

How Much Does a Hospital Save by Centralizing Doctors' Schedules?



“For our hospital, the PetalMD solution is a real breath of fresh air, because it allows doctors to be autonomous with their shift exchanges, which is recognized by the very low intervention of management. In addition, the instant processing of equity tables eliminates the risk of human errors linked to the manual entry of data on different media platforms.”

Florence Grellet

Director of Medical Affairs and Research
Le Vinatier Hospital Centre (France)



Decrease Spending by Centralizing Doctors' Schedules

In order to successfully complete their mission of providing quality patient care, hospitals often have to deal with a major challenge: financial resources. Indeed, even if a technology improves the quality of care, some hospitals may not be able to adopt it because they cannot afford it.

Fortunately, some innovative technologies not only improve coordination of care, but also reduce hospital administrative costs. This is the case of the digital platform developed by PetalMD, which centralizes and updates real-time physician care schedules and clinical tasks throughout the hospital to provide an overview of medical activities and shift coverage.

Our team has developed an analytical model that estimates the savings made by hospitals that digitize and centralize physicians' schedules based on testimonials and data from different health facilities. This model enables hospitals to assess the improvement in efficiency in aggregating physician schedules – improvement that can be achieved without hiring additional staff.

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Which Variables Make It Possible to Measure the Savings Achieved by the Centralization of Physicians' Schedules?

There are numerous factors in a hospital that can influence physician scheduling expenditures. Here are the most determining factors:



Physicians

- Number of physicians working for the hospital
- Annual salary of physicians (average)
- Weeks worked/physician/year (average)
- Hours worked/physician/week (average)



Administrative Staff

- Number of medical specialties (or time groups) in the hospital
- Annual salary of administrative staff (average)
- Weeks worked/administrative staff member/year (average)
- Hours worked/administrative staff member/week (average)



DID YOU KNOW?

In Canada, total payroll represents, on average, 60% of hospital expenditures.

What Is the Method Used to Calculate Savings?

The savings were calculated based on the number of hours earned by the 400 physicians and the administrative staff in 25 medical units. The hours are then converted into Canadian dollars.

For example, if a physician represents an hourly cost of \$240 for the hospital and the PetalMD solution helps him save 10 hours, this would be equivalent to \$2,400

in savings. This saving represents the value of the time gain that can be reallocated to value-added tasks.

This process has been divided into four stages in order to estimate the time spent by physicians and administrative staff in managing on-call schedules and clinical tasks.

At the same time, we also considered the time required to manage shift change between physicians.

Time Required by the Different Stages of the Scheduling Process

	 Physicians		 Administrative Staff	
	Current Procedure	PetalMD Procedure	Current Procedure	PetalMD Procedure
Step 1 Planning Personal Schedules	15 min/quarter	15 min/quarter	8 hr/quarter/specialty	1 hr/quarter/specialty
Step 2 Planning On-Call Schedules and Clinical Tasks	14 hr/quarter/specialty	2.8 hr/quarter/specialty	16 hr/quarter/specialty	2 hr/quarter/specialty
Step 3 Aggregation of On-call Schedules and Clinical Tasks	N/A	N/A	7 hr/quarter/specialty	N/A (automatic centralization)
Step 4 Communication of On-Call Schedules and Clinical Tasks	3 hr/physician/year	25 hr/year	37 hr/physician/year	49 hr/year
Shift Exchanges Between Physicians	15 min/exchange/physician	< 1 min/exchange/physician	30 min/exchange/physician	N/A (adjustments and automatic notifications)

How Can a Hospital of 400 Physicians Save \$1.67 Million a Year?

Our analysis model predicts the equivalent of an annual saving of \$1.67 million by using the data below, which is based on the reality of some existing health facilities.

Physicians
<ul style="list-style-type: none"> • 400 physicians • \$400,000 annual salary (average) • 42 weeks of work/year (average) • 40 hours worked/week (average) • 6 shift exchanges/physician/quarter (average)

Administrative Staff
<ul style="list-style-type: none"> • 25 medical specialties in the hospital (time groups) • \$40,000 annual salary (average) • 44 weeks worked/year (average) • 35 hours worked/week (average)

Estimated Reduction in Costs Related to Scheduling and Shift Exchanges Between Physicians

	 Physicians		 Administrative Staff		Expenses Avoided Annually
	Current Procedure	PetalMD Procedure	Current Procedure	PetalMD Procedure	
Step 1 Planning Personal Schedules	400 hr/year \$95.2k	400 hr/year \$95.2k	800 hr/year \$20.8k	100 hr/year \$2.6k	\$18.2k
Step 2 Planning On-Call Schedules and Clinical Tasks	1 400 hr/year \$333.3k	280 hr/year \$66.7k	1 600 hr/year \$41.6k	200 hr/year \$5.2k	\$303k
Step 3 Aggregation of On-call Schedules and Clinical Tasks	N/A	N/A	700 hr/year \$18.2k	N/A	\$18.2k
Step 4 Communication of On-Call Schedules and Clinical Tasks	1,200 hr/year \$285.7k	25 hr/year \$6k	14,800 hr/year \$384.4k	49 hr/year \$1.3k	\$662.8k
Shift Exchanges Between Physicians	2,400 hr/year \$571.4k	118 hr/year \$28.1k	4,800 hr/year \$124.7k	0 hr/year \$0k	\$668k
TOTAL	5,400 hr/year \$1,285.6k	823 hr/year \$196k	22,700 hr/year \$589.7k	349 hr/year \$9.1k	\$1,670.2k

What Costs Are Avoided at Each Stage of Schedule Management?

According to our observations, health facilities usually follow the steps outlined below to manage physicians' schedules.

Step 1: Planning Personal Schedules

First, each physician sends their availability and restrictions to the person responsible for planning the schedules of the medical service. According to our estimates, each physician allocates on average **15 minutes quarterly** to perform this task. As for the hospital administrative staff, it devotes **8 hours per quarter per medical specialty** to deliver physicians' schedule.

With the use of the scheduling solution developed by PetalMD, the time spent by physicians remains the same at this stage of the process. However, the administrative staff dedicates **1 hour per quarter per specialty** to centralize the schedules (80% reduction), in particular because the requests for absences entered by physicians are automatically included in the scheduling tool used by the planner of the administrative staff concerned.

Annual Expenses Related to Personal Physician Scheduling
(with data from a typical hospital of 400 physicians)

	 Physicians	 Administrative Staff
Without the Use of a Specialized Digital Solution	\$95.2k	\$20.8k
With the Use of the PetalMD Platform	\$95.2k	\$2.6k
Expenses Avoided Annually	\$0k	\$18.2k

Step 2: Planning On-Call Schedules and Clinical Tasks

After having received the availability and constraints of the doctors of the medical service, the planner must gather them in order to distribute the clinical tasks and the shifts for the quarter. They then send the schedule of their medical team to the Medical Affairs in the format that suits them (Excel or Word file, fax, email, etc.). Each planner allocates on average **14 hours per quarter** to this step. As for the administrative staff that transmit physicians' schedules and lists to the Medical Affairs, they allocate **16 hours per quarter per specialty** to this task.

With the use of the scheduling solution developed by PetalMD, planners have access to a solution that allows them to automate a large portion of scheduling, with the time spent by physician planners being **2.8 hours per quarter** (80% reduction). Administrative staff using the platform allocates **2 hours per quarter** to assist the planner (reducing time allocated by 87%).

Annual Expenditures Related to On-Call Scheduling and Clinical Tasks

(with data from a typical hospital of 400 physicians)

	 Physicians	 Administrative Staff
Without the Use of a Specialized Digital Solution	\$333.3k	\$41.6k
With the Use of the PetalMD Platform	\$66.7k	\$5.2k
Expenses Avoided Annually	\$266.6k	\$36.4k

Step 3: Aggregation of On-call Schedules and Clinical Tasks

The Medical Affairs receives schedules from all departments in the facility and must gather them to make them available throughout the hospital. This seemingly simple step, however, requires significant time investment, since the documents are received on different types of media. According to our estimates,

this process requires on **average 7 hours per quarter per medical specialty** for the administrative staff.

With the use of the PetalMD platform, all tasks related to this step can be eliminated, since aggregation is done automatically.

Annual Expenditures Related to the Aggregation of On-Call Schedules and Clinical Tasks (with data from a typical hospital of 400 physicians)

	 Physicians	 Administrative Staff
Without the Use of a Specialized Digital Solution	\$0k	\$18.2k
With the Use of the PetalMD Platform	\$0k	\$0k
Expenses Avoided Annually	\$0k	\$18.2k



Step 4: Communication of On-call Schedules and Clinical tasks

The Medical Affairs allocates on average **3 hours per physician per year** to all that relates to the communication of schedules. The administrative staff, who is responsible for the reception, transcribing and distribution of on-call schedules and clinical tasks, allocates **37 hours to this step, per physician, per year**. The size of the hospital or health organization greatly influences the time required to complete this step.

With the use of the PetalMD platform, the number of physicians is no longer a determining factor, because the process is largely automated at this stage. Indeed, schedules are sent out instantly to all staff involved, regardless of their number. The Medical Affairs allocates **25 hours a year** to this step, while the administrative staff allocates **49 hours a year**.

Annual Expenditures Related to Communication of On-Call Schedules and Clinical Tasks (with data from a typical hospital of 400 physicians)

	 Physicians	 Administrative Staff
Without the Use of a Specialized Digital Solution	\$285.7k	\$384.4k
With the Use of the PetalMD Platform	\$6k	\$1.3k
Expenses Avoided Annually	\$279.7k	\$383.1k



DID YOU KNOW?

In those hospitals where schedules are not digitized, the call centre can handle up to 350 calls per hour.

Shift Exchanges Between Physicians

Physicians frequently make changes to their schedule. Each of these changes requires the physician or his/her assistant to find a replacement, to communicate the change to the planner, and to notify the Medical Affairs as well as other departments concerned. Since the schedules distributed in the hospital must be manually updated, the administrative staff takes **3 hours per quarter per physicians**, added to the **15 minutes** already allocated by physicians for each of their shift exchange. According to our observations, physician exchange their shift an average of **6 times per quarter**.

With the use of the PetalMD platform, shift exchange can be done directly between physicians; they have access to the schedules of their group and they do not need to go through an intermediary to perform their shift exchange. In addition, these changes are instantly displayed in the group schedules and the hospital on-call list. Considering this, the time required by physicians for each change is significantly reduced and goes from **15 minutes to less than 1 minute** (over 95% reduction), while administrative staff no longer need to intervene.

Annual Expenses Related to the Shift Exchanges Between Physicians
(with data from a typical hospital of 400 physicians)

	 Physicians	 Administrative Staff
Without the Use of a Specialized Digital Solution	\$571.4k	\$124.7k
With the Use of the PetalMD Platform	\$28.1k	\$0k
Expenses Avoided Annually	\$543.3k	\$124.7k

Where Are the Main Savings Made?

Since the hourly cost of physicians is significantly higher for the hospital than that of administrative staff, the majority of savings are made by saving physicians' time. In fact, the simplification of work shift exchanges for doctors alone accounts for 33% of the savings made

by the hospital. This is due to the high volume of physician shift exchange and the fact that with the PetalMD platform, all schedules are updated automatically, in real time, whenever an exchange takes place.

Cost Reduction Related to Physician Activities (CAD \$)



However, the number of hours earned by administrative staff should not be underestimated. By automating the distribution of physicians' schedules, the system effectively eliminates the time allotted for step 4

(communication of on-call schedules and clinical tasks). This time saving represents 21% of all savings made by the hospital.

Reduction of Administrative Staff Costs (CAD \$)



What Are the Qualitative Benefits?

In addition to enabling hospitals to save large amounts of money, the centralization of physicians' schedules offers several qualitative benefits. Here are a few examples of the challenges that, once identified through the centralization of physicians' schedules via a specialized

digital solution, make it possible to improve the coordination of care and increase the speed with which patients are treated, and therefore contribute to their safety.

A Sample of Problems Experienced in Hospitals Where Doctors' Schedules are Not Centralized



The Medical Affairs has difficulty in easily guaranteeing full coverage due to the lack of a daily overview of on-call schedules.



Hospital Managers do not have access to reliable and up-to-date information of on-call coverage and physician duties to effectively improve the existing processes.



Physicians who want to make a change to the schedule must go through a complex process rather than directly consulting the availability of their colleagues and communicating with them autonomously.



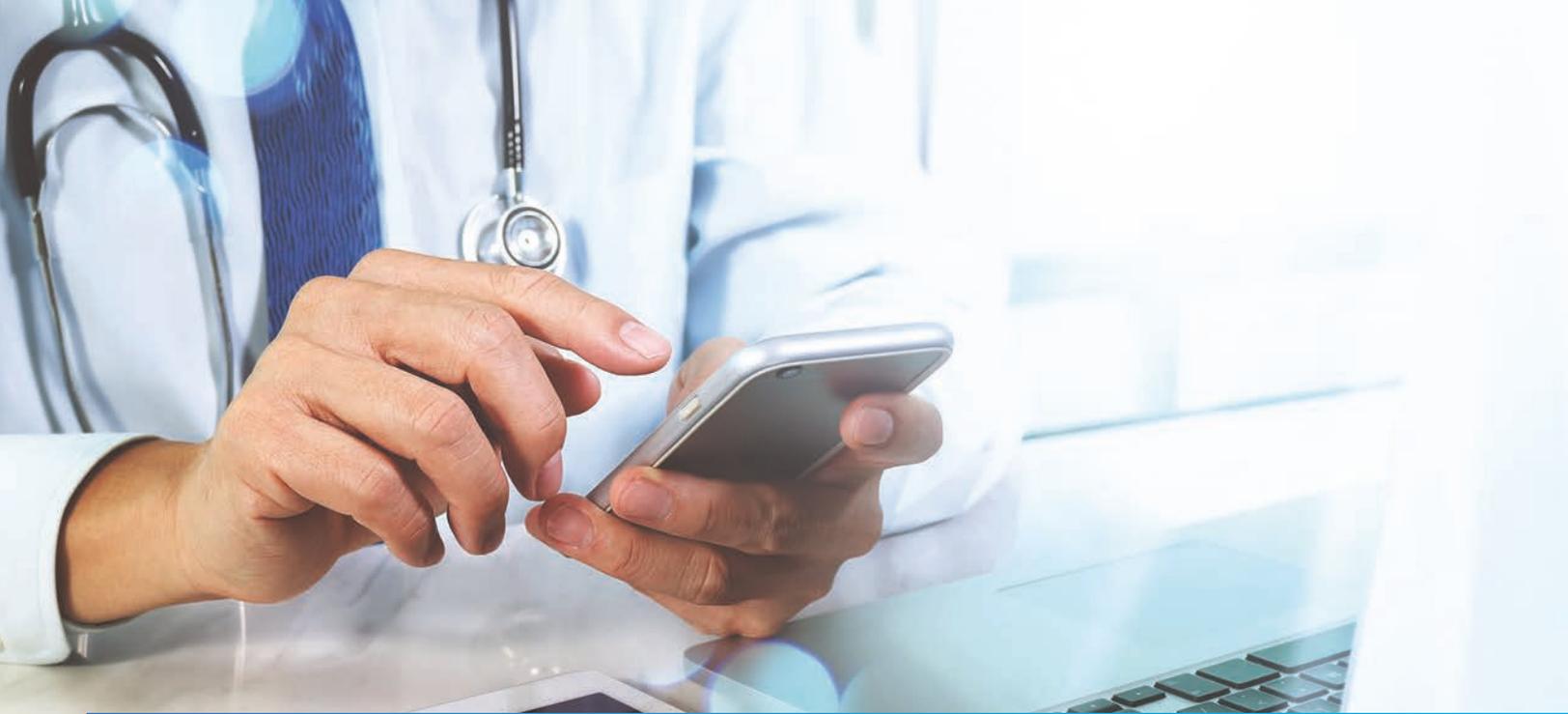
The Administrative Staff must manually create the on-call list from the different on-call schedules, which requires a lot of time and involves the risk of errors, especially during changes.



Nurses need to communicate with different stakeholders to access physician contact information and availability, which creates additional communication delays.



Patients must wait longer before being treated when hospital staff have difficulty reaching the doctor on-call. This can put patient safety at risk in certain emergency situations.



5 Reasons to Choose a PetalMD Solution

1. User Experience Adapted to the Realities of the Health Sector

The interface and functionalities of every solution developed by PetalMD are designed in collaboration with physicians, as well as hospital and medical clinic managers to effectively address their daily challenges.

2. High Standards of Information Security

All PetalMD solutions are hosted on cloud servers in Canada, including Microsoft Azure, ensuring data security at the highest available standards.

3. Avant-Garde Solutions That Take Advantage of the Latest Technologies

PetalMD ensures the use of the latest cutting-edge technologies to create high performance, innovative and easy-to-use solutions.

4. Turnkey Service

Our team is responsible for configuring, deploying, and customizing the PetalMD solution to best meet the reality of every physician and health facility.

5. Outstanding Post-Implementation Technical Support

Once the deployment is completed, PetalMD users have access to technical support, available online and over the phone. An online Help Center is also available at all times.

Cutting-Edge Solutions Offered by PetalMD

PetalMD stands out in the digital health marketplace for its comprehensive suite of complementary Web productivity solutions designed to maximize the efficiency of healthcare facilities, simplify the day-to-day lives of physicians and facilitate access to healthcare.

PetalScheduling

Schedule Management for Physicians

Maximizes physicians' schedules by reducing the time needed to create and manage it by up to 80%.

PetalOn-Call

Hospital Dashboard

Centralizes physicians' schedules to automatically generate and distribute up-to-date on-call schedules.

PetalMessage

Secure Messaging for Healthcare

Secures processes for communications and the exchange of confidential documents at the health facility level.

PetalBooking

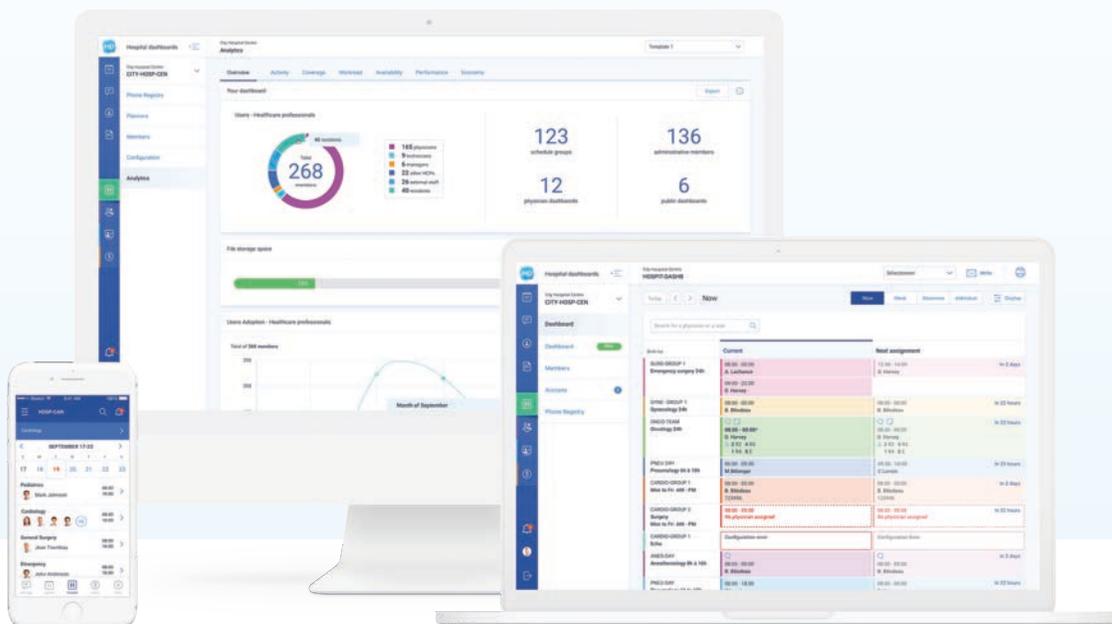
Appointment Management System

Improves access to healthcare by optimizing the management of patient appointments in medical clinics.

Xacte

Medical Billing

Simplifies medical billing with the RAMQ and prevents billing errors that could lead to payment refusals.



Find out How Much Your Hospital Can Save by Modernizing Physicians' Schedule Management

Each health facility or organization is unique and requires an appropriate deployment strategy. To find out how your facility could benefit from digitizing and centralizing physician on-call schedules and clinical tasks, do not hesitate to contact a specialized PetalMD team adviser or request a customized demonstration.

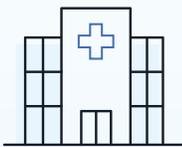
Call us at 1-888-949-8601 to request a free demonstration!



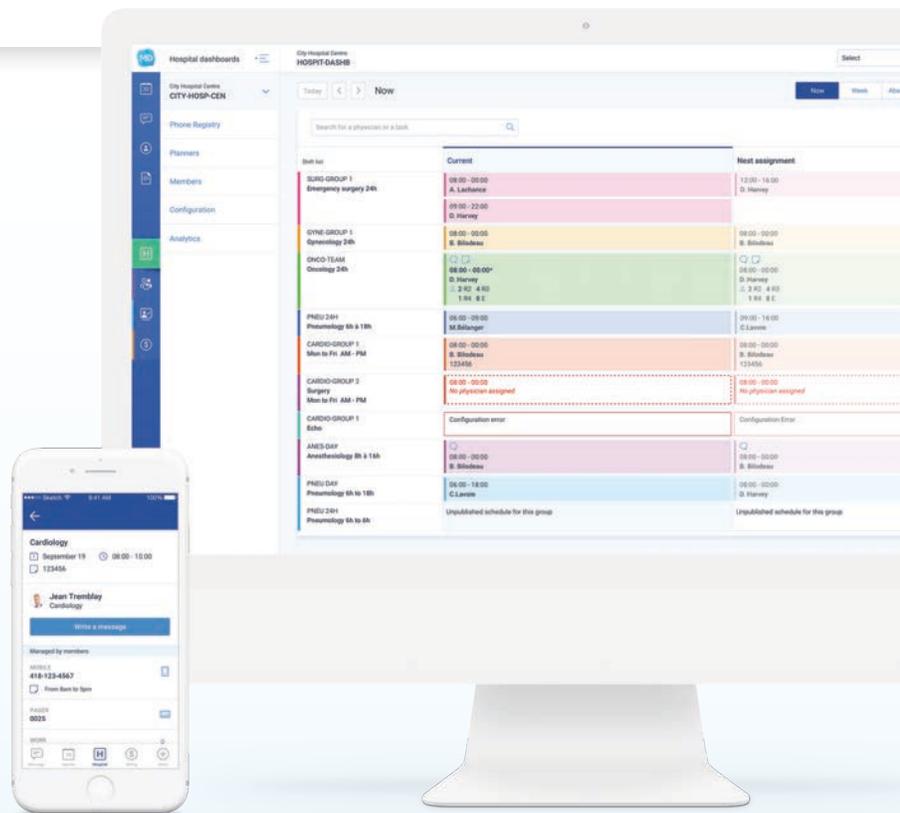
40,000
Healthcare
Professionals



1,400
Hospital
Departments



200
Health
Facilities



A Canadian leader in the digital health sector, PetalMD develops innovative Web solutions to simplify the daily tasks of physicians and improve the efficiency of healthcare facilities.

For more information, contact a specialized consultant at 1-888-949-8601.

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