

# Impact of structural and organizational reforms on resident physicians' daily work

<b>Submission date</b> 19/04/2018	<b>Recruitment status</b> No longer recruiting	<input checked="" type="checkbox"/> Prospectively registered <input checked="" type="checkbox"/> Protocol
<b>Registration date</b> 24/04/2018	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 31/07/2025	<b>Condition category</b> Other	<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

### Background and study aims

Due to an increasing number of patients with multiple or complex illnesses, a heavier administrative burden, and the evolution of young residents' expectations, organization of work in internal medicine wards is of utmost importance. In a 2015 study, we showed that residents spent 1.5 hours on administrative tasks and 1.7 hours with patients per day. In addition, residents switched activity on average 15 times per hour. This study investigated major reforms: task delegation to non-medical professionals, reorganization of the workday's schedule, and implementation of an early morning inter-professional decision meeting. An associated reduction in administrative and working hours and increased time with patients could greatly improve job satisfaction and attractiveness for internal medicine. We aim to quantify the impact of the organizational and structural reforms implemented in our department between 2016 and 2017 on residents' administrative workload, continuity and adequacy of work, duration of shifts, and time spent with patients.

### Who can participate?

Resident physicians at an internal medicine ward at Lausanne University Hospital.

### What does the study involve?

The residents will be observed for two 11-hour shifts. The 'before reform' group was observed in 2015 and results are already published. The 'after reform' group will be observed in 2018, using the same methods and tools. The intervention is made of major reforms implemented between 2016 and 2017, which will be reported in detail. The primary outcome will be time spent for administrative tasks. We will also measure the amount of task switching per hour, the mismatch between observed activities compared to the departmental work schedule, the effective duration of observed shifts, and the time spent in presence of patients. We added a qualitative part by means of focus groups composed of observed residents.

### What are the possible benefits and risks of participating?

There are no additional risks or benefits from participating in the study, because the physicians will be working as normal.

Where is the study run from?  
Lausanne University Hospital

When is the study starting and how long is it expected to run for?  
May 2018, with recruitment for 3 weeks.

Who is funding the study?  
An external funding application has been submitted.

Who is the main contact?  
Dr Antoine Garnier, antoine.garnier@chuv.ch

## Contact information

**Type(s)**  
Scientific

**Contact name**  
Dr Antoine Garnier

**Contact details**  
CHUV  
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Lausanne  
Switzerland  
1011

## Additional identifiers

**EudraCT/CTIS number**

**IRAS number**

**ClinicalTrials.gov number**

**Secondary identifying numbers**  
N/A

## Study information

**Scientific Title**  
Impact of structural and organizational reforms on residents' daily work

**Acronym**  
MED2DAY

**Study objectives**  
Because of an increasing number of complex polymorbid patients, a heavier administrative burden, and the evolution of young resident physicians' expectations, organization of work in internal medicine wards is of utmost importance. In a 2015 study, we showed that residents

spent 1.5 hours on administrative tasks and 1.7 hours with patients per day. In addition, residents switched activity on average 15 times per hour. This study motivated major reforms: task delegation to non-medical professionals, reorganization of the workday's schedule, and implementation of an early morning inter-professional decision meeting. An associated reduction in administrative and working hours and increased time with patients could greatly improve job satisfaction and attractiveness for internal medicine.

### **Ethics approval required**

Old ethics approval format

### **Ethics approval(s)**

The local ethical committee confirmed that this study is not subject to ethical approval.

### **Study design**

Observational cross-sectional study

### **Primary study design**

Observational

### **Secondary study design**

Cross sectional study

### **Study setting(s)**

Hospital

### **Study type(s)**

Other

### **Participant information sheet**

No participant information sheet available.

### **Health condition(s) or problem(s) studied**

Organization of healthcare and and physicians' work in a hospital setting.

### **Interventions**

Organizational and structural reforms, including task delegation to non-medical professionals, reorganization of the workday's schedule, and implementation of an early morning interprofessional decision meeting, implemented in our department between 2016 and 2017. We expect to include 35 residents. Each resident being observed twice (meaning 2 shifts of approx. 11 hours per resident), we will gather between 700 and 900 hours of observation.

### **Intervention Type**

Other

### **Primary outcome measure**

Time spent for administrative tasks (primary outcome), assessed by time-motion study with observation of residents' activities during shifts, by observers using a dedicated tablet application

### **Secondary outcome measures**

1. Amount of task switching per hour
2. Mismatch between observed activities compared to the departmental work schedule
3. Effective duration of observed shifts
4. Time spent in presence of a patient

**Overall study start date**

01/01/2018

**Completion date**

31/12/2018

## Eligibility

**Key inclusion criteria**

1. All residents registered in the internal medicine department at CHUV during the study, having graduated from a medical school, and with informed consent

**Participant type(s)**

Health professional

**Age group**

Adult

**Sex**

Both

**Target number of participants**

35

**Key exclusion criteria**

Inclusion criteria not met

**Date of first enrolment**

01/05/2018

**Date of final enrolment**

21/05/2018

## Locations

**Countries of recruitment**

Switzerland

**Study participating centre**

Lausanne university hospital

Switzerland

1011

# Sponsor information

## Organisation

Department of medicine

## Sponsor details

CHUV

Rue du Bugnon 46

Lausanne

Switzerland

1011

## Sponsor type

Hospital/treatment centre

## Website

[www.chuv.ch](http://www.chuv.ch)

## ROR

<https://ror.org/05a353079>

# Funder(s)

## Funder type

Not defined

## Funder Name

Investigator initiated. Funding pending.

# Results and Publications

## Publication and dissemination plan

Planned publication in a high-impact peer reviewed journal.

## Intention to publish date

01/06/2019

## Individual participant data (IPD) sharing plan

The data sharing plans for the current study are unknown and will be made available at a later date.

## IPD sharing plan summary

Data sharing statement to be made available at a later date

### Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Protocol file</a>	version 1.0	26/02/2018	16/08/2022	No	No
<a href="#">Results article</a>		30/07/2025	31/07/2025	Yes	No