



# Early professional careers in nursing in Switzerland

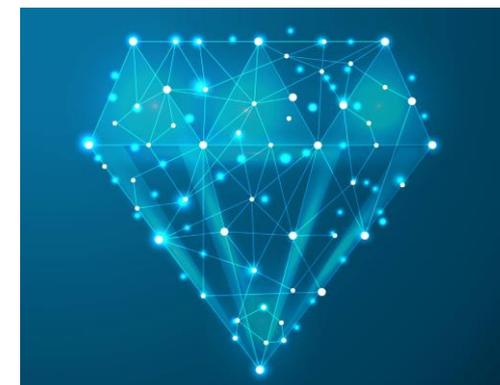
Results from a longitudinal study after career start

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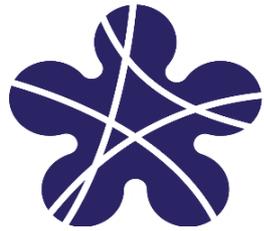
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**2nd International CNHW Conference,**

**«Effective Measures to keep our Treasures – How to care for Health Professionals and Family Caregivers», on the 29th - 30th of April 2021**



## Background



- In Switzerland **less than half of needed health professionals are trained.** (Dolder & Grünig, 2016)
- Expected **rise of 61 % in number needed** in skilled care or nursing workforce between 2014 and 2030 (Merçay, Burla & Widmer, 2016)
- **With 46 % the exit rate from the profession in nursing** is high compared to other health professions e.g. medical doctors with 32 % (Lobsiger et al. 2016)

The screenshot shows a job search interface for 'Pflegefachfrau'. At the top, there are social media links for Facebook, Twitter, LinkedIn, and XING. Below that is a search bar containing 'Pflegefachfrau'. There are two tabs: 'Jobs nach Tätigkeiten' (selected) and 'Jobs diverser Bereiche'. A section titled 'Job-Abo Pflegefachfrau aktivieren' prompts the user to enter an email address. At the bottom, a red circle highlights the text '6'756 Jobs gefunden', with a red arrow pointing from the text in the list above to this result.

<https://pflege-berufe.ch/search?terms=Pflegefachfrau>  
[visited 29.04.2021]

Dolder, P., & Grünig, A. (2016). *Nationaler Versorgungsbericht für die Gesundheitsberufe 2016*

Merçay, C., Burla, L., & Widmer, M. (2016). *Gesundheitspersonal in der Schweiz. Bestandesaufnahme und Prognosen bis 2030 (Obsan Bericht 71)*. Neuchâtel: Schweizerisches Gesundheitsobservatorium.

Lobsiger, M., Kägi, W., & Burla, L. (2016). Berufsaustritte von Gesundheitspersonal. *Obsan Bulletin*, 7, 2016. *Berufsaustritte von Gesundheitspersonal*.



# Objectives and Design



- **What are the professional careers of tertiary level nurses in Switzerland after graduation?**
- **Are there differences in job satisfaction between different career positions?**
- **Are there differences between language regions?**

The screenshot shows the zhaw website interface. At the top, there is a navigation bar with the zhaw logo, a search icon, and links for 'Medien', 'Hochschulbibliothek', 'Jobs und Karriere', 'DE / EN / FR / IT', 'Hochschule', and 'Gesundheit'. Below this is a secondary navigation bar with 'Studium', 'Weiterbildung', 'Forschung', 'Dienstleistung', 'Über uns', and 'Institute und Zentren'. The main content area features the title 'Berufskarrieren Pflege: Längsschnittstudie nach dem Berufseinstieg' and a sub-header 'Welche beruflichen Wege streben Absolvierende im Pflegebereich an und welche Karrieren verfolgen sie nach dem Berufseinstieg?'. There are four tabs: 'Ausgangslage', 'Zielsetzung', 'Ergebnisse', and 'Projektorganisation'. Below the tabs is an image of three healthcare professionals (two women and one man) looking at a laptop. To the right of the image is a text block: 'Der prognostizierte Fachkräftemangel beim Gesundheitspersonal gefährdet die zukünftige gesundheitliche und pflegerische Versorgung in der Schweiz. Damit wirksame Massnahmen gegen den Personalmangel entwickelt und umgesetzt werden können, sind auch Kenntnisse zu den Berufskarrieren der Pflegenden notwendig.' Below the image and text is a link for 'Projektbeschreibung (PDF 207,4 KB)'. At the bottom of the page, the word 'Ausgangslage' is displayed.

- **Longitudinal study with a cohort of nurses**
- **Descriptive analyses and group differences using nonparametric statistics (Kruskal-Wallis or Mann-Whitney U tests).**

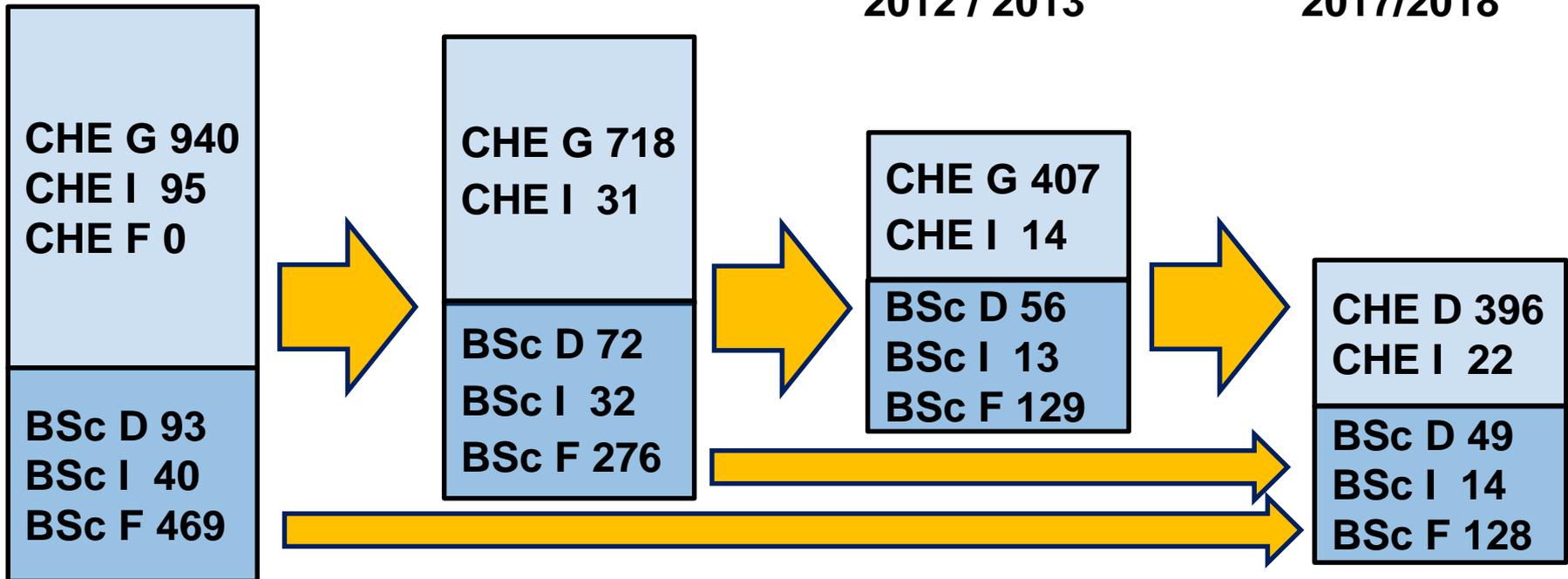


**Graduates  
2011 / 2012**

**Wave 1  
End of studies  
2011 / 2012**

**Wave 2  
1 year after  
graduation  
2012 / 2013**

**Wave 3  
6 years after  
graduation  
2017/2018**



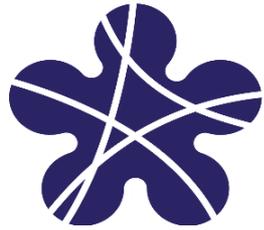
**100 % ~1640**

**69 % ~1120**

**38 % ~620**

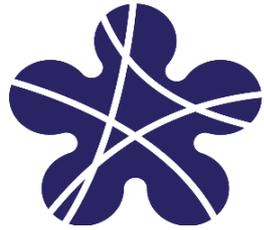
**37 % ~620**

<sup>1</sup> CHE – College of Higher Education (Höhere Fachschule, École supérieure)



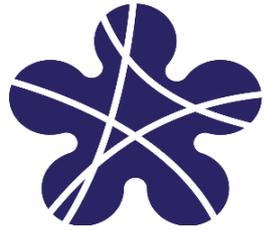
## Sociodemographic features: Age, sex, children

Age 6 years after graduation	Male	Having children during studies	Having children 6 years after graduation
30 years	7 %	4 %	29 %



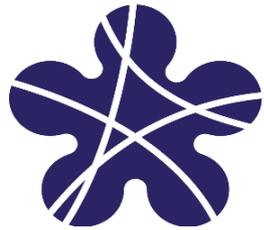
## Situation six years after graduation

	(n=609)	Valid Percent
Employed		73 %
Employed and in (further) education		22 %
Studies or further education but no employment		1 %
Neither employment nor studies		4 %



## (Working) situation six years after graduation

	Six year
<b>Nursing</b> without special tasks or functions	38 %
Nursing with <b>additional responsibilities</b>	18 %
<b>Nursing Experts</b> (Anesthesia, emergency, intensiv care, or other nursing experts)	16 %
<b>Professional trainer or teacher</b>	9 %
<b>Management</b>	5 %
Other, but nursing studies required	4 %
<b>No employment*</b>	5 %
<b>Work outside nursing</b>	5 %
* Mainly family break (4% ) or full time studies (1 %)	



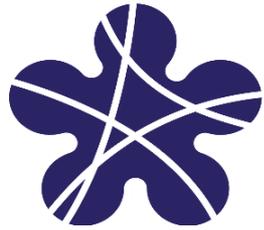
## Part-time work six year after graduation

### **Employment percentage** (for those still working in care)

- mean value 83 %
- median 90 %
- 40 % of nurses work part-time 80% or less  
→ this changed from 5 % one year after graduation
- 19 % work part-time 60% or less

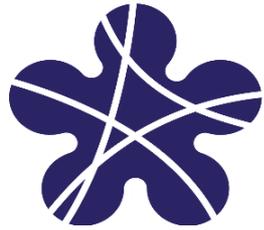
### **Reasons for working part-time (multiple answers)**

- 48% indicate more time for private life / family
- 42% indicate care responsibilities; housework; family
- 30% indicate full-time as too physically and mentally demanding



## Change as the norm in the first years after graduation

- **$\frac{3}{4}$  changed job between 1 and 6 years after graduation**
- on average **2.6 jobs** after graduation
- On average **33 months in one job**
- **$\frac{1}{2}$  of jobs** lasted **less than 2 years**
- **28 % of the jobs** lasted **less than 1 year**



## Change as the norm in the first years after graduation

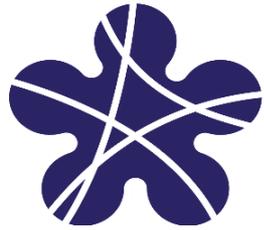


### **Interruptions in employment**

- 42 % of participants interrupt employment at least 2 months
- 80% of interruptions are short (last less than 6 months)

### **Continuing or further education**

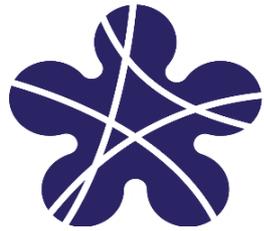
- 72 % of participants finished or still are in a further education
- 24 % of participants finished two or more trainings



## Change in functions between first job and job six years after graduation

	<b>1st job</b> (valid percents)	<b>Six years</b> (valid percents)
Without special tasks or functions	78 %	40 %
'Inside' with additional responsibilities or experts or professional trainers or management	19 %	50 %
Nursing studies required but working 'outside' as teachers, research, etc.	1.5 %	5 %
Working in other professions	1.5 %	5 %

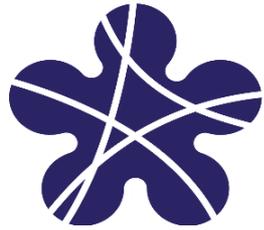
→ Those starting in positions with extended responsibilities more often kept their initial employment (61%) compared to those who started in a position without extended responsibilities (13%).



## Differences between language regions

### Different degrees leading to a diploma in nursing

- **French-speaking part:** all nurses graduate with BSc at University of Applied Science
- **German-speaking part:** Nurses either graduate at Colleges of Higher Education (survived cohort 90%) or at Universities of Applied Sciences (10%)
- **Italian-speaking part:** Nurses either graduate at Colleges of Higher Education (in survived cohort 70%) or at Universities of Applied Sciences (30%)



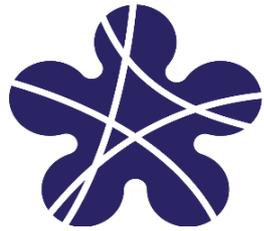
## Differences between different degrees and language regions



Function (4 categories)	CHE <sup>1</sup> German-speaking	BSc German-speaking	CHE <sup>1</sup> & BSc Italian-speaking	BSc French-speaking
Without special tasks or functions	32.8% <sub>a</sub>	20.8% <sub>a</sub>	62.9% <sub>b</sub>	62.1% <sub>b</sub>
'Inside' with additional responsibilities or experts or professional trainers or management	56.3% <sub>a,b</sub>	66.7% <sub>a</sub>	37.1% <sub>b,c</sub>	28.4% <sub>c</sub>
'Outside' nursing studies required but working 'outside' as teachers, research, etc.	5.6% <sub>a</sub>	8.3% <sub>a</sub>	0.0% <sub>a</sub>	2.6% <sub>a</sub>
Working in other professions	5.3% <sub>a</sub>	4.2% <sub>a</sub>	0.0% <sub>a</sub>	6.9% <sub>a</sub>

<sup>1</sup> CHE – College of Higher Education (Höhere Fachschule, École supérieure)

Values with different subscript differ at  $p < .05$  in two-tailed test for equality for column proportions (using Bonferroni correction)



## Differences between language regions

### **Number of different jobs since graduation:**

- Less different jobs in italian-speaking part (mean 1.89) compared to german-speaking part (2.72) or french-speaking part (2.67).

### **Reasons for periods of not being employed:**

- Main reason for break is traveling in french- or german-speaking part but family reasons in italian-speaking part.
- More breaks due to unemployment in french- than in german-speaking part.

### **Changes between functions (4 categories):**

- More changes (0.66) in german-speaking part compared to french- or italian-speaking part (0.36; 0.17)
- Nurses in the german-speaking part started careers more often with additional responsibilities (21 %) compared to french speaking part (11 %)



### **Generally participants show a medium to high job satisfaction**

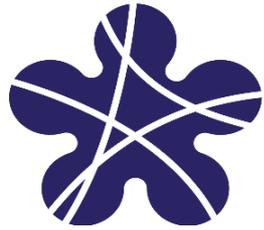
with a mean value of 4.40 in the question: *Overall, I am very satisfied with this job (1 strongly disagree - 6 strongly agree)*

**Those who left the profession have significantly higher job satisfaction (4.93 vs. 4.4)**

### **Differences in satisfaction between functions (4 categories)**

- 4.13 Without additional function
- 4.56 Additional functions within profession in institutions
- 4.93 Functions "outside" e.g. teaching, science

→ But BSc in german-speaking part show no differences between functions



## Differences in job satisfaction between degrees and regions

	Mean job satisfaction (6 point scale)
CHE <sup>1</sup> german-speaking part	4.5
BSc german-speaking part	4.4
CHE <sup>1</sup> & BSc italian-speaking part	4.6
BSc french-speaking part	3.9

<sup>1</sup> CHE – College of Higher Education (Höhere Fachschule, École supérieure)  
Sign. differences between BSc french-speaking part and italian-speaking-part and CHE german-speaking part ( $p < .05$ )

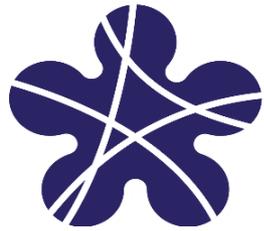


## **Strengths**

- Detailed information to first years of professional careers of one cohort of nurses.

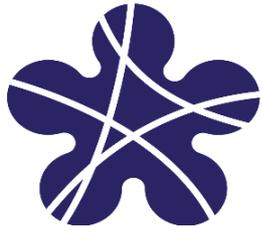
## **Limitations**

- Possible selection bias: Nurses that already left nursing may be underrepresented in the second and third wave.



## Discussion

- **Frequent changes** of jobs and positions in early professional careers in nursing.
  - **High investment** in further or **continuing education**.
  - Career paths show **movement to jobs with extended responsibilities** or expert roles.
  - Having a job with extend responsibilities not only goes along with a higher job retention rate but also with higher job satisfaction.
  - Differences between language regions are diverse and indicate differences in the structural background.
- **Offering career opportunities and jobs with extended responsibilities might be important in keeping nurses in the profession.**



**(Foto: Katrin Simonett)**

Thank you for  
your interest!

Questions?



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