Summary
Healthcare assistants play an important part in covering the increasing demand for qualified employees in the Swiss Health Service. This study about the professional careers of healthcare assistants with a vocational education and training (VET) diploma makes it possible for the first time to follow their professional careers and educational paths, throughout Switzerland, up to five years after completion of their VET in 2011. The results are as follows:
• Five years after completing their VET, 20% of the graduates had left the healthcare sector. Another two years later, it could be that 24% no longer work in the Health Service.
• Among the VET graduates, 26% continued to work in their original occupations as healthcare assistants. Approximately 54% were employed at the tertiary level in the Health Service, mostly in nursing.

However, to cover the future need for qualified employees, additional trained healthcare assistants must stay in the field. There is an urgent need for action, on one hand, to make it more attractive to continue working long term in the profession. On the other hand, it should be ensured that the equally important advanced qualifications from the colleges of higher education and universities of applied sciences offering healthcare programmes do not become unappealing. Those responsible for upper-secondary level VET and tertiary-level professional education, as well as the healthcare service providers, are therefore advised to take the following measures:
• Establish attractive, needs-based and distinct occupational profiles, both for persons employed as healthcare assistants and for tertiary-level qualified nurses.
• Promote professional mobility within the healthcare sector to expedite change in the different fields of work.
• Ensure flexible opportunities for further education and training and different working time models that facilitate work–life balance.

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1 CONTINUING NEED FOR QUALIFIED EMPLOYEES IN THE SWISS HEALTH SERVICE

The Swiss Health Service is faced with major challenges in human resources. According to the current forecasts, staffing requirements in the healthcare professions are increasing. By 2025, the number of employees will have to be increased by 20–30%, to around 220,000 (Merçay, Burla & Widmer, 2016). The main reason for this is the increasing number of nursing services being used due to the rising number of elderly people in Switzerland’s population. Healthcare service providers, health associations and the public sector are called upon to take measures to train sufficient staff. Additionally, they should create favourable working conditions, as well as training and career prospects to retain trained staff longer in the Health Service (Dolder & Grünig, 2016).

The study
Since 2010, the study on healthcare assistants’ careers has been conducted by the Swiss Federal Institute for Vocational Education and Training and the National Umbrella Group of the Professional Organisation for Health – OdASanté. The State Secretariat for Education, Research and Innovation (SERI) has participated in financing the study. To date, there have been three data collection periods (2010, 2012 and 2016). All graduates who completed the three-year basic healthcare assistant training and earned the federal VET diploma in 2011 were surveyed. The study focused on their career intentions and subsequent decisions. Almost all the apprentices from the graduating class of 2011 responded to the first survey (n = 2089). Around half of the cohort (2012: 53%, 2016: 48%) participated in the next two surveys. This report is based on all three surveys and summarises the most important results regarding the respondents’ professional careers and educational pathways, as well as further training and working conditions.

2 HEALTHCARE ASSISTANTS ARE IMPORTANT FOR STAFFING NEEDS

The new apprenticeship qualification of a healthcare assistant has existed at upper secondary level since 2004. This occupation is ranked the third place in the most widely chosen apprenticeships. With 4,091 apprenticeships completed, it accounts for 7% of all federal diplomas awarded (Statistical federal office BFS, 2017). So far, it is barely known to what extent, why and where these VET graduates remain in the healthcare sector.

The healthcare assistants with a VET diploma perform two essential functions. On one hand, they are qualified employees in healthcare. On the other hand, they form the recruiting pool for the healthcare professions at the tertiary level (tertiary-level professional education and higher education institutions). To meet future staffing needs, the Swiss Conference of Cantonal Ministers of Health and OdASanté have issued recommendations that are resting on forecasts based on the supply statistics from 2010 and 2014 (Merçay et al., 2016). According to these forecasts, yearly, 60% of all VET healthcare graduates should advance to the tertiary level, and 40% should work in their learned occupation (Dolder & Grünig, 2009, 2016).

It should be noted that the necessary mix of nursing staff at secondary level II and the tertiary level substantially differs, depending on the healthcare sector. In acute care hospitals, on average, 70% of the qualified nursing staff are trained at the tertiary level. In the so-called Swiss Spitex, an agency providing home healthcare, around 40% of the staff are qualified at the tertiary level compared with approximately 30% in
nursing homes (Merçay et al., 2016). In nursing homes and home healthcare agencies (Spitex), the demand for qualified employees at the tertiary level will rise sharply in both short and medium terms, according to current forecasts.

The healthcare assistants’ decisions to work in their chosen occupation after apprenticeship, start tertiary education, choose a specific field of work in the Health Service or leave it are of significant interest for the analysis of the future situation of qualified staff. To be able to reliably record these decisions, longitudinal data is required, which shows the healthcare assistants’ professional career paths after completing their apprenticeship. So far, such data has been lacking.

The study on the careers of healthcare assistants with a VET diploma provides such data. For the first time, it allows a comprehensive and nationwide description of the healthcare assistants’ professional and educational pathways five years after completion of their apprenticeship.

### Healthcare assistant: an apprenticeship occupation within the Swiss education system

The VET occupation of a healthcare assistant is predominantly workplace based, often in acute care hospitals or nursing homes, sometimes in other nursing care institutions, such as home healthcare agencies (Spitex) or psychiatric hospitals. After completion of their apprenticeship, healthcare assistants are sought-after qualified employees, above all in nursing and care and for medical-technical, logistic or housekeeping tasks. Additionally, immediately after completing their apprenticeship, the path to the tertiary-level healthcare is open for them – with a Federal Vocational Baccalaureate (FVB) at a university of applied sciences (UAS) or at a college of higher education in health without a FVB.

A total of 15 tertiary healthcare professions – nine at colleges of higher education and six at UAS – can be pursued over a three-year period (see Fig. 1). The UAS account for 75% and the colleges of higher education for 50% of the healthcare degrees in the nursing field. Since 2016, it has been possible to specialise in long-term nursing and care and therefore after earning the VET diploma, to obtain a federally recognised specialised certificate – the Federal Diploma of Higher Education for Long-term Nursing and Care. Other advanced tertiary vocational training courses are only accessible with an advanced diploma of higher education, which can lead to nursing specialisations in anaesthesia, intensive or emergency care, for example.

In contrast to all the other options, it is possible to pursue a shortened period of study at a college of higher education in nursing, as completion of the healthcare assistant apprenticeship is recognised as relevant prior education. In comparison, shifting to other tertiary healthcare professions or to a different professional field is more time consuming and costs more money.

In the following, a summary of the most important information regarding the career paths for healthcare assistants and the related firm-based and individual impact factors is given. Furthermore, different courses of action to keep healthcare assistants in the Health Service are sketched out.
One year after qualifying (2012), around one-third of the surveyed healthcare assistants with a VET diploma were already enrolled in a degree programme for nursing at a college of higher education or a university of applied sciences (UAS). This is a markedly higher proportion of immediate transitions to the tertiary level than in other occupations. For example, only 19% of social care assistants with a VET diploma had advanced to higher education within four years after completion of their apprenticeship (Salzmann, Berweger, Bührer & Sperger, 2016). A reason for this, besides the needs of the labour market, could lie in the history of the still novel occupational profile for healthcare assistants, which was developed as a basic qualification for the tertiary health professions.

A few remained in this occupation, but many advanced to tertiary-level nursing.

Under these conditions, it is not surprising that many healthcare assistants with a VET diploma quickly advanced to an occupation at the tertiary level and no longer worked in the occupation they were trained for.

Approximately 26% of the survey respondents continued to work as healthcare assistants five years after completion of their apprenticeship (see Fig. 2). Around 42% already worked with an advanced federal diploma in higher education or a UAS advanced federal degree in the healthcare sector, 90% of them in nursing. The most commonly practised non-nursing occupations were

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3 EDUCATIONAL PATHWAYS AND EMPLOYMENT PATTERNS

Fig. 1: Possible educational pathways of healthcare assistants with a VET diploma, OdASanté (2014), abbreviated version.

* for further details see OdASanté
registered paramedic (college of higher education) and medical practice assistant (MPA) with a VET diploma.

Approximately 12% were still or once again in training for a healthcare profession, mostly in the nursing field at a college of higher education or a UAS or pursuing an advanced federal diploma of higher education (10%). A few (2%) were studying for a different tertiary healthcare profession. Only some individuals were enrolled in a school for the vocational baccalaureate examination in healthcare or preparing for the university aptitude test to enter university programmes. Approximately 15% were working in an unrelated occupation or attending unrelated training. Around 5% were neither employed nor in training.

The regional language differences should be noted. In the German-speaking part of Switzerland, 22% of the VET graduates were employed as healthcare assistants compared with 53% in the French-speaking part. One reason for this difference lies in the various options for studying nursing. In the French-speaking part, these options are mainly reserved for those persons with a federal vocational, general or specialised baccalaureate, and they are offered at the UAS. Starting in 2018, it will most likely also be possible to study nursing in colleges of higher education in the French-speaking part of Switzerland. Overall, in the nursing degree courses offered in the UAS in French-speaking Switzerland, there are more students from specialised baccalaureate schools or upper-secondary level schools than in German-speaking Switzerland (Schaffert, Robin, Imhof & Rüesch, 2015). A further reason lies in the different age distributions of healthcare assistants in both regions. Students in the German-speaking part start their three-year healthcare assistant apprenticeship at the age of 17 on average, while in French-speaking Switzerland, the average age to start training is 19. However, precisely the young health care assistant VET graduates are more likely to pursue a tertiary health profession (Trede & Schweri, 2013).

In summary, this data means that five years after completing their apprenticeship, 80% of the qualified healthcare assistants were still working in healthcare, among them, 54% at the tertiary educational level of health. Approximately 26% continued working in their trained upper-secondary level occupation, while 20% had already left the healthcare sector.

**Dropout rate is too high**

Nevertheless, the proportion of healthcare assistants moving on to a tertiary health profession remained fairly low. According to the most recent recommendations, 60% is the percentage needed for future staffing levels (Dolder & Grünig, 2016). Moreover, the targeted 40% retention rate for healthcare assistants with a VET diploma was only two-thirds reached by the graduates in this study. As long as the responsibilities of the healthcare sector do not manage to recruit additional qualified staff through other channels – for example, by increasing the returning rate to the profession and training of adults, recruiting staff from other countries or strengthening access through the specialised schools and the preparatory schools for baccalaureate examinations – the 20% dropout rate must be significantly lowered.
Among the respondents, 20% were working outside the healthcare sector, five years after completing their apprenticeship. This proportion is lower than a recently calculated 40% dropout rate for all employees in nursing professions (Lobsiger, Kägi & Burla, 2016). However, it should be noted that the group investigated in this study had only been in the labour market for five years and that the dropout rate may increase due to the high number of women of child-bearing age. The dropout timing varied; 6% left directly after completing their apprenticeship, 4% followed after beginning another training in healthcare, and 8% quit after a period of employment as healthcare assistants. Therefore, measures to reduce the dropout rate should already start before the apprenticeship is completed, as well as in subsequent years.

**Education and social work – popular choices for those who drop out**

The majority of dropouts were undergoing training or found employment in occupations outside the healthcare sector (72%). The most commonly mentioned were occupations in social work (26%) or in the education sector (12%), as well as in a wide range of other occupations (35%) (see Fig. 3).

Smaller numbers of dropouts were neither in training nor employed (22%); nearly half of this group (10%) were homemakers. Around 6% reported a ‘bridging’ activity, such as travelling, spending a period of time abroad or preparing for training, and another 6% stated that they were job hunting.

Those who found other employment cited primarily three reasons for leaving the Health Service, as follows:
- other interests (53%),
- better working hours (34%) and
- higher pay (29%).

Those who were neither employed nor in training likewise quit the occupation most commonly because of their interests (47%) or for family reasons (38%).

**Social profiles of dropouts**

Among those employed outside the healthcare sector or undergoing training, there were above-average numbers of people without a family, with a compulsory school-leaving certificate with higher requirements and a high final score in their federal VET diploma. Many had also passed the FVB examination and had parents with a university education.

The almost exclusively female respondents, who at that point in time were homemakers, had more frequently than average a migration background and a compulsory school-leaving certificate with basic requirements.

**The most recent activity is the key**

Of those employed outside the healthcare sector, only 7% would consider working in the Health Service again. The majority of all dropouts seldom thought about it.

Unemployed persons who had worked as qualified nurses estimated their likelihood of returning to the profession within five years as higher (70%) than those who had recently been employed as healthcare assistants (50%). This difference suggests that returning to employment as a healthcare assistant is less appealing than resuming employment as a qualified nurse.

In the future, an even higher exit ratio can be expected. First, the numbers of those who are not in paid employment and who have transferred to another sector will increase over time because the dropout numbers
accumulate if the dropouts do not return to the healthcare sector after a short time (see Fig. 4). In 2016, three times as many people (15%) held jobs or were in training outside the health sector compared with 2012 (5%). Second, it is expected that career breaks to start a family will show an age-related increase.

**Drawing conclusions for the skilled labour situation**

First, it is noticeable that especially people with above-average academic performance do not work in the healthcare sector any longer. It is possible that for them, the higher education offered for healthcare professions is unknown or not sufficiently rewarding. Second, increasing numbers are leaving to start a family. Putting measures into place to promote returning to the profession after ‘parental leave’, even a few years after completing the apprenticeship, is therefore both sensible and necessary. However, above all qualified employees should remain in the healthcare sector after starting a family.
5  THOSE IN EMPLOYMENT

At the time of the survey in 2016, 74% of the respondents were gainfully employed, without simultaneously pursuing further education or training extending over several years. The majority worked as tertiary-level qualified nursing staff (52%), 35% as healthcare assistants with a VET diploma and only a small number in other healthcare professions (7%) or unrelated occupations (6%).

Of the 682 gainfully employed persons, 44% worked in acute care hospitals, 21% in nursing homes and 9% for home healthcare agencies (Spitex), while 26% held jobs in other fields of work (see Fig. 5).

The workplace differed greatly, depending on the occupation. Healthcare assistants with a VET diploma were frequently employed in nursing homes (42%), 18% in hospitals and 16% in home healthcare (Spitex). Approximately 24% worked in other sectors in healthcare, such as in psychiatry, in medical practices or as paramedics for emergency services.

The situation was quite different for the graduates who at the time of the survey were working as tertiary-level qualified nursing staff. Hospitals were the most frequent workplaces (69%) for this group, only 11% were employed in nursing homes, and 5% worked for home healthcare agencies (Spitex). Only 15% held jobs in other sectors, primarily in psychiatry (see Fig. 5).

The reason why former healthcare assistants, now tertiary-level qualified nursing staff, were so little represented in nursing homes was (among other things) that the graduates transferred from nursing homes to hospitals (37%) but seldom the other way around (7%) (not shown). The data collected here also shows that only one-third of all healthcare assistants who completed their apprenticeship in nursing homes in 2016 were still working in this sector (34%). Conversely, two-thirds (62%) of all healthcare assistants who did their apprenticeship in hospitals stayed. The majority of transitions to hospitals occurred in connection with or after the acquisition of a tertiary nursing degree.

This means that nursing homes can eventually only employ a small number of their previous apprentices as tertiary-level qualified nursing staff. However, the greatest shortage of tertiary-level qualified staff is expected in nursing homes and home healthcare agencies (Spitex) (see Merçay et al., 2016). The fact that healthcare assistants with a tertiary-level qualification mainly work in hospitals means that the shortage of

![Fig.5: Current healthcare sector according to occupation held in percent](image-url)
tertiary-level qualified nursing staff in nursing homes and home healthcare agencies (Spitex) will likely still increase. However, it is unknown whether the change to acute care is permanent or temporary.

Working environment and working conditions
Several studies on the quality of work and staff retention in the nursing professions show that working conditions, such as assigned duties, salary, job satisfaction and workload, are important reasons for leaving or remaining in the profession (Schwendimann, Widmer, Asserhofer & De Geest, 2014; Zuniga et al., 2013). These factors also influence the healthcare assistants’ decision for or against a tertiary education in the nursing and healthcare professions (Trede, 2015). Therefore, the most important facts about the working conditions, as well as job satisfaction of the respondents who are employed, are presented in more detail below.

Management and training function
Five years after qualifying, around 30% of the employed respondents had a function as workplace trainers or reference persons for learners. Approximately 40% performed a first managerial function – mostly as day or shift supervisors or group leaders. The following three aspects are particularly noticeable:

First, it is more common for qualified nursing staff (50%) than for healthcare assistants (33%, not depicted) to have a management function. This is plausible because healthcare assistants are not trained for management. Particularly in the acute care sector, healthcare assistants rarely assume a management function (5%). In nursing homes, this role is a lot more common (64%) (see Fig. 6).

Second, similar proportions of healthcare assistants and tertiary-level qualified nurses perform a training function in nursing homes or hospitals. This implies that many healthcare assistant apprentices may often be supervised by healthcare assistants who already hold a VET diploma.

Third, both management and training functions are more likely performed in nursing homes than in hospitals. This indicates that graduates employed in nursing homes are entrusted with management and training duties sooner than those in hospitals.

Salary according to healthcare sector and occupation
The salary can be an incentive for a higher education to be perceived as profitable and consequently chosen (Schweri, 2015). The difference in the salaries of a healthcare assistant and a qualified nurse is therefore an important factor. The wage levels paid to healthcare assistants and tertiary-level qualified nurses are partly fixed by the canton or at least recommended. In cantons in central Switzerland, the difference between the recommended starting salaries, for instance, for healthcare assistants with a VET diploma and nurses with an advanced diploma of higher education, is around CHF 1,000 per month. For those who graduated from a UAS, the difference is often even higher.

The median monthly salary of the respondents (which means exactly the same number of people earn more or less, respectively) projected onto a full-time job was CHF 5,395 without perks. For employed healthcare assistants, the amount was CHF 4,887, whereas tertiary-level qualified nurses took home around CHF 670 more.

Both the healthcare assistants and the qualified nurses who participated in the survey received higher salaries.
This pay gap between the two sectors remained the same, even when the roles of the employed persons were taken into account. The explanation could be the staff shortages in nursing homes, which try to entice staff with higher wage incentives.

Nonetheless, the pay gap between the employed healthcare assistants and the qualified nurses appears small.

Admittedly, the salaries and the recommendations differ considerably according to the canton, the region and the employee’s age. However, when these factors are controlled for, the difference still remains under CHF 1,000. Whether this is enough incentive to study nursing in a college of higher education or in a UAS is a point for discussion.

Working hours

Working hours have a significant influence on the availability of skilled workers. In the nursing professions with a high share of women, the average employment percentage is lower (76%) than in the economy as a whole (82%) (Lobsiger & Kägi, 2016). Therefore, overall, more people are required to fill the same number of full-time jobs. In the surveyed group, the average volume of work was 90%, higher than in the economy as a whole, which may be explained by the fact that the respondents had just started their professional careers. The tertiary-level qualified healthcare professionals’ average working percentage was higher (95%) than that of healthcare assistants (82%). The working hours clearly differed according to the healthcare sector; healthcare assistants in hospitals had on average a higher volume of work (89%) than healthcare assistants in nursing homes (83%) and home healthcare agencies (Spitex) (72%).

The reasons given by the respondents for working part-time speak for themselves (it was possible to give more than one answer):

- more time for private life and family (60%),
- full-time work is too stressful (32%) and
- care responsibilities and other family obligations (24%).

Tertiary-level qualified nurses regarded lack of time for their private life and the heavy workload as distinctly more important arguments for part-time work than healthcare assistants did. Family obligations were less important for the tertiary-level qualified nurses. The latter could be explained by the fact that tertiary-level qualified nurses were more often childless than healthcare assistants.

The most frequently cited reasons for a full-time job were as follows:

- to gain experience (61%),
- financial reasons (55%),
- enjoy working (34%) and
- necessary for good career prospects (29%).

No one with a full-time job claimed as a reason that they could not find a part-time one.

It is striking that “too stressful” was mentioned as a central argument against a full-time job. This suggests that less working hours serve to decrease the heavy workload to be able to carry on in the occupation. It must be taken into account that 55% of those in full-time jobs did not reduce their employment rate for financial reasons. They could therefore not afford to work part-time in order to lighten their too heavy workload.

Workload

Overall, the average psycho-physical stress at work lies in the middle to lower range (2.8 on a scale of 1–6) and slightly increased in comparison to the burden during
the apprenticeship. It is interesting to compare the different aspects; the most important stress factors are the lack of time, which did not allow them to respond to patients’ requests or problems, and physical exhaustion after work (see Fig. 8).

Exhaustion was a topic (3.9), especially in the case of healthcare assistants employed in hospitals, and slightly less in nursing homes (3.5) or home healthcare agencies (Spitex) (3.1, not depicted). The healthcare assistants who were working full-time felt significantly more exhausted (full-time: 3.6, part-time: 3.2). Physical exhaustion is a well-known reason for leaving the profession (Dolder & Grünig, 2016; Zuniga et al., 2013), which is why intense exhaustion, which healthcare assistants working in acute care particularly experience, should be reduced. To prevent resignations, the employer should distribute the burden of work in a way that makes it possible for the staff to carry out their work without overexertion.

Social profile of employees in healthcare professions
Compared with the employed healthcare assistants, those working who had a qualification in nursing or another tertiary healthcare degree more frequently had the following characteristics:
• without children,
• born in Switzerland,
• held a compulsory school-leaving certificate with higher requirements and
• earned good to very good final grades in the VET diploma.

The proportion of women among the nurses trained at the tertiary level was significantly higher (97%) than among the healthcare assistants (87%). It was lower in the case of those employed at the tertiary level in other healthcare professions (87%).

Different career paths – different work incentives
Job characteristics, such as salary, level of responsibility or the compatibility of work and family, can be positive or negative incentives for an occupation. In 2016, the graduates were asked how the different job characteristics – regarding material, family-oriented and social and patient-related aspects – had developed over the last five years since they completed their apprenticeship. They rated how much the statement “Today I receive a higher salary” or “Today I can better combine my job and my family responsibilities” was true for their current situation compared with their situation five years ago. From these ratings, it can be deduced which work incentives are associated with which occupations. This helps in the evaluation of both advantages and disadvantages of the individual occupations in the Health Service.

The largest increase in incentives was similarly ranked by those who were working in the health professions (employed healthcare assistants, qualified nurses, as well as other healthcare professionals), as follows:
• They can work more independently today and bear more responsibility than just after qualifying.
• They are confronted with more complex situations and need to use their specialised knowledge in their working day more often.
• They can put their abilities to better use (see Fig. 9).

![Fig.8: Stress burden experienced by healthcare assistants and tertiary-level qualified nurses according to work context. Average, scale: 1 = does not apply at all, 6 = completely applies (n = 399)

Legend: Bars above the red centre line (> 3.5) mean that these stress factors are more likely (4) respectively, predominantly apply (5) to the working day. Bars under the red centre line mean that they are not likely (3), respectively do not predominantly apply (2).]
The employed healthcare assistants rated the increase in these aspects much lower than the nurses qualified at the tertiary level or other healthcare professionals.

The greatest development regarding salary and career opportunities was noted by those who at the time of the survey worked as tertiary-level qualified nurses (5.3). The employed healthcare assistants evaluated their prospect for a salary increase as significantly worse (3.8).

From the point of view of the qualified nurses at the time of the survey, direct patient contact had increased less (3.5) than for the employed healthcare assistants (4.1). However, the nurses had clearly observed a rise in administrative work (5.2).

Compatibility between job and family demands, as well as time for private life, were the most negatively rated by both healthcare assistants and qualified nurses. However, these aspects were significantly better evaluated by the respondents working in other tertiary healthcare professions (4.4 each). On the other hand, job security from the perspective of those in other healthcare professions increased less (3.5) than for healthcare assistants and qualified nurses (4.3).

If healthcare assistants perform a training or a leadership role, they mostly benefit from their enhanced function because they are able to carry out more challenging and interesting work. They also have higher salaries and better opportunities for further education, training and careers. However, this situation does not improve the compatibility of work and family life (not depicted).

**Potential for development in hospitals, nursing homes and home healthcare agencies (Spitex)**

Healthcare assistants who worked in acute care hospitals had a more negative evaluation of their jobs in terms of responsibility, autonomy, career possibilities and time for private life compared with those in other healthcare sectors. Those who held a tertiary nursing degree evaluated the aspects of responsibility, autonomy and career possibilities similarly in all healthcare sectors. However, they reported that shift work was substantially increasing in hospitals. Moreover, they rated the compatibility of work and family life as worse and also found that they had less time for their private life (not depicted).

Fig. 9: Change in work incentives since graduating with VET diploma. Scale 1 = does not apply at all, 6 = completely applies. n = 608 (only those in employment today).

Legend: Bars to the right of the red centre line (> 3.5) mean that respondents are of the opinion that today they have on average rather more (4) or substantially more (5) time for their private life than 5 years previously. Bars to the left of the red centre line mean that respondents are of the opinion that today they have rather less (3) respectively substantially less (2) time for their private life.
Implications for the availability of qualified staff

In summary, we conclude that measures aiming to retain staff should focus on designing tasks and improving work–life balance. Individual working time arrangements can help reduce overload and stress and increase the compatibility between the job and private life.

Besides advanced management and training functions, healthcare assistants find more responsibilities in nursing homes compared with hospitals. On one hand, they have a better evaluation of their careers and further training and education opportunities. On the other hand, their physical burden or exhaustion is lower than in hospitals.

Additionally, it is noteworthy that both those holding positions as healthcare assistants and qualified nurses in nursing homes receive special incentives, as follows:

- The salary is higher.
- The working hours are less.
- The work–life balance improves.

These evaluations suggest that for healthcare assistants in particular, nursing homes are attractive workplaces. The (few) tertiary-level qualified nurses who are employed in these places also have an advantage in the work–life balance compared with those who have jobs in hospitals.

6 THE STUDENTS

In 2016, 21% of the entire group committed themselves to a longer period of training or study. Of these, 56% attended courses in the healthcare sector; 42% took courses outside the sector. Fig. 10 depicts the distribution of the individual training courses, which are predominantly at the tertiary level.

In 2016, over half of the students were employed by a company (80% of the students in tertiary-level professional education and 15% in higher education institutions). A sizeable 20% of all current students at that time indicated that they were completing their studies part-time.

Approximately 40% of the students pursuing nursing in a college of higher education or a UAS were mostly satisfied or completely satisfied with their current studies. The percentage of mostly or completely satisfied students was significantly higher among those who were studying for an Advanced Federal Diploma of Higher Education expert qualification or a master’s degree in nursing (72%). This was also the case for the students in tertiary-level health-related programmes other than nursing (69%) and in sectors unrelated to health (81%) (see Fig. 11). The lower satisfaction levels of students pursuing nursing in a college of higher education or a UAS were also shown in the 2012 survey although less marked (Trede & Schweri, 2013). The reasons could be individual factors, as well as study conditions, and should be investigated more closely.

Social profile of the students

The students were usually unmarried (89%) and had no children (95%). The number of men (11%) was somewhat above average compared with the entire group (7%).

Conclusions for the qualified employee situation

Looking at the group who was studying at the time of the survey, three aspects are apparent. First, among all respondents, the percentage of students undergoing a training course or education outside of healthcare had more than doubled since 2012 (from 4% to 9%). This points to a delayed onset in shifting to an unrelated occupation, while the transition to nursing at the tertiary level more frequently occurred shortly after graduation. If the tendency to transfer to a different sector of work continues in the coming years, this will have a further negative impact on the staff situation in the healthcare sector.
Second, in comparison to the first three years after receiving the federal VET diploma, more courses in specialised subjects and more courses at universities were being attended. In other words, five years after graduation, an increasing number of courses were being chosen that made it possible to obtain more in-depth knowledge and a specialisation. The education and training providers therefore have the important role of offering needs-based possibilities for higher education at all levels of healthcare professions to encourage the staff to remain in the Health Service. Since most courses are part-time and are being completed while people are gainfully employed, the compatibility of workplace and training requirements is particularly important.

Third, it is noticeable that very few people with children were represented among the students. As the respondents’ desire to start a family will likely increase with age, the challenge is to make the study conditions more family friendly, making it more attractive to stay in the healthcare sector.
Almost two-thirds (65%) of the employed healthcare assistants foresaw themselves as most probably remaining in their current occupation in two years’ time (see Fig. 12). For the nurses with a tertiary-level education, this percentage was slightly higher (68%). In the case of persons in other tertiary-level healthcare professions, it was even higher at 86%.

In contrast, a further multiyear training course was the most likely option for only 19% of the employed healthcare assistants. However, 16% of all employed healthcare assistants and 16% of tertiary-level qualified nurses (see Fig. 12) did not plan to continue working or to study.

Fig. 12: Future plans according to current occupation in percent; employed and students

Fig. 13: Planned employment in full-time equivalents 2018, according to occupation, in percent (n = 920).
This means that – provided all intentions are realised – in this group of respondents, the number of employed healthcare assistants could be reduced to less than 20% and that of tertiary-level qualified nurses could decrease to 34% (calculation not depicted in Fig. 12).

Furthermore, the employment rate of graduated healthcare assistants will likely decrease significantly in the next two to five years. The reason is that employed healthcare assistants would like to work an average of 15 job percentage points less in five years’ time (from 82% to 67%). The tertiary-level qualified nursing staff would like to see a reduction of 24 job percentage points on average (from 94% to 70%).

Fig. 13 shows how massively the number of employees in the Health Service could be reduced in full-time equivalents by 2018, taking into account the desired working hours. If the shift to another sector, dropouts and reduction in working hours are taken into account, the healthcare sector would therefore already be missing 48% of these qualified employees seven years after they completed their apprenticeship.

The extent to which the planned reductions in working time are implemented might depend on financial considerations and how quickly family plans are realised. How working hours will develop over time in the nursing professions is not yet known (Dolder & Grünig, 2016). Therefore, it remains open to what extent working hours will increase again over the course of a person’s working life or to what extent re-entries will occur. Overall, the desire for fewer working hours may lead to the further decline in the gainful employment of healthcare assistants and qualified nursing and healthcare staff, in turn increasing the demand for qualified employees in the sector.

8 CHALLENGES AND NEED FOR ACTION

A fifth of the respondents who completed their apprenticeship in 2011 had left the Health Service. Another two years later, a quarter could have left the sector. Approximately 26% worked in their learned occupation as healthcare assistants, while 54% practised an occupation at the tertiary-level healthcare, mostly nursing. According to recent forecasts, this is insufficient to cover future staffing requirements. These figures show the need for action on the part of vocational education and the job market to increase the drawing power of the occupation. On one hand, their aim should be to make it more attractive to work long term as a healthcare assistant. On the other hand, they should ensure that the equally important higher qualifications from the colleges of higher education and the UAS for health do not become unappealing. The reason is that overall, more trained healthcare assistants with a VET diploma must remain in the healthcare sector. Based on this study’s results, several challenges and potentials arise, which are summarised in the following six proposals:

1. The percentage of healthcare assistants remaining in the profession five years after graduation has fallen to 26%; the transition rate to tertiary level has increased to 54%.

Especially for the young VET graduates, their professional path leads to tertiary education in nursing. This can weaken the attractiveness of their occupational profile in the eyes of the remaining healthcare assistants, as well as potential learners. Furthermore, qualified staff is urgently needed in tertiary-level professional education. Here, healthcare institutions in particular are called upon to develop an effective human resources strategy. To ensure a high level of nursing care, they must clearly define the job profiles for both levels of education and the necessary mix of qualifications to be able to recruit and train learners. Occupational development is at the same time challenged to conceptualise the appropriate occupational profiles.

▷ The health sector should act in a coordinated way to be attractive for various personnel groups.
2 The mobility between the healthcare sectors is limited for those graduating as healthcare assistants. Considering the employed healthcare assistants, it is noticeable that overall, they only make a few moves between acute and long-term care after graduating. Most transfers occur during or after obtaining a tertiary nursing degree. Many of the graduates then switch to acute care. However, employed healthcare assistants find more opportunities to develop their careers in nursing homes than in hospitals. The strong differentiation between acute and long-term care can hinder their career development and lead to dropouts. Vocational education should tackle the innovative task of conveying a future-oriented image of nursing in an integrated care system beyond institutional boundaries. On the one hand, the challenges for nursing homes are to present an attractive image of long-term care and to provide greater incentives for the staff trained at the tertiary level. On the other hand, the acute care hospitals are challenged to create more attractive career and working conditions, not only for the staff at the tertiary level but also for healthcare assistants.

▷ Mobility between the different healthcare sectors should be promoted for all staff levels, without neglecting the clarity of professional roles.

3 Healthcare graduates with high educational aspirations and who were high achievers in school are switching to other sectors. These switches to other sectors primarily lead to occupations in the social sector and education. The tertiary educational opportunities in healthcare do not appear attractive enough to retain this group of people in the Health Service. The reasons for this should be examined more closely.

▷ Tertiary-level professional education and higher education institutions are encouraged to develop further options for highly ambitious people.

4 Only 2–4% of VET graduates choose other tertiary-level healthcare professions over nursing. Originally, more than 10% of the apprentices intended to choose other tertiary-level healthcare professions. For the graduates, the conditions for entry to professions other than nursing are possibly too restrictive due to the limited availability of study places and stringent admission requirements. Another reason could be that healthcare graduates lack sufficient competencies for medical-technical or therapeutic occupations. There is reason to fear that the multifaceted options provided by the 15 tertiary healthcare professions for health-care assistant graduates are not easily and realistically accessible. This could lessen the drawing power of the occupation of healthcare assistant and the healthcare sector for future learners. This sector could lose qualified employees due to their disappointment with unrealisable occupational aims.

▷ It should be clarified whether changes in the training plan and targeted support on entry to other tertiary healthcare professions are necessary.

5 Satisfaction levels of students in colleges of higher education and UAS are comparatively low. The three-year full-time course with traineeship is no longer the norm for graduates who study for several years in a college of higher education or a UAS. The study programmes are becoming more diverse. In view of the low satisfaction levels, we can pose the questions of how favourable the course of study is and how well the curricula are adapted to the new part-time or shortened study programmes. These students may also need more individual support.

▷ Employers and education and training providers should develop suitable approaches to support students individually in transition, in the initial phase and during the course of study and to evaluate the fit of the new degree programmes.

6 The need to reduce working hours is increasing, and an age-related number of personnel departing for longer periods can be expected because they want to start a family. Consequently, the requirements for work-family balance are increasing. This situation can be countered by suitable working conditions and further education and training conditions. Healthcare companies are called upon to create favourable working conditions, for both full-time and part-time employment for the staff with all levels of qualification and to facilitate individual work schedule arrangements. Vocational education and training providers are encouraged to develop custom-made offers that enable learning in different phases of life and career.

▷ Work-life balance is one of the most important tasks for employers and education and training providers to retain qualified staff in the health sector.
9 ACRONYMS

BFS Federal Statistical Office (FSO)
FVB Federal Vocational Baccalaureate
MPA Medical practice assistant
OdASanté The National Umbrella Group of the Professional Organisation for Health

UAS University of applied sciences
VET Federal vocational education and training diploma

10 BIBLIOGRAPHY


