

# 2

## Business Performance

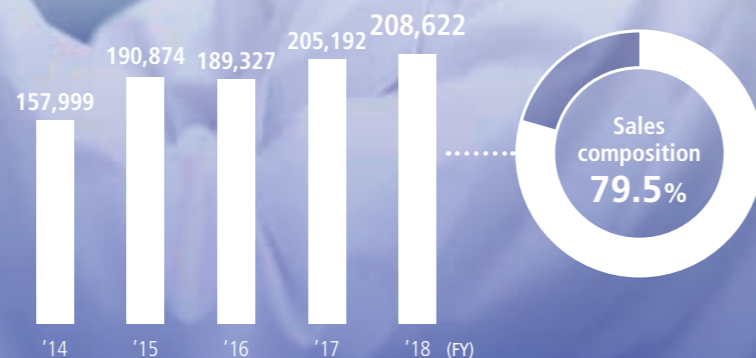
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# Dispensing Pharmacy Business

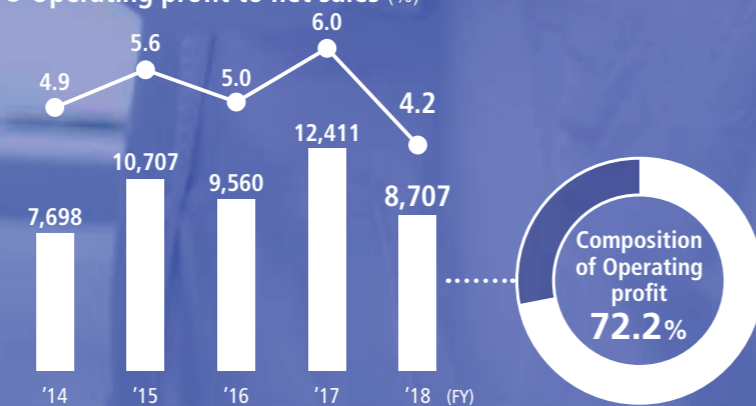
Nihon Chouzai Co., Ltd. and Dispensing Pharmacy Subsidiaries



Net sales (millions of yen)



Operating profit (millions of yen)  
Operating profit to net sales (%)



## Long-Term Vision — Rapid Progress toward Industry Restructuring

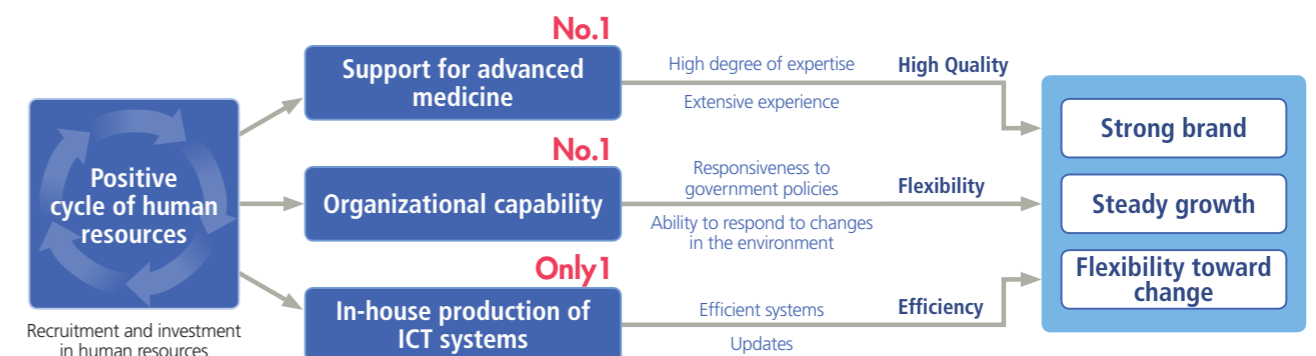
### Nihon Chouzai's Growth Strategy

Nihon Chouzai's growth strategy in the Dispensing Pharmacy Business consists of three key factors centered on the positive cycle of human resources, which is the most important.

- 1 Support for advanced medicine
- 2 Organizational capability
- 3 In-house production of ICT systems

"Support for advanced medicine," the first strength that we developed since our founding, ensures that we have pharmacists with a high degree of expertise and extensive experience in the Company, and it creates high-value-added medical services that our rivals cannot surpass. "Organizational capability," our second strength, has enabled us to steadily overcome drug price and dispensing fee revisions with our strong responsiveness to government policies and measures and a changing environment. "In-house production of ICT systems," our third strength, creates the efficient systems needed for future pharmacy management through ongoing system investment, and we have achieved even greater efficiency with ICT by continuously updating it.

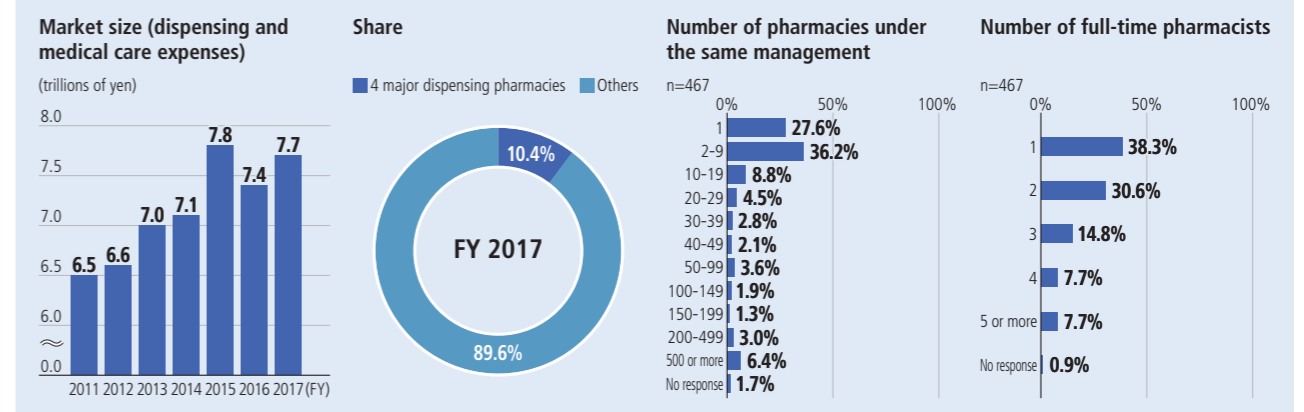
#### Growth strategy



In the dispensing pharmacy industry, government-initiated drug price and dispensing fee revisions are performed, and the industry is said to be strongly regulated by government. With the rapid aging of the population as we head to 2025, the government has been implementing measures in rapid succession to control increasing medical costs. Continued severe drug price and dispensing fee revisions are expected due to the impact of tight financial

conditions. This harsh business environment will further increase the pressure on the dispensing pharmacy industry to restructure, and a considerable degree of consolidation can be expected to follow. Nihon Chouzai will successfully negotiate this industry restructuring with a strong growth strategy and seek further business expansion.

#### Market environment



Market size and share: Trend of Dispensing and Medical Care Expenses, Ministry of Health, Labour and Welfare, prepared by Nihon Chouzai based on the securities reports of each company  
Number of pharmacies under the same management and number of full-time pharmacists: Fact-Finding Survey Report for Achieving a Vision of Pharmacies for Patients, March 31, 2017, Ministry of Health, Labour and Welfare



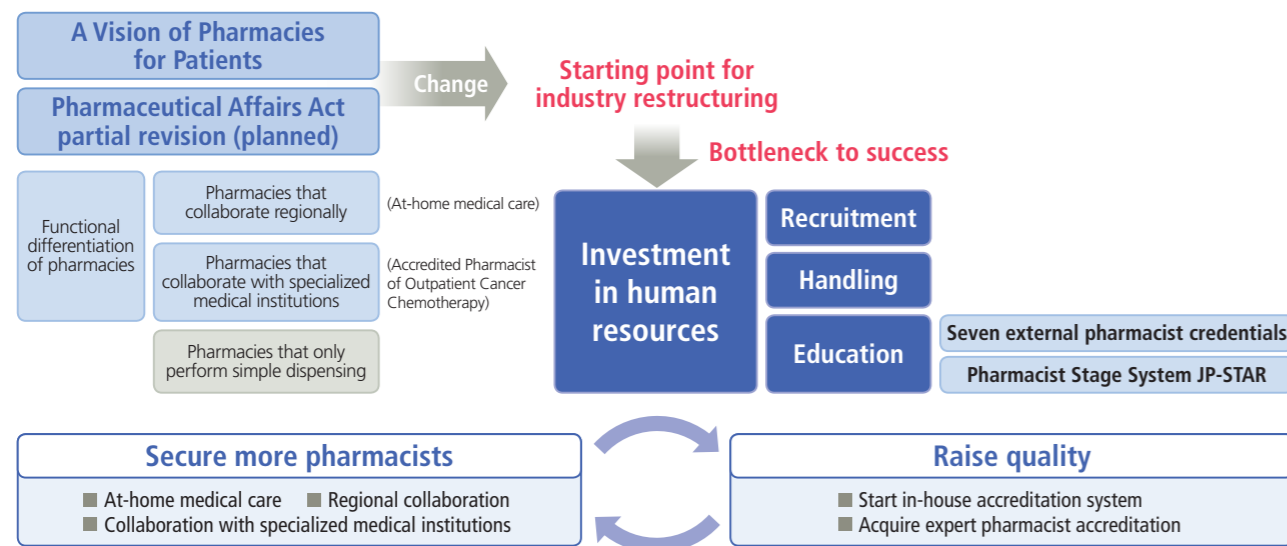
# Growth Strategy: Achieve a Positive Cycle

## Investment in Human Resources

Nihon Chouzai views people who support the Company as essential management resources and continuously invests in human resources. We are recognized within the industry as a company with topnotch, quality education, as exemplified by our providing various career opportunities and training.

Nihon Chouzai believes that "A Vision of Pharmacies for Patients" announced by the Ministry of Health, Labour and Welfare in October 2015, the proposed partial revision of the Pharmaceutical Affairs Act submitted to an ordinary session of the Diet, and the "strengthening of the interpersonal relations

skills of pharmacists," common to both of these, will be the starting point of industry restructuring. It is expected that a higher level of interpersonal skills will be required than before and that the compensation structure will be balanced. Anticipating that these major, unprecedented changes will be the starting point of industry restructuring, Nihon Chouzai has made strategic resource investments for several years in people, who are the bottleneck to successful restructuring, and the foundation for growth is now in place.



### Investment in human resources

Both "A Vision of Pharmacies for Patient" and the partially-revised Pharmaceutical Affairs Act calls for pharmacists and pharmacies to provide more efficient product services and stronger interpersonal service skills.

More efficient product services indicate that a portion of dispensing services has been replaced by the increasing use of internet communications technology. The strengthening of interpersonal service skills also requires the implementation of at-home medical care and support for advanced medicine, and inevitably many pharmacists with expertise will be required. We view these changes as an opportunity to continue investing in human resources, which will be an important factor for the industry's successful restructuring as we steadily prepare for medium- and long-term growth.

#### A Vision of Pharmacies for Patients

A Vision of Pharmacies for Patients indicates that all pharmacies will be restructured into family pharmacists and family pharmacies by 2025. We are encouraging the functional differentiation of pharmacies into two types: those with health support functions and those with advanced pharmacology management functions. The vision also indicates that the skills required of pharmacists will shift from product skills to interpersonal service skills.

#### Revised Pharmaceutical Affairs Act (Planned)

Certain revisions to the Pharmaceutical Affairs Act have been submitted to an ordinary session of the Diet in fiscal 2019 and are currently being discussed. It has been proposed that dispensing pharmacies be functionally differentiated into pharmacies that collaborate with medical institutions and nursing care providers, pharmacies that collaborate with specialized medical institutions that perform advanced medicine, and pharmacies that only perform simple dispensing.

#### Securing more pharmacists

A major component of Japan's population is the baby boomer generation born during the baby boom between 1947 and 1949. As we head to 2025, when all baby boomers will be over the age of 75, it will be essential to control increasing medical expenses, and the need for at-home medical care will increase. In light of this, it will be essential that future pharmacists and pharmacies address at-home medical care. At-home medical care, wherein a pharmacist visits a patient's home, is difficult for a pharmacy with only one pharmacist to address. The number of new recruits is an important factor in increasing the number of pharmacists per pharmacy.

#### Raise quality

Future pharmacists and pharmacies need to have the expertise to perform at-home medical care and advanced medicine based on family pharmacist and pharmacy functions. Today, it is said that around 80% of cancer patients are treated as outpatients, and the importance of patient follow-up by pharmacists is increasing. It is difficult to handle advanced medicine with pharmacy work experience alone, so we are trying to raise the quality of pharmacists through active participation in hospital training and other means.

## Recruitment of High-quality Pharmacists

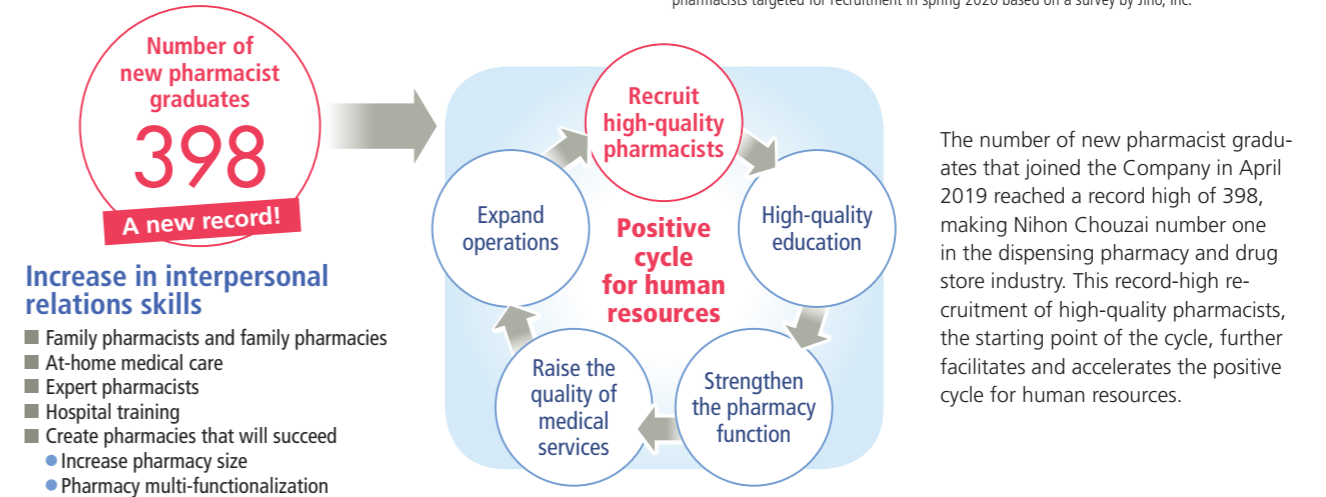
Because the pharmacist shortage in the dispensing pharmacy industry has continued for many years, the recruitment of pharmacists, who are essential to the long-term growth of the Company, has become a key management issue.

As a result of taking a strategic approach to recruitment activities, Nihon Chouzai has increased its recruitment of pharmacists and recruited high-quality pharmacists with the goal of providing advanced medical care and at-home medical care. In addition, pharmacists play an active role in various departments utilizing

their expertise thanks to investment in human resources, such as education and customer service and the preparation of a variety of career plans. The proportion of female pharmacists, who account for the majority of employees, is high at around 70%, and it is imperative and we must strengthen our efforts to advance women in the workplace. The active role played by pharmacists with diverse backgrounds and a wide range of experience has become the driving force behind Nihon Chouzai's growth.

### Results No.1\* in the dispensing pharmacy and drugstore industry

\* The number of pharmacists entering major pharmacy chains in spring 2019 and the number of new pharmacists targeted for recruitment in spring 2020 based on a survey by Jiho, Inc.



The number of new pharmacist graduates that joined the Company in April 2019 reached a record high of 398, making Nihon Chouzai number one in the dispensing pharmacy and drugstore industry. This record-high recruitment of high-quality pharmacists, the starting point of the cycle, further facilitates and accelerates the positive cycle for human resources.

## High-quality Education

Although we have established a quality education system, we launched the Pharmacist Stage System JP-STAR in April 2018, in addition to our existing 15-step-up training. Through training and self-study, pharmacists can advance their stage by obtaining knowledge and technology, and we look forward to improvements in their expertise and motivation. Also, since it is extremely difficult to acquire the seven external pharmacist credentials for expert pharmacists through pharmacy work experience alone, the Company totally supports pharmacists, even with costs, by encouraging them to participate in hospital training at more than 15 locations nationwide.



### Personnel system JP-STAR, the Pharmacist Stage System

\* Started operation in April 2018



#### Seven external pharmacist credentials for expert pharmacists

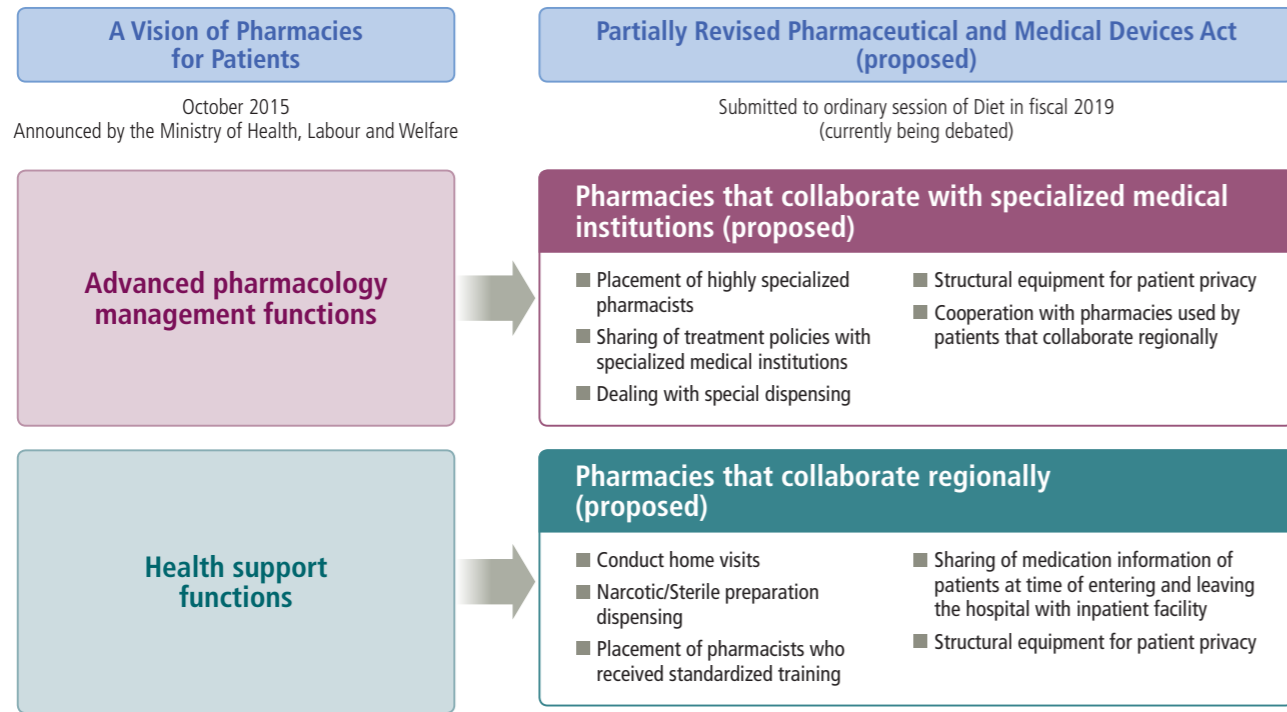
1. Accredited Pharmacist of Outpatient Cancer Chemotherapy
2. Expert Pharmacist (certified) in Kidney Disease Drug Therapy
3. Nutrition Support Team Expert Therapist
4. Board Certified Pharmacist in Diabetes Drug Therapy
5. Board Certified Pharmacist in Palliative Pharmacy
6. Expert Pharmacist in Cancer
7. Board Certified Pharmacist in HIV Infection Drug Therapy

## Growth Strategy: Achieve a Positive Cycle

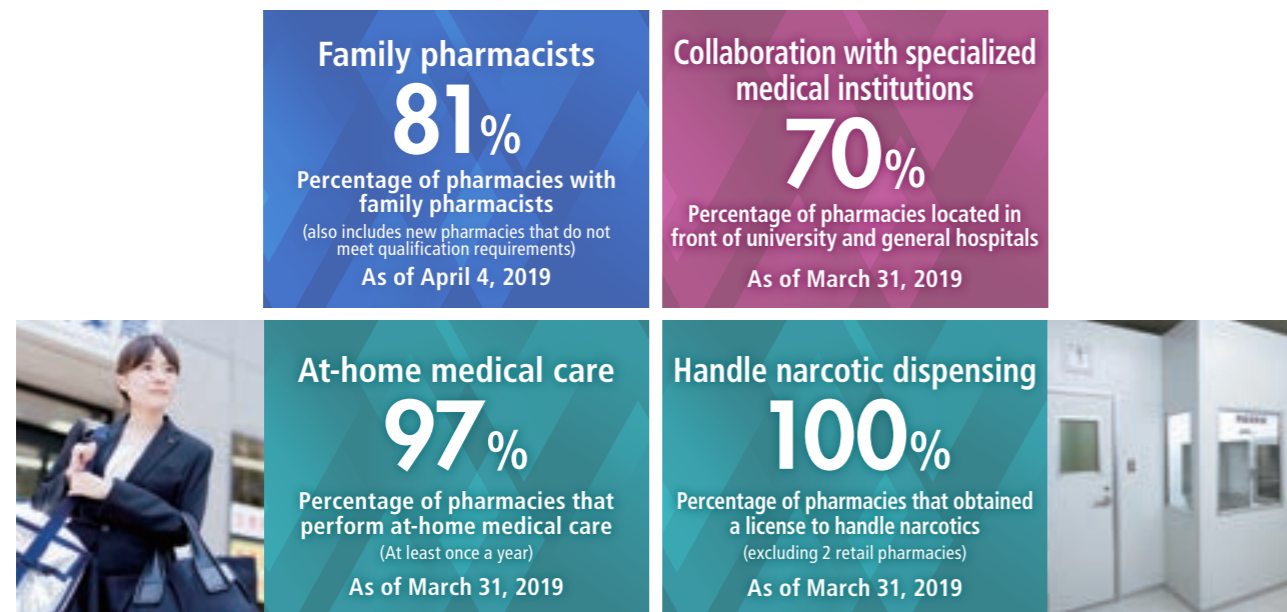
### Strengthen Pharmacy Function

A Vision of Pharmacies for Patients, announced by the Ministry of Health, Labour and Welfare, specifically indicated the functions required of future pharmacists and pharmacies. Similarly, the partially revised Pharmaceutical and Medical Devices Act submitted to an ordinary session of the Diet in fiscal 2019 also indicated the

need to strengthen interpersonal relations skills. What is required of both is to control increasing medical costs and to continue to provide efficient, high-quality medical care.



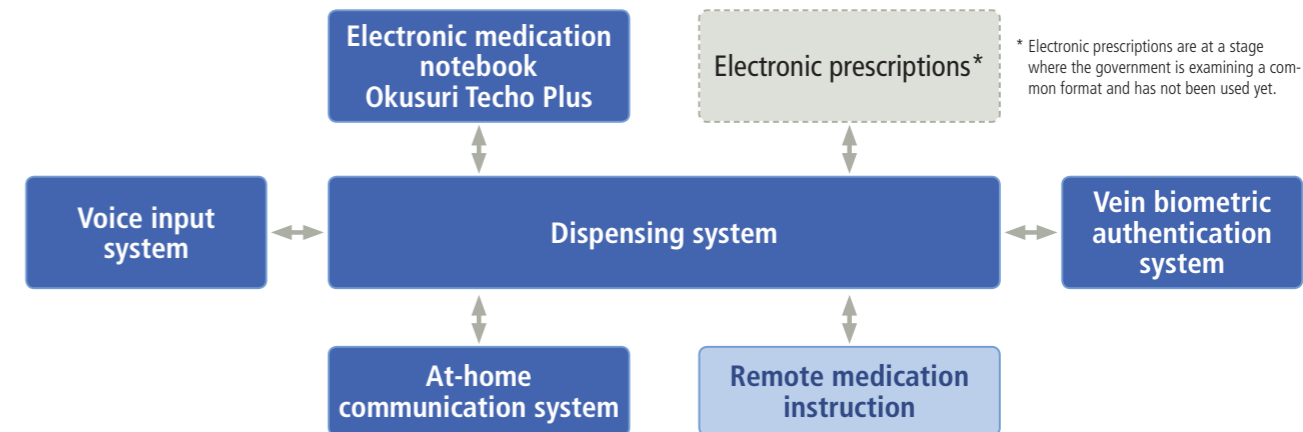
Website of the Ministry of Health, Labour and Welfare: Excerpt from the proposed law at the 198th ordinary session of the Diet



### Quality Improvement of Medical Services



System linkage utilizing ICT



**Dispensing system**

Nihon Chouzai has been investing in ICT for many years and is the only company in the dispensing pharmacy industry to develop by itself and operate a dispensing system for use in pharmacy work. Our proprietary dispensing system helps streamline work and supports pharmacists' work by enabling linkage with the at-home communication system and electronic medication notebook.

**Voice input system**

We have introduced a voice input system that assists with the input of medication history after the pharmacist has provided the medication instructions. The system's voice recognition function is highly accurate, and it supports technical terminology. At pharmacies that have introduced this system, the time it takes to input medication history can be shortened and the entry can be updated.

**Electronic medication notebook Okusuri Techo Plus**

The electronic medication notebook Okusuri Techo Plus links with the dispensing system to enable centralized management of medication history. Furthermore, the electronic notebook is also equipped with a personal health record (PHR) function that offers tremendous convenience by linking data from weight scales and blood glucose measuring devices and helps manage the patient's daily habits and health.

**At-home communication system**

We have devised a system that enables the pharmacist to access the at-home communication system using a tablet PC that can be carried around when performing at-home medical care, and records of past history and at-home medical care can be checked and entered on the spot. The system is used as a tool to streamline the work of pharmacists who conduct at-home medical care and collaborate with local doctors, thus providing high-quality medical care.

**Vein biometric authentication system**

Nihon Chouzai has introduced a vein biometric authentication system utilizing finger veins that is linked to a dispensing system. This system applies a time stamp for work performed and guarantees the work's authenticity. At the same time, work can be managed, and this promotes work-style reforms by optimizing working hours.

**Remote medication instruction**

Currently, remote medication instruction is only allowed in National Strategic Special Zones in Aichi Prefecture, Fukuoka City in Fukuoka Prefecture, and Yabu City in Hyogo Prefecture. Nine patients (as of March 31, 2019) have received such instruction. Nihon Chouzai registered a business that performs remote medication instruction in the National Strategic Special Zones in Aichi Prefecture and Fukuoka City in Fukuoka Prefecture, and conducted remote medication instruction in Aichi Prefecture in February 2019. For patients in areas with no pharmacies, pharmacists remotely explain the medicines and work to improve patient convenience.

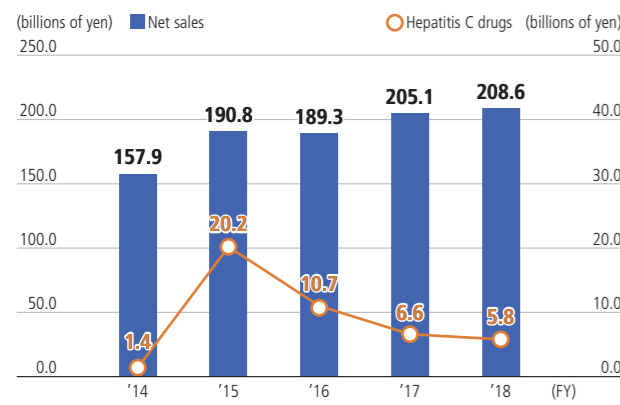


## Growth Strategy: Achieve a Positive Cycle

### Expand Business Operations

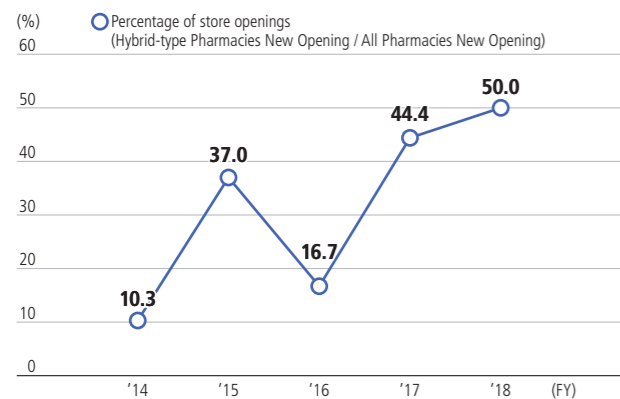
#### Net sales

Sales continued to steadily increase despite the effects of drug price and dispensing fee revisions. The sales amount of expensive hepatitis C drug use was cut in half in fiscal 2016, peaking at 20.2 billion yen in fiscal 2015, and it is now around 5.0 billion yen. This trend is one reason for the decline in sales from fiscal 2015 to fiscal 2016, but in real terms, excluding the impact of hepatitis C drugs, sales have continuously increased, and we are achieving continuous growth through the steady of opening of pharmacies, mainly Nihon Chouzai pharmacies.



#### Pharmacy opening strategy

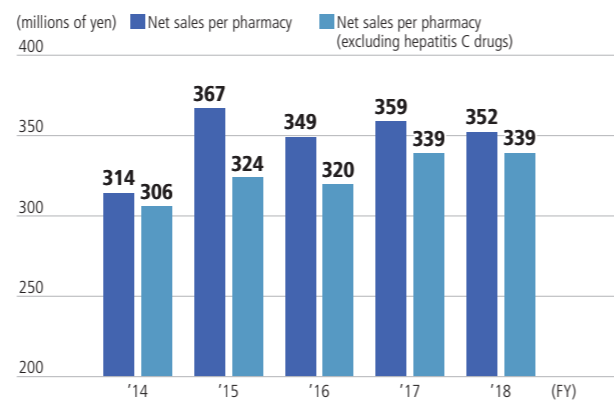
According to the Long-term Vision announced by the Company in April 2018, Nihon Chouzai seeks to change the current pharmacy mix of 70% for hospital-front pharmacies and 30% for hybrid-type pharmacies to 50% for hospital-front pharmacies and 50% for hybrid-type pharmacies, while working to increase its overall number of pharmacies by fiscal 2030. Although it will vary depending on the fiscal year, in the future, while emphasizing the opening of hybrid-type pharmacies, our strategy is to open hospital-front pharmacies and hybrid-type pharmacies in a balanced manner.



\* Hybrid-type pharmacy: see Explanation of Terminology, page 76

#### Net sales per pharmacy

Nihon Chouzai regards net sales per pharmacy as a key factor to successful industry restructuring. We view collaboration with specialized medical institutions and the performance of at-home medical care as essential to achieving A Vision of Pharmacies for Patients. To carry these out, multiple pharmacists and pharmacies of ample size are both required. Therefore, we are opening Nihon Chouzai pharmacies and pharmacies through mergers and acquisitions, with a focus on pharmacies of ample size or larger.



#### Trend in pharmacy openings

Our pharmacy opening strategy is centered on the opening of Nihon Chouzai pharmacies, but we also actively pursue M&A depending on pharmacy size and other conditions. Because dispensing fees are expected to be severely reduced through revisions, our strategy is to open Nihon Chouzai pharmacies and conduct M&A focusing exclusively on pharmacies that have a chance of future success. Since combining and merging small pharmacies would saddle us with pharmacies that have no chance of success, we conduct M&A by carefully examining one pharmacy at a time.

(FY)	'14	'15	'16	'17	'18
Pharmacy openings	29	27	42	36	32
Nihon Chouzai pharmacies	28	22	21	23	26
M&A	1	5	21	13	6
Pharmacy closures	12	11	12	8	19
No. of pharmacies at fiscal year-end	511	527	557	585	598

## Growth Strategy: Various Approaches

### Initiatives to Enhance Health Support Functions

#### Health Check Stations

As a health support function, Nihon Chouzai set up in-pharmacy Health Check Stations and is proactively working to maintain the health of local residents and on pre-symptomatic disease prevention. Blood pressure meters and body composition measurement equipment have been installed in the Health Check Stations, and a variety of measurements and nutritional consultations by registered dietitians are conducted there.

	March 2017	March 2018	March 2019
No. of Health Check Stations*	3	37	63

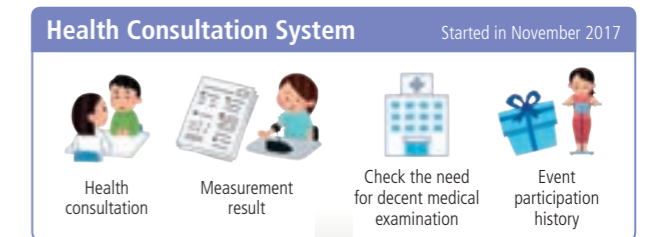
\* The Health Check Station is a registered trademark of Nihon Chouzai Co., Ltd.

- (1) Advice on diet and exercise from registered dietitians
- (2) Promoting use by local residents through the holding of health fairs
- (3) Specialist booths on health maintenance and promotion
- (4) Health management using various measurement devices, including blood pressure meters and body composition measurement equipment
- (5) Support for self-medication with a range of more than 500 items, including OTC drugs and health food
- (6) Recommendations to receive a medical examination and referrals to medical institutions depending on symptoms



#### Health Consultation System

We have developed and introduced a Health Consultation System that records and collects the details of health consultations. Coupled with the dispensing system, we have developed a system that enables continuous health support.



Holding of health event led by a registered dietician  
Consolidation of various information including health consultations

Actively support pre-symptomatic disease prevention for local residents utilizing ICT

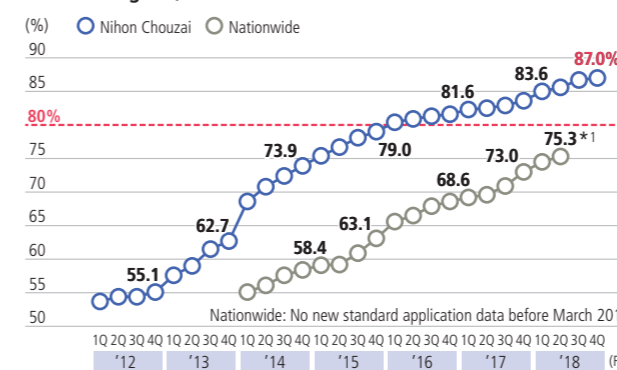
**Increasing tendency of local residents to visit the pharmacy**  
(Local residents without prescriptions are also increasing)

### Initiatives to Control the Increasing Costs of Medical Care

#### Trend of use of generic drugs, volume based

We achieved the government target of 80% set for September 30, 2020 two years ahead of schedule. At present, we have achieved the industry's leading share of generic drug use, volume-based at 87%.

#### Generic drug use, volume-based



Promoting the use of generic drugs leads to control of increasing medical costs

Internal sales of the pharmaceutical manufacturing and sales business are expanding (Group synergies)

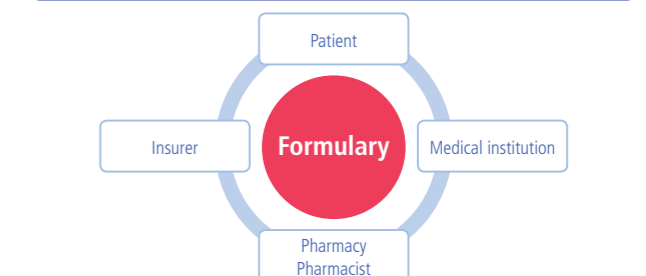
\*1 Trend of Dispensing and Medical Care Expenses, generics ratio, volume-based (new indicator), Ministry of Health, Labour and Welfare

#### Promotion of formulary

To fully advance formularies that we have been working on, we established the Formulary Business Promotion Division in April 2019, which we are further disseminating and promoting.

#### Establishment of Formulary Business Promotion Division (April 1, 2019)

To support the regional medical care economy of the future, we seek to pursue and spread a "true formulary" \*\*2 in each region.



Spread formularies => Leads to control of increasing medical costs

Generic drug use volume is increasing => Market expands as a result

\*\*2 Guideline for pharmacists that provides drug treatment with the goal of proper medicine use and medical care safety for doctors' standard treatments in accordance with medical care guidelines.

# Information Provision and Consulting Business

Japan Medical Research Institute Co., Ltd. (Established January 2012)

Information Provision and Consulting Business financial results are included in the Dispensing Pharmacy Business segment of the Company's consolidated financial statements.

## For a Future of Ample Medical Care

Striving to provide its vision of high-quality medical care at low cost



## Information Provision Service "RI-CORE"

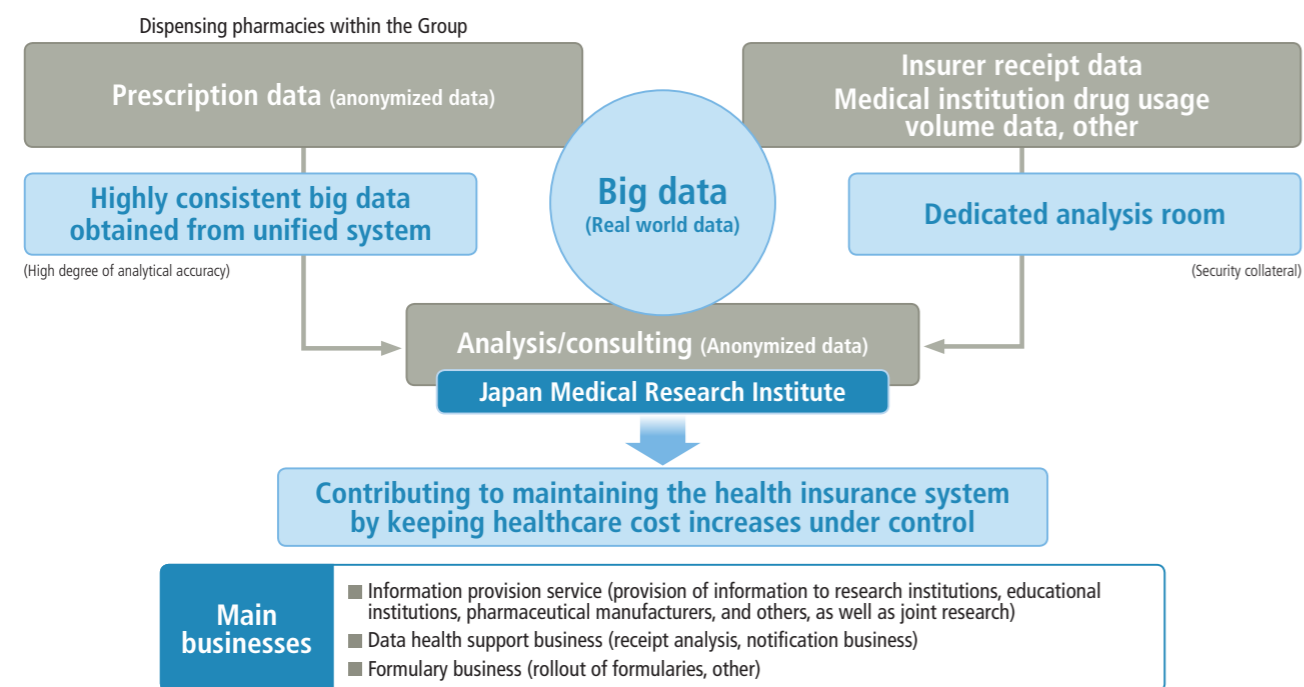
### Providing high-value-added information that competitors cannot match

The information provision service RI-CORE is the foundation upon which analytical tools are developed and operated to process the information obtained from prescription data. Surveys, research, information provision and consulting businesses are conducted for research institutions, educational institutions, pharmaceutical manufacturers and others.

One example was the survey conducted at Nihon Chouzai pharmacies with the objective of promoting the use of generic drugs, announced at the 12th Conference of the Japanese Society of Generic and Biosimilar Medicines, held in July 2018. By integrating big data, such as the anonymized prescription data from the Group's Dispensing Pharmacy Business, together with questionnaire surveys that pharmacists conducted at pharmacies, the result was high-value-added information unparalleled in the industry. Providing information in this manner enables us to contribute to the rationalization of medical care costs.



### Business model



### 1 High-quality information provision service that utilizes real-world data

Based on the foundation of RI-CORE, which commenced services in fiscal 2017, the information provision service offers development and operation of analytical tools to process an entire five-year period of prescription data gained from Group dispensing pharmacies. This is big data of approximately 250 million prescription records, which, when integrated with information provided by pharmacists, achieves a maximum degree of synergies with the Dispensing Pharmacy Business to realize high-value-added data that is unrivaled in the industry. Providing this real-world data to universities, medical institutions, pharmaceutical manufacturers and others, as well as conducting joint research, contributes to improving patient adherence (medication management) and rationalizing medical expenses.

### 2 Data health initiatives and formulary collaboration

The Japan Medical Research Institute conducts various data health initiatives that leverage its accumulated expertise in data analysis, as well as its consulting capabilities. This is demonstrated by the analyses and simulations it conducts based on anonymized data obtained from health insurance associations, which it then utilizes to support the introduction of formularies. This is a service that is Nihon Chouzai's proprietary technology. Formularies are already in place in Europe and the United States, but in Japan, where controlling rising medical care costs in an ultra-aging society is a topic of much discussion, formularies have just started to be introduced, and it is anticipated that they will spread in the future.

## In-store Promotion Advertising Media Services

### Also contributing to the advance of self-medication

We perform in-store promotion (IP) and advertising media services conducted in stores by positioning a variety of IP in easily seen areas of stores to target a total of over 14 million patients that visit every year.

Examples of IP we carry out include videos airing on in-store monitors and poster displays, merchandise displays, and the samplings and booklets distributed directly to patients by pharmacists. From last year we also expanded upon efforts for samplings and other services performed by national registered dietitians and have been conveying useful information to patients who visit our pharmacies. Moreover, while linking these services to provide information, we are also taking up the challenge of new initiatives that bring data and people together and endeavoring to promote self-medication.

## Formulary Study Groups

### Promoting the spread of formularies

In fiscal 2017, we held formulary efficacy seminars for hospital management eight times at seven venues nationwide. In fiscal 2018, we held seminars under the theme of stopping the breakdown of the medical insurance system and the upcoming start of regional formulary activities, twice in Tokyo and a cumulative total of four times in Tokyo, Nagoya and Osaka. A number of instructors spoke from the perspective of a variety of positions: speakers were from Nihonkai Healthcare Net, an organization which promotes regional medical care cooperation, the Shizuoka branch of Japan Health Insurance Association, which gave the insurer's view, St. Marianna University School of Medicine, and Keiso Masuhara, a director of the Japan Medical Research Institute (currently a director at Nihon Chouzai). All speakers presented the current situation and issues surrounding the medical care industry from their point of view and announced initiatives with regard to establishing formularies. The participating insurers and hospital management staff, whose numbers had increased substantially, learned of the rising momentum that formularies have been experiencing recently.



### What is a "formulary?"

A formulary is defined as a policy for drug use that provides patients with optimal efficacy and cost-effectiveness, and they are standard management guidelines for proper usage now well established in Europe and the U.S. Both in the short term and long term, formularies are expected to offer a cost-controlling effect while maintaining quality medical care. In Japan as well, certain medical institutions such as university hospitals and others have introduced formularies as policies for the usage of medical products, and with the thinking that they are an acceptable way to achieve a balance between healthcare quality and economy, there is increasing utilization of them in the delivery of standard medical treatments.



# Pharmaceutical Manufacturing and Sales Business

Nihon Generic Co., Ltd. and Choseido Pharmaceutical Co., Ltd.

## Growth Strategy

### Create Group Synergies Possessed Only by Nihon Chouzai and Steadily Expand Operations

- 1 Together with the expansion of the dispensing pharmacy business within the Nihon Chouzai Group, the Company possesses an unrivaled business model that is expanding the Pharmaceutical Manufacturing and Sales Business (Nihon Generic Co., Ltd. and Choseido Pharmaceutical Co., Ltd.). As the only corporate group in Japan with both dispensing pharmacies and drug manufacturing companies, the Nihon Chouzai Group is taking full advantage of Group synergies to steadily expand its business.
- 2 With Nihon Chouzai's purchase of Nihon Generic's and Choseido Pharmaceutical's generic drugs, which are sold through wholesale companies, its generic drug distribution network is expanding into wholesale distribution channels nationwide, and it has built a unique business model that is growing external sales.

#### Group synergies



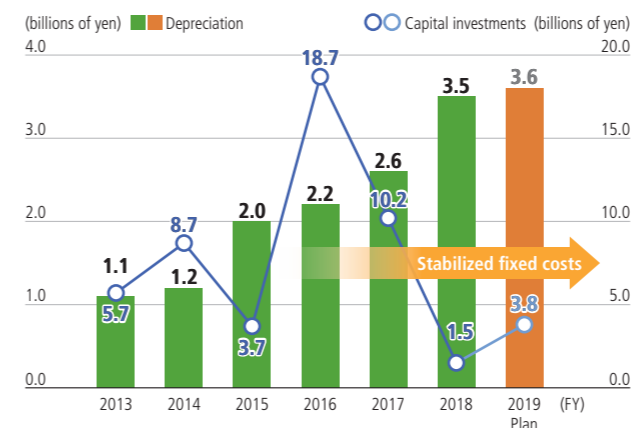
### Prior investment completed → Sales strategy review / Cost control → Profitability improvement

The completion of Tsukuba No. 2 Plant and the relocation of the Tsukuba Research Institute brought to an end several years of investment in Nihon Generics and Choseido Pharmaceuticals. In fiscal 2018, due to increased depreciation associated with the start of operations at Tsukuba Plant No. 2, personnel costs, and other factors, the Company created an operating profit target of about 50 million yen annually, but operating profit significantly exceeded the initial forecast and reached a total of about 1.9 billion yen. We are confident about the V-shaped recovery of operating profit for the next fiscal year.

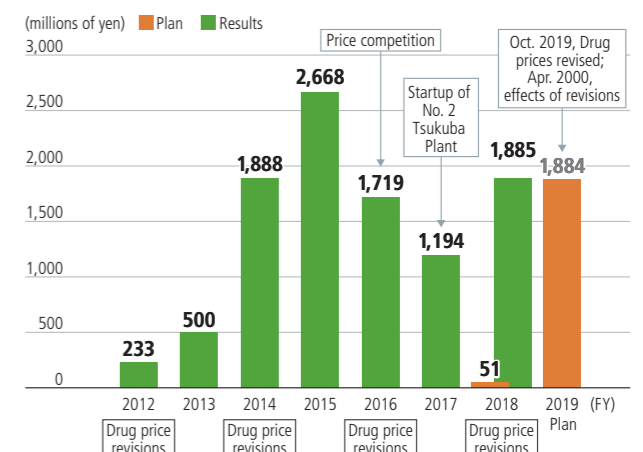


Tsukuba Plant No. 2

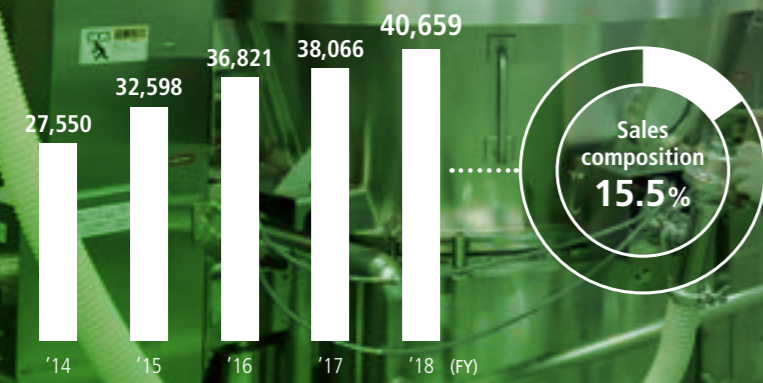
#### Cost of capital investments and depreciation costs



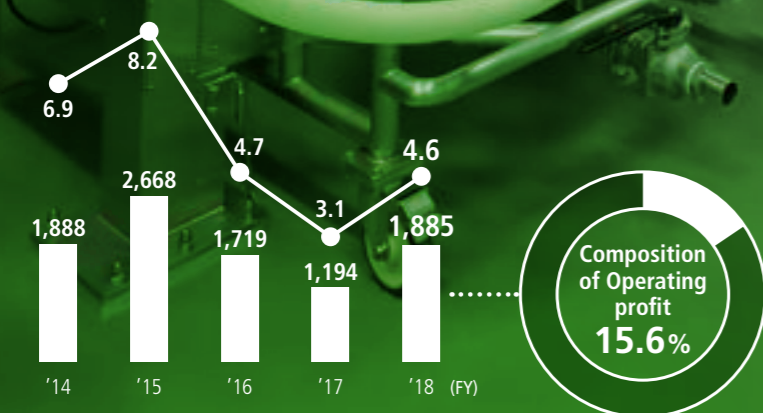
#### Operating Profit



#### Net sales (millions of yen)



#### Operating profit (millions of yen)



## Growth Strategy

### Expand Operations to Create Group Synergies

The Pharmaceutical Manufacturing and Sales Business consists of two manufacturing and sales companies, Nihon Generic and Choseido Pharmaceutical, and these two operations are managed by taking advantage of their respective characteristics. In addition to the internal and external sales mentioned earlier, we contract out manufacturing to drug manufacturers and also sell out-licensed contract manufacturing products and sales alliance products. On the other hand, there are items we contract out to other compa-

nies to manufacture, and we also purchase in-licensed contract manufacturing products and sales alliance products.

We have built an unrivaled business model, and the pharmaceutical manufacturing and sales business has achieved sales growth because Japan's leading dispensing pharmacy chain, Nihon Chouzai pharmacies, is part of the Group. We seek to further expand sales channels and sales growth through the measures shown below.



Internal sales	<b>Convert generic drugs dispensed at Nihon Chouzai pharmacies into Nihon Generic and Choseido Pharmaceutical products</b> Promote sales by converting generic drugs dispensed at Nihon Chouzai pharmacies into in-house products.
	<b>Create synergistic effects with Nihon Chouzai's pharmacy strategy</b> Together with the pharmacy opening strategy of the Dispensing Pharmacy Business, we can dramatically increase internal sales.
External sales	<b>Expand external sales by leveraging internal sales growth</b> Increase external sales through strong relationships with wholesalers that have been built up over the years in the Dispensing Pharmacy Business.
	<b>Enhance development of DPC hospitals</b> Increase the number of in-house products in major university hospitals and strengthen external sales by raising their recognition in the industry.
	<b>Intensify development of company clinics</b> Increase generic drug adoption in company clinics, especially in urban areas with many large companies.
	<b>Draft/Promote plan for specific items</b> From a product lineup of more than 600 items, conduct various sales promotion measures with the proper timing and frequency to achieve efficient sales promotion.
	<b>Strengthen response to local formularies</b> In the business of developing local formularies, while generic drug use is expected to drastically increase, the Pharmaceutical Manufacturing and Sales Business will create a framework to steadily follow this trend.

#### Enter OTC business

This is a business that started new initiatives expecting synergistic Group effects. In December 2018, we launched the hair growth agent Minoxidil Lotion JG. In fiscal 2019, we plans to place several items in Group dispensing pharmacies under the PDCA cycle.

### Expand Operations with Out-licensed Contract Manufacturing Products and Sales Alliance Products

#### Contract manufacturing

Produce items developed by other companies at Nihon Generic and Choseido Pharmaceutical.

#### Contract manufacturing

The operation of Tsukuba No. 2 Plant will free up production lines at existing plants and enable us to manufacture other companies' products. In recent years, while generic drug use has increased, many generic drug manufacturers have been in difficult circumstances in terms of profitability due to annual price revisions, a decrease in blockbuster products (popular original drugs whose patents have expired), and stricter quality assurance. There are also cases in which manufacturers are hesitant to make new capital investments. Under these circumstances, we will actively work on contract manufacturing to help build up a stable industry-wide supply system. Choseido Pharmaceutical's Kawachi Plant is dedicated to producing cephem antibiotic formulations, and it will continue to further expand its market share with unrivaled originality.

#### Acquire new contract manufacturing of long-listed drugs

In Japan, as the switch to generic drugs progresses, the size of the original drug market itself is shrinking. Because the Group also has a small-lot production system, the Group is receiving an increasing number of contract manufacturing inquiries, and we expect this trend to continue.

#### Sales alliance products

Sales of items (Nihon Chouzai licensed products) that the Group holds manufacturing and sales approval for to other companies. Other companies sell these as their own products.

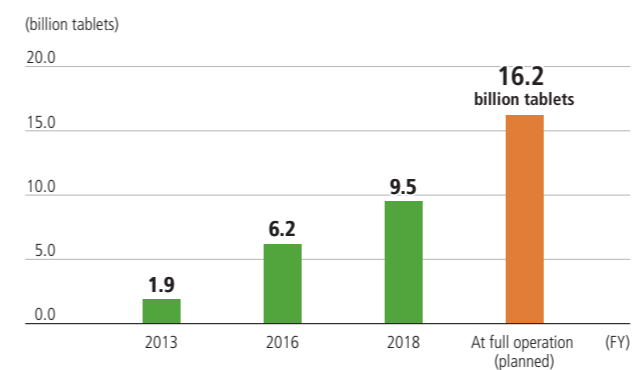
The startup of Tsukuba Plant No. 2 enabled us to move aggressively since it freed up production lines at existing plants. Our licensed products exceed 450 items (as of December 2018) and it is going to actively respond to inquiries from other manufacturers.

### Expansion of Production Capacity

#### Tsukuba Plant No. 2 completed

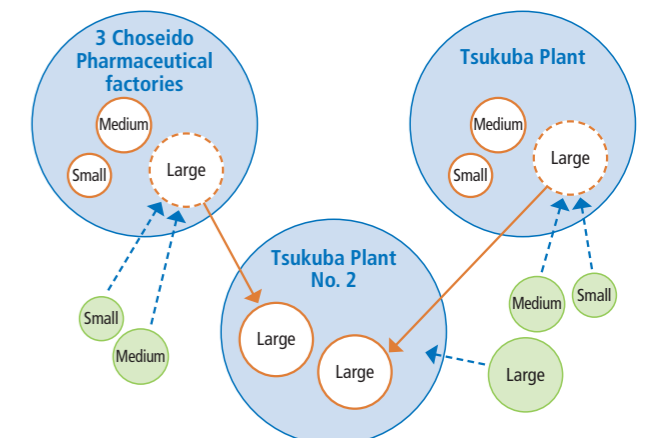
Anticipating the establishment of a stable system of supply tailored to market trends and the expansion of the Dispensing Pharmacy Business, we have made aggressive upfront investments for several years and expanded production capacity. With the completion of the Tsukuba Plant No. 2 (phase 1 construction), the maximum production capacity, including the other four plants, will be 9.5 billion tablets, so we have built a production capacity that can sufficiently meet future demand increases.

#### Maximum plant productivity



#### Further expand contract manufacturing/sales alliance business

By transferring the production of large-lot products to the completed Tsukuba No. 2 Plant, we are utilizing the free lines available at the Tsukuba Plant and Choseido Pharmaceutical plant and have laid a foundation that will allow us to take on new businesses such as the contract manufacturing and sales alliance businesses. We are flexibly promoting total optimization among production bases within the Group.



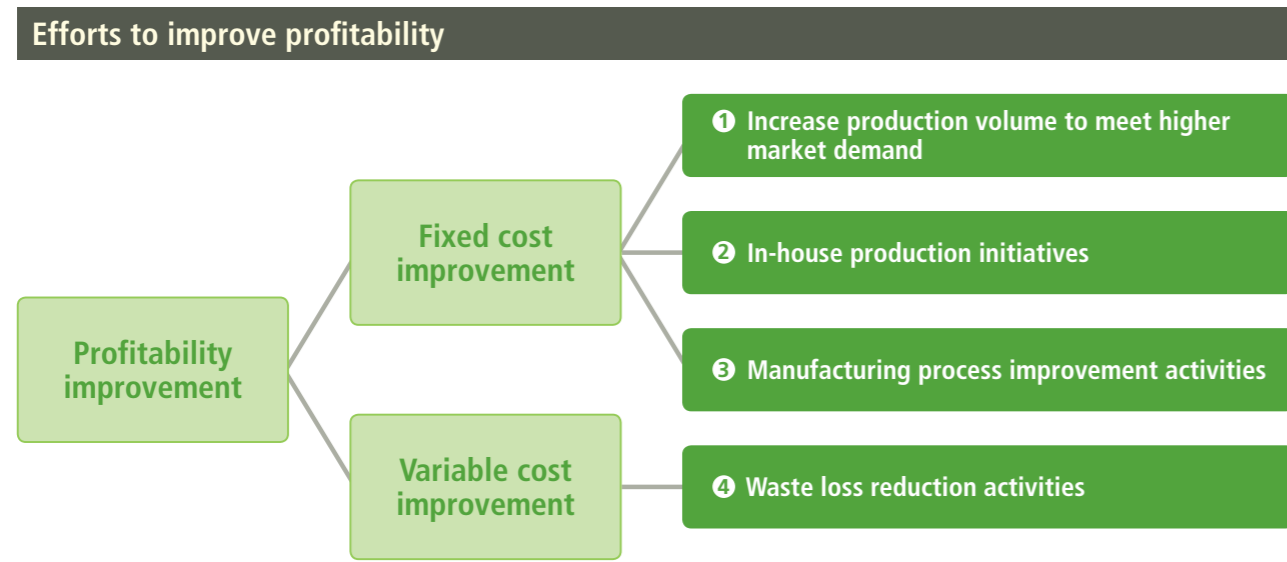


## Growth Strategy

### Profitability Improvement

#### Capital investment peaks out, profitability improves

Anticipating a labor environment (work-style reforms) where rapid change is expected along with measures to reduce medical costs (promotion of generic drug use and annual drug price revisions), we seek to improve profitability by gaining greater production volume while making full use of existing resources.



**1 Increase production volume to meet higher market demand**

To meet the 80% volume-based market share target for generic drugs in the generic drug market set by the national government, we expect further market expansion and production volume increases in the future, mainly due to strong promotions and formulary initiatives becoming commonplace.

**2 Initiatives to promote in-house production**

We are working on in-house production at Nihon Chouzai plants targeting items that are contract manufactured at other companies. Although it does not directly contribute to sales growth for items that have been used in Group dispensing pharmacies and in other medical institutions and pharmacies outside of the Group, it will lead to an improved operating rate and gross margin ratio at our Group plants, along with improved cash flow (by holding capital investment funds).

**3 Manufacturing process improvement activities**

We will take steps to improve fixed costs with efficient manufacturing by setting specific goals for the detailed review and improvement of the manufacturing process and continuously using the PDCA cycle. We will also focus on employee education as part of our improvement activities. With the goal of creating a culture where improvement activities can be enjoyed, we are now creating a mechanism that is able to maintain activities that sustain employee motivation.

**4 Waste loss reduction activities**

We are working to reduce wasteful product disposal by drawing up and implementing efficient production plans and producing the necessary products in the right amount when needed. Regarding sales, we have conducted improvement activities while being conscious of the cash conversion cycle (CCC). With a wide gap between production volume and sales volume, we have drawn up a supply chain management (SCM) strategy tailored to the characteristics of each item, leading to waste loss and more efficient operations.

### R&D

#### R&D that maximizes group synergy

As a generic drug manufacturer with an unrivaled business model, we conduct development, manufacturing, and sales as a package.

#### Efficient R&D focused on items that are widely used at Nihon Chouzai pharmacies

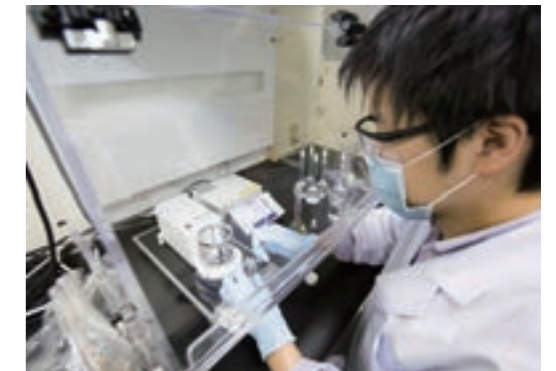
- The ability to predict sales volume for Nihon Chouzai in advance enables profit and recovery forecasting, leading to efficient development planning.
- As Nihon Chouzai is noted for reliability, other manufacturers can take part in joint development with peace of mind since development is carried out according to a plan.
- Because we must meet the need of pharmacies, our largest customers, we conduct a wide range of R&D that is unrelated to any particular disease. Although we deal with many medicines, in the end, we can accumulate the latest know-how and technology, resulting in a positive cycle.

#### The two research facilities, Nihon Generic and Choseido Pharmaceutical, utilize their respective expertise and know-how

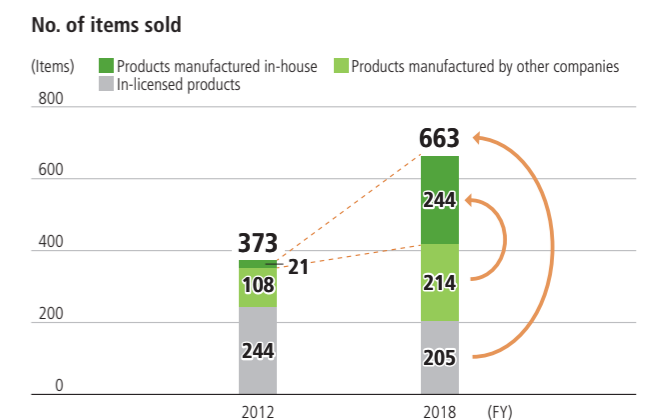
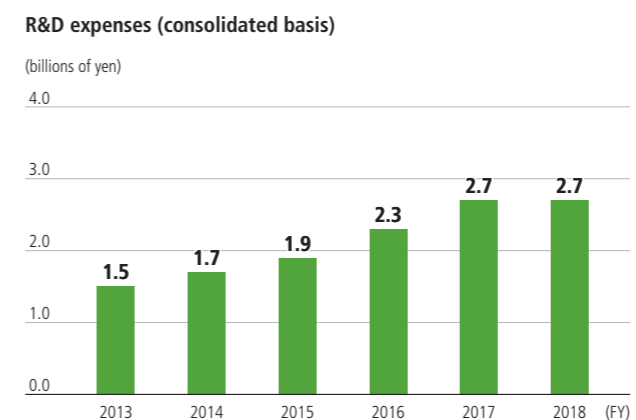
#### Efforts to minimize additional equipment investment by carrying out development appropriate to each manufacturing plant



Consolidate R&D bases (moved to Tsukuba Research Institute as of June 2018)



Analysis Research Center



Products manufactured in-house: License held in-house, manufactured in-house  
 Contract manufacturing by other companies: License held in-house, manufacturing outsourced to other companies  
 In-licensed products: License not held in-house but purchased

## Quality Control

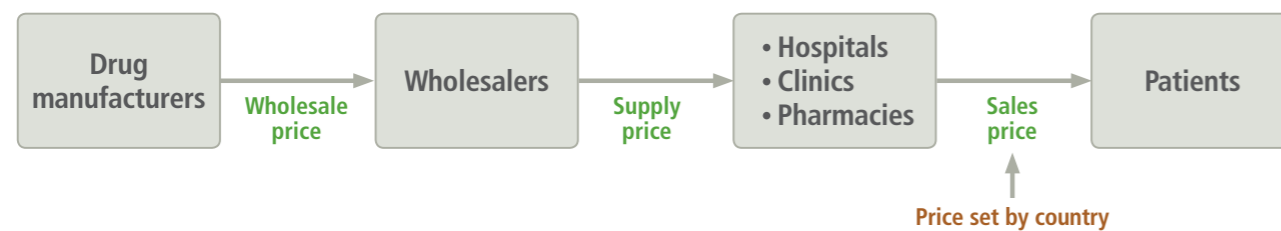
Conduct stricter quality control than before, set quality targets and begin operation.

### Fiscal 2018 quality objectives

- 1) Maintenance of approval documentation that is suited to the manufacturing circumstances
  - Annual inspection of approval documentation, compliance check via GMP inspections, assessment of the appropriateness of the change of management practices
  - Appropriate implementation of the three roles of manufacturers and marketers, appropriate application of revisions to the Japanese Pharmacopoeia
- 2) Practical application of quality risk management
  - Product and manufacturing risk assessment, examination of validation procedures, etc. associated with the change of management, implementation of appropriate risk management practices when selecting new bulk drug and additive manufacturers
- 3) Improvements to the system of providing information regarding quality to medical institutions and patients
  - Improving the clarity of information that needs to be provided as well as the procedures for gathering, transmitting, releasing, and managing such information and entering into contracts related to the provision of information about in-licensed products
- 4) Continuous improvement to realize solid quality system
  - Increasing awareness of compliance, optimizing the quality system, adopting a GMP operations support system, planning and promotion of QA conferences with Nihon Generic and Choseido Pharmaceutical

## Market Environment

### Distribution channels for medicines for medical treatment in Japan



Based on the Revised Distribution Guidelines, excessive price discount negotiations have been corrected and drugs are being distributed at an appropriate price. Both the wholesale and supply price tend to be raised.

#### Revised Distribution Guidelines

(Started using from April 2018)

1. Establish appropriate market prices in order to eliminate negative primary margin on sales
2. Promote early settlement and unit price-based/individual product transactions
3. Revise discount negotiations

#### Set appropriate wholesale price/rebate, etc.

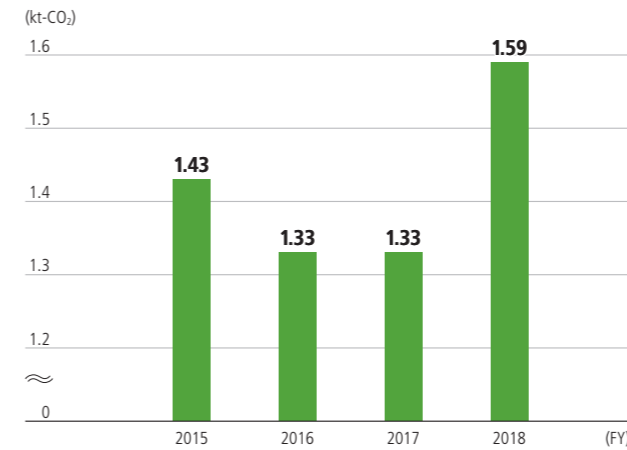
(Started using from April 2018)

1. Set an appropriate rebate that assesses the wholesale function
2. Reflect the wholesale price's corrected rebate item in the wholesale price

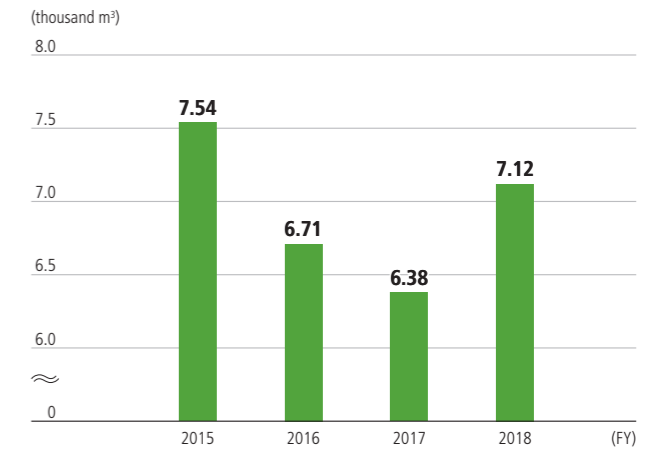
## Environmental Initiatives

The Pharmaceutical Manufacturing and Sales Business reforms plant buildings it obtains and installs the latest equipment to ensure that CO<sub>2</sub> emissions, fresh-water usage, and electrical power usage are kept to a minimum. Newly constructed plants are designed from the planning stage to be environmentally friendly.

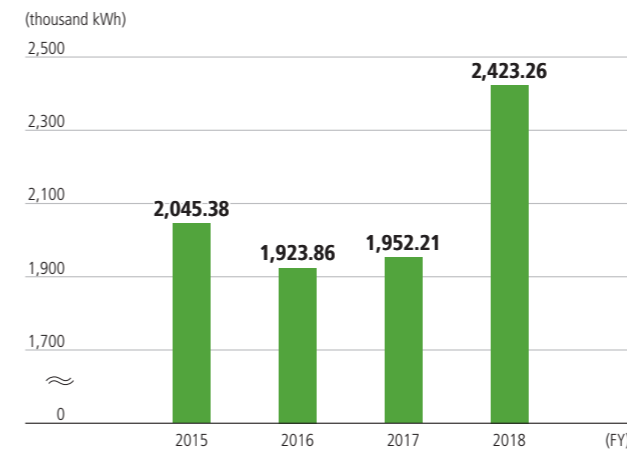
### CO<sub>2</sub> emissions



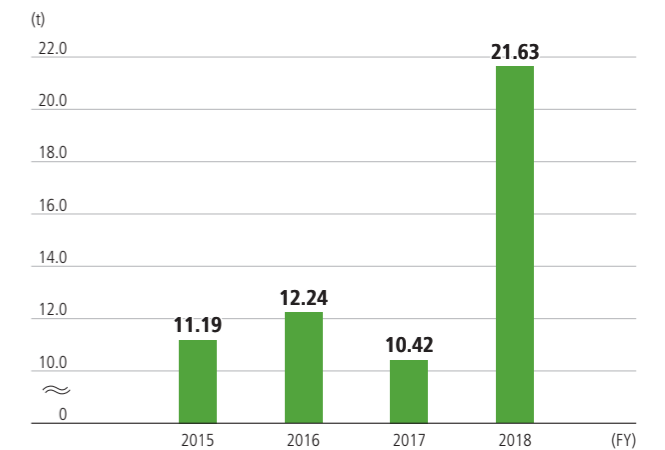
### Fresh water consumption or water consumption



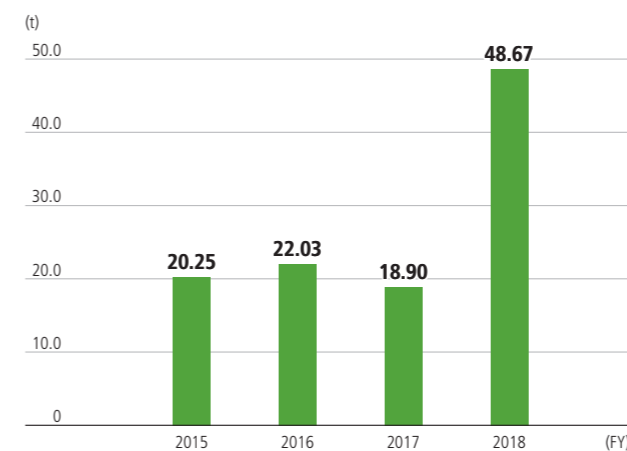
### Electric power consumption



### Amount recycled



### Amount of waste material, etc.



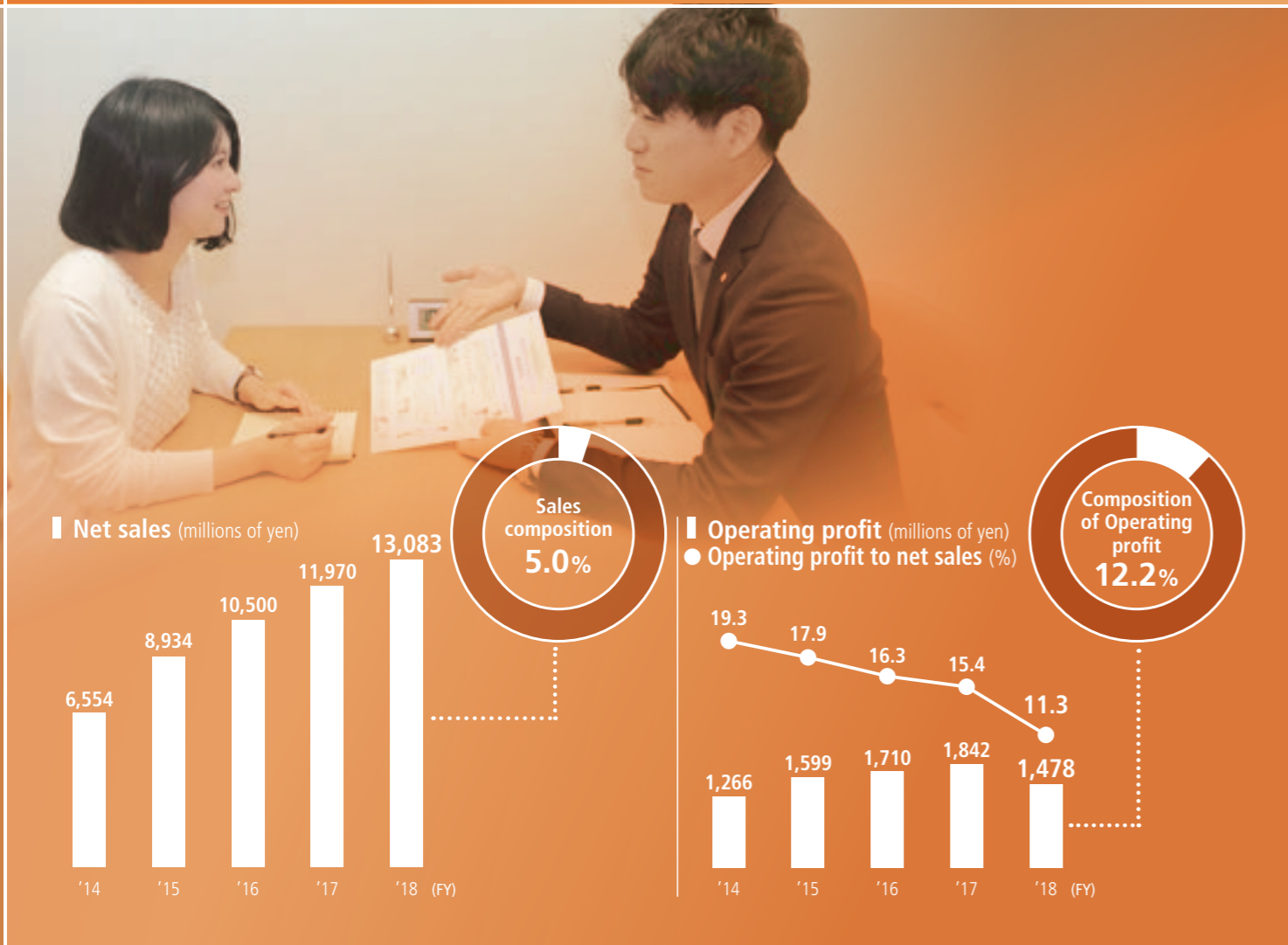
### Examples of environmental initiatives

1. Power consumption reduced at Tsukuba No. 2 Plant and No. 2 Plant at Choseido Pharmaceutical headquarters by decreasing chiller load with mist spray cooling using plant wastewater
2. Adoption of LED lighting at Tsukuba Plant, Tsukuba No. 2 Plant and Tokushima Research Institute
3. Decrease air conditioning load by adopting low air flow-type draft chamber at Tsukuba No. 2 Plant
4. Adoption of ultra-high-rate transformer capable of reducing loss by about 35% for top runner transformers at Tsukuba No. 2 Plant



# Medical Professional Staffing and Placement Business

Medical Resources, Co. Ltd.



Providing high-value-added services to job providers (medical institutions and companies) and job seekers (doctors and pharmacists) as a comprehensive human resources service company for the medical industry

**Growth**  
Average growth over a 7-year period (Fiscal 2012 – 2018)  
**21.9%**

The medical industry can expect continuing high growth thanks to high demand for workers due to personnel shortages. Fields in which the Pharmacist Staffing and Placement Business is mainly engaged, including fields involving physicians, nurses, registered pharmaceutical medicine sellers, and other medical professionals are expanding.

**Medical Professional Staffing and Placement Business**  
**No.1**

**Pursuing group synergies**  
Leveraging the high-quality education system established by Nihon Chouzai, we dispatch and introduce high-quality pharmacists to medical worksites. We conduct business with the aim of further improving the quality of pharmacists who are responsible for achieving a true separation of drug prescribing and dispensing services.

**Profitability**  
Operating margin (Fiscal 2018)  
**11.3%**

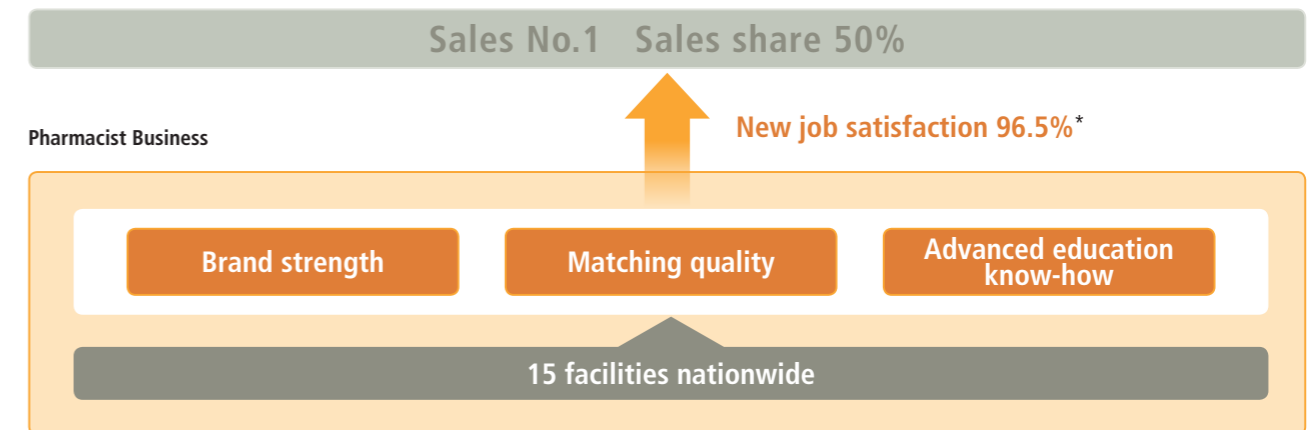
The operating margin has temporarily declined due to upfront investments to expand the Pharmacist Staffing and Placement Business and the Medical Professional Staffing and Placement Business. This is an important year in which we invested in growth for the future, and we anticipate growth in fiscal 2019.

Internal sales 2%  
**Ratio of internal sales and external sales**  
External sales 98%

**External supply of human resources**  
Medical Resources Co., Ltd., which engages in the Medical Professional Staffing and Placement Business, recruits human resources from the mid-career staffing market and dispatches and introduces them externally (to pharmacies other than Nihon Chouzai). The medical industry can supply high-quality human resources on a stable basis because of its many qualified professionals and highly mobile personnel.

## Strengths of the Pharmacist Business

Market for dispatching pharmacists



\* Customer satisfaction survey questionnaire (conducted by Medical Resources from July 25 to August 22, 2018)

### Brand Power Generated by the Nihon Chouzai Group

#### Synergies with Nihon Chouzai's education

Medical Resources is a human resources business operated by Nihon Chouzai, a company with massive brand power in the medical industry and known for its high education level. It provides high-quality content to temporary staff and pharmacist placements, and it supplies high-value-added human resources. The advanced education system at pharmacies in the Nihon Chouzai pharmacy business is a strength unmatched by other companies.

\* For details, see "Content Provided" on page 47.

### 15 Offices Provide Nationwide Coverage

#### Group management with national presence

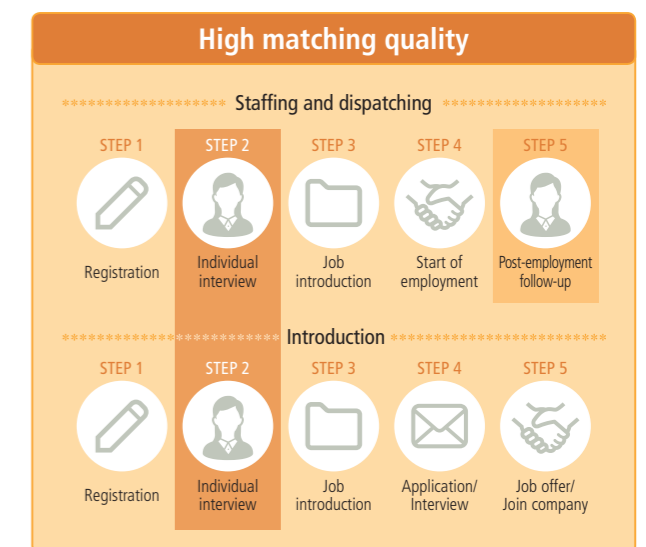
Like Nihon Chouzai, with facilities nationwide, Medical Resources' Pharmacist Business operates 15 offices throughout Japan and one head office. In fact, because its employees respond so meticulously to customer needs, it is able to differentiate itself from Internet-based-only human resource companies and has created a system that provides high customer satisfaction.

## Matching Quality Underpins Customer Satisfaction

#### Peace of mind through face-to-face meetings

With facilities nationwide, Medical Resources can provide face-to-face counseling (outplacement counseling) to meet each and every pharmacist in a courteous manner and helps them find a satisfying place to work. It also provides detailed information on the distinctive characteristics of desired areas for work and the latest job change information.

There is a strong need for the people in charge of recruiting personnel for pharmacies to meet reliable job candidates face to face. We provide win-win matching quality for both pharmacists and recruiters of pharmacists to actually meet while using it as an opportunity to understand their other needs as well.



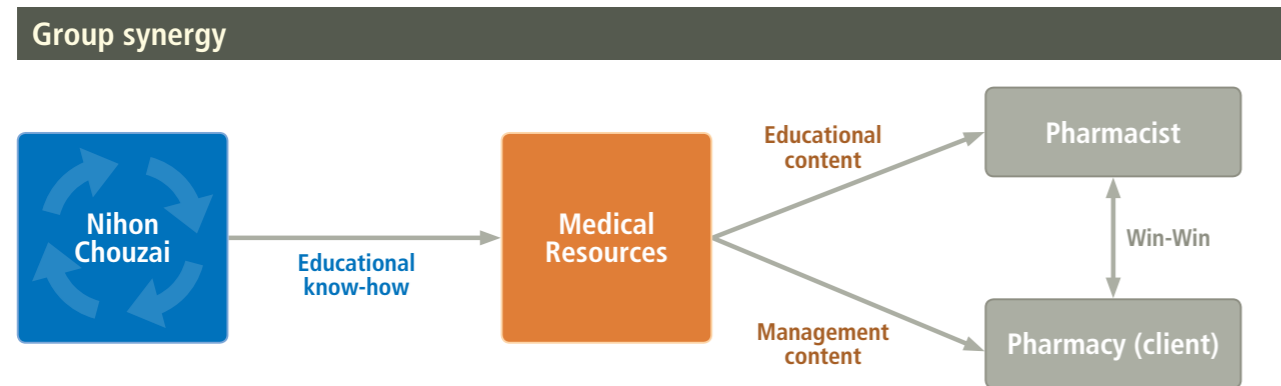
## Strengths of the Pharmacist Business

### Take Advantage of Advanced Educational Know-how to Provide High-quality and Up-to-date Content

#### Contribute to raising the quality of the medical industry as a whole

Medical Resources provides advanced educational content and management content to pharmacists and pharmacies outside the Group based on high-quality educational know-how provided by Nihon Chouzai. We are further promoting the achievement of a

true separation of drug prescribing and dispensing services and working to improve the quality of the medical industry as a whole through these efforts. In this way, Medical Resources will pursue sustainable growth and provide value to society by continuously operating its business as a company that society regards as indispensable.



#### Content Provided

Content Type	Content Name	Description
WEB content	Yaku-Tore app	A dispensing textbook that has been edited by Nihon Chouzai is provided as an app for smartphones. It also deals with dispensing fee revisions.
	JP Learning	JP Learning is an e-learning course that allows one to obtain the credits needed to be certified as a family pharmacist. The course provides more than 1,000 pages of enhanced content.
Real content	Dispensing textbook	The textbook represents a portion of Nihon Chouzai's educational material converted to text. It provides practical information to help deal with dispensing fee revisions.
	Seminars for pharmacists	We hold seminars for pharmacists to learn the latest trends in the pharmacy industry.
	Retention program	This program is held as part of the health and welfare benefits for dispatched workers. We also hold money seminars as well as other seminars for working women.
	Management seminars	The pharmacy management seminar teaches Nihon Chouzai's management know-how.



Yaku-Tore app



JP Learning



Seminars for pharmacists

## Growth Strategy

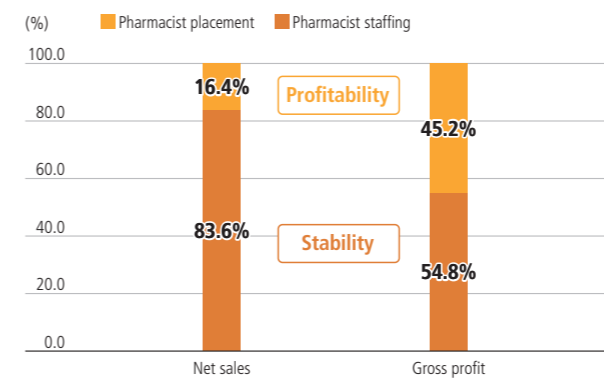
### In Addition to the Continuing Stability of the Staffing Business, We Are Expanding the Placement Business

Because pharmacists hold a national qualification, it is easier for them to change jobs compared to regular occupations, and the job offers high personnel mobility. Furthermore, since women account for about 70% of all pharmacists, a distinctive feature is that many take maternity and childcare leave. Adding in the fluctuations of seasonal demand, the pharmacist shortage has remained constant.

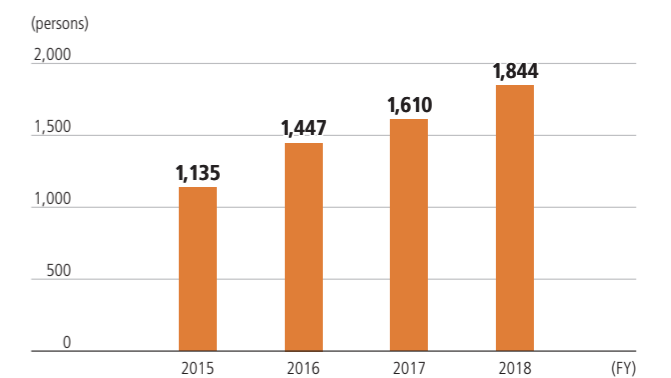
Because we can anticipate this high demand, we have always focused on the pharmacist staffing business where continuous sales can be expected as a core business. The aging of the population in recent years and the constant high demand for pharmacists are steadily expanding the business. At present, the Company has achieved about a 50% sales share in the pharmacist staffing market and is number one in the industry in sales results.

With an eye on further growth, Medical Resources has focused on increasing its market share of the highly profitable placement business while maintaining an overwhelmingly high share of the staffing business. In recent years, pharmacists' work has diversified (it now includes family pharmacists, at-home medical care, integrated community care teams, advanced pharmaceutical management, etc.) due to recent revisions to the system, and high quality is demanded of pharmacists. Medical Resources has steadily increased the number of pharmacists placed through close coordination with clients and a flexible response to market conditions. In preparation for further expansion of the Placement Business, in fiscal 2019, we will increase the number of sales offices and staff, and cultivate human resources. We seek higher profitability through expansion of the Placement Business.

#### Sales ratio and Gross profit ratio of Pharmacist Business



#### Number of pharmacists placed



### Expansion of Service Lineup

#### Expand the Medical Professional Staffing and Placement Business

The Medical Professional Staffing and Placement Business was started in fiscal 2017, and sales in fiscal 2018 sharply increased, by 200%, year on year. We added four sales offices, doubled our sales staff and spent more on advertising. We seek to expand further from next fiscal year by activating our now larger sales staff.

Business offices	● Added four new offices, in Sapporo, Nagoya, Osaka, and Fukuoka
Sales staff	● Doubled
Advertising	● Website ● SNS

#### Began strengthening the registered pharmaceutical medicine sellers and nurse staffing businesses

Demand for workers for registered pharmaceutical medicine sellers, who are qualified to sell Type 2 and Type 3 drugs from among over-the-counter (OTC) drugs, has increased. In fiscal 2018, because of high demand for workers in this area, a business unit was created. After taking this business nationwide, the number of job offers has reached 10,000 annually.

Since the nurse staffing business is a human resources market about twice the size of that for doctors and pharmacists, we will expand the market by updating the website in fiscal 2019 and improving our ability to attract customers.

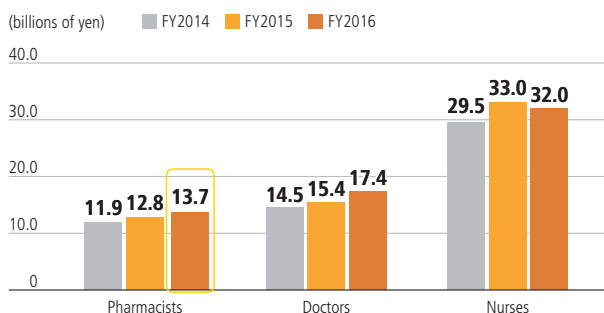


## Market Environment for Medical Professionals

### Market Size and Nihon Chouzai's Market Share of the Medical Professional Staffing and Placement Market

The size of the medical professional staffing and placement market in fiscal 2016 was 13.7 billion yen for pharmacists, 17.4 billion yen for doctors, and 32.0 billion yen for nurses. Since we have about a 50% share of the pharmacist staffing market, we will further expand our share of the placement market, which has significant room for growth. In addition, the placement market for doctors and nurses is larger than that for pharmacists, so we have significant room for market share growth. Although we are late-comers to this field, we will expand by leveraging the experience gained in the Pharmacist Business and our nationwide network of offices.

Size of medical professional placement market



Number of pharmacists (persons): 301,323  
 Number of doctors (persons): 319,480  
 Pharmacies (pharmacies): 58,678  
 Hospitals (institutions): 8,439

Source: Ministry of Health, Labour and Welfare, Employment Placement Business Report, Worker Dispatching Undertaking Business Report compiled by Nihon Chouzai based on various figures.

### Changes in Market Conditions / Human Resources Demand

Demand for pharmacist placement has increased with the start of the family pharmacist system that resulted from medical service fee revisions in April 2016. On the other hand, overtime has been reduced due in part to work-style reforms, and pharmacist staffing demand remains high.

Furthermore, demand for high-quality pharmacists is larger than ever before due to the expansion of the pharmacists' area of work. In addition to dispensing services, interpersonal services are

increasing due to at-home medical care, where interpersonal skills and expertise are required. As small- and medium-sized pharmacy chains and individual pharmacies account for approximately 80% of the prescription dispensing pharmacy industry, many pharmacies face the challenge of hiring a sufficient number of pharmacists, and the market environment always reflects a state of high demand.

### Providing Highly Reliable Human Resources

While the dispensing pharmacy business has worked to improve the strength of Nihon Chouzai's brand for 40 years, Medical Resources has worked to improve its matching quality through in-depth counseling over many years. As a result, based on an evaluation by a third-party institution, we received the Ministry of Health, Labour and Welfare's "Excellent Job Placement Agency" and the "Excellent Temporary Staffing Agency" certifications. As a company that retains important personal information, we have also acquired the Privacy Mark. Therefore, we have been able to maintain a highly reliable staffing and placement business.

