occupational health, safety, and workplace environment in conformity with the regulations to establish measures for managing and monitoring employees' health conditions. The Occupational Health Center and Safety Occupational Health & Environment Department must review the information, arrange preliminary surveys, organize site visits, and prepare the performance report to identify health threats. In addition, the working team is responsible for identifying and evaluating risks from operations in all departments, considering the possibility of potential danger, potential contact, and level of danger to propose further procedures, preventive measures, control health threats, or rectification.

Health Threats

Chemicals
Such as respirable dust, dental amalgam, liquid nitrogen, nitrous oxide, methanol, and alcohol.

Biologicals
Such as infection from customers or the workplace.

Physicals
Such as light, laser, uv-rays, x-ray, noise, and heat.

Ergonomics
Such as sitting or standing for long periods, unnatural posture or movement, lifting heavy objects or repetitive motion.

Social Psychology
Such as work-related stress and aggressive patients or relatives.

Safety
Such as puncture wounds, body fluid splashes into the eyes, defective electrical outlets, water leaks, poor-condition ceilings, unpleasant odors, poisonous insects, and defective light bulbs.

Fire Safety
Such as location and access to fire extinguishers, fire exits, fire exit signs and storage of flammable substances.

Air Quality Inside Building
Such as mold, improper temperature, insufficient ventilation, and indoor air quality.

Preventive Measures, Control or Rectification

- Engineering control
- Management control
- Workplace assessment
- Employee health monitoring

Occupational Disease Procedure

BDMS emphasizes the health of all employees driving the service operations in the organization while adhering to and fostering the importance of preventive measures. As a result, when occupational doctors identify any employees with occupational disease, BDMS will investigate to find the root cause while providing suitable care and suggestions on the correct measures. The objective is to prevent disease occurrence, intensification, and chronic diseases.

In addition, BDMS implements the relief and prevention plan for occupational diseases in both short and long terms.

Short-Term Plan

1. Health advice by doctors
Occupational doctors provide suggestions on healthcare ergonomics such as muscle stretching and appropriate self-care.
2. Work environment adjustment and management
Adjust and manage a proper working environment in collaboration with the department

Long-Term Plan

Adjust work patterns of the employees and provide breaks during the day for muscle stretching.
* The department is responsible for adjusting the work schedule and providing breaks during the day for muscle stretching.
* Ensure adequate manpower in the department for the workload and encourage job rotation.
* Acquire equipment and amenities to prevent the reoccurrence of occupational diseases.

Health, Safety and Biohazard Post-Exposure Management Policy for Employee

BDMS enforces the Policy regarding Staff Health and Biohazard Post-Exposure Management to ensure the work readiness of employees and contractors in the hospitals.

The Policy comprises the risk analysis from infection during operations and establishes proper preventive guidelines in case of biohazard exposure. In addition, the Policy states clear responsibilities and guidelines communicated during interim meetings and on posters displaying the work process in treatment areas. Moreover, BDMS organizes annual training on infection prevention in the hospital.

Duties and Responsibilities

Infection Control Committee (ICC):
Establish health and safety measures for employees.

Supervisors of Related Departments:
Ensure that the employees working in the division comply with the measures while reporting issues to infectious control nurses.

Hospital Management Committee:
Revise and approve health and safety measures for employees

Human Resources Department or Assigned Personnel:
Comply with the guidelines and monitor the performance such as occupational disease rates, health check-up rates, and immunization according to the established guidelines.

Executives:
Approve operations following the employee health and safety measures while monitoring its performance.

Related Personnel:
Operate following the operational measures.

Operational Guideline

Health Check-ups

Assess risks and set out health screening criteria for pre-employment medical check-ups, annual medical check-ups, health check-ups specific to occupational risk factors, and repeat medical examinations.

Health Risk Assessment

Identify operational hazards and implement proventive measures according to risk assessment results. Annually assess the building condition and indoor air quality according to the regulations and report to ECC on a quarterly basis.

Immunizations

Provide necessary immunizations to the employees and contractors in an appropriate timeframe and established guidelines.

Patient Handling Training

Organize the patient manual handling courses, including lifting and moving the patients, transporting patients safely using a wheelchair, and improving workplace ergonomics for the risk groups such as nurses, patient handlers, physical therapists, and nursing assistants.

Violence Management Training

Arrange workplace violence management training and issue preventive measures from the process design to management.

Second Victim Support Training

Ensure management training for personnel involved in adverse events.

Treatment for Work-Related Injury or Sickness

Manage and monitor work-related injury or sickness such as accident reports, initial treatment at the staff clinic or emergency department, disease prevention and control in the hospital, procedures for accidents, exposure to patient's blood or body fluid, and walkthrough surveys to assess risks, provide rectification and avoid repetition.

Process of Service Efficiency Monitoring and Assessment

Establish the indicators for employee efficiency such as health check-up rates, immunization rates, work-related disease rates, and disease transmission incidents in the hospitals, etc.

Occupational Health and Safety Initiatives

BDMS determines hospital's subsidiaries to organize initiative projects in accordance with Safety, Health, and Environment Policy, together with other relevant policies. Details of such projects are as follows:

I. Safety Projects

Fire Drills Project

Bangkok Hospital Headquarter organizes fire drill training and practice once a year for employees of the Front Stage Officers and Back Stage Officers both at the hospital and in the office building; for example, Public Relations Department, Medical Record Department, Human Resources Department, Accounting and Finance Department, Engineering Department, General Support and Facilities Department, Quality Department and Security Department, etc. The Hospital initiates operational training, and simulation training, including the review of operational procedures in a case where any employee is being injured owing to fire incident; for example, evacuation during an emergency situation and fire fighting with fire extinguisher. In 2023, fire drill training successfully encompassed all employees of the Hospital.

Emergency Response Plan Project

Bangkok Hospital Headquarter organizes emergency response plans in case where any suspicious objects have been found, the customer is injured, elevator's failure to operate, riot, inundation, some parts of the clothes are stuck in the escalator and the customer jumps off the building etc. In 2023, the hospital arranged the emergency response plan which successfully covers every personnel of the hospital.

BLS for Non-Healthcare Provider Project

Basic Life Support (BLS) is deemed significant for every employees performing their duty in medical facilities since critical incidents or deaths are unable to be predicted in advance. Therefore, all employees require continual learning and practice as speed and accurate basic life support can minimize the intensity or potential loss, both inside and outside the medical facilities.

Consequently, the Human Resources Department of Bangkok Hospital Headquarter organizes the "BLS for Non-Healthcare Provider" Project to educate and review such skills to all employees as well as to enhance their understanding of the importance of basic life support, including correct skills and practices which in turn, enable them to assist other people in accordance with JCI. This JCI states that all personnel must review their skills every 2 years. There are approximately 456 non-healthcare providers requiring repeated training and there are 114 new employees who require training during their 90-day probation period (especially for non-healthcare providers). Nonetheless, for this year, there are a total of 565 employees attending the program per condition. The number of trained personnel correlates 100 percent with the established goals among a group of newly hired employees requiring repeated training during that year. In addition, 100 percent of all employees successfully pass both theory and practice.

100% Helmet Wear for Safety Project

Bangkok Hospital Rayong realizes the significance of employees safety; thus, the hospital sets forth the 100% Helmet Wear for Safety Project, with the aim to foster awareness of safe motorcycle riding, respect for traffic rules, and helmet wear for both riders and passengers. Besides, the hospital creates safety awareness for all staffs, medical doctors, nurses, full-time employees, part-time employees, contractual employees, and employees of the rental shops to ensure their strict compliance. The hospital implements safety measures regarding 100 percent helmet wear, prepares posters and public relations media via online channels as well as organizes various campaigns to promote consistent helmet wear to ensure utmost safety. The result has shown a constant increase in helmet wear from January 2023 from 99.15% to 99.86% in August 2023, resulting in lower risk and less injury in case of any accidents.

Initiatives for the Employee Well-Being

BDMS understands and emphasizes the importance of development and support for employee well-being in addition to occupational health in the workplace. Consequently, BDMS launches initiatives for employee well-being with the performance in 2023 as follows:

1.Employee Well-Being Projects

Ergonomic Evolution 2023

Bangkok Hospital Rayong recognizes the importance of sickness and operational safety of all employees which may arise from improper posture, lifting and moving items, including workplace environment problems. The objectives are to ensure suitability of work condition of each department while promoting work incentive in terms of operational psychology. Therefore, the hospital employs ergonomics to improve and promote proper work posture to ensure employees' good health and well-being as well as achieve the established goals and work satisfaction to solve work-related health problems.

According to the 2023 survey of physical and mental health of 1,043 hospital employees, there were 72.09% of these employee with lower left back abnormalities. Thus, Bangkok Hospital Rayong organizes Ergonomic Evolution 2023 by employing the site visit survey results of the staffs and their work condition to analyze the root cause and plan for a suitable solution. Moreover, the hospital establishes a Pre-Assessment of each department (Nordic Questionnaire, Pain Score, JCQ Assessment Form, and Low Back Pain) to promote and encourage Health Education as well as adjust work position and factors affecting work-related injury to comply with ergonomics principles; for example, environment, work position and safety equipment. The hospital also plans to educate the working team to further their knowledge to target employees while simultaneously teaching and organizing various activities to ensure personnel awareness of potential problems so that they can adjust their work positions to be more appropriate etc. In addition, the hospital follows up and evaluates results after completion of activities such as satisfaction surveys, following-up of symptoms, and expenditures arising from medical check-ups concerning ergonomics-related disease etc.

The operation results indicate that expenditures relating to ergonomics-related medical treatment of employees decrease by 25 percent and staff satisfaction increases by 80 percent while accurate knowledge and understanding of staff regarding work position and exercising reports at 80 percent.

BHH Happy Together Project

Bangkok Hospital Hat Yai recognizes health problems of employees with abnormal conditions of risk group disease of non-communicable diseases such as diabetes, high blood pressure, high cholesterol, metabolic syndrome, including other chronic diseases such as thyroid and gout, etc. Therefore, the hospital initiated the BHH Happy Together Project to encourage the well-being and better health of all staff, to lessen illness rates while strengthening good relationships between employees and the hospital. To achieve this end, the hospital provides health care knowledge to employees, recommends suitable food consumption, exercise, and mental care to ensure their happiness, less tension and stress as well as suggest the change in eating habits and daily lifestyle. Thus, the hospital selected and invited risk group employees by taking into consideration their annual health check-up results with a total of 210 employees to participate in this Project. The Project also invites healthy staffs to become role models and to be the inspiration for others. According to employee's annual health check-up results, those with health-related risks decline to 79.01 percent from 100 percent and the score of employee satisfaction from attending this Project is reported at 4.80 from 5.0 score. In addition, most employees agree that the hospital should organize such projects consistently.

Respecting of Human Rights

At present, human rights are the most recognized issue globally. The issues include forced labor, child labor, discrimination, harassment, improper labor treatment since human rights impact potentially affects the company's reputation and business operations. Consequently, BDMS hospitals and subsidiaries are committed to building awareness of respect of human rights of every stakeholder group and subjects of law, especially the vulnerable group, according to the organization's determination to act in accordance with international human rights standards.

Supporting the UN SDGs

5.1, 5.2, 8.5, 8.8, 10.3 and 16.3

Target and Performance

2023

Target

100% operation on human rights due diligence, encompassing every BDMS business unit.

Performance

100% operation on human rights due diligence, encompassing every BDMS business unit.

Management Approach

BDMS Human Rights Due Diligence

BDMS realizes the responsibility in promoting and respecting human rights of all employees, suppliers, business partners and stakeholders to be in accordance with the organization's human rights policy. Thus, the company announced the policy and strictly acts in line with international practice and domestic laws; for example, the United Nations Guiding Principles on Business and Human Rights (UNGP), the ILO Declaration on Fundamental Principles and Rights at Work, the International Bill of Human Rights and the Labor Protection Act B.E. (1998) etc. The company has strongly conformed to the principle which protects zero tolerance policy for discrimination as well as fosters the equality principle in every business operation to achieve the company's mission of becoming a medical service provider well-accepted at the international standards.

Human Rights Due Diligence of BDMS

BDMS realizes the significance of respect of human rights of all stakeholders and the subjects of law directly impacted by the company's business operations. Thus, the company thoroughly performs human rights due diligence according to the United Nations Guiding Principles on Business and Human Rights (UNGP). In 2023, BDMS arranged for risk assessment on human rights to identify risks as well as established the mitigation plan to ensure the company's efficient risk assessment procedure and impact on human rights of the business units throughout the supply chain. Moreover, BDMS establishes forth the mitigation measures for very high, high and medium risks concerning human rights as the company's priority. This procedure will take into consideration the subjects of law and the stakeholders being impacted (including the employees, customers and community) and in the vulnerable group (including female, children, disabled, elderly, minorities, migrant workers, native people and LGBTQI+. BDMS has evaluated risks and their impacts every 3 years which encompass every business unit of the organization as well as follow up medium and low risks on human rights at an organizational level and throughout the supply chain. Simultaneously, BDMS expects that complete assessment of human rights will lead to appropriate risk management and risk mitigation, including transparent disclosure of the assessment results.

For further details on BDMS Human Rights Policy, please refer : https://investor.bangkokhospital.com/en/corporate-governance

BDMS evaluates risks of human rights and their impacts by stressing these following risks which cover the company's business operations.

Risk Issue	Subject of Law Being Impacted			
	Employee	Customer	Community	Supplier (Third-party contracted labor)
Gender Equality	●			
LGBTQI+ Discrimination	●			
Discrimination in Recruitment	●			
Sexual Harassment	●	●		
Well-Being of employees and their families	●			
Workplace Conditions	●			
Diversity and Inclusion	●			
Health Disparity		●	●	
Personal Data Protection and Data Security		●		
Safety of Customers, Patients and Product Safety	●	●		●
Pollution and Environmental Impacts			●	●
Cyber Bullying	●			
Human Trafficking	●			
Freedom of Association	●			
Bargaining Right	●			
Forced labor	●			
Equal remuneration	●			

BDMS Mitigation Plan for Human Rights Risks

BDMS Human Rights Risks and Risk Mitigation Measures			
Well-being of Employees and Families	**Diversity and Inclusion**	**Safety of Customers and Patients and Product Safety**	**Pollutions and Environmental Impact**
• Arrange breastfeeding area in all BDMS facilities • Encourage paternity leave	Organize mandatory training related to Diversity and Inclusion	Inspect the facilities and technology for patient care, including an innovation to promote the safety of all customers elevate experiences of excellent services to the customers and patients	Establish the transfer system in a case of environmental impact

Human Rights Risks and Risk Mitigation Measures for Suppliers		
Responsible Sourcing	**Pollutions and Environment Impact on the Community**	**Safety of Customers and Patient and Product Safety**
• Determine such topic during the suppliers' meeting (for training and building awareness) • Add topics to support the suppliers to act in accordance with responsible procurement procedures • Review measures for of supplier evaluation	• Determine such topic during the suppliers' meeting (for training and building awareness) • Establish the transfer system in a case of environmental impact	• Determine such topic during the suppliers' meeting • Review the inspection criteria for suppliers within the quality and safety standards

In 2023, BDMS communicated the human rights principle and operations, including risk issues and preventive measures on human rights at the organizational level. Besides, the company provided examples of risk management and business-related measures to the employees, suppliers and contractors to ensure their understanding and specify practices and measures to prevent breaches of human rights in the organization on an annual basis.

Communication, Knowledge Enhancement and Awareness of Human Rights

BDMS consistently emphasizes the awareness of the issue as well as builds competency of personnel responsible for such issue. The company provides knowledge, understanding and fosters human rights culture on an annual basis to ensure employee awareness and guidelines on respect of human rights through various training, projects and activities. Examples of these activities in 2023 are as follows:

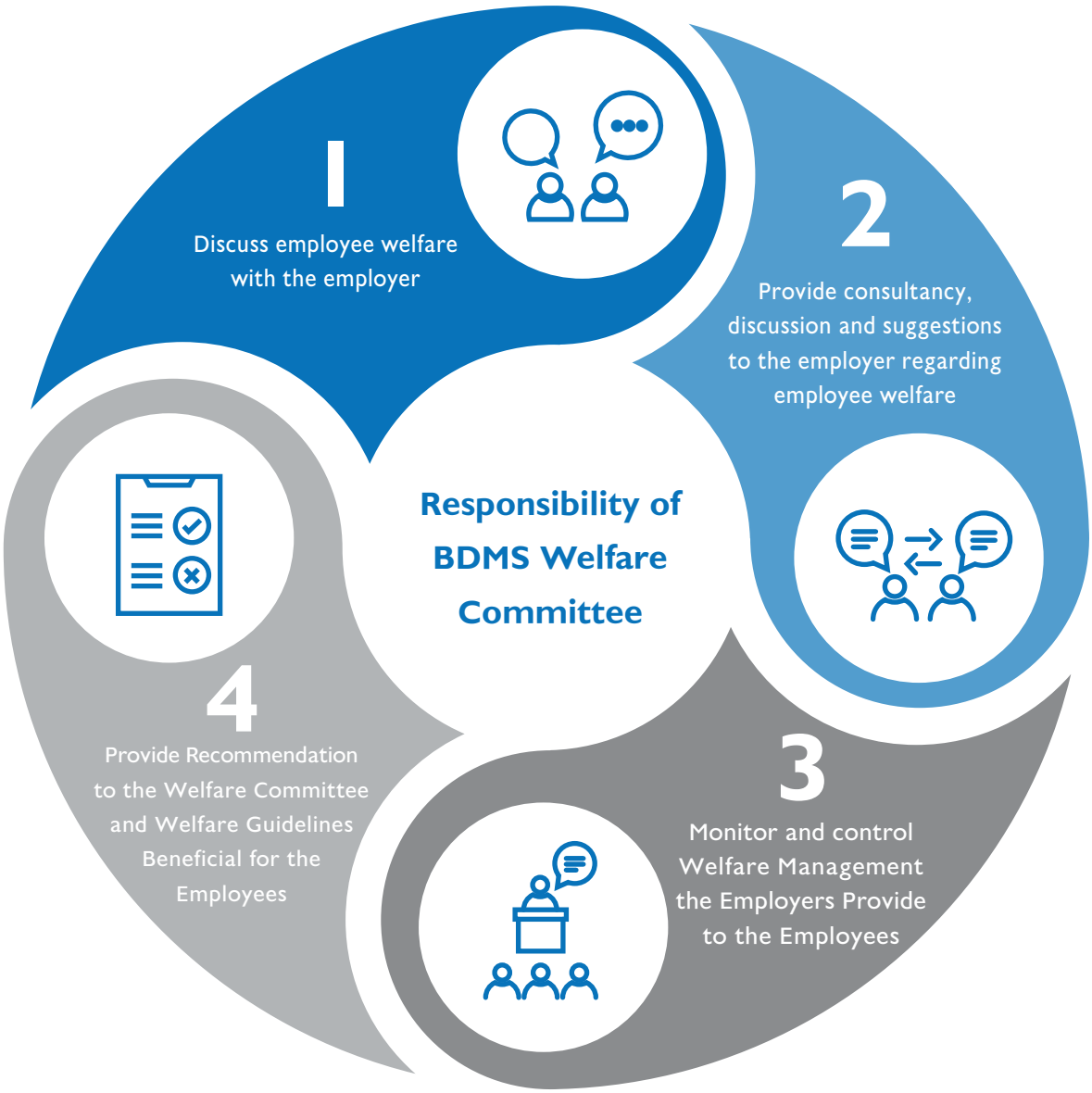
- "Stop the Line" project to promote and build safe workplace culture in the organization, create awareness of the executives and employees, emphasize on non-discrimination and anti-harassment of every form. BDMS also establishes data security standards as well as encourages employees' collaboration through various activities of the hospitals and subsidiaries by submitting VDO clips for contest and used as the media to communicate knowledge via every channel of the organization.

- To build awareness of human rights in business operations, BDMS launched " Human Rights in Business Practices" program for employees of every level to provide knowledge of human rights and basic human rights principle in business operations.

Freedom of Association

Welfare Committee

BDMS appoints forth the Welfare Committee following the specifications. The Committee is comprised of no less than 5 employees of the supervisory and operational levels to act as the representative of all employees of every level (100%). The Committee shall hold the directorship position for 2 years and shall organize meetings on a quarterly basis or in a case where no less than half of the Committee members request with the aim to listen to their opinion and adjust the operation according to the employees' opinions or the company's context. The objectives are to promote employees well-being and ensure healthy, suitable and safe workplace environment.



Complaint Management Procedures and Remedy on Human Rights

BDMS strives to efficiently organize complaints on human rights while respecting the rights of reports and protecting the whistleblower throughout the grievance receiving process. In addition, the company will ensure the confidentiality and privacy of the whistleblower to manage the complaints transparency as well as elevate the level of investigation, rectification and management measures for other cases. Nonetheless, BDMS will proceed with the wrongdoer based on the severity of the misconduct (from warning to legal proceedings) for every stakeholder group, both internal and external. Besides, the relevant department will investigate the facts and monitor and report on the complaint within 7 days. Should there be any serious incidents investigation will be promptly carried out.

Phone Number
0-2755-1911-2

Email
ConductEmployee@bdms.co.th

Website
www.bdms.co.th

Operating Results According to Human Rights Policy and Practices 2023

0 cases
of unfair treatment and human rights violations.

369 persons
with disabilities were hired as BDMS

100% of all employees were trained on human rights and non-discrimination.
Newly recruited employees attended the orientation via online and were assessed 100% on their awareness.

Environment

Energy and Climate Change Management

Global warming and climate change currently taking place globally affect the quality of life and living conditions of many living creatures. BDMS hospitals and subsidiaries strive to operate the business according to the strategic plan. Specifically, BDMS strongly encourages the use of renewable energy (solar cell) to enhance the efficiency of energy consumption within the organization reduce pollution emissions and organize the carbon credit project which is deemed a crucial part of supporting the achievement of the net zero emissions by 2050.

Supporting the UN SDGs

7.2, 7.3, 11.6, 12.2, 13.1, and 13.3

Target and Performance

2023

Target

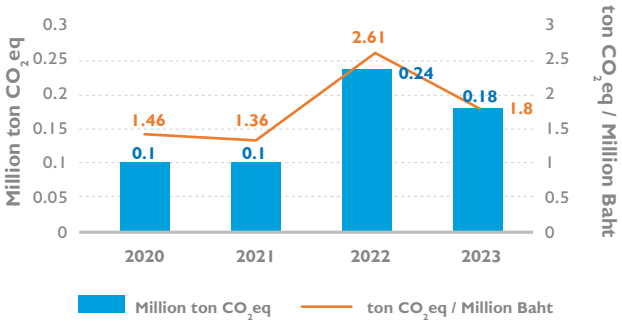
- Net zero emissions by 2050
- Carbon Neutrality by 2030
- At least **30%** reduce greenhouse gas emissions by 2030 from the base year 2022

Performance

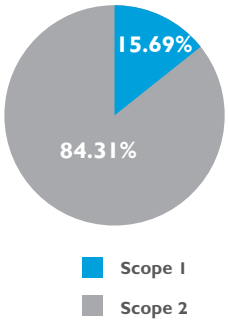
Reduce greenhouse gas emissions **24.05%** from the base year 2022

Key Performance Dashboard

Greenhouse Gas Emissions **2023**



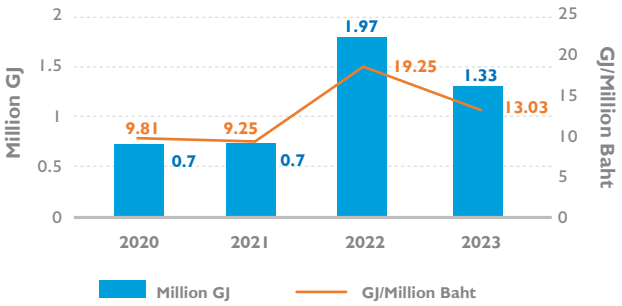
Greenhouse Gas Emissions per Scope
Scope 1 15.69%
Scope 2 84.31%



184,209.73 tons CO_2eq

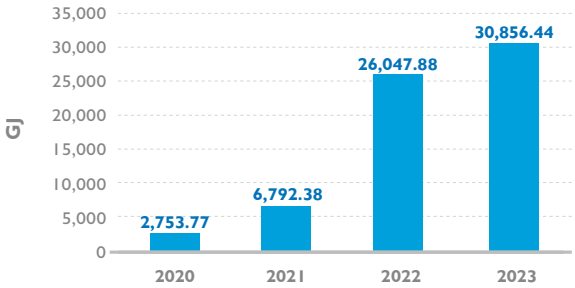
Greenhouse Gas Emissions Intensity **1.80** tons CO_2eq per million Baht

Energy Management **2023**



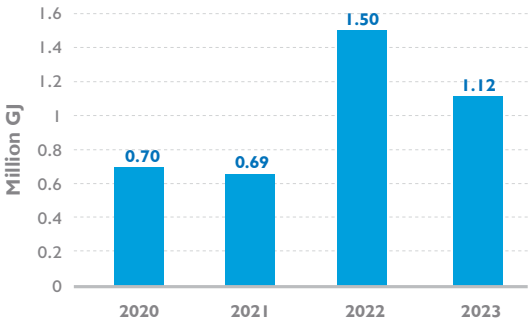
Total Energy Consumption **1.33** Million GJ

Energy Consumption Intensity **13.03** GJ per Million Baht

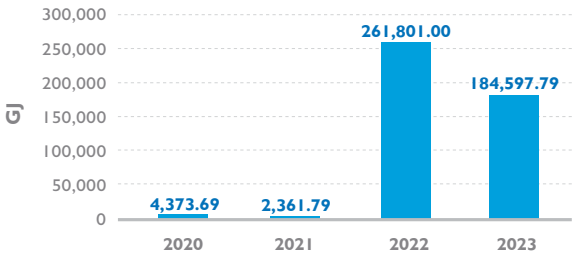


Renewable Energy Ration **2.32%**

Renewable Energy Consumption **30,856.44** GJ



Electrical Energy Consumption **1.12** Million GJ



Fuel Energy Consumption **184,597.79** GJ

Management Approach

BDMS realizes and adheres to operating and developing the business in line with the sustainable principle by emphasizing environmental evaluation and management throughout all business operations with the guidelines as follows:

1. Operate the businesses in compliance with the regulations and in consideration of local and global issues to ensure sustainable development.
2. Identify materiality, key indexes, and strategies to accomplish the target.
3. Establish sustainable procurement with an emphasis on the selection of raw materials, products, and services that least impact climate change.
4. Encourage efficiency in energy and natural resources consumption throughout the supply chain.
5. Develop or integrate technology and innovation in business operations to ensure resource efficiency, energy conservation, and low greenhouse gas emissions.
6. Increase the ratio of circular and low carbon energy consumption.
7. Enforce procedures to promote the recycling of biodegradable plastic or green containers following the circular economy principle to limit climate change and waste management.
8. Support and collaborate with the government and education sectors, the communities, and other stakeholders in tackling climate change on both national and international scales.
9. Communicate and raise awareness on adapting to climate change to all employees, business partners, and stakeholders from time to time.
10. Disclose the environment management performance through the annual Sustainability Report or relevant information to the stakeholders.

Risk and Opportunity Assessment from Climate Change

BDMS studies and sets the operational guidelines on climate change management throughout the supply chain as well as assessing risks and opportunities relating to climate change in various dimensions, including potential financial impact. In addition, the Scenario Analysis may be established in the future according to the guidelines set forth by Task Force on Climate-Related Financial Disclosure (TCFD) whereby the operation plan will be initiated which encompasses every dimension, for example, physical risk, technology, marketing, policy, rules and regulations and the organization's reputation etc.

Please see further details.

Low Emission Support Scheme: LESS

To minimize the impact arising from climate change, BDMS participates and supports the Low Emission Support Scheme (LESS) project with the aim to reduce greenhouse gas emission, emphasize energy conservation as well as enhance the efficiency of energy and clean energy consumption such as renewable energy, etc. Besides, BDMS encourages low-emission projects of the BDMS network hospital groups and subsidiaries in an efficient manner while preparing for the development of low emission projects to be at a carbon credit trading level.

In 2023, BDMS submitted 4 LESS projects and can minimize the volume of greenhouse gas of over 2 million tons CO_2eq.

BDMS Green Healthcare

As a role model in sustainable environmental management, BDMS initiates BDMS Green Healthcare with the determination to reach net zero emissions by 2050. To evaluate the environmental practice in the BDMS network hospital groups and subsidiaries, BDMS ensures the completeness of the environmental management process according to BDMS Earth Healthcare Policy, environment sustainability development strategy, and work scope. Other factors include general environmental management guidelines for healthcare services with excellent standards and practices at an international level. In addition, BDMS implements the rating system called Leadership in Energy & Environmental Design (LEED) to ensure that the BDMS network hospital group and subsidiaries will be certified in the future.

As for the BDMS network hospital group and subsidiaries that have already been evaluated, the re-evaluation will take place every 3 years. There are 18 hospitals and subsidiaries attending BDMS Green Healthcare Project in 2023 as indicated below:

Platinum level
5 sites as follows:

- Bangkok Hospital
- Bangkok Hospital Phuket
- Phyathai 1 Hospital
- Phyathai 2 Hospital
- Paolo Hospital Samutprakarn

Gold level
10 sites as follows:

- Bangkok Hospital Sanamchan
- Bangkok Hospital Muangraj
- Samitivej Chonburi Hospital
- Bangkok Hospital Pattaya
- Bangkok Hospital Rayong
- Bangkok Hospital Chanthaburi
- Bangkok Hospital Chiang Rai
- Bangkok Hospital Ratchasima
- Bangkok Hospital Khon Kaen
- The Medicpharma Co., Ltd. (Sinsakhon Industrial Estate)

Silver level
3 sites as follows:

- Bangkok Hospital Siriroj
- Dibuk Hospital
- National Healthcare Systems Co., Ltd. (Hat Yai)

Performance of 18 hospitals and companies can be summarized as follows:

Energy saving of 3,550,660 kWh

Waste recycling of 16,218 tons

Water reduction of 38,900 cubic meters

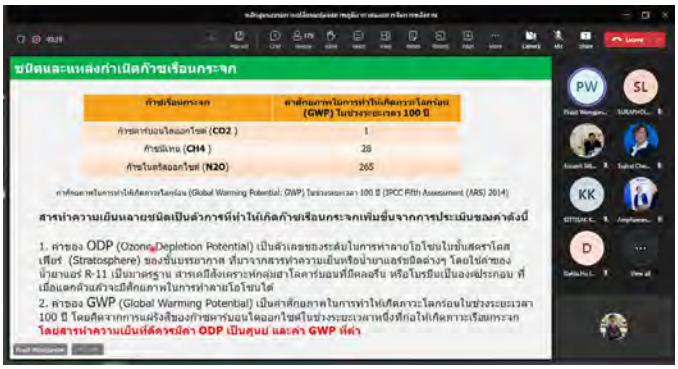
Decarbonization of 1,815 ton CO_2eq

BDMS Solar Energy Promotion to Become Net Zero Organization

Striving to implement more renewable energy practices, following the Environmental and Climate Change Management Policy, BDMS targets all hospital network groups and its subsidiaries to a 100% use of renewable energy. In 2050, the renewable energy ratio is expected to be 30% of the total energy consumption while the purchase of the Renewable Energy Certificate (REC) will be proceeded in the future. Overall, the 21 solar rooftops were installed in 2023, generating energy of 10,990 kW while reducing the greenhouse gas emission of over 11,050 tons CO_2eq per year or saving energy of more than 25 million Baht per year.

For example, Bangkok Hospital Sanamchan installed a 997 kW solar cell system under the Power Purchase Agreement (PPA), saving 1,358,300 kWh per year. At the same time, three hospitals in Phuket; namely, Bangkok Hospital Phuket, Bangkok Hospital Siriroj, and Dibuk Hospital installed a total of 1,501.5 kW solar rooftop and parking lot under the Power Purchase Agreement (PPA), resulting in energy savings of approximately 1,987,247 kWh per year. In addition, Bangkok Hospital Surat installed a 506 kW solar rooftop under the PPA, resulting in energy savings of about 684,600 kWh per year.

Awareness and Acknowledgment of Climate Change



BDMS realizes the significance of constantly building awareness and understanding of self-adaptation to climate change for all employees, business partners, and stakeholders. Mr. Prasit Wongchandee, ISO consultant, CFO, CFP and TVER, was BDMS's guest speaker of honor to present via an online system the topics of climate change and energy management which was held on 10 October 2023. There were a total of 296 employees and suppliers attending this event

Global Sustainable Energy and Environment (GSEE) of the Provincial Electricity Authority

Phyathai 3 Hospital is certified with the Global Sustainable Energy and Environment (GSEE) at a gold level. This GSEE is up-to-date and in line with the Sustainable Development Goals (SDGs) which in turn, helps promote PEA's image and sustainable development guidelines. Besides, GSEE encourages energy conservation measures according to the policy set forth by the Ministry of Energy, all of which represent many benefits; for example, energy cost saving, minimization of environmental impact, low emission of greenhouse gas, building of good image and sustainable culture which are deemed important foundations of the sustainable development at organizational, national and global levels.

Green IAQ (Indoor Air Quality) for Green Hospital at Bangkok Hospital Headquarter

Many areas of Bangkok Hospital Headquarter are equipped with an aeration system to ensure a suitable level of CO_2. The existing system is completely turned on at all times which is unnecessary as no air quality measurement tool is available; therefore, the system cannot be adjusted more appropriately. At present, IoT advancement enables the hospital to install sensors to measure air quality; for example, moisture, CO_2, and PM 2.5. Then, data will be recorded on the Cloud and shown on the Web board. When air quality is in line with the established standard, the system will remind the Department of Mechanics to adjust the aeration system accordingly by referring to ASHRAE 2021. This in turn helps minimize energy consumption and solve the complaints of the customers regarding air quality. Besides, the system helps lessen the burden of the staffs who need to record the air quality scale every hour, especially for the rooms where temperature and moisture must be controlled such as drug and medical supply storage rooms. The investment cost is 18,000 Baht which helps minimize energy consumption of 15,590 kWh per year while the energy payment is 74,968 Baht per year.

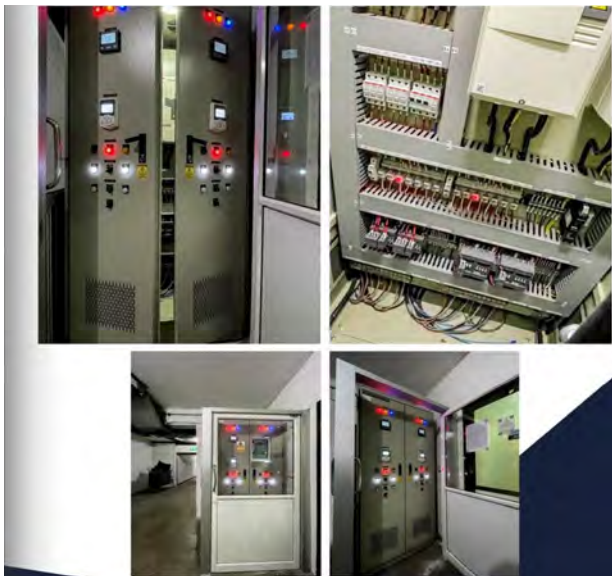
The project is awarded the second runner-up prize of the BDMS Awards 2023 in the Green Healthcare section.

Battery Reactivation for Smart Lighting System at Phyathai 1 Hospital

To ensure the stability of electricity supplied to medical equipment in case of power shortage, the hospital requires an efficient backup power system. The backup power system used by the hospital requires backup batteries which must be replaced every 2 years. Therefore, there are a lot of used batteries that need to be destroyed during each battery replacement. The hospital has the initiative to use these used but still efficient batteries to be a power source for the lighting system at the car park during night time to replace energy consumption from the electricity. The solar cell will be employed as a power source for backup battery charging. In a case where the backup battery is fully charged, power from the solar cell will supply the electricity back to the daytime lighting system. The electricity from the solar cell is clean energy and environmentally friendly. The hospital invests 165,000 Baht and can save energy of 5,676 kWh per year while electricity expenditures are reduced up to 33,430 Baht per year.

VSD Installation of Chiller System at Bangkok Hospital Phitsanulok

The electricity consumption of Bangkok Hospital Phitsanulok tends to become higher, coupled with an extremely high Fuel Adjustment Charge (FT). The Energy Working Committee analyzed the ratio of energy consumption and realized that the air-conditioning system is the system which consumes the most electricity or equivalent to 40 percent of the total energy consumption of the hospital. Therefore, the hospital devises a method to save energy as well as establishes a plan and project to install VSD of the chiller system to enhance its efficiency and save electricity costs within the hospital area. A comparison of the volume of power consumption of the chiller system before and after the installation has been conducted whereby the energy meter is also installed for data storage. The result of VSD performance calculation illustrates that energy consumption is reduced at 50,105 kWh per year and



CO_2 is reduced to 25 tons CO_2eq per year while the payback period is 1.02 per year.

Reforestation Project at Bangkok Hospital Samui

Bangkok Hospital Samui establishes a project with local agencies in Amphoe Koh Phangan, Koh Phangan Municipality, and Phangan Department of Forestry, including local people. The objectives are to increase trees in the area, add more oxygen as well, and foster an awareness of forest conservation owing to deforestation and minimization of the forest area caused by many factors; for example, cutting down trees to build houses, for commercial purposes and other activities. Thus, Bangkok Hospital Samui realizes the significance of environmental conservation to maintain the green area and absorb more carbon dioxide in the atmosphere. The project was established in collaboration with the community to create their awareness of forest admiration and conservation. There are a total of 100 local people and staffs participating in this project and 300 seedlings were also planted.

Circular Economy

At present, climate change and environmental problems have become more severe; therefore, many organizations and people must review and change their mindset regarding production methods, consumption, and services. The circular economy is one solution that can solve these challenges while enabling economic growth, minimizing waste management expenditures as well as ensuring adequate resources. Nonetheless, population growth can lessen the need to rely on key raw materials from abroad, minimizing CO_2 emission and waste while creating new production innovation which in turn, helps generate more added value. BDMS determines the directions and sustainability goals for 2050 by increasing the ratio of non-hazardous and reusable waste by 50%

Supporting the UN SDGs

12.3, 12.4 and 12.5

Target and Performance

2023

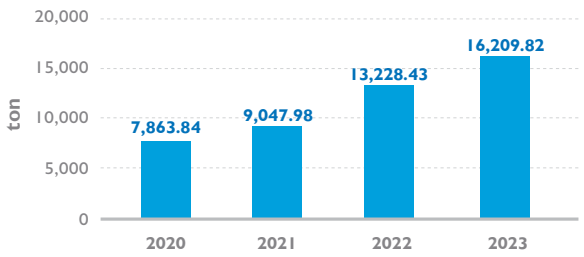
Target

Non-hazardous waste is utilized
23%

Performance

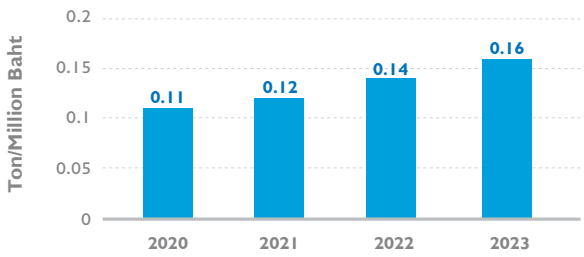
Non-hazardous waste is utilized
24.46%

Key Performance Dashboard



Total waste generated

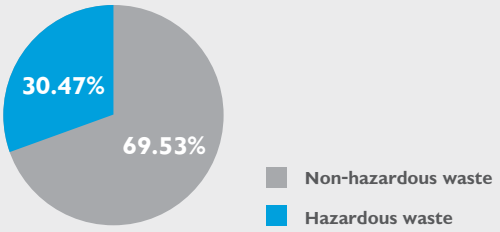
16,209.82 tons



Waste Intensity

0.16 tons/million Baht

Waste quantity per category
Non-hazardous waste 11,271.29 tons or 69.53%
Hazardous waste 4,938.53 tons or 30.47%



Waste Quantity Classified by Management Method

Non-hazardous waste		Hazardous waste
75.54%	Directed to disposal	99.98%
62.76%	landfill	0.27%
4.78%	incineration without energy recovery	95.98%
7.79%	incineration with energy recovery	2.71%
0.21%	others	1.02%
Non-hazardous waste 24.46%	Diverted from disposal	Hazardous waste 0.02%
18.94%	recycle	0.02%
5.52%	others	0.00%

Management Approach

BDMS values resource use efficiency while minimizing loss and emphasizing recycling throughout the supply chain under the circular economy principle. Simultaneously, BDMS raises awareness and encourages consumer behavior changes following the 5Rs principle (reduce, reuse, recycle, repair, and reject).

Reduce consumption, resource usage, and waste.

Reuse to extend the product's life cycle.

Recycle used items into new products.

Reusable repair items.

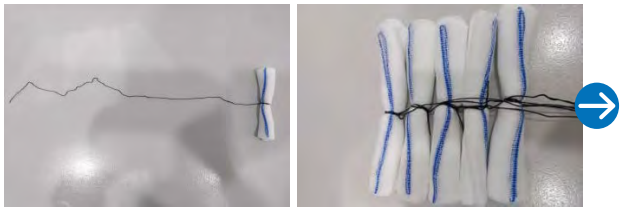
Reject substances and materials that are harmful to the environment and encourage less purchase and usage of products in line with the sustainable lifestyle.

BSN Waste Bank at Bangkok Hospital Sanamchan

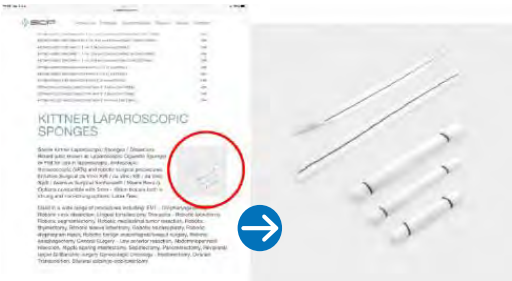
Bangkok Hospital Sanamchan provides a variety of medical services with lots of employees and customers visiting the hospital each day. One of the most significant challenges affecting the environment is a higher volume of waste. To solve such waste problems, Bangkok Hospital Sanamchan establishes the Waste Bank Project as a solution for systematic waste separation. Thus, each department will separate different types of waste which in turn, will be gathered and subsequently brought to the Waste Bank. The junk shop then purchases, separates, and weighs these recycled wastes as well as records the weight of each department's waste in a form prepared by the Waste Bank. The Waste Bank will allocate and return dividends to each department afterward. According to the project's performance, there are higher volumes of recycled wastes from Year 2021-2023.

Safe & Green Healthcare Laparoscope Gauze at Bangkok Hospital Muangraj

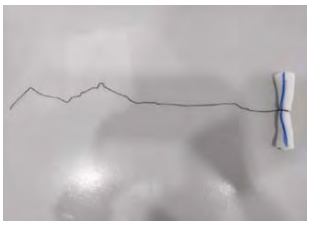
At present, there are more patients having the services at Bangkok Hospital Muangraj for laparoscopes. This laparoscopic procedure is a procedure which minimizes the recovery time after surgery, including minor surgeries. Nonetheless, this procedure requires special many pieces of equipment and tools, compared to other surgeries. Another important matter of laparoscopic procedures lies in the fact that medical equipment must be complete, convenient, and always available. Besides, the hospital team designed the laparoscopic sponges specifically for laparoscopic cases, enabling more convenience and easier counting. Apart from the safety issue, the hospital team also applies the reuse principle by inventing the laparoscopic sponge from leftover x-ray gauze which will be used to stop blood during the laparoscopic procedure. The imported ethylene oxide procedure also minimizes cost and ensures an efficient use of resources.



อบก๊าซ Ethiline Oxide ก่อนนำมาใช้



Laparoscpic Sponges ในท้องตลาด



BMR Laparoscpic Sponges

Label-Free Water Bottles at Bangkok Hospital Headquarter and Samitivej Hospital

Bangkok Hospital Headquarter and Samitivej Hospital* have changed their drinking water bottles to be clear bottles, label-free, and have smaller caps. This results in less plastic use of 5.74 million pieces per year while CO_2 is reduced to 6,800 kilograms of CO_2 equivalent per year. To separate pet bottles, this can be done by pouring out leftover water, separating caps, pressing bottles, or treading bottles to make them smaller to reduce the waste area and these bottles will be dumped in the "Recycle Bin".

*The twelve pilot hospitals using label-free bottles include

- Bangkok Hospital Headquarter
- Bangkok Hospital Phetchaburi
- Bangkok Hospital Ratchasima
- Bangkok Hospital Chiang Rai
- Bangkok Hospital Khon Kaen
- Samitivej Srinakarin Hospital
- Bangkok Hospital Huahin
- Bangkok Hospital Sanamchan
- Bangkok Hospital Chiang Mai
- Bangkok Hospital Udon
- Samitivej Sukhumvit Hospital
- Samitivej Chonburi Hospital.

Plastic Conversion to Oil Project at Bangkok Hospital Headquarter and Samitivej Hospital

Bangkok Hospital Headquarter, Samitivej Sukhumvit Hospital, and Samitivej Srinakarin Hospital, together with Corsair Co., Ltd., a business solution developer in the environment that has its operation base both in Thailand and the Netherlands promote the use of Pyrolysis technologies that change plastic waste to advanced bio-oil to be used as raw materials in producing alternative fuel, with the aim to collaboratively solve Thailand's environmental problem in a sustainable manner

Blister Pack Waste Reduction at the Medicpharma Co., Ltd.

From the analysis of waste generated by the factories, most of the waste consists of blisters, accounting for 48% of the total waste from manufacturing procedures. As a guideline for systematically managing and reducing waste from the manufacturing procedures, the Blister Pack Waste Reduction Project was initiated (waste reduction arising from blisters). This can be achieved by exploring the amount of waste arising from each type of blister to find out which drug blisters generate the highest amount of waste as well as analyzing and improving drugs under study to incur the least amount of waste. Besides, waste elimination operators who can recycle such waste instead of waste incineration must be sought after. The result is less plastic waste of approximately 38.9 tons per year which in turn, helps minimize the expenditures in waste elimination of approximately 200,000 Baht per year.

Implementation Project

Factor 1 : Machine model => Cutting concept

(Old Machine Model)

Waste : 17.11 Kg./Batch size 4000,000's

(New Machine Model)

Waste : 10.45 Kg./Batch size 4000,000's

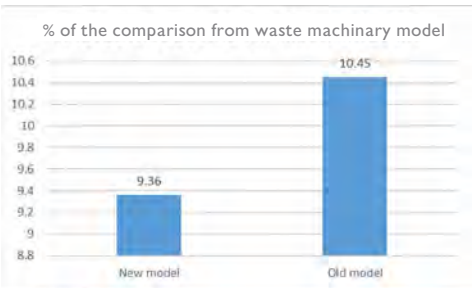
Implementation Project

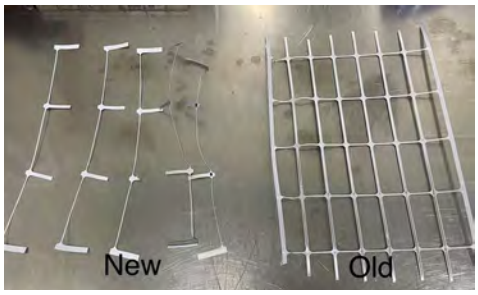
Factor 1 : Machine model => Cutting concept

Improvement Idea :

1. Adjust prodution plan by more utilize new machine model
2. Specify new cutting concept to New blister pack machine

Result :





Public Beach Cleaning Project at Bangkok Hospital Samui

Since Samui Island is one of the famous tourist attractions, the positive image and cleanliness of the area are the important reasons of this project. The objective is to promote the tourism of the island while encouraging more revenues for the communities and a higher number of tourists.

Thus, Bangkok Hospital Samui establishes the Public Beach Cleaning Project to adjust the beach landscape to be more suitable for vacation. The project is deemed part of the community activities as well as promotes tourism in the area, which in turn will bring more revenues to the community. There are 400 participants attending the project.

"From Waste to Merit, the Greatest Offering" Project

To promote an appropriate waste separation that will be beneficial to society, BDMS organizes the activity called "From Waste to Merit, the Greatest Offering" Project for all employees and customers. BDMS visited Wat Chak Daeng to learn about waste management. Wat Chak Daeng uses already-used products to create a new product; for example, pet bottles are recycled from the monk's yellow robe, house roofs are made from mild and fruit juice boxes, tables are made from bottle caps and pillows for bedridden patients, etc. Bangkok Hospital Headquarter donated 708 kilograms of pet bottles to Wat Chak Daeng and Paolo Hospital Phrapradaeng also donated 136 kilograms of pet bottles to Wat Chak Daeng for further use.

Water Stewardship

Floods and droughts caused by severe climate change significantly affect all living creatures, including business operations. BDMS; therefore, values the importance of water as one of the natural resources essential for consumption, particularly clean water which is considered key to BDMS business operations. BDMS is determined to improve water management throughout the supply chain by constantly developing the process, and technology to ensure utmost efficiency in water management.

Supporting the UN SDGs

6.3, 6.4 and 12.2

Target and Performance

2023

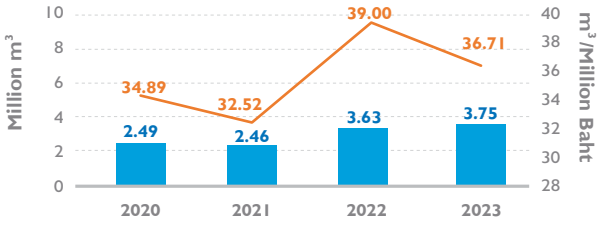
Target

Minimize water withdrawal **1%** per revenue from the base year 2022.

Performance

Minimize water withdrawal **5.88%** per revenue from the base year 2022.

Key Performance Dashboard

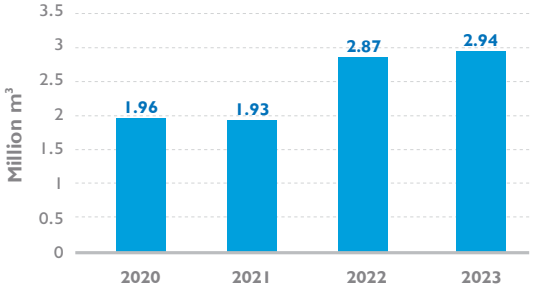


Total water withdrawal

3.75 million m³

Water withdrawal intensity

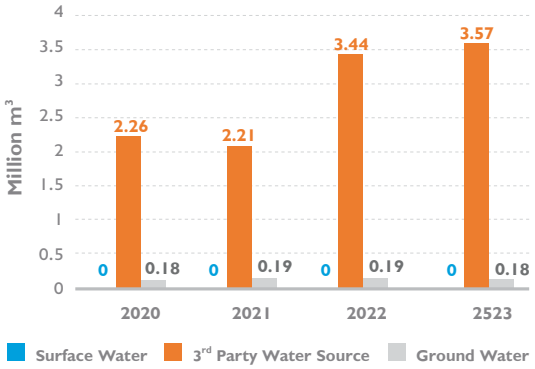
36.71 m³ per million Baht



Water discharge

2.94 million m³

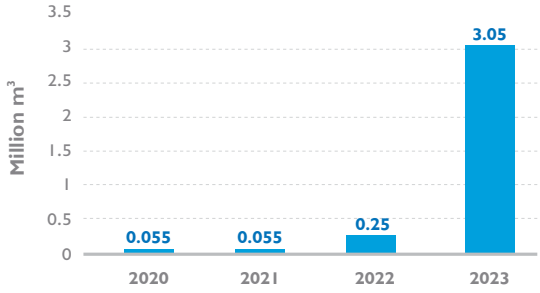
Total water withdrawal by source



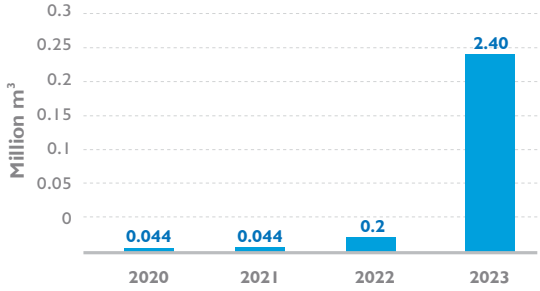
Total water consumption

0.81 Million m³

Water stress area data[1]



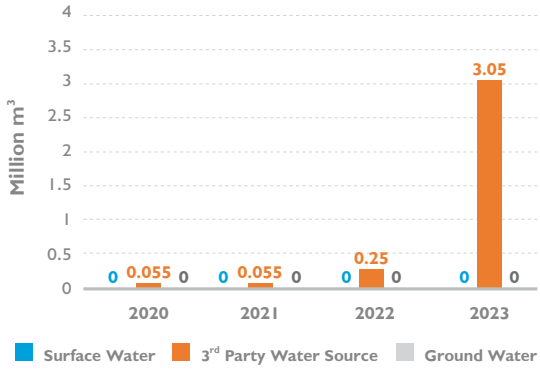
Water withdrawal **3.05** million m³



Water discharge

2.40 million m³

Total water withdrawal by source



Total water consumption

0.65 Million m³

[1]Departments located in the high and extremely high baseline water stress using Aqueduct Water Risk Atlas

Management Approach

BDMS enforces water resource management following BDMS Earth Healthcare Policy as well as operates the business in line with the water conservation framework. The objectives are to establish guidelines to achieve the strategic target covering risk assessment in water scarcity as well as to devise a water resource management plan at the corporate level with key partners.

Water Conservation Management

1 Establish the intention

The executives are responsible for enhancing efficiency and encouraging water resources management throughout the supply chain.

2 Assess risks, opportunities and impacts

Evaluate and manage the integrated water resources management covering physical risks, quantity, quality, regulations, and corporate image.

3 Set out objectives and policy

Establish the Environmental Sustainability Policy and set Sustainability Goals 2023 covering water resources management.

4 Implement

Adapt the water resources management throughout the supply chain.

5 Monitor the performance

Monitor the progress compared with the target and analyze the results to improve the operations.

6 Communicate with the stakeholders

Disseminate the strategy and share the progress while encouraging collaboration with external stakeholders.

Risk Assessment in Integrated Water Resources Management for Water Planning Throughout the Supply Chain

BDMS applies risk assessment in water resources management in all business sectors by performing an evaluation concerning several risk factors such as water consumption in each sector and baseline water stress, using the internationally certified Aqueduct Water Risk Atlas of the World Resources Institute (WRI). The results are thereafter categorized into 3 levels for further water management plans.

Water Risk Assessment Framework

Baseline Water Steees	Water Withdrawal	Water Risk
Low - Medium	Low - Medium Volume	Low Risk
	High Volume	Medium Risk
High - Extremely High	Low Volume	Low Risk
	Medium Volume	Medium Risk
	High Volume	High Risk

Water Management Plan

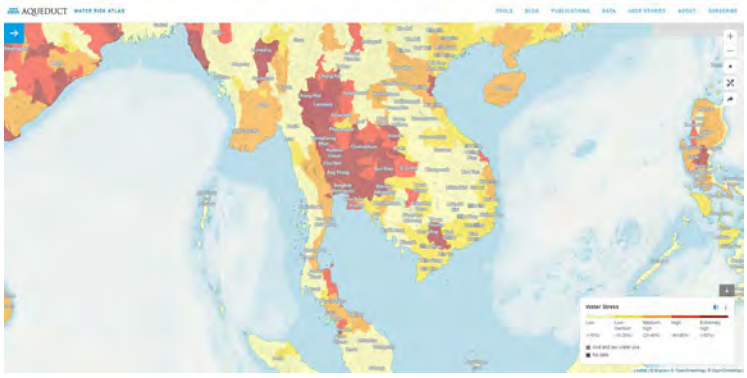
Low Risk
- Regularly monuitor water withdrawals through reporting systems

Medium Risk
- Improve water use effciency using the "5Rs" principle
- Regular monitor water withdrawals through reporting systems

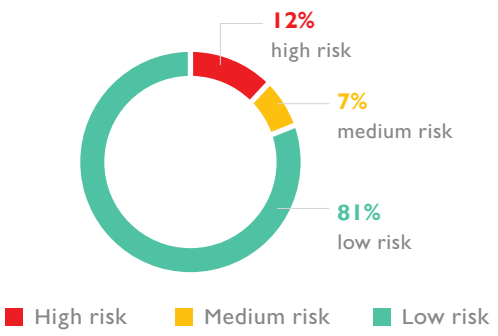
High Risk
- Improve water use effciency using the "5Rs" principle
- Regular monitor water withdrawals through reporting systems
- Assess local-level risks using the "Local Water Tool"
- Assess water risks for key suppliers

Water Risk Assessment Framework

This year, BDMS performed a review and an assessment regarding water risks for all BDMS hospitals and subsidiaries. The results have shown that 12% of BDMS hospitals and subsidiaries are in a high-risk area of water shortage. Thus, BDMS promotes the operations according to the water resources management plan while consistently monitoring the result of less water consumption (reviewed on 20 November 2023).



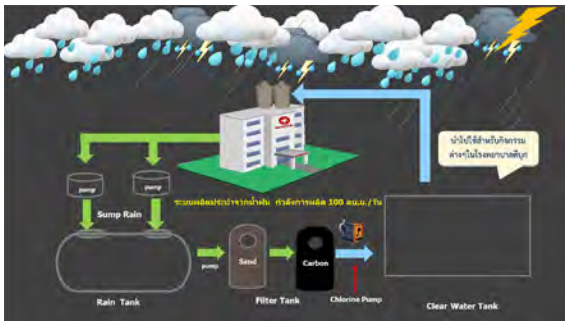
BDMS Subsidiaries by Water Risk Level

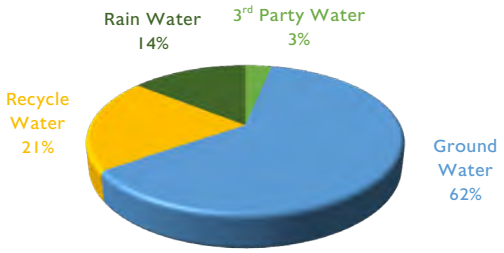


Sustainable Water System Management at Dibuk Hospital

Phuket is one of Thailand's major tourist attractions whereby lots of tourists from all around the world have visited. This is a key factor resulting in a higher number of populations each year which also makes Phuket confronted with water shortage, especially during summer, starting from December to March or equivalent to 5 months in total. Since water demands become higher during summer, resulting in inadequate water supply while water quality during some periods is below standard; for example, no chlorine is found in the water and the sediments are also inspected.

Dibuk Hospital reviews the water shortage problem and water quality which directly affect many activities of the hospital. Therefore, the hospital designed its water management plan with the aim to monitor water quality, enabling the hospital to handle the water shortage situation and have an adequate water supply for consumption. Besides, Dibuk Hospital's water management system renders the most efficient use of rainwater as one of the natural resources, having 14% of rainwater. Wastewater from the wastewater treatment process is recycled by filtration and chlorination, resulting in 21% of recycled water used in the hospital's sanitary system and plant watering.





The result shows that the hospital can control the quality of tap water within the criteria set forth by the Provincial Waterworks Authority and the amount of water reserves is over 80% of the total amount of water consumed. The hospital has adequate water reserves for consumption and in case of water shortage in total of 500 cubic meters, the hospital has adequate water reserves for consumption for 8 consecutive days (equivalent to an average of 60 cubic meters of water consumption per day). These 4 water management systems established by the hospital enable the hospital to minimize its water consumption from the Provincial Waterworks Authority of over 95% of the total amount of water consumption which in turn, helps lessen the expenditures of about 46,783 Baht/month or equals to 80% of expenditures paid to the Provincial Waterworks Authority. In addition, the hospital can reserve water in case of emergency for Bangkok Hospital Phuket, Bangkok Hospital Siriroj, including the community around the hospital. This project is awarded the first prize in the BDMS Awards 2023 in the Green Healthcare section.

Wastewater Management from the Septic Tank

Owing to the minimization of clean water resources, BDMS hospitals and subsidiaries strive to improve the quality of wastewater for recycling purposes and used in the procedures and services not related to the patients and customers. The main objective is to use this water to replace water consumption outside the building.

Bangkok Hospital Rayong and Bangkok Hospital Ratchasima have the initiative to establish a project to recycle treated wastewater. This can be achieved by using treated wastewater for plant watering purposes to enhance the efficiency of water consumption while simultaneously reducing the use of such treated wastewater in the hospital. The operation results can be seen as follows:

Bangkok Hospital Rayong establishes a water resources management plan, including efficient wastewater treatment procedures with the aim to use such water in the most efficient manner. This can be accomplished by recycling treated wastewater from the last septic tank and using this treated water to water trees and plants as well as clean the hospital's rooms. Thus, the hospital can reduce its water consumption by 5,952 units per year and can save water expenditures of approximately 270,100 Baht per year.

Bangkok Hospital Ratchasima launches the automatic plant watering project by recycling wastewater and rainwater to their utmost efficiency. Solar cells and loT systems are employed to monitor air and soil moisture to ensure appropriate timing of plant watering which is relevant to the plants' needs while minimizing water waste and manpower to accomplish the task. The project investment is about 245,000 Baht and can reduce water consumption of 2,304 units per year, and save water expenditures of 60,000 Baht per year, with a 4 year payback period.

Sustainable Water Treatment at Phyathai 3 Hospital

The wastewater treatment system of the hospital is a key factor illustrating its social responsibility as water must be treated according to the established standards and relevant laws prior to discharging to the public. In addition, sediments must be handled properly to ensure the utmost benefit and sustainable management. Therefore, the Engineering Department of Phyathai 3 Hospital implements the project by dividing it into 3 phases as indicated below:

1 Upstream

Install an automatic garbage conveyor to prevent any waste from getting into the system as well as enhance the efficiency of the wastewater treatment.

2 Middlestream

Improve the performance of the aeration tank, both in terms of the structure and operation method.

3 Downstream

Install the filter press to minimize expenditures arising from sludge pumping for the entire year and then reuse these pressed sludges to achieve the utmost benefit.

The outcomes of this project are listed below:

1. Wastewater treatment's efficiency is enhanced whereby BOD sustainably declines. Previously, BOD was at 15-18 mg/L but in July 2023, BOD was reported at 3 mg/L. In addition, the result shows that pressed sludges can be used for planting as they contain some minerals while coliform inspection is in line with the established criteria and no helminth eggs have been found.
2. Fewer waste is blocked inside the waste grating.
3. Minimize expenditures in getting rid of the sediments of about 240,000 Baht per year.
4. Reduce energy consumption by 72,713 kWh/year or equivalent to 349,751 Baht per year.
5. Sediments can be recycled and used as fertilizer. There are 40-50 bags of fertilizer per month (each bag weighs about 40 kilograms) and these fertilizers are given to the community.

The project is awarded the first runner-up prize in the BDMS Awards 2023 in the Green Healthcare section.

Appendix

About BDMS and About this Report

About BDMS

With the vision to achieve the leading tertiary healthcare service provider in Thailand, Bangkok Dusit Medical Services Public Company Limited strongly determines to provide patient treatment with high international standards and cutting-edge medical technology. Consequently, BDMS establishes a team of ethical and efficient medical personnel to provide safe and successful treatments to every patient.

Bangkok Dusit Medical Services Public Company Limited has been listed on The Stock Exchange of Thailand under the symbol "BDMS" as a healthcare service provider, including private hospitals and other businesses related to healthcare in Thailand and abroad. BDMS Headquarter is located at 2 Soi Soonvijai 7, New Phetchaburi Road, Bang Kapi, Huai Khwang, Bangkok 10310 Thailand.

BDMS currently manages 58 hospitals in Thailand and Cambodia, operating one-stop healthcare services such as preventive healthcare, treatment, and rehabilitation programs for both Thai and foreign customers. All BDMS services are certified with international quality standards.

To strengthen the medical service efficiency in all dimensions, BDMS launched the BDMS Center of Excellence in the subsidiary hospitals. The hospital integrated patient care management from world-class leading medical institutions while establishing clear guidelines per international standards.

BDMS hospitals collaborate as alliances in the regions where the tertiary hospitals (Hub) are responsible for patients with severe cases, exceeding the treatment capability of the subsidiary hospitals (Spoke). This collaborative network helps ensure the utmost and mutual benefits on the resources and medical personnel management. Moreover, BDMS embrace other businesses related to healthcare such as medical laboratory, manufacturing of medicine and saline, pharmacy and medical supply store.

BDMS Network

Bangkok Hospital

Medical Hub of Asia Pacific, Moving towards Smart Healthcare

Samitivej Hospital

Thailand's leading hospital in comprehensive medical care, cutting-edge technology and supportive infrastructure

BNH Hospital

Your Trustworthy Lifetime Healthcare Companion

Phyathai Hospital

Becoming the leader in creating good health and patient well-being

Paolo Hospital

Thailand's leading hospital in providing the best treatment experience to patients with outstanding results and innovation

Royal Bangkok Hospital

A hospital group for healthcare services in Thailand and abroad

BDMS Wellness Clinic

Striving for preventive care, rehabilitation, and promoting a long, healthy, and fulfilling life

Chiva Transitional Care Hospital

A care facility specializing in rehabilitation for post-operative and elderly patients

Businesses Related to Healthcare

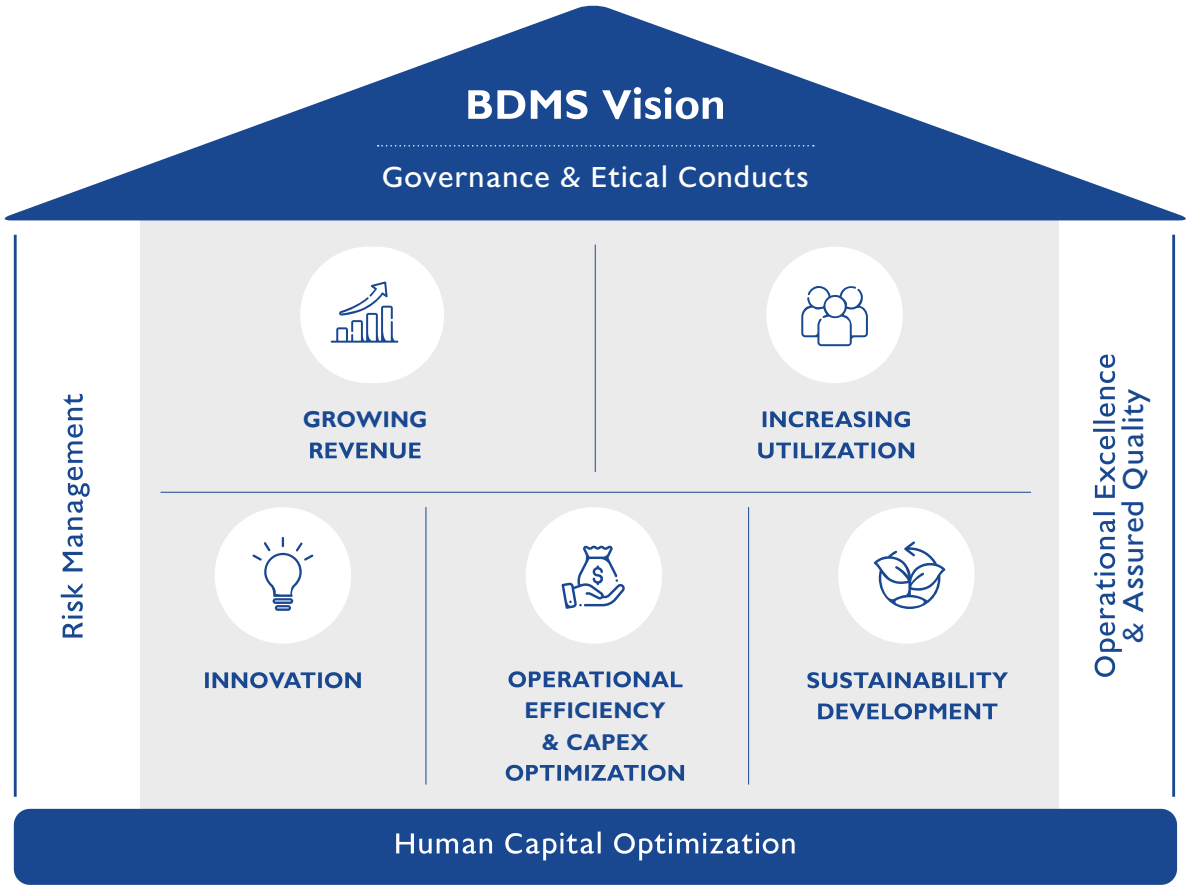
Manufacturing and distribution of medicine, saline and medical supplies, medical laboratories, air ambulance and other services

Business Member and Association

As a member of business associations and organizations, BDMS represents a healthcare service provider and a company listed on The Stock Exchange of Thailand. Examples of the business associations with BDMS are The Stock Exchange of Thailand, The Securities and Exchange Commission, The Thai Institute of Directors Association (IOD), The Private Hospital Association and the Medical Association of Thailand.

BDMS Business Strategy

BDMS devises a strategy focusing on expanding the customer base with reasonable medical fees, enhancing patient transfer efficiency, and the capability of being the Center of Excellence. As a result, BDMS expends the customer base from insurance and contracts while increasing occupancy rates and medical equipment. In addition, BDMS collaborates with international medical companies in transforming into a Smart Virtual Hospital and fosters innovations such as health applications. Regarding sustainability, BDMS emphasizes quality and safety standards, good corporate governance as well as social and environmental responsibilities. With such strong determination, BDMS continuously receives awards in the related field.



BDMS Value Chain

BDMS Value Chain Process

Screening

Screen patients before providing the services to identify the hospital's capability considering current resources and prioritize emergency patients.

Admission

Manage patient care throughout the service process in the hospital, covering outpatient registration, inpatient admission per criteria and prioritizing healthcare needs for inpatients. Other services include communicating ward guidelines, treatment and fees to the patients and their families.

Continuity of Care

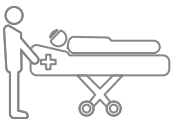
Ensure continuous patient care from certified doctors, nurses and other medical specialists throughout the service process, such as emergency assistance, inpatient admission, diagnosis, treatment, outpatient treatment and other services appropriate to the patients.

Discharge, Referral, and Follow-Up

Collaborate with medical personnel and external sectors on proper referral or discharge depending on the patient's condition. After, the hospitals must summarize the services to the patients at the end of treatment and inform health monitoring guidelines. Complex medical records must be maintained for the related medical personnel in case of outpatient treatment. In addition, the hospitals must inform the patients and families of the guidelines for continuous care as necessary while managing and following up with patients who refuse treatment or flee from the hospital.

Transfer of Patients

Safely transfer patients in line with the treatment acceptance and capability of the receiving hospitals that will continue the treatment. Record patient data systematically.



Transportation

Perform patient transportation in compliance with the quality and safety standards per rules and regulations regarding patient transportation.

About Sustainability Report 2023

Bangkok Dusit Medical Services PLC (BDMS) has published the Sustainability Report for 11th consecutive year following the Global Reporting Initiative Standards (GRI Standards). Information disclosure in the report is based on the Core option of the GRI Standards with the date from January 1st to December 31st, 2023, continued from the previous Sustainability Report Volume 10 (published on March 7, 2023). The report is published to update sustainability performance progress covering the economic, social, environmental, and corporate governance aspects. In addition, BDMS strives to become the leader in healthcare service excellence accredited under international standards with utmost customer satisfaction in response to all stakeholders' expectations.

Audit by External Organization

TUV NORD Thailand Co., LTD. is responsible for data credibility evaluation in BDMS Sustainability Report 2023. The company is a reliable independent sector globally certified. The information evaluated includes GRI302-1, GRI303-5, GRI305-1, GRI305-2, GRI306-3, GRI306-4, GRI306-5, GRI403-9 and GRI3-1 (See further details on page 177)

Organizations in Scope of Report

Human resources management performance includes 100% of BDMS subsidiaries, while energy, water, waste and safety performance cover all hospitals and subsidiaries. (See further details on page 175)

Contacting Channels

For any inquiries on BDMS Sustainability Report 2023
please contact the Corporate Sustainability Development Department
Bangkok Dusit Medical Services Public Co., Ltd. at

2 Soi Soonvijai 7 New Petchburi Rd.,
Bangkapi, Huai Khwang,
Bangkok 10310, Thailand.

0 2310 3133

bdmscsd@bdms.co.th

www.bdms.co.th

BDMS Reporting Boundary 2023

No.	Hospital / Company	Economic	Environment				Society	
			GHG	Energy	Water	Waste	Human Capital	Occupational Health
Bangkok Hospital Group								
1	Bangkok Hospital	•	•	•	•	•	•	•
2	Bangkok Hospital HuaHin	•	•	•	•	•	•	•
3	Bangkok Hospital Sanamchan	•	•	•	•	•	•	•
4	Bangkok Hospital Muangraj	•	•	•	•	•	•	•
5	Bangkok Hospital Phetchaburi	•	•	•	•	•	•	•
6	Bangkok Hospital Pattaya	•	•	•	•	•	•	•
7	Bangkok Hospital Rayong	•	•	•	•	•	•	•
8	Bangkok Rayong Cancer Hospital	•	•	•	•	•	•	•
9	Bangkok Hospital Pluakdaeng	•	NR	NR	NR	NR	•	NR
10	Bangkok Hospital Chanthaburi	•	•	•	•	•	•	•
11	Bangkok Hospital Trat	•	•	•	•	•	•	•
12	Koh Chang International Hospital	•	•	•	•	•	•	•
13	Bangkok Hospital Chiang Mai	•	•	•	•	•	•	•
14	Bangkok Hospital Ratchasima	•	•	•	•	•	•	•
15	Bangkok Hospital Pakchong	•	•	•	•	•	•	•
16	Bangkok Hospital Udon	•	•	•	•	•	•	•
17	Bangkok Hospital Phitsanulok	•	•	•	•	•	•	•
18	Bangkok Hospital Khon Kaen	•	•	•	•	•	•	•
19	Bangkok Hospital Phuket	•	•	•	•	•	•	•
20	Bangkok Hospital Hat Yai	•	•	•	•	•	•	•
21	Bangkok Hospital Samui	•	•	•	•	•	•	•
22	Phangan International Hospital	•	•	•	•	•	•	•
23	Bangkok Hospital Surat	•	•	•	•	•	•	•
24	Bangkok Hospital Chiang Rai	•	•	•	•	•	•	•
25	Bangkok Hospital Siriroj	•	•	•	•	•	•	•
Samitivej Group								
26	Samitivej Sukhumvit Hospital	•	•	•	•	•	•	•
27	Japanese Hospital by Samitivej	•	•	•	•	•	•	•
28	Samitivej Srinakarin Hospital	•	•	•	•	•	•	•
29	Samitivej Sriracha Hospital	•	•	•	•	•	•	•
30	Samitivej Thonburi Hospital	•	•	•	•	•	•	•
31	Samitivej Chonburi Hospital	•	•	•	•	•	•	•
32	Samitivej Chinatown Hospital	•	•	•	•	•	•	•
BNH								
33	BNH Hospital	•	•	•	•	•	•	•
Royal Hospital Group								
34	Royal Angkor International Hospital	•	•	•	•	•	•	•
35	Royal Phnom Penh Hospital	•	•	•	•	•	•	•
Phyathai Hospital Group								
36	Phyathai 1 Hospital	•	•	•	•	•	•	•
37	Phyathai 2 Hospital	•	•	•	•	•	•	•
38	Phyathai 3 Hospital	•	•	•	•	•	•	•
39	Phyathai Sriracha Hospital	•	•	•	•	•	•	•
40	Phyathai Bangphra Hospital	•	•	•	•	•	•	•
41	Phyathai Nawamin Hospital	•	•	•	•	•	•	•

No.	Hospital / Company	Economic	Environment				Society	
			GHG	Energy	Water	Waste	Human Capital	Occupational Health
Paolo Hospital Group								
42	Paolo Hospital Phaholyothin	•	•	•	•	•	•	•
43	Paolo Hospital Rangsit	•	•	•	•	•	•	•
44	Paolo Hospital Kaset	•	•	•	•	•	•	•
45	Paolo Hospital Samutprakarn	•	•	•	•	•	•	•
46	Paolo Hospital Chokchai 4	•	•	•	•	•	•	•
47	Paolo Hospital Phrapradaeng	•	•	•	•	•	•	•
Community Hospital								
48	Sri Rayong Hospital	•	•	•	•	•	•	•
49	Tepakorn Hospital	•	•	•	•	•	•	•
50	Dibuk Hospital	•	•	•	•	•	•	•
51	Jomtien Hospital	•	•	•	•	•	•	•
Business Related to Medical Services								
52	BDMS Wellness Clinic Co.,Ltd.	•	•	•	•	•	•	•
53	A.N.B. Laboratories Co.,Ltd.	•	•	•	•	•	•	•
54	The Medic Pharma Co.,Ltd.	•	•	•	•	•	•	•
55	Save Drug Center Co.,Ltd.	•	•	•	•	•	•	•
56	National Healthcare Systems Co.,Ltd.	•	•	•	•	•	•	•
57	N Health Pathology Co.,Ltd.	•					•	
58	N Health Cambodia Co.,Ltd. (Cambodia)	•					•	
59	N Health Myanmar Co.,Ltd. (Myanmar)	•					NR	
60	Bio Molecular Laboratories (Thailand) Co.,Ltd.	•					•	•
61	First Health Food Co.,Ltd.	•					•	
	% Compared to business operations	100	100	100	100	100	100	100

Remark

NR = Non Relevance (The data is not relevant or has no significance to the overall performance of BDMS or is not included this year)

Office/Investment/Sales/Service where the collection of environmental, safety and occupational illness data is not necessary

No. 9 Started operating in 2023

No. 12 Report infectious waste only

No. 59 Are in the process of human resources

TÜVNORD

Independent Assurance Statement

Introduction and Engagement

Bangkok Dusit Medical Services Public Company Limited (hereafter 'BDMS') commissioned TÜV NORD (Thailand) Ltd. (hereafter 'TUVN') for Sustainability Assurance Engagement. TUV NORD provide independent assurance on BDMS's sustainability information, (hereinafter 'the Report'), for the applied reporting period for the calendar year 2023. This assurance engagement was conducted against the Global Reporting Initiative Standards a limited level of assurance and TUV NORD's verification procedure is based on current best practice, is in accordance with ISAE 3000 and ISAE 3410 (limited assurance). The Report covers BDMS's Sustainability Report for the period 1st January 2023 to 31st December 2023. The desk review, verification and interviewing were conducted in Dec.2023 and Jan.2024.

Scope, Boundary and Limitations of Assurance

The scope of the assurance includes Sustainability Report indicators in the report as per the specify disclosures required by GRI. In particular, the assurance engagement includes the following:

- Verification of the reliability of the GRI Standards Disclosure on the Environmental and Social indicators
- Other relevant rules, including the host country legislation and sustainability criteria. The independent assurance is not meant to provide any consultation to the reporting organization. However, stated requests for clarifications and/or corrective actions may provide input for improvement of the sustainability report. The sustainability report boundary encompasses.

The reporting aspect boundaries are set out in the Report covering the sustainability performance of Bangkok Hospital Group, Samitivej Group, Phyathai Hospital Group, BNH hospital, Paolo Hospital Group ,Royal Hospital Group in Cambodia, Community Hospital, total 51 Hospitals and 10 companies in Business Related to Medical Services .

Our engagement did not include an assessment of the adequacy or the effectiveness of BDMS's strategy or management of sustainability related issues. During the assurance process, TUVN did not come across the limitations to the scope of the agreed assurance engagement. No external stakeholders were interviewed as a part of the sustainability engagement for the reporting period.

The below material aspects were verified by the assurance team:

Material aspects	**GRI Disclosure Number**
Energy consumption within the organization	GRI 302-1
Water consumption	GRI 303-5(2018)
Direct (Scope 1) GHG emissions	GRI 305-1
Indirect (Scope 2) GHG emissions	GRI 305-2
Waste generated.	GRI 306-3 (2020)
Waste diverted from disposal	GRI 306-4 (2020)
Waste detected to disposal	GRI 306-5 (2020)
Work-related injuries	GRI 403-9(2018)
Process to determine material topics	GRI 3-1(2021)

TÜV NORD (Thailand) Ltd.
1858/75-76 16th Floor, Interlink Tower,
Debaratna Road, Bangna Tai, Bangna,
Bangkok 10260 Thailand
Tel: +66 2751 4050
Fax: +66 2751 4048
thailand@tuv-nord.com
www.tuv-nord.com/th

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Verification Methodology

This assurance engagement was planned and carried out in accordance with the GRI Standards and TUV NORD's verification procedure, The Report was evaluated against the following criteria:

- International Standard on Assurance Engagement ISAE 3000 Assurance Engagements Other than Audits or Reviews of Historical Financial Information and ISAE 3410 Assurance Engagements on Greenhouse Gas Statements

- Application of the principles and requirements of the Global Reporting Initiative Standards.

During the assurance engagement, TUVN adopted a risk-based approach, concentrating on verification efforts on the significant BDMS's context and its stakeholders. TUVN has sampled location namely Phyathai 3 Hospital, Bangkok Hospital Trat, Koh Chang International Hospital, Royal Angkor International, The Medic Pharma, A.N.B. Laboratories Bangkok Hospital and Head Quarter, some locations have onsite visited. TUVN has verified reliability of GRI Standards Disclosure on the Environmental and Social indicators made in the Report. In doing so:

- TUVN examined and reviewed the documents, data and other information made available by BDMS for the reported performance indicators;

- TUVN conducted interviews with key representatives including data owners and decision-makers from different functions of the Company during the verification;

- TUVN verified sample-based checks of the processes for generating, gathering and managing the quantitative data and qualitative information included in the Report for the reporting period.

Opportunities for Improvement

There is not any observation reported to the management of BDMS are considered in drawing our conclusions on the period Report. In any cases, it is not affected in our conclusion.

TÜV NORD (Thailand) Ltd.
1858/75-76 16th Floor, Interlink Tower,
Debaratna Road, Bangna Tai, Bangna,
Bangkok 10260 Thailand
Tel: +66 2751 4050
Fax: +66 2751 4048
thailand@tuv-nord.com
www.tuv-nord.com/th

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Conclusions

Based on the procedures we have performed, nothing has come to our attention that causes us to believe that the information subject to the limited level assurance engagement was not prepared, in all sustainability information is not reliable in specific topics, with regards to the reporting criteria.

TUVN did perform any assurance of procedures on the prospective information, Consequently, TUVN draws conclusion on the prospective information. This assurance statement has been prepared in accordance with the terms of our engagement. It does include detailed testing of source data or the operating effectiveness of processes, internal controls and consequently they do enable us to obtain the assurance necessary to become aware of all significant matters that might be identified in a limited level assurance engagement.

In our view, the Report could be adherence to Inclusivity, Materiality, Responsiveness, Reliability, and Time frame.

TUVN's responsibility regarding this verification is in accordance with the agreed scope of work which includes non-financial quantitative and qualitative information (Sustainability Performance – environmental and social indicators) prepared by BDMS in the Report. This assurance engagement is based on the assumption that the data and the information provided to TUVN by BDMS are complete and reliable.

TUVN expressly disclaims any liability or co-responsibility for any decision a person or entity would make based on this Assurance Statement. The intended users of this assurance statement are the management of BDMS.

The management of the Company is responsible for the information provided in the Report as well as the process of collecting, analyzing, and reporting the information presented in web-based and printed Reports, including website maintenance and its integrity.

TUV's Competence and Independence

TUVN is an independent, neutral, third-party providing sustainability services, with qualified environmental and social assurance specialists. TUVN states its independence and impartiality with regard to this assurance engagement. In the reporting year, TUVN 's assurance team did not work with BDMS on any engagement that could compromise the independence or impartiality of our findings, conclusions, and recommendations. TUVN 's assurance team was not involved in the preparation of any content or data included in the Report, apart from this Assurance Statement. TUVN maintains complete impartiality toward any people interviewed during the assurance engagement.

Ms. Numfon Sangeamruk

Lead Verifier

TÜV NORD (Thailand) Ltd.

Bangkok 10260 Thailand

TÜVNORD Digitally signed by Numfon Sangeamruk Date: 2024.02.29 12:09:26 +07'00'

Date: 29 February 2024/Place: Bangkok, Thailand Project Reference No: TUVN/BDMS/SA/2023

TÜV NORD (Thailand) Ltd.
1858/75-76 16th Floor, Interlink Tower,
Debaratna Road, Bangna Tai, Bangna,
Bangkok 10260 Thailand
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www.tuv-nord.com/th

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Bangkok Dusit Medical Services Public Company Limited