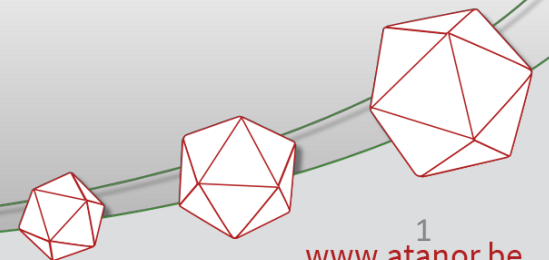


KickCancer Paediatric Haemato- Oncologists

Comprehensive Survey Analysis
Prepared by ATANOR for KickCancer



Survey's Objectives

- Understand motivations for choosing paediatric haemato-oncology
- Assess career expectations and work-life balance
- Identify stress factors and well-being drivers
- Evaluate current work conditions and identify needs
- Provide actionable recommendations for KickCancer and for policy papers

Methodology

- Two complementary surveys have been run.
 - One on-line questionnaire for all PHO working in Belgian hospitals.
 - A set of 8 interviews with PHO of neighbouring countries (Netherlands, France, Germany).

Note on survey methodology

- The options included in the multiple-choice questions were based on stress factors at work, as identified in the human resources literature, and adapted to the context of this survey.
- To avoid influencing the open-ended responses, each multiple-choice question (e.g. on stress factors) was always preceded by an open question on the same topic.

Part 1 : ON-LINE SURVEY

1. Respondents' profile

All ages and institutions represented

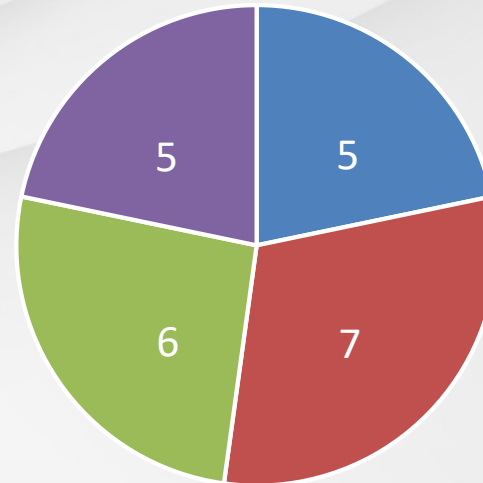
- 31 respondents out of 55 invitations
- Diversity of regions, hospitals and experience

Institution



■ CHU Mont Légia ■ CHU Liège ■ UZ Gent ■ UZ Leuven
■ UZ Antwerpent ■ C.U. Saint-Luc ■ HUDERF

Years of experience



■ < 5 years ■ 5 to 9 ■ 10 to 19 ■ 20 +

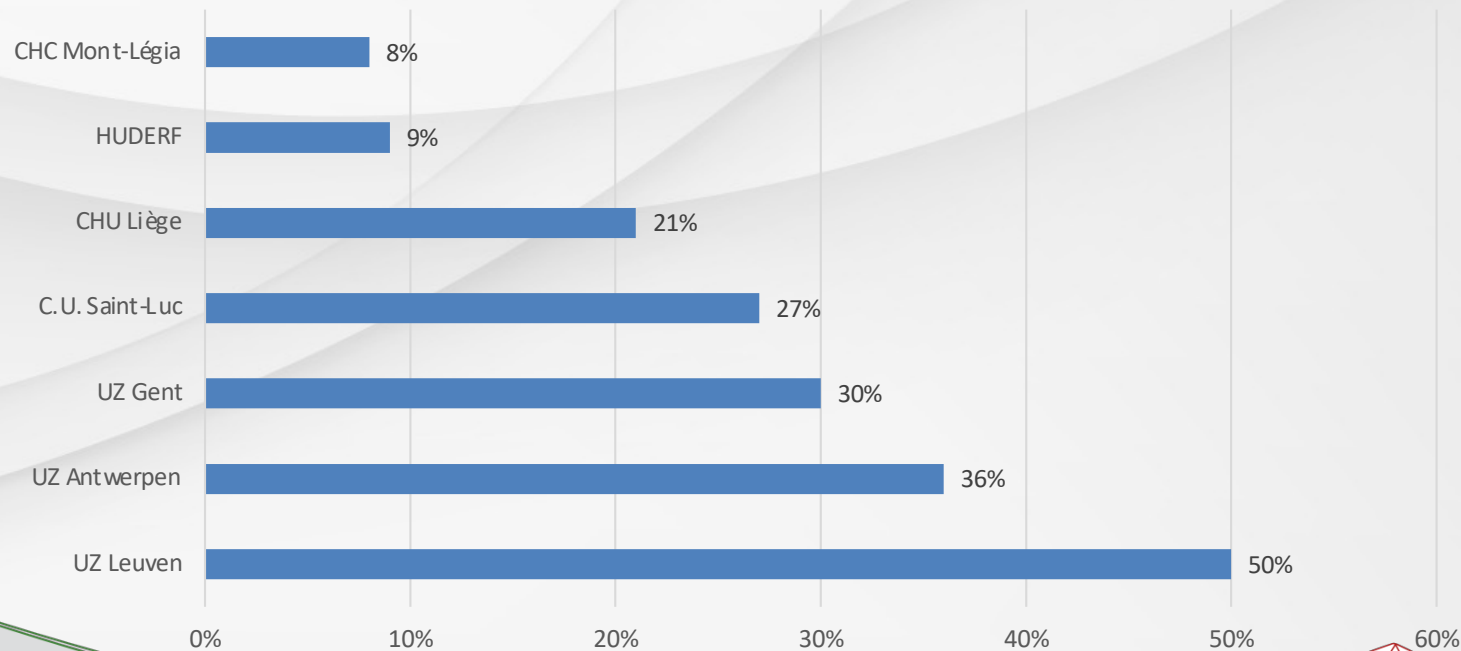
2. Time allocated to research

Time allocation in PHO's life

- We interviewed respondents about time dedicated to
 - Clinical work,
 - Desk research (directly related to a patient's treatment options), and
 - Scientific research

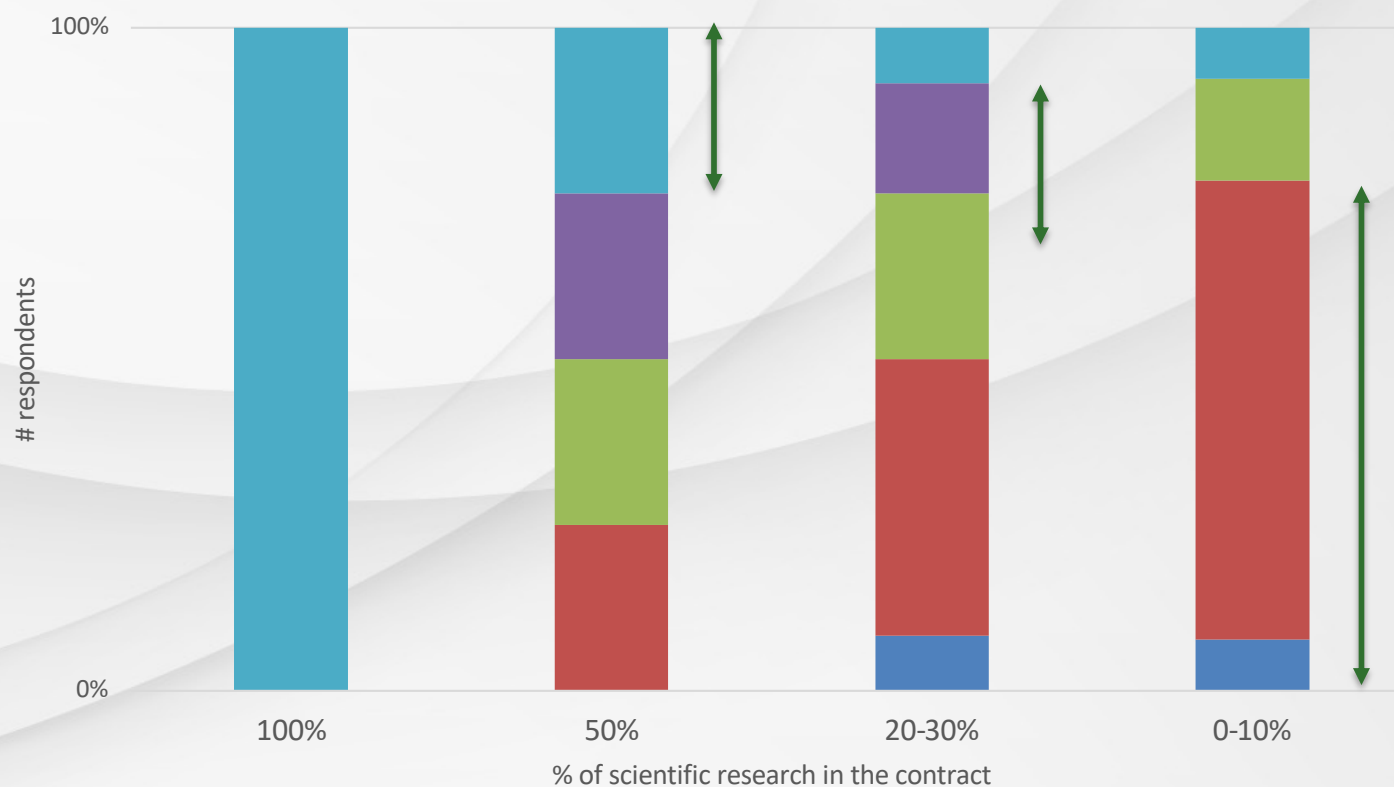
Contractual time allocated to research

- % of time contractually allocated to scientific research is
 - 22% on average
 - Significantly higher in Flanders
 - NB: potential bias for Leuven : 2 full time research



Real time allocated to scientific research

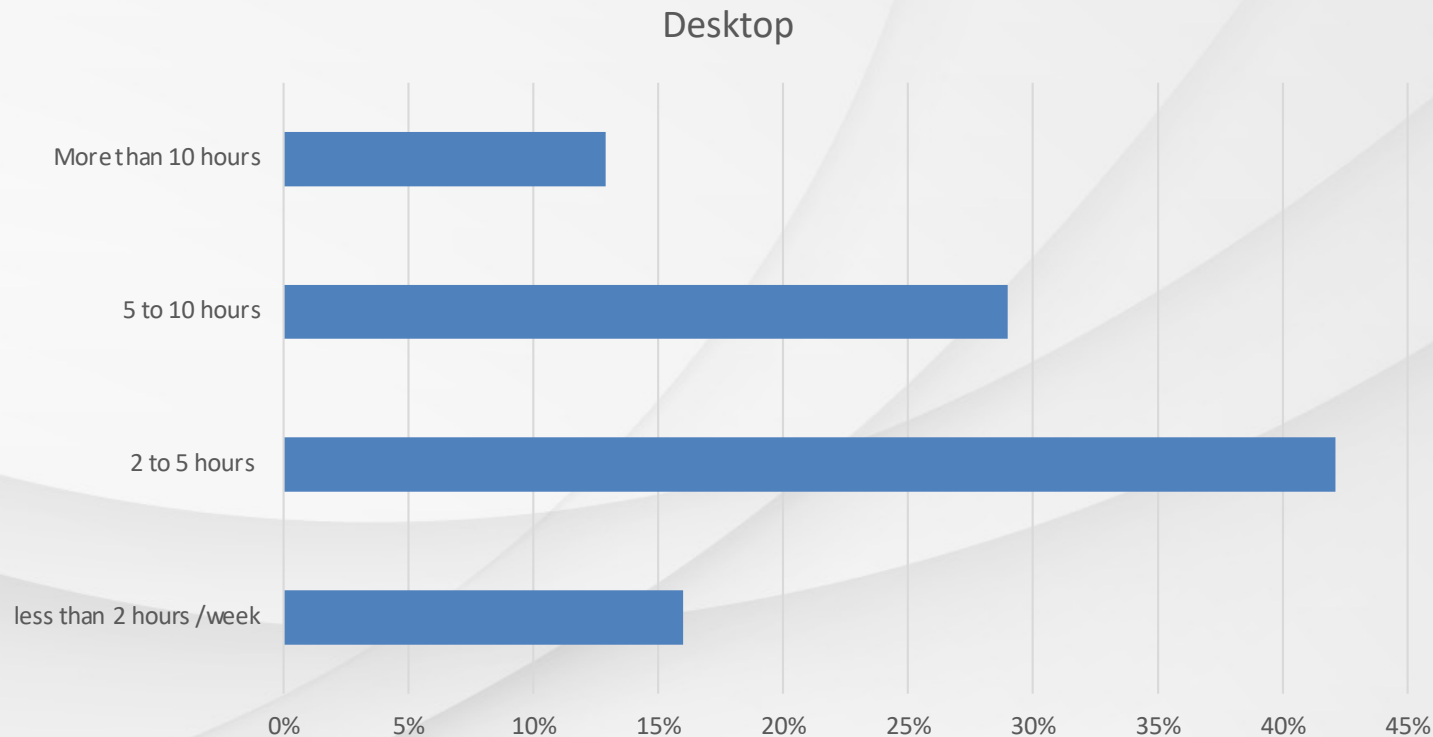
Allocated research time is often reduced in practice due to clinical and administrative demands.



■ 0 hour ■ less than 2 hours ■ 2 to 5 hours ■ 5 to 10 hours ■ more than 10 hours

Share of respondents devoting the correct amount of time that is in line with the contractual provisions

Real time allocated to desktop research



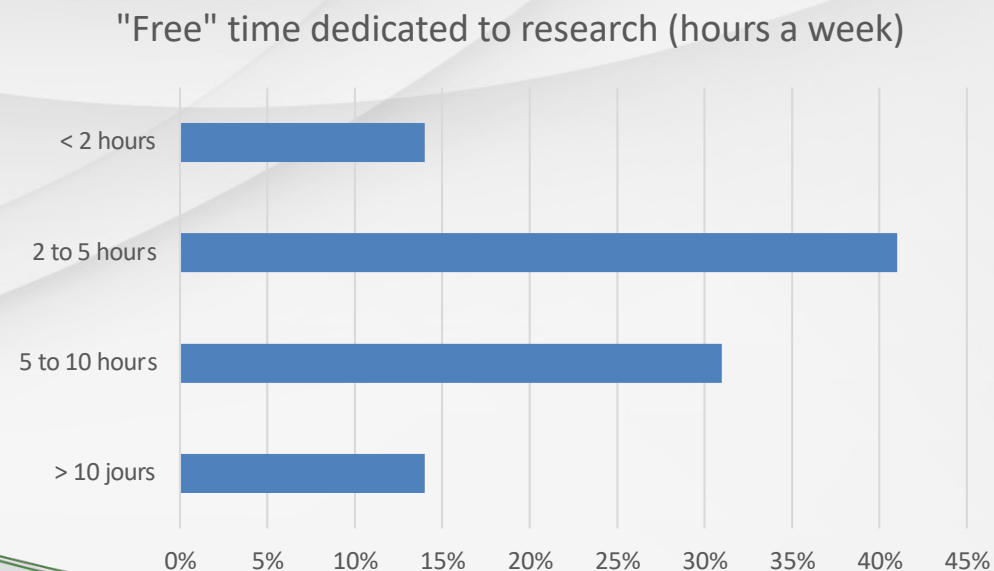
research time: scientific work, that is time to work on a research project

desktop research time : time devoted to increasing knowledge on a given disease to make a treatment decision for a specific patient.

Conclusion on PHO's actual time spread

In reality :

- **Desktop research** is significantly more prevalent than scientific work
- No notable differences between regions or institutions
- Use of **free-time to secure at least** a part of research work (desk and scientific) is extremely common



Free comments on use of free time for research

- ...or if done from the hospital, then I do clinical work from home (which ends up in being the same)
- ...scientific work only during personal time (even maternity leave!)
- During calmer weeks, this is around 4-5h, during busy weeks this can amount to 10h or more
- All my scientific work is carried out in "free" time.
- Most of the hours for research are in my free time (evening, weekend)
- The greatest percentage
- Theoretically, I have 5/10 for research, but practically it is 8/10. The extra 3/10 are carried out during my free time. Also, the hours spent for desktop research, are usually carried out during my free time. So you can imagine, that practically, my working arrangement is about 15/10, with 5/10 carried out during my free time.
- Majority performed during free time, during working hours insufficient time

Aspirations vs. reality on time allocation

A very **large majority of respondents** wish to spend more time on research

- **64.5%** of respondents would like their role to involve more research.
- **22.6%** wish to maintain research at its current level.
- **12.9%** would prefer to do less research – this concerns 4 respondents and requires some cautions:
 - 2 are students conducting research solely as part of their thesis.
 - 2 have already exceeded their contractual research hours and continue to work primarily in their free time.

3. Choice of the PHO-specialty & work conditions

Drivers for the choice of specialty

- **High importance:**
 - potential of impact on patients' lives
 - clinical complexity
 - teamwork
 - research opportunities
- **Low importance:**
 - professorship
 - social recognition
 - career hierarchy

65% would recommend the specialty; 6.5% would not

Concerns about the choice of specialty

Despite high % of **positive recommendation**, some important negative aspects are pointed out

1. **Work-life balance** difficult to reach or not satisfying / stressful job / too much work / lack of personnel
2. **Uncertainties of professional career**: job positions only available in a few centres and specialty not completely useful in other centres – limited opportunities to find a position - *“I do not know if I would recommend to stay in Belgium”*
3. **Psychologically taxing**: delivery of bad news on a very frequent basis – can be emotionally draining

Working conditions

30 % rate their working conditions as good, 45% average; 26% rate them as poor

Main issues

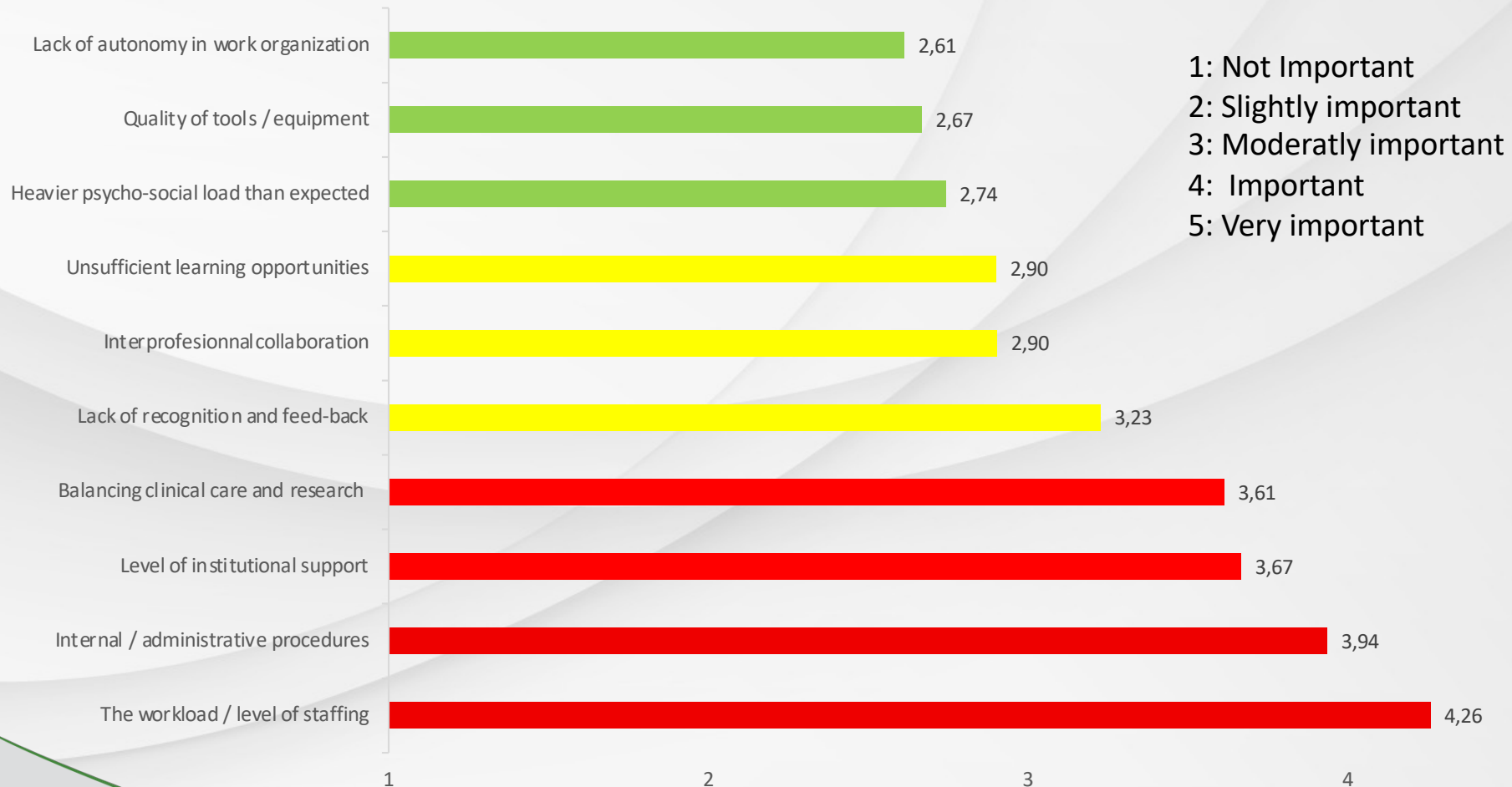
- work overload
- lack of support (at an institutional level and at a practical level - e.g. administration, logistics)
- insufficient time for research

Positive aspects

- Work itself (exciting, fulfilling, interesting...)
- Contact with patients

Working conditions – Stress factors

Importance of stress factors



Work conditions – Stress factors

The most important stress factors are :

1. The **workload/level of staffing**: 84%*
2. Internal/administrative **procedures**: 71%*
3. Balance between **clinical care and research** : 68%*
4. The level of **institutional support**: 45%*

* % of respondents that have answered 4 or 5 (important or very important stress factor)

There are **significant variations** in the importance of the stress factors among the different institutions. Detailed results for each centre can be presented in the centres.

4. Career aspirations

Career aspirations – Spontaneous answers

Develop expertise for quality of care and research

- Develop a sub-specialty expertise
- Collaborate in centralised reference centres
- Provide top-tier treatments and raise national standards
- Engage in international conferences and research
- Gain more time for research and quality clinical work

Work-life balance

- Increase staffing and reduce workload

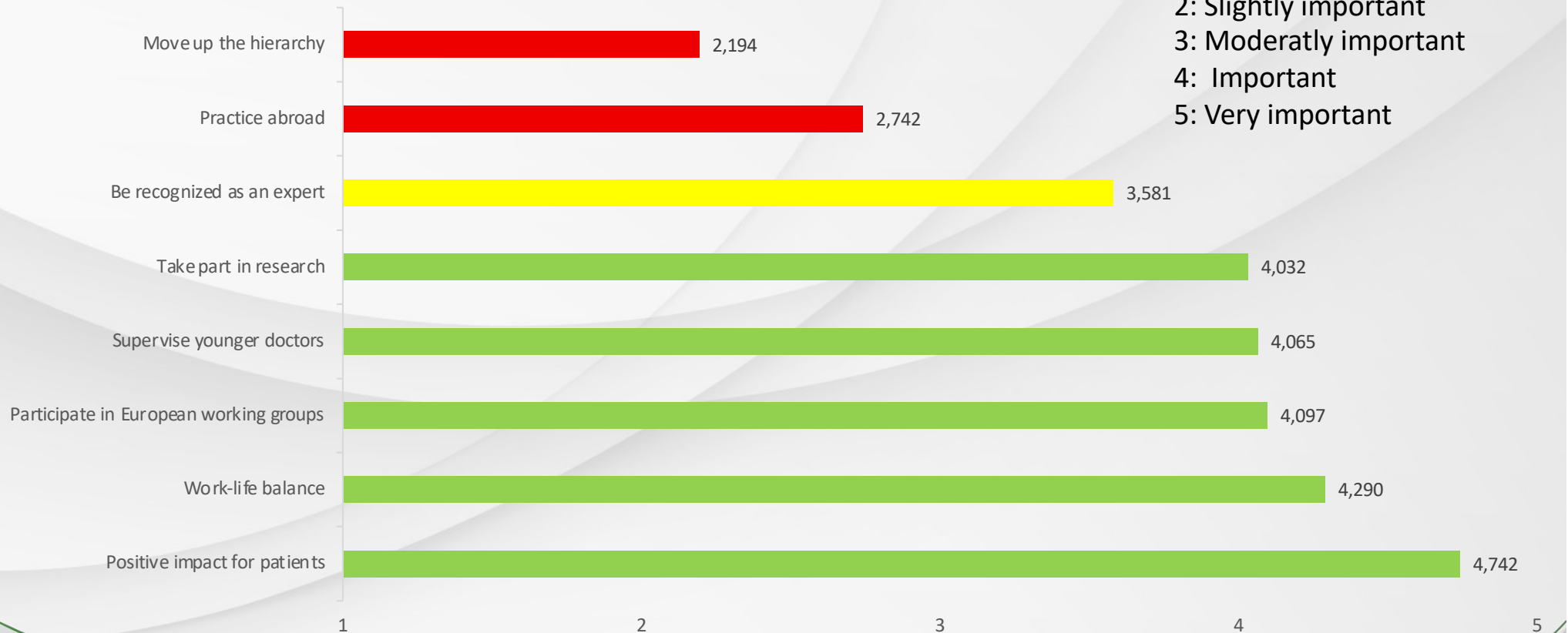
Career management

- Clarify long-term career pathways

Career aspirations – Multiple choice

Importance of motivational factors

1: Not Important
2: Slightly important
3: Moderately important
4: Important
5: Very important



Career aspirations – multiple choice

Most important career priorities

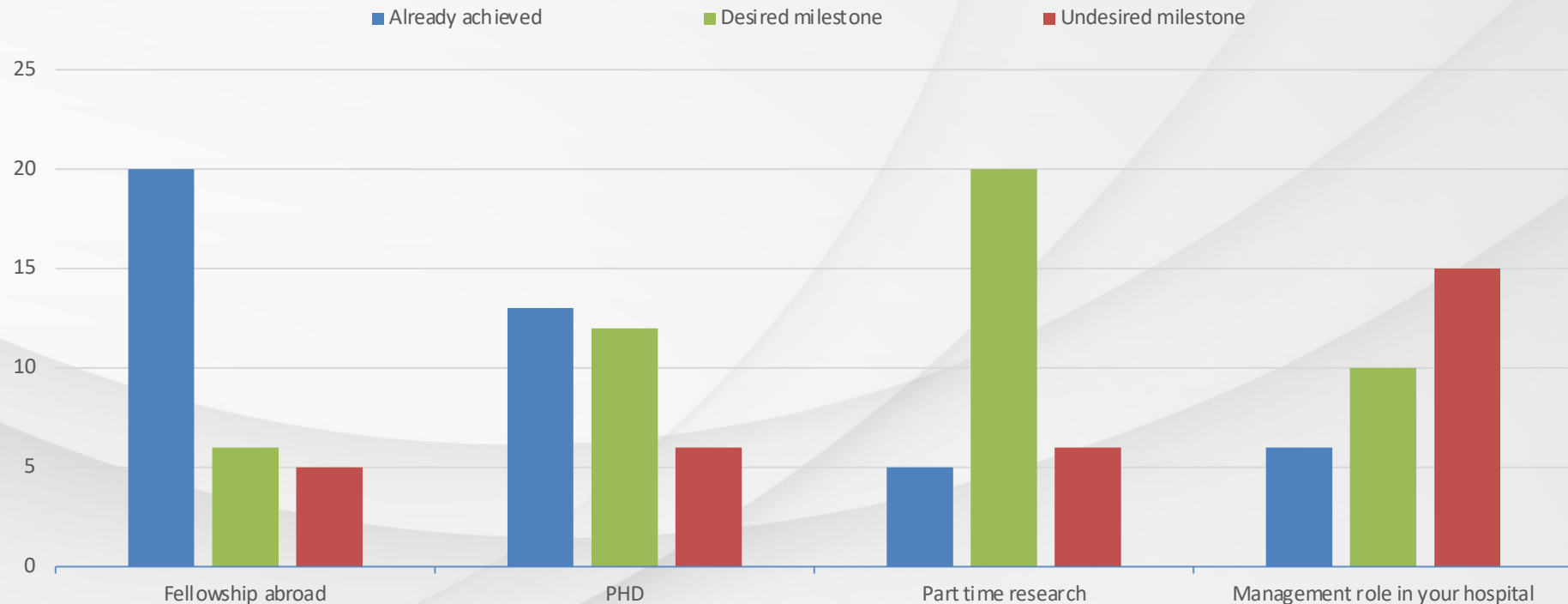
- **Work-life balance** (while it is the main issue!)
- Participation in research (with 2 notable exceptions, more attached to clinical work)
- Involvement in European collaborative groups
- Mentoring younger doctors
- Recognition as expert

Less Important

- Moving up the hierarchy
- Practicing abroad (though very important to a minority)

Spontaneous answers aligned with prompted answers

Career aspirations – (un)desired milestones



Institutionalised part-time research :

- 16% have reached it.
- 65 % desire it.

5. Key support needs

Key support needs – Spontaneous answers

1. Staffing

- Hire more paediatric oncologists, admin staff, nurses & paramedics
- Reduce the burden of on-call shifts

Key support needs – Spontaneous answers

2. Research

- Increase funding for clinical & translational research
- Enable 50/50 clinical-research roles when desired
- Establish a dedicated institution for paediatric cancer trials
- Strengthen political and institutional investment in paediatric oncology research

Key support needs – Spontaneous answers

3. Collaboration

- Create one reference centre with centralised expertise
- Foster inter-hospital collaboration & shared case discussions
- Build a strong national/international PHO network

5. Key learnings

Key learnings

- Significant mismatch between contractual research time and actual practice
- Most research conducted during “free time”, especially desk research
- PHOs are motivated by impactful care, collaboration, and specialisation, not hierarchy
- Working conditions are heavily affected by staff shortages, administrative overload, and unclear career paths

Key learnings

- There is strong demand for **stronger cooperation** between hospitals, both for clinical care and research integration
- Respondents express a clear **need for structural support**: staffing, funding, and institutional recognition
- **Research is valued**, but clinical workload often prevents proper engagement
- There is also a strong desire to participate **in international networks** and to bring Belgium to higher standards of care



Part 2 : International interviews

Respondents profile

8 interviews:

- Netherlands:
 - Rob Pieters (PMC)
 - CM Zwaan (PMC)
 - Hans Merks (PMC)
- Germany:
 - Cornelis van Tilburg (Heidelberg)
 - Simon Zeuner (Heidelberg - junior)
 - Cecilia Hardyn (Heidelberg - junior)
- France:
 - Véronique Minard (Institut Gustave Roussy)
 - Nadège Corradini (Lyon – Centre Léon Bérard)

Note on methodology

Originally, we had foreseen to interview 1 senior and 2 juniors in 4 countries.

- After the interviews of the first 2 juniors, we concluded it was more interesting to focus on senior PHOs;
- We had hope to interview PHOs from Denmark but couldn't have the agreement for an interview;
- The interview methodology was a semi-directive interview, based on the set of questions hereunder.

Questions

1. **Career track** (PhD, existence of part-time research)

- What is a standard career track within your institution ?
- Do all PHOs have a PhD?
- Do all junior PHOs hold a full-time clinical position ?
- Do some (or all) senior PHOs hold a part-time research position ?

2. **Work organization**

- Distribution of research and clinical work
- Tasks delegated to other staff (other than PHO)

3. **Role of patients' organizations** in your country within paediatric oncology?

4. **Good practice(s)** that you would recommend adopting - or adapting - in Belgium?

1. Career track

Out of the 8 interviews, we could identify **3 main career tracks** within the PHO:

1. Fundamental research
2. Translational research and clinical work
3. Clinical work

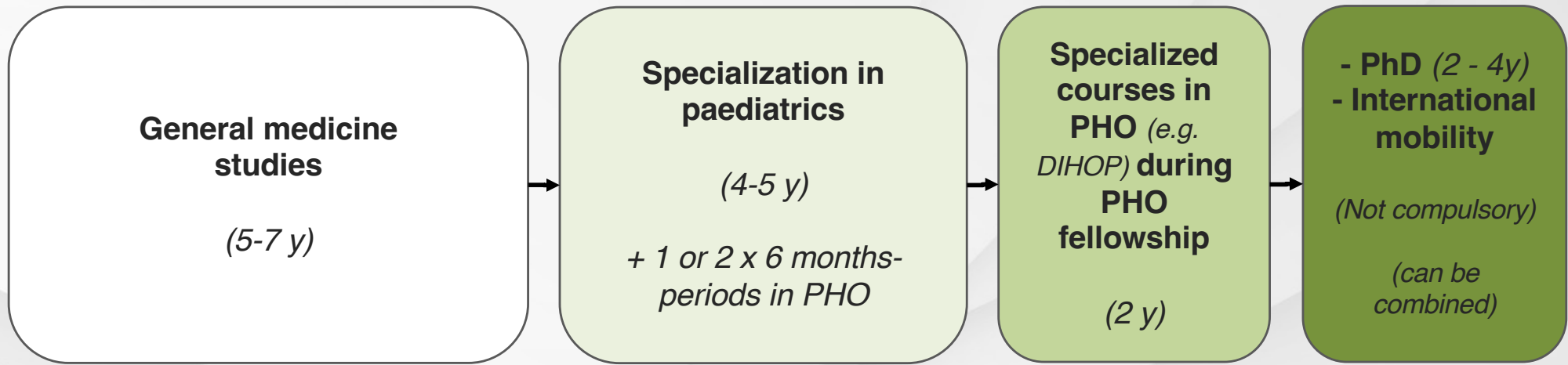
And **5 building stones** of these career tracks:

- General medicine studies
- Specialization in paediatrics, with internships in PHO
- Specialized courses in PHO, during fellowship
- PhD
- (inter)national mobility

These lead to a « stable » position, and then eventually to management roles within the institution.

1. Career track

4 building stones:



Leading to 3 career tracks:

Fundamental research	- Location in large centers, with research lab - PhD strongly recommended
Translational research	- Location in large centers - PhD and international mobility recommended - Protected time for research is highly valued, but difficult to gain due to clinical workload
Clinical	- All types of centers possible (large or small) - PhD and international mobility are nice to have but not requested

1. Career track

Out of the 8 interviews, we could also find answers to the following sub-questions:

- **Do all PHOs have a PhD ?**

→ *No, only compulsory for fundamental research.*

- **Do all junior PHOs hold a full-time clinical position ?**

→ *No, it depends on the available positions.*

- **Do some (or all) senior PHOs hold a part-time research position ?**

→ *Some of them but not all. The situation differs from one country to another.*

Netherlands : Protected time (20%) for all PHOs to do « other things than clinical work » (research, management roles, IT projects...)

2. Work organization

The work organization differs fundamentally in each country, and even in each hospital.

In all countries :

Practical organization of PHO presence is left to the PHO (seen as positive by respondents)

In France :

- The more experienced you are, the less time you spend on « patient works » or « on call » ;
- France has created a new role: « Advanced practice nurse » (*infirmière de pratique avancée*)
→ nurse + a 3-year master's degree (*can prescribe supportive care in a specialty, or re-prescribe oral chemotherapy already prescribed previously*).

2. Work organization

In Germany:

- Existence of « consultant » position
 - The consultant is the team leader of 3 to 5 clinician PHOs
 - The consultant is the final (legal) responsible for the decision of each clinician of his/her team.
- Usually, the consultant does have a PhD, and is involved in research (30% to 50 % of his/her time).
- Mobility (even national) is not usual and not requested.

2. Work organization

In The Netherlands:

- All researchers do clinical work and vice versa (80/20%, 50/50% or 20/80%)
- Disease committee for each cancer type, including:
 - Clinician
 - Diagnostic
 - Pre-clinical research
 - Clinical research
- Talent program : funded by PMC Foundation → a 5 year-contract to develop one original project (goal = creativity)
- ALL PHOs have minimum 20% of their time allocated to something else than direct care (research, management,...)
- International mobility is highly recommended, but not compulsory



3. Role of patients' organizations

There is a gradation in patients' organizations roles :

Step 1: Funding for patients and family comfort

Step 2: Funding for research

Step 3: Patients' participation (consultative)

Step 4: Advocacy about organization of PHO

Step 5: Participation in Hospital governance

4. Good practices to export to Belgium

Through the interviews, we collected the following recommendations/suggestions:

1. **Merge the centers in Belgium** : Seen as the only way to improve research and quality of care;
2. **Create half-time research positions for seasoned PHOs**, and compensate their time by hiring other doctors;
3. **Encourage international mobility** and participation in international groups;
4. **More PhD => better research**;
5. Help PHOs **learn how to protect their time**;
6. Stimulate a local **community of young researchers**.
7. **Create an inter-university HOP program (like DIHOP in France)**