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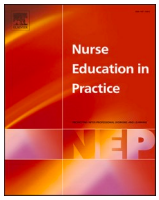

Practice of midwifery competencies in Switzerland: frequency and influencing factors from a national cross-sectional survey with qualitative analysis of open-ended questions

Anouck Pfund *, Alessia Abderhalden-Zellweger, Amal Tawfik, Claire de Labrusse

HESAV School of Health Sciences - Vaud, HES-SO University of Applied Sciences and Arts Western, Switzerland

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ABSTRACT

Aim: To assess how frequently midwives apply the 26 professional competencies across different work settings and to identify factors influencing their opportunities to do so.
Background: In Switzerland, midwifery education and practices are structured around 26 professional competencies. Opportunities to apply these competencies vary by work setting, potentially restricting scope of practice and participating in deskilling.
Design: A national cross-sectional survey was conducted between July and October 2024 among practicing midwives in Switzerland.
Methods: Through an online questionnaire, participants rated how often they had the opportunity to practice each competency in the past twelve months, on a scale from 0 (never) to 4 (always). Differences between hospital and community-based settings were analysed using R. Qualitative responses to open-ended questions were thematically analysed to identify perceived barriers.
Results: Among 580 respondents, the mean frequency score across all competencies was 2.76/4. Hospital-based midwives reported significantly lower scores for 16 out of 26 competencies (62 %) compared with those in community-based settings ($p < 0.05$), particularly from the roles of Health promoter [E], Leader [D] and Expert [A]. Barriers in hospital settings included limited autonomy and poor working conditions, such as time constraints and work overload.
Conclusions: Midwives in Switzerland face barriers to practice the full scope of their competencies, especially in hospital settings. In contrast, community-based environments seem to offer greater professional fulfilment. Strengthening institutional support and recognition, continuing education and professional networks are essential to enabling the full scope of midwifery practice and preserving autonomy, skills and care quality.

1. Introduction

The scope of practice defines the roles, responsibilities and activities that professionals are authorised to perform. It encompasses the competencies acquired during academic training and applied in professional practice (NMBI, 2015). According to the International Confederation of Midwives ICM, (2017)), midwifery scope of practice includes providing support, care and advice in partnership with women and families throughout the perinatal period, managing childbirth and delivering care to newborns and infants. Regardless of the work setting, midwives are responsible for health promotion, prevention, early detection of complications, facilitating access to appropriate care and implementing emergency measures when necessary (ICM, 2017).

In Switzerland, midwifery is an independent profession with its own academic and regulatory framework. Midwives are required to complete a four-year Bachelor's degree in midwifery, whereas individuals already holding a Bachelor's degree in nursing science may access an accelerated two-year midwifery bachelor's program (Fédération Suisse des Sages-femme FSSF, 2026). The midwifery curriculum and the competencies taught are designed to align with international standards, thereby ensuring consistency with globally accepted benchmarks (Ammann-Fiechter et al., 2020; University of Applied Sciences and Arts Western Switzerland HES-SO, 2020). Both midwifery education and scope of practice are regulated by the Federal Act on Health Professions

* Correspondence to: HESAV School of Health Sciences – Vaud, Avenue de Beaumont 21, Lausanne 1011, Switzerland.
E-mail address: anouck.pfund@hesav.ch (A. Pfund).

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(LPSan, 2016) and further specified by the related Ordinance (OCPSan, 2019). These legislative frameworks aim to ensure high-quality care for women and families by defining the competencies expected at graduation and in professional practice (Ammann-Fiechter et al., 2020). During the development of the LPsan and OCPSan, the Specialised Health Conference of the Swiss Universities of Applied Sciences (CSS), in collaboration with professional associations, undertook a comprehensive review to clarify and consolidate the competencies for all regulated health professions, including midwifery. This process resulted in a revised competency framework, outlining 26 specific competencies organised into seven professional roles: Expert [A], Communicator [B], Collaborator [C], Leader [D], Health promoter [E], Learner and educator [F] and Professional [G] (CSS, 2021).

Internationally, several studies have examined midwives' scope of practice and their opportunities to implement it, highlighting gaps in the full exercise of midwifery competencies (Chakraborty et al., 2023; Luo et al., 2024). These studies underscore that challenges in implementing midwifery competencies are not country-specific but occur across diverse settings. Barriers arise not only from local or institutional constraints but also from systemic factors, including variations in the legal recognition of midwives' scope of practice and differences in educational frameworks across countries (Chakraborty et al., 2023; Li et al., 2022; Mattison et al., 2020). Several other factors influence midwives' ability to fully exercise their professional competencies. Key determinants identified in the literature include the level of professional autonomy, the needs of families and clinical situations encountered, interprofessional collaboration, task-sharing, as well as staffing levels (Mattison et al., 2020; NMBI, 2015; Perrenoud, 2020; Renfrew et al., 2014). These factors are highly context-dependent and vary across care settings and institutional environments (Barker et al., 2019; Perrenoud, 2020). The scoping review by Watkins et al. (2023) highlights that in hospital settings, where care is shaped by service constraints and a dominant medical model, midwives often face barriers to fulfilling their roles. Limited opportunities to exercise competencies may lead to deskilling, where underused skills deteriorate over time. This process can result in professional dissatisfaction and increased turnover (Bloxsome et al., 2019; Shen et al., 2004).

Swiss midwives work across diverse settings, including women's homes (as independent practitioners), university or regional hospitals, private clinics and birth centres. Maternity care is predominantly under medical control, with most hospital-based midwives working within obstetric-led systems (Brailey et al., 2017). In contrast, midwife-led care is more common in community-based settings, although midwives in these contexts are primarily involved in postpartum care and, to a lesser extent, in antenatal care, which remains largely managed by private gynaecologists (Brailey et al., 2017). At present, there is limited empirical evidence regarding the extent to which Swiss midwives practice the full range of their professional competencies. Are they able to practice the full scope of skills defined in the national framework? What barriers influence the deployment of midwifery competencies? Addressing these issues is critical to prevent deskilling, professional dissatisfaction, and turnover.

Accordingly, this study aims to:

- Assess how frequently midwives apply the 26 professional competencies across different work settings and identify factors influencing their implementation.
- Explore perceived barriers to competency mobilisation.

2. Materials and methods

2.1. Study design

A national cross-sectional survey was conducted between July and October 2024. Quantitative data assessed how frequently midwives apply their professional competencies, as well as influencing factors. In addition, a qualitative analysis of open-ended questions explored barriers affecting the mobilisation of these competencies. The STROBE checklist (Supplementary material 1) was used for reporting (Von Elm et al., 2007).

2.2. Study population

In Switzerland, in 2021, 1840 midwives were practicing independently, while 2849 were employed in hospitals and clinics, representing a total of 4689 practicing midwives across all linguistic regions (Borner and Grylka, 2022). This entire population constituted the target for the present study. Inclusion criteria required participants to have actively practiced as a midwife in Switzerland within the previous year and to hold a midwifery degree recognised for professional practice within the country, regardless of workload percentage or practice setting. Efforts were made to ensure broad and inclusive recruitment across different work settings (hospital and community-based), type of hospital institutions (university hospitals, regional hospitals, private clinics) and linguistic regions (French-, German- and Italian-speaking). No a priori sample-size or power calculation was conducted, as the study aimed to include the entire accessible population of eligible professionals during the data collection period.

2.3. Data collection

Data were collected using an online questionnaire developed on LimeSurvey to assess how frequently midwives had the opportunity to apply the 26 professional competencies (CSS, 2021) over the past twelve months and the factors influencing their implementation. The questionnaire comprised three sections: socio-demographic data, self-reported frequency of each competency and open-ended questions exploring perceived barriers and facilitators. The 26 competencies were assessed using 58 items (Supplementary material 2), each rated on a five-point ordinal scale: 0 =never to 4 =always. For each item, participants could also indicate "not relevant to my practice".

The questionnaire was initially developed in French and reviewed for clarity and relevance by an expert committee of four midwife researchers and clinicians from all three Swiss linguistic regions. The experts were selected for their representation of private and public hospital settings and community-based practice, with at least a Master's-level academic background (Supplementary material 3). The final version was then translated into German and Italian using a four-step method adapted from Ingram et al. (2022). The French version of the questionnaire is available in Supplementary material 4.

Following pilot-testing with fourteen midwives from each linguistic region, representing a variety of care settings, minor wording changes were made to address grammatical issues and clarify expressions related to linguistic idioms. To reach a broad midwifery audience, the final versions were disseminated nationwide through multiple channels (e.g., email, newsletters, social media) to midwives employed in Swiss maternity hospitals, members of the Swiss Federation of Midwives (FSSF), members of midwifery organisations and birth centres and alumni of Swiss universities of applied sciences offering midwifery programs. Eligibility was ensured through an initial screening question confirming that respondents had practiced as midwives in Switzerland within the previous year before accessing the full questionnaire.

2.4. Data analysis

2.4.1. Scoring

Responses coded as "not relevant to my practice" were treated as missing data. Mean scores were first calculated for individual items (Table A1 in Supplementary material 5) and each competency was then analysed as a separate outcome variable. The measurement of the seven single-item competencies retained the original 0–4 ordinal metric. The remaining 19 multi-item competencies were operationalised as the

mean of their constituent items, yielding quasi-continuous scores ranging from 0 to 4, provided that at least 50 % of the items within that scale were completed. A global competency score was computed as the mean of all 26 competencies, requiring valid responses for at least 50 % of them. Role-specific scores were computed by averaging the competencies within each role, using the same 50 % threshold.

2.4.2. Internal consistency

The evaluation of internal consistency was conducted exclusively for multi-item competencies. For competencies comprising three or more items, reliability was assessed using Cronbach's α and McDonald's ω (omega), with ω providing a more accurate estimate of scale reliability (Revelle and Condon, 2019). For two-item competencies, Cronbach's α and Spearman's inter-item correlation (ρ) were reported. However, α values for two-item competencies should be interpreted with caution, as they provide no additional information beyond the inter-item correlation ($\alpha = 2\rho / [1 + \rho]$). Both indices are presented for completeness and comparison, while noting their conceptual redundancy. No reliability coefficients (α, ω, or ρ) were computed for single-item competencies, as internal consistency cannot be evaluated for one-item measures. Reliability coefficients (α, ω) were not computed for role scores or the global competency score, as these represent formative composites of conceptually distinct competencies rather than reflective scales (Bollen and Bauldry, 2011).

2.4.3. Regression models

The competency scores were treated as continuous outcomes and modelled using ordinary least squares (OLS) regression with heteroskedasticity-consistent (HC3) robust standard errors, implemented via the sandwich package (Zeileis et al., 2020). Given that competency scores are bounded between 0 and 4 and several scales exhibited skewness or heteroskedasticity, HC3 standard errors provide valid statistical inference under violations of the normality and homoscedasticity assumptions.

Between-setting differences were estimated using simple linear regression models. In addition, multiple regression models examined predictors of self-reported competency use, including type of institution, linguistic region, and years of professional experience. Effect sizes were quantified using Cohen's f^2, based on changes in R^2 between nested regression models (Cohen, 1988).

Quantitative analyses were conducted in R 4.5.2 (R Core Team, 2025). Reliability coefficients were computed using the psych package (Revelle, 2025).

2.4.4. Analysis of qualitative data

Qualitative data obtained from open-ended questions were exported in Excel format, anonymised through encoding and imported into MAXQDA 24 software for thematic analysis. Following the reflexive approach described by Braun and Clarke (2022), recurring themes related to perceived barriers to competency implementation were identified.

2.5. Ethical considerations

The Ethics Committee of the Canton of Vaud issued a declaration of non-competence (non-entry into matter) after evaluating the study protocol (Req-2024–00654), as the study did not fall within the scope of the Swiss Federal Act on Research Involving Human Beings.

Participants were informed at the beginning of the questionnaire about the study's purpose and the confidentiality of their data. By initiating the questionnaire, they provided informed consent to participate. No personally identifiable information was collected and all responses were recorded anonymously and stored securely in compliance with data protection regulations.

3. Results

3.1. Quantitative results

3.1.1. Socio-demographic data

The study sample included 580 midwives practicing in Switzerland (n = 327 hospital settings; n = 253 community-based settings), representing 12 % of the target population (Table 1). Regarding the type of institution, 10 % were employed in university hospitals, 39 % in regional hospitals and 7.4 % in private clinics. More than half (56 %) were from the German-speaking region, 37 % from the French-speaking region and 7 % from the Italian-speaking part of Switzerland. Most of them (62 %) had more than eleven years of professional experience.

3.1.2. Internal consistency

The internal consistency estimates for the 26 competency measures are presented in Table A2 (Supplementary material 5). For multi-item scales (three or more items), McDonald's ω ranged from.72 to.88, indicating acceptable to good reliability. Cronbach's α values were generally consistent with ω estimates, though slightly lower in most cases, as expected. For two-item scales, Spearman's inter-item correlations (ρ) ranged from.38 to.80, with several competencies (e.g., B3: ρ =.39; G2: ρ =.38) demonstrating only modest item consistency. For Competency A1, two items were excluded from the final composite score due to psychometric issues: one item (A1_6) exhibited consistently weak and negative item–total correlations, while another (A1_4) showed very low item–total correlations that substantially reduced scale reliability. Finally, seven competencies (A6, A7, B2, C1, C3, E2 and E3) were measured using single items and therefore do not permit internal consistency estimation, a psychometric limitation that should be considered when interpreting results for these constructs.

3.1.3. Mean frequency score of competency practice during the last twelve months

The overall mean frequency score across the 26 competencies was 2.76 (95 % Confidence Interval (CI) 2.72–2.79, N = 580) (Table 2).

Several competencies appear to be under practiced (Table 3), such as: *Assessing interventions' effectiveness using validated tools* (A7) (Mean (M) 1.81, 95 % CI 1.71–1.90); *Incorporating evidence-based findings into their practice* (F3), (M 1.88, 95 % CI 1.79–1.97); *Actively participating in health promotion and prevention programs* (E3), (M 1.94, 95 % CI 1.84–2.04). Despite being infrequently practiced, these competencies were not rated as "not relevant", suggesting that midwives perceive them as pertinent to their daily practice but encounter barriers to applying them.

Table 1
Sample characteristics.

Variables	n	%
Work setting		
Community-based	253	43.6
Hospital	327	56.4
Type of institution		
University hospital	58	10.0
Regional hospital	224	38.6
Private clinic	43	7.4
Community-based	253	43.6
Missing	2	0.3
Linguistic region		
German-speaking	325	56.0
French-speaking	214	36.9
Italian-speaking	41	7.1
Years of professional experience		
0–2	45	7.8
3–5	74	12.8
6–10	101	17.4
11 +	360	62.1

Note. N = 580.

Table 2
Descriptive statistics for global competency score by work setting.

Work settings	M	SD	Min	Max	95 % CI		n
					LL	UL	
Hospital	2.67	0.48	1.64	3.85	2.62	2.73	327
Community-based	2.86	0.46	1.76	4.00	2.80	2.92	253
Total	2.76	0.48	1.64	4.00	2.72	2.79	580

Note. M = mean; SD = standard deviation; Min = minimum observed score; Max = maximum observed score; CI = confidence interval; LL = lower limit; UL = upper limit; n = number of valid observations. Confidence intervals are 95 % CIs around the mean. The global competency score was computed as the mean of all 26 competency scores, requiring valid responses on at least 50 % of competencies (minimum 13 of 26).

The Communicator role [B] was reported as the most frequently practiced (M 3.07, 95 % CI 3.02–3.12), while the Learner and educator role [F] was the least practiced (M 2.49, 95 % CI 2.44–2.55) (Table A3 in Supplementary material 5).

3.1.4. Opportunity to practice professional competencies according to work settings

Variations according to work setting were observed. On average, competencies were practiced less frequently in hospital (M 2.67, 95 % CI 2.62–2.73) than in community-based settings (M 2.86, 95 % CI 2.80–2.92) (Table 2). 16 out of 26 competencies (62 %) were practiced significantly less frequently in hospitals ($p < 0.05$) (Table 4). The largest context effects were observed for *Assuring leadership and responsibility for care within their professional scope* (A1) (Expert role: $\Delta = 0.53$, $f^2 = 0.26$), *Efficiently managing resources (logistical, financial, administrative)* (D2) (Leader role: $\Delta = 0.73$, $f^2 = 0.19$), *Independently making decisions, diagnoses and risk assessments* (A2) (Expert role: $\Delta = 0.74$, $f^2 = 0.18$) and *independently diagnosing deviations from the norm* (A3) (Expert role: $\Delta = 0.70$, $f^2 = 0.17$), with higher levels reported in community-based settings, all representing medium to medium-large effects.

Three out of 26 competencies (12 %) were practiced significantly less frequently in community-based than in hospital settings ($p < 0.05$): *Detecting emergency situations, establish priorities and independently initiate first care measures (A5)* (Expert role: $\Delta = -0.47$, $f^2 = 0.07$); *Fostering learning processes for women, families, other professionals (F2)* (Learner and educator role: $\Delta = -0.19$, $f^2 = 0.02$); and *Establishing and maintaining intra and interprofessional collaborations (C1)* (Collaborator role: $\Delta = -0.17$, $f^2 = 0.01$).

3.1.5. Effects of institution type, linguistic region and years of professional experience on the opportunity to practice professional competencies

Multivariate linear regression analyses examined the effects of institution type, linguistic region and years of professional experience on self-reported competency practice (Table A4 in Supplementary material 5). All three variables were significantly associated with the self-reported competency implementation. The model explanatory power varied across competencies, with adjusted R^2 values ranging from 0.01 to 0.25, indicating a wide range of explanatory power.

Regarding institution type, midwives working in private clinics reported significantly lower frequencies of practice for eight competencies, particularly those from the Expert [A] and Collaborator [C] roles, compared with those in university hospitals. One competency (i.e., *Incorporating evidence-based findings into practice* (F3)), was practiced significantly more often by midwives in private clinics than in university hospitals ($\beta = 0.43$, $p = 0.031$). Midwives in regional hospitals also reported lower practice levels compared with their counterparts in university hospitals; however, these differences were less consistent and involved four competencies, mainly from the Expert [A] role.

Midwives from the French-speaking part of Switzerland and to a lesser extent those from the Italian-speaking region, reported significantly higher self-assessed competency practice in fourteen and eight competencies, respectively, compared with those in the German-speaking regions. These competencies were mainly from the Professional [G] and Health promoter [E] roles. Conversely, two competencies from the Expert role [A] were practiced less frequently in these regions.

Midwives with over eleven years of experience reported higher levels of practice for three competencies from the Expert [A] and Health promoter [E] roles than respondents with two years of experience or

Table 3
Descriptive statistics for competency measures.

Competency	Competency description	M	SD	Min	Max	95 % CI		n
						LL	UL	
A1	Ensure leadership and assume professional responsibility for meeting the needs of the woman	3.21	0.58	0.00	4.00	3.16	3.26	575
A2	Independently make decisions, diagnoses and risk assessments	2.87	0.95	0.00	4.00	2.79	2.95	573
A3	Independently diagnose deviations from the norm	2.71	0.92	0.00	4.00	2.63	2.78	569
A4	Identify indicators of deviation from physiology and pre-existing diseases	2.63	0.84	0.00	4.00	2.56	2.70	568
A5	Detect emergency situations, establish priorities, and independently initiate first care measures	2.94	0.92	0.00	4.00	2.86	3.01	569
A6	Promote physiological processes in complex and vulnerable situations	2.80	0.92	0.00	4.00	2.72	2.88	569
A7	Assess interventions' effectiveness using validated tools	1.81	1.17	0.00	4.00	1.71	1.90	561
B1	Use professional, person-centred communication	3.15	0.68	0.00	4.00	3.10	3.21	578
B2	Maintain high-quality, effective communication in complex situations	2.79	0.94	0.00	4.00	2.71	2.87	560
B3	Use appropriate communication tools	3.25	0.61	1.00	4.00	3.20	3.30	580
C1	Establish and maintain intra and interprofessional collaborations	2.77	0.88	0.00	4.00	2.70	2.85	571
C2	Organise and coordinate healthcare networks	2.83	0.78	0.00	4.00	2.76	2.89	574
C3	Adopt a proactive approach to facilitate constructive conflict resolution	2.64	0.95	0.00	4.00	2.57	2.72	570
D1	Autonomously organise their work and establish priorities	3.46	0.56	1.00	4.00	3.42	3.51	579
D2	Efficiently manage resources (logistical, financial, administrative)	2.62	0.91	0.00	4.00	2.54	2.70	541
D3	Document and analyse their professional practice using scientifically valid approaches	2.94	0.72	1.00	4.00	2.88	3.00	565
E1	Strengthen the competencies of women and families	3.20	0.65	1.00	4.00	3.14	3.25	577
E2	Protect and support vulnerable populations	2.66	0.99	0.00	4.00	2.58	2.74	563
E3	Actively participate in health promotion and prevention programs	1.94	1.17	0.00	4.00	1.84	2.04	534
F1	Analyze and develop their own learning processes	3.02	0.69	0.00	4.00	2.97	3.08	579
F2	Foster learning processes for women, families, other professionals	2.56	0.76	0.25	4.00	2.50	2.63	572
F3	Incorporate evidence-based findings into practice	1.88	1.08	0.00	4.00	1.79	1.97	568
G1	Critically and reflectively assess current professional practice	2.28	0.88	0.00	4.00	2.21	2.35	578
G2	Take measures to ensure optimal perinatal care	2.62	1.03	0.00	4.00	2.54	2.71	561
G3	Ensure the quality of their professional services and respect deontology	3.35	0.70	0.50	4.00	3.29	3.40	578
G4	Take care of their own health and that of their colleagues	2.65	0.68	0.33	4.00	2.59	2.70	577

Note. M = mean; SD = standard deviation; Min = minimum observed score; Max = maximum observed score; CI = confidence interval; LL = lower limit; UL = upper limit; n = number of valid observations. Confidence intervals are 95 % CIs around the mean. Sample sizes vary across competencies due to missing data. N = 580.

Table 4
Estimated marginal means and between-setting differences in competency scores.

Competency	M (Community based)	M (Hospital)	Δ (Community based − Hospital)	95 % CI		p	f^2	Adjusted R^2	n
				LL	UL				
A1	3.51	2.98	0.53	0.45	0.62	**< .001**	.26	.21	575
A2	3.29	2.55	0.74	0.60	0.89	**< .001**	.18	.15	573
A3	3.10	2.40	0.70	0.56	0.85	**< .001**	.17	.14	569
A4	2.68	2.60	0.08	-0.06	0.22	.261	.00	.00	568
A5	2.67	3.14	-0.47	-0.62	-0.32	**< .001**	.07	.06	569
A6	2.91	2.71	0.20	0.05	0.35	**.009**	.01	.01	569
A7	1.80	1.81	-0.01	-0.21	0.18	.897	.00	.00	561
B1	3.24	3.08	0.16	0.05	0.27	**.006**	.01	.01	578
B2	2.74	2.83	-0.09	-0.25	0.07	.25	.00	.00	560
B3	3.31	3.21	0.10	0.00	0.20	.053	.01	.00	580
C1	2.68	2.85	-0.17	-0.32	-0.02	**.023**	.01	.01	571
C2	2.90	2.77	0.14	0.01	0.26	**.038**	.01	.01	574
C3	2.60	2.68	-0.08	-0.24	0.07	.301	.00	.00	570
D1	3.60	3.36	0.24	0.15	0.33	**< .001**	.05	.04	579
D2	3.03	2.30	0.73	0.59	0.88	**< .001**	.19	.16	541
D3	3.03	2.88	0.15	0.03	0.27	**.012**	.01	.01	565
E1	3.42	3.02	0.40	0.30	0.50	**< .001**	.10	.09	577
E2	2.83	2.53	0.30	0.13	0.46	**< .001**	.02	.02	563
E3	2.23	1.71	0.53	0.33	0.72	**< .001**	.05	.05	534
F1	3.17	2.90	0.27	0.16	0.38	**< .001**	.04	.04	579
F2	2.46	2.64	-0.19	-0.31	-0.06	**.003**	.02	.01	572
F3	2.04	1.76	0.28	0.11	0.46	**.002**	.02	.02	568
G1	2.27	2.29	-0.02	-0.16	0.13	.834	.00	.00	578
G2	2.66	2.60	0.06	-0.11	0.23	.487	.00	.00	561
G3	3.43	3.28	0.16	0.04	0.27	**.007**	.01	.01	578
G4	2.75	2.57	0.18	0.07	0.29	**.001**	.02	.02	577

Note. M = estimated marginal mean; Δ = mean difference (Community-based − Hospital); CI = confidence interval; LL = lower limit; UL = upper limit; f^2 = Cohen's effect size. Estimated marginal means and between work setting differences were derived from separate simple linear regression models for each competency, using heteroskedasticity-consistent standard errors (HC3) and the emmeans package (Lenth and Piaskowski, 2025). Adjusted R^2 represents the proportion of variance explained by work setting. N = 580.

less. In contrast, greater professional experience was negatively associated with one competency from the Communicator [B] role: *Using professional, person-centred communication (B1)* ($\beta = -0.31$, $p = 0.002$).

3.2. Qualitative results: perceived barriers to competency practice

A total of 338 midwives reported perceived barriers in response to the open-ended questions. Analysis revealed a wide range of barriers, organised into five thematic levels: individual, interpersonal, organisational, community and public policy (Table 5).

3.2.1. Individual-Level Barriers

Midwives described personal barriers to practicing certain professional competencies. One recurring issue was the difficulties in balancing private and professional life. This issue appeared more pronounced among self-employed midwives, likely due to the more permeable boundaries between work and personal life in this group of midwives.

Some respondents additionally reported a lack of knowledge and confidence in specific competencies (e.g., diagnosis, obstetric manual skills, analysis and integration of scientific literature into practice), which discouraged their use, thus reinforcing a vicious cycle of non-practice.

3.2.2. Interpersonal-Level Barriers

Challenges in collaboration and communication with other healthcare professionals appear to greatly affect midwives' opportunities to practice professional competencies. Difficult relationships with physicians (e.g., gynaecologist-obstetricians, paediatricians), were frequently reported. These tensions were often linked to medical decisions not aligned with evidence-based guidelines and to differing perspectives on care, with physicians tending to adopt a more pathologising approach. While this issue was primarily raised by hospital-based midwives, independent practitioners also reported challenges in interprofessional collaboration. More broadly, midwives reported a general lack of trust and recognition from medical colleagues:

> *"Working in a University hospital, we are constantly expected to refer to the medical team. They often underestimate our competencies in terms of autonomy and we have to fight to assert our legitimacy." (ID 106, French-speaking region, Hospital, ≥11 years' experience)*

Midwives also described difficulties in the relationships with women and families, such as language barriers, which impeded the exercise of certain competencies.

3.2.3. Organisational-Level Barriers

Midwives identified detrimental working conditions as a major obstacle to practicing the full range of their professional competencies. The most frequently reported barrier was lack of time, often attributed to administrative overload and a misalignment between the time required to provide high-quality, person-centred care and the reimbursement scheme in place:

> *"The administrative side of work is taking up more and more of our time, to the detriment of time spent in the field. I'm not a secretary but a midwife who likes to be with families to support, accompany, encourage, listen and mobilise resources." (ID 725, French-speaking region, Community-based, ≥11 years' experience)*

Time constraints also appeared to hinder the application of competencies related to evidence-based practice and continuing professional development. Across work settings, participants expressed frustration regarding the difficulty of balancing clinical demands with expectations for research and analysis of scientific literature.

Reports of work overload were frequent. Several midwives also pointed to persistent understaffing as a key factor compounding this overload, contributing to dissatisfaction within the profession:

> *"The reduction in staffing levels and the resulting need to care for more mothers and children… it's no wonder that no one wants to work in this*

Table 5
Principal barriers perceived by midwives.

Themes Individual-Level Barriers	Sub-themes (when pertinent)	Codes (when pertinent)	Illustrative quotes
Difficulties in balancing private and professional life			*"It's very difficult to find a balance between my family life and my job. The lack of affordable childcare in Switzerland restricts my way of working, my interest in further training, and exchanging ideas with colleagues." (ID 658, German-speaking region, Community-based, ≥11 years' experience)*
Lack of knowledge and confidence in specific competencies			*"Lack of professional competence in diagnosis and obstetric manual skills (device-based medicine is mastered, but recognising and integrating overall contexts gets lost in the process)." (ID 283, German-speaking region, Hospital, ≥11 years' experience)*
Interpersonal-Level Barriers			
Challenges in collaboration and communication with other healthcare professionals	Challenging communication and collaboration with physicians	Physicians not adhering to evidence-based guidelines	*"Doctors who prescribe a course of action that does not align with the latest research and current recommendations in obstetrics/pediatrics." (ID 118, French-speaking region, Hospital, 0–2 years' experience)*
		Divergent perspectives on clinical care	*"Medical teams (gynaecologist, paediatrician). They see pathology everywhere, even in physiological situations, because they are not used to seeing physiology." (ID 336, French-speaking region, Hospital, 0–2 years' experience)*
		Lack of trust and recognition of midwives by physicians	*"Working in a University hospital, we are constantly expected to refer to the medical team. They often underestimate our competencies in terms of autonomy, and we have to fight to assert our legitimacy." (ID 106, French-speaking region, Hospital, ≥11 years' experience)*
	Lack of mutual support and collaboration among midwives		*"Working alone in an independent setting, with exchanges limited to only a few midwives." (ID 668, German-speaking region, Community-based, ≥11 years' experience)*
Difficulties in the relationship with women and families	Language barrier with women/families		*"Language barriers (some patients/families do not want interpreters)." (ID 255, French-speaking region, Community-based, 6–10 years' experience).*
	Increasing complexity of situations		*"An increasing number of tasks and more complex situations that must additionally be managed (e.g., gynaecology patients, women with complex medical histories)." (ID 939, German-speaking region, Hospital, 3–5 years' experience)*
Organisational-Level Barriers			
Detrimental working conditions	Lack of time	Lack of time for research and analysis of scientific literature	*"No time is allocated to midwives to learn about new practices or studies. They always have to wait until the clinician in the department has done so." (ID522, French-speaking region, Hospital, 0–2 years' experience)*
			"Working full-time as an employee, with no time to take care of additional tasks (e.g., an office day to explore how new findings could be integrated into the birthing centre)." (ID234, German-speaking region, Community-based, 0–2 years' experience)
		Insufficient consultation time with women/couples	*"The administrative side of work is taking up more and more of our time, to the detriment of time spent in the field. I'm not a secretary but a midwife who likes to be with families to support, accompany, encourage, listen and mobilise resources." (ID 725, French-speaking region, Community-based, ≥11 years' experience)*
	Work overload		*"Too much and overly complex documentation. Nowadays, unlike at the beginning of my career as a midwife, I spend far too much time on the computer." (ID 916, German-speaking region, Hospital, ≥11 years' experience)*
	Insufficient staffing		*"The reduction in staffing levels, and the resulting need to care for more mothers and children… it's no wonder that no one wants to work in this field anymore." (ID 740, German-speaking region, Hospital, ≥11 years' experience)*
	Professional exhaustion		*"It's not always possible to strengthen one's own resources, since there are seldom any breaks, little opportunity to eat, and a great deal of stress." (ID 348, German-speaking region, Hospital, 0–2 years' experience)*
Limiting institutional culture and care organisation	Limited autonomy due to hierarchical dynamics (more power given to the medical profession)		*"The structural hierarchy in the hospitals, which assigns a higher rank to the medical profession and therefore makes it difficult to work as equals as a joint team." (ID 404, German-speaking region, Hospital, 0–2 years' experience)*
			"Hierarchical imbalance between the medical profession and (out-of-hospital) midwives." (ID 673, German-speaking region, Community-based, ≥11 years' experience)
	Practice within a medical model of care		*"The current practice of obstetric medicine is not focused on midwifery care; physiology is being lost, and the focus is on searching for pathology. Midwifery care during pregnancy needs to be urgently strengthened to be able to work in a woman-centred way again." (ID 310, German-speaking region, Hospital, 3–5 years' experience)*
	Lack of institutional recognition		*"Nonrecognition of midwifery skills by hospital structures. For the management, we are "specialised nurses" and therefore we have no autonomy, not even in physiology." (ID 766, Italian-speaking region, Hospital, 6–10 years' experience)*
	Lack of training opportunities within the institution		*"Training requests are rarely accepted and therefore at our own expense!" (ID 477, French-speaking region, hospital, 3–5 years' experience)*

(*continued on next page*)

Table 5 (*continued*)

Themes Individual-Level Barriers	Sub-themes (when pertinent)	Codes (when pertinent)	Illustrative quotes
Financial barriers	Limited financial resources in hospital settings		*"The financial and organisational aspects leading to staff shortages and pressure linked to financial costs." (ID 173, French-speaking region, Hospital, 3–5 years' experience)*
	Insufficient remuneration		*"Unfair remuneration compared with other professional groups such as teachers or office employees, particularly in view of the working conditions." (ID 612, German-speaking region, Hospital, 6–10 years' experience)*
Administrative and material barriers	Rigid, medically-centred institutional protocols		*"Restrictive obstetric protocols limit full midwife autonomy." (ID 195, French-speaking region, Hospital, 3–5 years' experience)*
	Difficulty using IT tools/digitization		*"Insufficient training and proficiency with digital tools." (ID 85, French-speaking region, Community-based, ≥11 years' experience)*
Community-Level Barriers			
Challenges in accessing scientific literature and training	Expensive education for out-of-hospital midwives		*"Continuing education is expensive, and as a self-employed person, incomes can fluctuate. Everything depends on self-discipline and initiative." (ID 951, German-speaking region, Community-based, 6–10 years' experience)*
	Gap between available education and the practical needs of midwives		*"Lack of training on the roles and resources of midwives outside the clinical setting. I was only trained in the clinic, not in communication or management." (ID 116, French-speaking region, Community-based, ≥11 years' experience)*
Public Policy-Level Barriers			
Lack of recognition of the midwifery profession	Services insufficiently recognised by legal frameworks/ insurance providers		*"There's a paradox between our autonomy in managing physiological pregnancies and the impossibility of issuing a sick leave certificate, prescribing antibiotic prophylaxis for Group B strep, or ordering bacteriological tests." (ID 759, French-speaking region, Community-based, ≥11 years' experience)*
	Insufficient reimbursement or non-reimbursement of out-of-hospital midwifery activities		*"I work a lot for free. Telephone consultations, long visits for support, assisting the family ecosystem, networking with other professionals are often services I cannot bill for." (ID 777, German-speaking region, Community-based, ≥11 years' experience)*

field anymore." (ID 740, German-speaking region, Hospital, ≥11 years' experience)

Combined with limited recovery time, these factors were perceived as contributing to professional exhaustion.

Institutional culture and care organisation also play a role in hindering the implementation of professional competencies. Barriers linked to perceived limited autonomy were widely reported by midwives across all work settings.

Particularly in hospital settings, hierarchical dynamics were identified as limiting midwives' autonomy and positioning them with less decision-making authority in clinical care. Midwives further highlighted that the dominance of the medical model of care in hospital settings limits their ability to fully exercise their competencies as physiology in maternity care is overlooked in favour of a pathology-focused approach. More broadly, many of them described a widespread lack of institutional recognition of their professional competencies and autonomy:

"Nonrecognition of midwifery skills by hospital structures. For the management, we are "specialised nurses" and therefore we have no autonomy, not even in physiology." (ID 766, Italian-speaking region, Hospital, 6–10 years' experience)

A recurring issue concerned insufficient institutional support for continuing education, with training requests often being denied or left to the individual's financial responsibility.

Financial barriers also emerged as a significant barrier. In hospitals, midwives pointed the pressures linked to budgetary constraints, leading to chronic understaffing. They also highlighted insufficient remuneration as a significant concern.

3.2.4. Community-Level Barriers

Midwives reported limited access to scientific literature and continuing education. Particularly, self-employed midwives reported a financial burden related to continuing education. Moreover, participants noted a disconnect between training content and their practical needs.

3.2.5. Public Policy-level Barriers

Midwives voiced concern about a lack of recognition of their profession by legal frameworks and insurance providers. In community-based settings, this was particularly evident in relation to inadequate reimbursement of key clinical activities:

"I work a lot for free. Telephone consultations, long visits for support, assisting the family ecosystem, networking with other professionals are often services I cannot bill for." (ID 777, German-speaking region, Community-based, ≥11 years' experience)

4. Discussion

This study revealed an overall mean frequency score of 2.76/4 for the 26 professional competencies, indicating they are partially integrated into midwives' practice despite being perceived as relevant. Contextual differences emerged, with almost two-third of competencies less practiced in hospital settings. Institutional differences were also observed: compared with midwives working in university hospitals, those in private clinics and regional hospitals reported significantly fewer opportunities to practice certain competencies (eight and four, respectively). This suggests that larger or academically affiliated institutions may offer broader opportunities for professional engagement and interprofessional collaboration. Regardless of institution type or work setting, midwives reported barriers including difficult working conditions, challenges in interprofessional collaboration and limited autonomy.

4.1. Mobilisation of professional competencies among midwives

The overall mean frequency score across the 26 professional competencies was moderate. Competencies related to Learner and educator role were less frequently mobilised, while those from the Communicator role were the most frequently applied. Thematic analysis of reported barriers confirmed that many midwives face challenges in applying the full scope of their competencies. Key challenges included poor working

conditions, lack of time, high workload, insufficient staffing, limited autonomy and low recognition, particularly within medically dominated hierarchical structures. These findings align with previous research showing global challenges in full scope midwifery practice within fragmented, medicalised care models that remain prevalent in many healthcare systems (Vermeulen et al., 2019; Watkins et al., 2023). Moreover, even within midwife-led models of care, poor working conditions, such as time constraints and excessive workloads, also limit midwives' ability to practice to the full extent of their competencies (Hansson et al., 2020). Finally, insufficient staffing levels, especially in hospital settings, further exacerbate these challenges and hinder optimal professional practice (Cramer and Hunter, 2019). These limitations may negatively affect midwives' emotional wellbeing, job satisfaction, and contribute to intentions to leave the profession (Cramer and Hunter, 2019; Harvie et al., 2019; Shen et al., 2004).

4.2. Variations in competency mobilisation according to work settings

Midwives working in community-based environments reported significantly higher frequencies of practice for 16/26 competencies compared with their hospital-based counterparts. Open-ended responses highlighted that hospital-based practice often limits professional autonomy, potentially hindering full use of midwives' competencies. These results align with previous studies showing that community-based midwives generally experience higher levels of autonomy, job control and professional satisfaction than hospital midwives (Bloxsome et al., 2019; Clemons et al., 2021; Perdok et al., 2017; Vermeulen et al., 2023; Yoshida and Sandall, 2013). Broader exercise of competencies in community-based settings has also been identified as a contributing factor in midwives' decisions to leave hospital settings (Barker et al., 2019), potentially worsening working conditions and exacerbating turnover in hospital settings. In Switzerland, community-based midwives primarily provide postnatal care, while hospital midwives work throughout pregnancy, childbirth and early postnatal care. This indicates that the midwifery competencies are broad enough that, despite a narrower scope, community-based midwives still frequently mobilise most professional competencies.

The most pronounced differences between community-based and hospital settings concerned competencies from the Expert and Leader roles, especially in autonomous risk assessment and care responsibility (A2), identifying deviations and initiating responses independently (A3), assuring leadership and responsibility for care (A1), and managing administrative and financial resources (D2). These competencies embody key dimensions of professional autonomy and leadership, which appear to be more fully exercised in community-based contexts. In our study, hospital-based midwives reported experiencing limited autonomy, primarily due to hierarchical dynamics and the dominant role of the medical profession. They also described a lack of recognition of their expertise, both from physicians and from the institutions where they work. In some cases, relational tensions with physicians, embedded within these power dynamics, were reported to further restrict the scope of midwifery practice. This aligns with previous research documenting hospital midwives' subordination within medical hierarchies and the associated constraints on their professional status and autonomy, both in Switzerland and internationally (Brailey et al., 2017; Clemons et al., 2021; Vermeulen et al., 2023). An integrative review by Bloxsome et al. (2019) underscored that professional autonomy and full scope of practice are key to midwives' retention.

The Learner and educator role was less frequently exercised in hospital settings, particularly regarding integrating evidence-based findings into practice (F3) and developing personal learning strategies (F1). Hospital midwives reported difficulties in accessing continuing education due to time constraints, limited access and insufficient financial support from their institutions. In Switzerland, disparities in continuing education opportunities exist between hospitals and community-based midwives. While self-employed midwives are legally required to undertake continuing education (FSSF, 2025), no such obligation applies to hospital-employed midwives, likely contributing to differences in training access and professional development opportunities.

Limited opportunities for hospital-based midwives to apply their competencies reflect a broader lack of recognition and institutional support, a concern explicitly voiced by participants. Many felt undervalued within obstetric-led care models that restrict autonomy and limit full competency use. The World Health Organization (WHO) strongly advocates for midwifery care models that enable their full scope of practice (World Health Organization (WHO) (WHO), 2024). Such models are associated with improved clinical outcomes, enhanced experiences for women and reduced healthcare costs (WHO, 2024).

4.3. Variations in competency mobilisation according to institution types

Midwives in private clinics and to a lesser extent, in regional hospitals, reported practicing certain competencies less frequently than their counterparts in university hospitals. This was particularly evident in competencies from the Expert and Collaborator roles. Literature indicates a higher degree of medicalisation in private clinic settings (Brailey et al., 2017; Pellegrini et al., 2014), which may limit midwives' ability to mobilise their specific competencies. Differences in competency mobilisation extend beyond the hospital and community-based dichotomy and are also pronounced in hospital settings. Institutional dynamics, care models and resource availability directly shape midwives' opportunities to fully exercise their professional competencies.

4.4. Variations in competency mobilisation by linguistic regions

French- and Italian-speaking midwives reported significantly higher use of several competencies, particularly from the Professional and Health promoter roles, compared with German-speaking midwives. Although the questionnaire translation was based on core documents in all three national languages, linguistic nuances may have affected interpretation or understanding of some items. These variations may also reflect underlying cultural, institutional, or educational differences across regions. For example, medicalised births (e.g., caesarean sections), are more frequent in the German-speaking part of Switzerland (Obsan, 2023). Further research is needed to explore regional differences in competency perception and application.

4.5. Variations in competency mobilisation by years of professional experience

More experienced midwives reported higher mobilisation of three competencies (two from the Expert role and one from the Health promoter role) and a slight decline in one competency from the Communicator role. Surprisingly, these differences were limited, suggesting that practice context exerts a stronger influence on competency use than professional experience. This also indicates that initial training and early integration of newly graduated midwives are generally effective, with no major gaps in their ability to apply core competencies.

4.6. Strengths and limitations

This study offers a comprehensive overview of Swiss midwives perceived opportunities to apply their professional competencies. To our knowledge, it is the first study to specifically investigate self-reported practice of competencies as defined by a national framework (CSS, 2021). A major strength of the study lies in the large and diverse sample of midwives encompassing various work settings and all linguistic regions, enhancing the findings' relevance and generalisability.

Nonetheless, several limitations should be acknowledged. First, the use of single-item measures limits psychometric assessment, as internal consistency cannot be evaluated. This approach was consistent with the instrument structure, where certain competencies represented narrowly

defined behavioural outcomes that could not conceptually and meaningfully be divided. Results involving single-item skills should be interpreted with caution. Second, the reliance on self-reported data may introduce bias, including potential misunderstandings of competency definitions despite careful translation and piloting. Ethnographic studies would be valuable to observe how competencies are enacted in practice. Finally, the small number of respondents from midwife-led hospital units (n = 32) precluded subgroup analysis. These units may offer important insights for expanding professional autonomy in hospital settings and merit future research.

5. Conclusion

This study highlights significant discrepancies between professional competencies taught to Swiss midwives during their Bachelor program and their opportunities to apply them in practice, especially in hospitals where institutional constraints and medical hierarchies limit professional autonomy. Conversely, community-based environments provide more favourable conditions for the full deployment of competencies, especially in leadership, autonomous decision-making and health promotion.

The underuse of core competencies may reduce professional satisfaction and affect the quality of care for women and families. These findings underscore the need for greater institutional and social recognition of midwifery practice, supportive work environments and sustained investment in continuing education.

Promoting midwifery-led care models and improving working conditions would enable midwives' full scope of practice, contributing to safer, person-centred and cost-effective maternity care systems, in line with the WHO recommendations (WHO, 2024).

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CRediT authorship contribution statement

Claire de Labrusse: Writing – review & editing, Supervision, Project administration, Methodology, Investigation, Funding acquisition, Conceptualization. **Anouck Pfund:** Writing – review & editing, Writing – original draft, Visualization, Investigation, Formal analysis, Data curation, Conceptualization. **Alessia Abderhalden-Zellweger:** Writing – review & editing, Writing – original draft, Visualization, Supervision, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization. **Amal Tawfik:** Writing – review & editing, Visualization, Formal analysis, Data curation.

Declaration of Generative AI and AI-assisted technologies in the writing process

During the preparation of this work the authors used ChatGPT to revise certain sections and translate participants' responses to open-ended questions. After using this tool, the authors reviewed and edited the content as needed and take full responsibility for the content of the publication.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at doi:10.1016/j.nepr.2026.104758.

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