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

Submission date
19/04/2018

Recruitment status
No longer recruiting

Registration date
24/04/2018

Overall study status
Completed

Last Edited
28/04/2026

Condition category
Other

[X] Prospectively registered
[X] Protocol
[_] Statistical analysis plan
[X] Results
[_] 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
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Additional identifiers

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.

Primary study design
Observational

Study design
Observational cross-sectional study

Study type(s)
Other

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(s)
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

Key secondary outcome(s)
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

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

Healthy volunteers allowed

No

Age group
Adult

Sex
All

Total final enrolment
75

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

ROR
https://ror.org/05a353079

Funder(s)

Funder type
Not defined

Funder Name
Investigator intiated. Funding pending.

Results and Publications

Individual participant data (IPD) sharing plan

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?
Results article		30/07/2025	31/07/2025	Yes	No
Results article		27/04/2026	28/04/2026	Yes	No
Protocol file	version 1.0	26/02/2018	16/08/2022	No	No