

## Supplementary Table S1. CREDES checklist for Reporting Delphi studies

### Delphi studies in social and health sciences – recommendations for an interdisciplinary standardized reporting (DELPHISTAR).

From: Niederberger, M., Schifano, J., Deckert, S., Hirt, J., Homberg, A., Köberich, S., Kuhn, R., Rommel, A., Sonnberger, M. & the DEWISS network (2024). Delphi studies in social and health sciences—Recommendations for an interdisciplinary standardized reporting (DELPHISTAR). Results of a Delphi study. *PLoS ONE* 19(8): e0304651. <https://doi.org/10.1371/journal.pone.0304651>

More information under OSF (<https://osf.io/gc4jk>) and DEWISS (<https://delphi.ph-gmuend.de/>)

#### What is the aim of DELPHISTAR?

- Improve, harmonize, and make the reporting in publications on Delphi studies comparable
- Facilitate the evaluation of Delphi studies including during peer review processes
- Reduce, and ideally prevent, inconsistencies and unclear descriptions in publications on Delphi studies
- Raise awareness of the diversity among the Delphi variants and of their specific potentials and challenges

#### DELPHISTAR is a Delphi reporting guideline that is:

- valid for all Delphi variants (e.g., classic Delphi, real-time Delphi, group Delphi, policy Delphi, argumentative Delphi, café Delphi)
- applicable to different purposes (e.g., Delphi studies to establish consensus, to gather expert judgments or to forecast)
- given equal consideration in the health and social sciences

**This reporting guideline is meant for studies using Delphi techniques in the health and social sciences.** These also include all Delphi variants and modifications that meet the following criteria:

1. Survey of several people (=experts) with specialized knowledge (e.g., operational knowledge, experiential knowledge, functional knowledge, contextual knowledge)
2. Structured communication process
3. Carrying out at least two survey rounds or the option to respond at least two times
4. Feedback: the (interim) results are presented to the experts starting from the second round
5. Basis is a quantitative questionnaire with the possibility to contribute or supplement arguments for the respective position
6. Quantitative and qualitative answer are systematically analyzed (quantitative: e.g., descriptive statistics, qualitative: e.g., thematic analysis)

This reporting guideline is available in English and German at <https://delphi.ph-gmuend.de/activities/delphistar> (last update October 2024).

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**Table S1** Checklist for Reporting Delphi studies

Topic	Section	Item	Checklist Item	Reported on Page No.	Exemplary wording
I Title and Abstract		1	Identification as a Delphi study in the title	1	What is a public health intervention? Results of a Delphi study.
		2	Identification as a Delphi study in the abstract	1-2	A Delphi study was selected to answer the research question.
		3	Structured abstract	1-2	e.g., background, method, results and discussion

**Supplementary Table S1. CREDES checklist for Reporting Delphi studies**

Topic	Section	Item	Checklist Item	Reported on Page No.	Exemplary wording
II Context	Formal	4	Information about the sources of funding	23	The Delphi study was funded by [SOURCE].
		5	Information about the team of authors and/or researchers (e.g., discipline, institution)	1, 8	The Delphi study was conducted by an interdisciplinary team with representatives from medicine, public health, and health promotion.
		6	Information about method consulting	NA	The study group was advised by experts from [INSTITUTION] regarding statistics. Or: No consulting in regard to method took place.
		7	Information about the project background	3-5	The Delphi study was part of a mixed-methods study on [AIM].
		8	Information about the study protocol	NA	The study protocol is available at [LINK].
	Content	9	Justification of the chosen method (Delphi) to answer the research question	5-7	The Delphi method is suitable for answering the research question because it systematically gathers the judgments of different expert groups and can identify agreement and disagreement.
		10	Aim of the Delphi study (e.g., consensus, forecasting)	7	The aim of the Delphi study is to find consensus on criteria to define a public health intervention.
III Method	Body & Integration of knowledge	11	Identification and elucidation of relevant expertise, spheres of experience, and perspectives (e.g., theory, practice, affected groups, disciplines)	10-11	The experts represent the sciences and clinical practice because [REASON].
		12	Handling of knowledge, expertise and perspectives which are missing or have been deliberately not integrated	NA	If it is not possible to recruit experts specialized in [AREA], this will be openly communicated to the other experts during the Delphi study.
		13	Basic definition of expert <sup>a</sup>	11	A person who has been active in the area for at least [NUMBER] years is considered to be an expert.
	Delphi variant and modifications	14	Identification of the type of Delphi variant and potential modifications (e.g., classic Delphi, real-time Delphi, group Delphi)	7	A classic Delphi study was used [LITERATURE REFERENCE].
		15	Justification of the Delphi variant and modifications, including during the Delphi study, if applicable	7, 12	If the willingness to participate clearly decreases between the first and second round, a third round will not be held.
	Sample of experts	16	Selection criteria for the experts (per round, per expert group if applicable)	11	All of the experts who met the definition were invited to the first round. All of the experts who completed the previous round were invited to participate in the subsequent round.
		17	Identification of the experts	11, 15	The experts were identified based on publications in [DATABASE].
		18	Information about recruiting and any subsequent recruiting of experts	11	The experts were informed about the Delphi study and invited to participate.

**Supplementary Table S1. CREDES checklist for Reporting Delphi studies**

Topic	Section	Item	Checklist Item	Reported on Page No.	Exemplary wording
	Survey	19	Elucidation of the content development for the questionnaire <sup>b</sup>	8-10	The questionnaire was developed based on the results of systematic reviews [LITERATURE REFERENCE].
		20	Description of the questionnaire (content and structure)	12	The questionnaire was divided into three segments on [TOPICS]. The statements made in the questionnaire were evaluated using standardized items, with the option to comment in free-text boxes.
	Delphi rounds	21	Number of Delphi rounds	12	Three Delphi rounds were held.
		22	Information about the aims of the individual Delphi rounds	12	The first Delphi round focused on exploring relevant aspects. These aspects were then presented to the experts in the second Delphi round for standardized evaluation.
		23	Disclosure and justification of the criterion for discontinuation	12	The number of rounds was defined in advance to be a maximum of three rounds.
	Feedback	24	Information about what data was reported back per round	12	In terms of feedback, we shared the statistical results plus the summary of the open responses.
		25	Information on how the results of the previous Delphi round were fed back to the experts surveyed (e.g., via frequencies, mean values, measures of dispersion, listing of comments)	12	Mean values, standard deviations and percentage frequency distributions were reported.
		26	Information on whether feedback was differentiated by specific groups (e.g., by field of expertise, institutional affiliation)	NA	The feedback was aggregated across all expert groups.
		27	Information about how dissent and unclear results were handled	12	The results showing dissent were presented again for evaluation in the next Delphi round.
	Data analysis	28	Disclosure of the quantitative and qualitative analytical strategy	10, 13-14	The quantitative items were descriptively analyzed. The open-ended items were analyzed using thematic analysis [LITERATURE REFERENCE].
		29	Definition and measurement of consensus	12	Consensus was defined as percentage agreement, meaning that agreement was assumed if at least 80% of the respondents agreed on an item.
		30	Information on group-specific analysis or weighting of experts (e.g., theory vs. practice, discipline-specific analysis)	NA	In the analysis, the mean values for percent agreement are weighted for each expert group in terms of the number of group members.
	IV Results	Delphi process	31	Illustration of the Delphi study (e.g., in a flow chart)	7
32			Information about special aspects during the Delphi study (e.g., deviations from the intended approach with justification)	NA	During the Delphi study the political discussion mentioned climate change and the effects on health. It is possible that this influenced the experts' responses.

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Topic	Section	Item	Checklist Item	Reported on Page No.	Exemplary wording
		33	Number of experts per round (both invited and participating)	15	The number of experts participating in the first Delphi round was [NUMBER], and the number of experts in the second round was [NUMBER]. This corresponds to a response rate of [NUMBER]% in the first round and [NUMBER]% in the second round.
	<b>Results</b>	34	Presentation of the results for each Delphi round and the final results	15-17	In the first Delphi round [NUMBER]% of the experts agreed, in the second [NUMBER]%, and in the third [NUMBER]%.
<b>V Discussion</b>	<b>Quality of findings</b>	35	Highlighting the findings from the Delphi study	18-21	The central findings can be summarized as follows: [STATE FINDINGS].
		36	Validity of the results (e.g., transferability of the findings)	18-22	The results are not transferable to other countries due to different legal regulations.
		37	Reliability of the results (e.g., split half, inter-rater reliability)	18	The responses in the free-text comments were analyzed by two independent reviewers [SPECIFY].
		38	Reflection on potential limitations (e.g., number of experts, response bias)	21-22	The results are to be viewed critically with regard to the composition of the panel because [REASONS].

<sup>a</sup> “Experts” are the participants; these can be people from academia, practice, or representatives of lived experience (e.g., patients, family members).

<sup>b</sup> The term “questionnaire” stands for the survey instrument regardless of whether quantitative or qualitative items are integrated or weighted.

**Supplementary Table S2.The detailed third-level indicators****Final Results of the Third-level Indicators of the Evaluation Index System are shown in Table S2.****Table S2** Final Results of the Third-level Indicators of the Evaluation Index System

Third-level Indicators	Importance score (mean $\pm$ standard deviation)	CV	Weight	Agreement rate
A1.1 Growing Demand for TCM specialist nurses	4.80 $\pm$ 0.41	0.086	3.24%	100.00%
A1.2 Government Policy Support	4.80 $\pm$ 0.41	0.086	3.24%	100.00%
A1.3 Availability of Financial Support for Training Programs	4.80 $\pm$ 0.41	0.086	3.24%	100.00%
A2.1 Training needs for specialized knowledge in TCM nursing	4.93 $\pm$ 0.26	0.052	1.12%	100.00%
A2.2 Training needs for specialized skills operation in TCM nursing	4.93 $\pm$ 0.26	0.052	1.12%	100.00%
A2.3 Rationality of resource allocation in clinical practice bases	4.80 $\pm$ 0.56	0.117	0.56%	93.33%
A2.4 Requirements for clinical teaching models and effects	4.80 $\pm$ 0.56	0.117	0.56%	93.33%
A2.5 Training needs for policies and norms in TCM nursing	4.80 $\pm$ 0.56	0.117	0.56%	93.33%
A3.1 Overall training objectives	4.80 $\pm$ 0.56	0.117	1.24%	93.33%
A3.2 Training objectives at each stage	4.87 $\pm$ 0.52	0.106	2.47%	93.33%
A3.3 Training objectives for specialized fields	4.87 $\pm$ 0.52	0.106	2.47%	93.33%
B1.1 Degree of Match between Course Objectives and Training Objectives	4.80 $\pm$ 0.56	0.117	0.87%	93.33%
B1.2 Degree of Rationality in Course Arrangement	4.73 $\pm$ 0.59	0.126	0.51%	93.33%
B1.3 Clinical Rotation Plan and Standards	4.73 $\pm$ 0.59	0.126	0.51%	93.33%
B1.4 Training Methods(Applicability and Diversity)	4.80 $\pm$ 0.56	0.117	0.87%	93.33%
B1.5 Assessment Methods(Applicability and Diversity)	4.67 $\pm$ 0.62	0.132	0.34%	93.33%
B2.1 Emergency Response Plan Development	4.13 $\pm$ 0.83	0.202	0.33%	73.33%
B2.2 Teaching Facilities and Equipment	4.53 $\pm$ 0.64	0.141	0.82%	93.33%
B2.3 Library Resources and Electronic Information Resources	4.13 $\pm$ 0.83	0.202	0.33%	73.33%
B2.4 Teaching Management Level	4.80 $\pm$ 0.56	0.117	1.61%	93.33%
B3.1 Teaching Quality (Teaching Attitude and Skills)	4.87 $\pm$ 0.52	0.106	0.76%	93.33%
B3.2 Teaching Ability	4.87 $\pm$ 0.52	0.106	0.76%	93.33%
B3.3 Practical Skills Level of the Supervising Teachers	4.87 $\pm$ 0.52	0.106	0.76%	93.33%

**Supplementary Table S2. The detailed third-level indicators**

B3.4 Professional Title Structure and Proportion	4.27±0.88	0.207	0.16%	73.33%
B3.5 Educational Level Structure and Proportion	4.33±0.90	0.208	0.21%	73.33%
B3.6 Ratio of Teachers and Students	4.67±0.62	0.132	0.44%	93.33%
B4.1 Management Regulations for Training Fees	3.93±0.70	0.179	0.16%	73.33%
B4.2 Regulations for Training Time Arrangement and Scheduling	4.53±0.74	0.164	0.35%	86.67%
B4.3 Management and Assessment Standards for Training Attendance	4.73±0.70	0.149	0.60%	86.67%
B4.4 Operating and Management Norms of Practice Bases	4.87±0.52	0.106	1.13%	93.33%
B4.5 Clinical Supervision System	4.80±0.56	0.117	0.86%	93.33%
B5.1 Sound Organization Structure	3.93±0.80	0.203	0.17%	73.33%
B5.2 Feedback and Suggestion Mechanism	4.80±0.56	0.117	0.90%	93.33%
B5.3 Continuous Support for Traditional Chinese Nursing Education and Career Development	4.67±0.62	0.132	0.48%	93.33%
C1.1 Evaluation of the Nursing Laws and Regulations Course	4.67±0.62	0.132	0.61%	93.33%
C1.2 Evaluation of the Theory Knowledge Course for TCM Nursing Specialization	5.00±0.00	0.000	2.04%	100.00%
C1.3 Evaluation of the Nursing Practice Skills Course for TCM Nursing Specialization	5.00±0.00	0.000	2.04%	100.00%
C1.4 Evaluation of the Advanced Nursing Practice Course	4.80±0.56	0.117	1.08%	93.33%
C1.5 Evaluation of the Research Course	4.80±0.56	0.117	1.08%	93.33%
C2.1 Evaluation of Teaching Supervision	4.80±0.41	0.086	1.12%	100.00%
C2.2 Feedback Evaluation from TCM specialist nurses	4.93±0.26	0.052	2.38%	100.00%
C2.3 Peer Evaluation among Teachers	4.33±0.82	0.188	0.44%	80.00%
C2.4 Classroom Participation	4.80±0.56	0.117	1.12%	93.33%
C2.5 Implementation of Feedback Loop	4.87±0.52	0.106	1.81%	93.33%
C3.1 Attendance Rate	4.40±0.63	0.144	0.74%	93.33%
C3.2 Theory Examination Scores	5.00±0.00	0.000	2.97%	100.00%
C3.3 Examination Scores for TCM Appropriate Techniques	5.00±0.00	0.000	4.62%	100.00%
C3.4 Completion Number of Group Plans	4.87±0.52	0.106	2.18%	93.33%
C3.5 Number of Nursing Cases Completed	4.87±0.52	0.106	2.18%	93.33%

**Supplementary Table S2. The detailed third-level indicators**

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C3.6 Pass Rate of TCM specialist nurses' Graduation Examination	4.53±0.64	0.141	1.05%	93.33%
D1.1 Work Attitude	4.87±0.52	0.106	1.75%	93.33%
D1.2 Competency in Syndrome Differentiation Nursing	4.87±0.52	0.106	1.75%	93.33%
D1.3 Ability in Handling Difficult and Critical Cases	4.87±0.52	0.106	1.75%	93.33%
D1.4 TCM Health Education	4.87±0.35	0.072	1.75%	100.00%
D1.5 Clinical Critical Thinking Ability in TCM	5.00±0.00	0.000	3.01%	100.00%
D1.6 Teaching Ability	4.80±0.56	0.117	1.18%	93.33%
D1.7 Frequency of Participation in Continuing Education and Professional Development Activities for TCM Nursing by TCM specialist nurses	4.73±0.59	0.126	0.94%	93.33%
D1.8 Number of Adverse Events Related to TCM Nursing Operations by TCM specialist nurses after Training	4.67±0.90	0.193	0.78%	86.67%
D2.1 Patient Satisfaction	4.80±0.56	0.117	2.43%	93.33%
D2.2 Clinical Implementation Cases of TCM Nursing Techniques	5.00±0.00	0.000	4.18%	100.00%
D2.3 Outpatient Visits in TCM Nursing Clinics	5.00±0.00	0.000	4.18%	100.00%
D2.4 Number of Outgoing Lecturers	4.93±0.26	0.052	3.09%	100.00%
D2.5 Number of Completed Cases of TCM Nursing Plans for Specialized Diseases	4.93±0.26	0.052	3.09%	100.00%
D2.6 Proportion of Published Papers	4.47±0.64	0.143	1.20%	93.33%
D2.7 Proportion of Project Applications	4.47±0.64	0.143	1.20%	93.33%
D2.8 Proportion of Obtained Patents	4.47±0.64	0.143	1.20%	93.33%
D2.9 Satisfaction of the Original Unit's Department	4.27±0.80	0.187	0.77%	80.00%
D2.10 Satisfaction of Colleagues	4.20±0.68	0.161	0.62%	86.67%
D2.11 Self-satisfaction	4.80±0.56	0.117	2.43%	93.33%
D2.12 Satisfaction of TCM Health Education	4.13±0.64	0.155	0.52%	86.67%
D2.13 Promotion Rate of Position	4.33±0.82	0.188	0.89%	80.00%

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## Supplementary File 1. Theoretical mapping of the initial indicator system and Preliminary system

Theoretical mapping of the initial indicator system is presented in Table S1.1.

**Table S1.1** Theoretical mapping of the initial indicator system (Post-Interview, Pre-Delphi) using the integrated CIPP-Kirkpatrick framework

CIPP Dimension (1st-level)	Integrated Kirkpatrick Level	Theoretical Rationale / Definition	Derived 2nd-level Indicators (Initial Skeleton)(Examples)	Representative 3rd-level Indicators Mapped from Lit/Interview(Examples)	Primary Source
A Context Evaluation	None directly equivalent. It serves as a prerequisite foundation.	Serves as the foundational assessment of pre-training needs, objectives, and policy environment, acting as the prerequisite for the training program.	A1 Training Needs	A1.1 Basic Training Needs in Traditional Chinese Medicine	Interview
			A2 Training Objectives	A2.1 Overall Training Objectives	References
B Input Evaluation	None directly equivalent. It serves as a resource guarantee.	Evaluates the structural, human, and material resource investments required to achieve the training objectives.	B1 Curriculum Construction	B1.2 Rationality of Course Arrangement	References and Interview
				B1.4 Dialectical nursing with teachers	Interview
			B3 Faculty Team	B3.1 Teaching Quality (Teaching Attitude and Skills)	References
				B3.6 Ratio of Teachers to Students	References and Interview
B5 Management Mechanism	B5.2 Feedback and Suggestion	References and Interview			
	B5.3 TCM nursing support system after training	Interview			
C Process Evaluation	Integrated Kirkpatrick's Reaction Level.	Besides routine CIPP process monitoring of curriculum delivery, this dimension integrates learners' immediate reactions (e.g., satisfaction, engagement) under the specific heading of "Quality Assurance" to dynamically improve the ongoing training process.	C1 Training Content	C1.3 Nursing Practice Skills Course for TCM Nursing Specialization	Interview
			C2 Quality assurance	C2.1 Evaluation of Teaching Supervision	Interview
				C2.4 Enthusiasm in class	References and Interview
D Product Evaluation	D1. Learning Level Assessment	Evaluate the level of knowledge and skills that the trainees have	D1 Learning Level Assessment	D1.1 Attendance Rate	References
				D1.4 Examination Scores for TCM	References and

## Supplementary File 1. Theoretical mapping of the initial indicator system and Preliminary system

	acquired by the end of the training course.		Appropriate Techniques	Interview
D2. Behavior Level Assessment	Evaluation of the changes in nurses' clinical practice behaviors after returning to their positions following training	D2 Behavior Level Assessment	D2.2 Syndrome Differentiation - based Nursing  D2.3 The ability to inherit traditional Chinese medicine culture	Interview  Interview
D3. Results Level Assessment	Evaluate the organizational benefits, patient gains, and social impacts brought about by the behavioral changes.	D3 Results Level Assessment	D3.1 Patient Satisfaction  D3.5 Satisfaction of TCM culture inheritance	References  Interview

After the interview, regarding the research question of "evaluation of training effectiveness", the research team summarized and analyzed the interview materials, extracting 6 related themes and 32 sub-themes regarding the evaluation of the training effect of specialized nurses in traditional Chinese medicine: ① Evaluation of the training needs of trainees before the training; ② The training base should have the necessary training conditions; ③ The ability of syndrome differentiation and treatment is one of the core abilities of specialized nurses in traditional Chinese medicine; ④ Specialized nurses in traditional Chinese medicine need to possess professional qualities in traditional Chinese medicine nursing; ⑤ Continuous vocational education and career development support in traditional Chinese medicine nursing; ⑥ The training program requires continuous feedback to continuously improve the training process. The newly extracted indicators were compared with the list derived from the literature. Overlapping concepts were merged, indicators requiring clearer wording were modified, and new emerging indicators were retained after team discussion. Finally, after discussion by the research team, it was decided to add 1 secondary indicator of "training needs", and 12 tertiary indicators: "basic training needs in traditional Chinese medicine, training needs for specialized nurses in traditional Chinese medicine positions, follow-the-master classes for syndrome differentiation and treatment, ability of syndrome differentiation and treatment, support system for traditional Chinese medicine nursing after training, theoretical knowledge of traditional Chinese medicine nursing for specialized nurses, practical skills of traditional Chinese medicine nursing for specialized nurses, teaching supervision evaluation, feedback cycle link, ability to inherit traditional Chinese culture, participation in traditional Chinese medicine nursing continuing education and professional development activities, satisfaction with the inheritance of traditional Chinese culture". A total of 4 primary indicators, 12 secondary indicators and 57 tertiary indicators were included in the evaluation index system, see **the Supplementary Table S1.2**. The initial indicator pool for the Delphi survey was formed.

**Table S1.2** Preliminary system after Literature research and Semi-structured interviews

## Supplementary File 1. Theoretical mapping of the initial indicator system and Preliminary system

First-level indicators	Second-level indicators	Third-level indicators	Source	
A Context Evaluation	A1 Training Needs	A1.1 Basic Training Needs in Traditional Chinese Medicine	Interview	
		A1.2 Training Needs for Specialist Nurse Positions in Traditional Chinese Medicine	Interview	
	A2 Training Objectives	A2.1 Overall Training Objectives	References	
		A2.2 Stage - specific Training Objectives	References	
		A2.3 Specialized Training Objectives	References	
	B Input Evaluation	B1 Curriculum Construction	B1.1 Degree of Match between Course Objectives and Training Objectives	References and Interview
B1.2 Rationality of Course Arrangement			References and Interview	
B1.3 Clinical Rotation Plan and Standards			References and Interview	
B1.4 Dialectical nursing with teachers			Interview	
B1.5 Scientific research courses			References and Interview	
B1.4 Training Methods (Applicability and Diversity)			References	
B1.5 Assessment Methods (Applicability and Diversity)			References	
B2 Teaching Conditions			B2.1 Barriers to implementation	References
		B2.2 Emergency Response Plan Development	References	
		B2.3 Practical Skills Level	References	
		B2.4 Teaching Facilities and Equipment	References and Interview	
		B2.5 Library Resources and Electronic Information Resources	References	
		B2.6 Teaching Management Level	References and Interview	
		B3 Faculty Team	B3.1 Teaching Quality (Teaching Attitude and Skills)	References
			B3.2 Teaching Ability	References and Interview
B3.3 Professional Title Structure and Proportion			References	
B3.4 Educational Level Structure and Proportion	References			
B3.5 Age structure ratio	References			
B3.6 Ratio of Teachers to Students	References and Interview			
B4 Rules and Regulations	B4.1 Training fee system	References		
	B4.2 Training time arrangement system	References		
	B4.3 Training attendance and assessment system	References		
	B4.4 Clinical teaching system	References and Interview		

## Supplementary File 1. Theoretical mapping of the initial indicator system and Preliminary system

	B5 Management Mechanism	B5.1 Sound Organization Structure	References
		B5.2 Feedback and Suggestion	References and Interview
		B5.3 TCM nursing support system after training	Interview
C Process Evaluation	C1 Training Content	C1.1 Nursing Laws and Regulations Course	References
		C1.2 Theory Knowledge Course for TCM Nursing Specialization	Interview
		C1.3 Nursing Practice Skills Course for TCM Nursing Specialization	Interview
	C2 Quality assurance	C2.1 Evaluation of Teaching Supervision	Interview
		C2.2 Feedback Evaluation from TCM specialist nurses	References and Interview
		C2.3 Peer Evaluation among Teachers	References
		C2.4 Enthusiasm in class	References and Interview
		C2.5 Implementation of Feedback Loop	Interview
D Product Evaluation	D1 Learning Level Evaluation	D1.1 Attendance Rate	References
		D1.2 Homework completion grade	References and Interview
		D1.3 Theory Examination Scores	References and Interview
		D1.4 Examination Scores for TCM Appropriate Techniques	References and Interview
		D1.5 Pass Rate of Graduation Examination	References and Interview
	D2 Behavioral Level Evaluation	D2.1 Work Attitude	References and Interview
		D2.2 Syndrome Differentiation - based Nursing	Interview
		D2.3 The ability to inherit traditional Chinese medicine culture	Interview
		D2.4 Teaching Ability (Teaching, Tutoring, Training, and Professional Guidance)	References and Interview
		D2.5 The proportion of published papers and patents	References and Interview
		D2.6 Frequency of Participation in Continuing Education and Professional Development Activities for TCM Nursing by TCM specialist nurses	Interview
		D2.7 Number of Adverse Events Related to TCM Nursing Operations after Training	References
	D3 Result Level Evaluation	D3.1 Patient Satisfaction	References
		D3.2 Satisfaction of leaders	References
		D3.3 Satisfaction of Colleagues	References

**Supplementary File 1. Theoretical mapping of the initial indicator system and Preliminary system**

D3.4 Self - satisfaction	References
D3.5 Satisfaction of TCM culture inheritance	Interview
D3.6 Promotion Rate of Position	References and Interview

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## Supplementary File 2. Semi-structured Interview Guide and Basic information of interviewees

The complete interview guide is available in Supplementary Table S2.1.

Table S2.1 Semi-structured Interview Guide

Interview Target Group	Interview Objective	Interview Questions
Nursing Managers	To gain a detailed understanding of the influencing factors on training effectiveness (i.e., context evaluation and input evaluation indicators), key focus areas during the training (process evaluation indicators), and the training outcomes (product evaluation indicators).	<ol style="list-style-type: none"> <li>1. Could you please share your understanding of the effectiveness of the Traditional Chinese Medicine (TCM) specialist nurse training?</li> <li>2. What factors do you believe influence the effectiveness of TCM specialist nurse training? From what aspects do you think this effectiveness should be evaluated?</li> <li>3. From a long-term perspective, what indicators do you think reflect the training's effectiveness?</li> <li>4. After the training, what tasks do you expect them to be competent in? Alternatively, what qualities or abilities do you believe a qualified TCM specialist nurse should possess?</li> <li>5. What conditions do you think a TCM specialist nurse training base (center) should meet? Which of these are relatively more important?</li> <li>6. During the training process, what do you think we should focus on?</li> <li>7. Do you have any other suggestions regarding the current training effectiveness evaluation plan?</li> </ol>
TCM Nursing Experts	To gather detailed supplementary information on the process evaluation indicators for training effectiveness.	<ol style="list-style-type: none"> <li>1. Could you please share your understanding of the effectiveness of the TCM specialist nurse training?</li> <li>2. What factors do you believe influence the effectiveness of TCM specialist nurse training? From what aspects do you think this effectiveness should be evaluated?</li> <li>3. After the training, what qualities or abilities do you believe a TCM specialist nurse should possess? Alternatively, what tasks do you expect them to be competent in?</li> <li>4. During the training process, what else do you think should be focused on?</li> <li>5. Do you have any other suggestions regarding the current training effectiveness evaluation plan?</li> </ol>
TCM Specialist Nurses	To understand the evaluation needs from the perspective of TCM specialist nurses, in order to make the overall evaluation more comprehensive.	<ol style="list-style-type: none"> <li>1. What have you gained from the training? After the training, what qualities or abilities do you believe a TCM specialist nurse should possess? Alternatively, what tasks do you expect to be competent in?</li> <li>2. What factors do you believe influence the effectiveness of TCM specialist nurse training? From what aspects do you think this effectiveness should be evaluated?</li> <li>3. How did the departments you rotated through conduct assessments and evaluations? Do you know the specific criteria? Did the departments have standardized mentorship (preceptorship) procedures?</li> </ol>

**Supplementary File 2. Semi-structured Interview Guide and Basic information of interviewees**

Are you satisfied with the training methods? Do you have any other suggestions?

4. During the training process, what aspects do you most hope the nurse manager (head nurse) will focus on?
5. Do you have any other suggestions regarding the current training effectiveness evaluation plan?

The basic information of the interview participants is presented in Supplementary Table S2.2.

**Table S2.2** Basic Information of Interviewees (n=20)

Code	Gender	Age (Years)	Professional Title	Highest Degree	Years in Nursing Practice	Current field of work
N1	Female	38	Nurse Supervisor	Bachelor	14	Clinical Nursing
N2	Female	41	Nurse Supervisor	Bachelor	15	Clinical Nursing
N3	Female	42	Nurse Supervisor	Bachelor	21	Clinical Nursing
N4	Man	33	Nurse Practitioner	Bachelor	7	Clinical Nursing
N5	Female	45	Co-chief superintendent nurse	Bachelor	24	Nursing Management
N6	Female	42	Co-chief superintendent nurse	Bachelor	18	Clinical Nursing
N7	Female	40	Nurse Supervisor	Bachelor	16	Clinical Nursing
N8	Female	45	Associate senior	Bachelor	25	Clinical Nursing
N9	Female	42	Nurse Supervisor	Bachelor	20	Clinical Nursing
N10	Female	34	Nurse Supervisor	Bachelor	12	Clinical Nursing
N11	Female	35	Nurse Supervisor	Bachelor	14	Nursing Management
N12	Female	38	Nurse Supervisor	Bachelor	17	Clinical Nursing
N13	Female	33	Nurse Supervisor	Bachelor	15	Clinical Nursing
N14	Female	50	Chief superintendent nurse	Bachelor	27	Nursing Management
N15	Female	48	Chief superintendent nurse	Bachelor	26	Nursing Education
N16	Female	38	Chief superintendent nurse	Master	16	Nursing Management
N17	Female	48	Chief superintendent nurse	Bachelor	26	Nursing Management
N18	Female	54	Chief superintendent nurse	Bachelor	35	Nursing Management
N19	Female	36	Nurse Supervisor	Bachelor	15	Nursing Education
N20	Female	49	Co-chief superintendent nurse	Bachelor	26	Nursing Management

**Supplementary File 3. AHP Judgment Matrices and Consistency Testing Results**  
**1. Methodology Overview**

To ensure the scientific rigor of the indicator weights, the Analytic Hierarchy Process (AHP) was employed following the Delphi consultations. The judgment matrices were constructed based on the absolute differences in mean importance scores from the second round of expert inquiries. These differences were systematically mapped to the Saaty 1–9 scale to quantify the relative importance between paired indicators. Judgment Matrix for 1st-level Indicators is shown in Supplementary Table S3.1.

**Table S3.1** Judgment Matrix for 1st-level Indicators

Indicators	Context (A)	Input (B)	Process (C)	Outcome (D)
Context (A)	1	2	0.5	0.5
Input (B)	0.5	1	0.5	0.5
Process (C)	2	2	1	0.5
Outcome (D)	2	2	2	1

**2. Representative Matrix Logic**

Due to the extensive number of indicators (71 tertiary items), we provide a representative matrix to illustrate the pairwise comparison logic at the granular level. The Behavioral Layer Evaluation (D1) was selected as it represents a core dimension of the Kirkpatrick model integrated into this study, see the Table S3.2.

**Table S3.2** Representative Judgment Matrix for 3rd-level Indicators (D1 Behavioral Level Evaluation)

Indicators	D1.1	D1.2	D1.3	D1.4	D1.5	D1.6	D1.7	D1.8
D1.1	1	1	1	1	0.5	2	2	2
D1.2	1	1	1	1	0.5	2	2	2
D1.3	1	1	1	1	0.5	2	2	2
D1.4	1	1	1	1	0.5	2	2	2
D1.5	2	2	2	2	1	2	3	3
D1.6	0.5	0.5	0.5	0.5	0.5	1	2	2
D1.7	0.5	0.5	0.5	0.5	0.333	0.5	1	2
D1.8	0.5	0.5	0.5	0.5	0.333	0.5	0.5	1

D1.1 Work Attitude、 D1.2 Competency in Syndrome Differentiation Nursing, D1.3 Ability in Handling Difficult and Critical Cases, D1.4 TCM Health Education、 D1.5 Clinical Critical Thinking Ability in TCM, D1.6 Teaching Ability, D1.7 Frequency of Participation in Continuing Education and Professional Development Activities for TCM Nursing by TCM specialist nurses, D1.8 Number of Adverse Events Related to TCM Nursing Operations by TCM specialist nurses after Training

**3. Comprehensive Results and Mathematical Validation**

To confirm the mathematical validity of the entire system, Table S3.3 summarizes the weights and consistency test results for all indicators.

**Table S3.3** Comprehensive AHP Results and Consistency Testing

Eigenvector	Local Weight	$\lambda_{max}$	CI	RI	CR	Result
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### Supplementary File 3. AHP Judgment Matrices and Consistency Testing Results

Indicators								
A1 Training Needs			3	0	0.52	0	Pass	
A1.1 Growing Demand for TCM specialist nurses	1	0.3333						
A1.2 Government Policy Support	1	0.3333						
A1.3 Availability of Financial Support for Training Programs	1	0.3333						
A2 Training Objectives			5	5	1.12	0	Pass	
A2.1 Training needs for specialized knowledge in TCM nursing	1.429	0.28571						
A2.2 Training needs for specialized skills operation in TCM nursing	1.429	0.28571						
A2.3 Rationality of resource allocation in clinical practice bases	0.714	0.14286						
A2.4 Requirements for clinical teaching models and effects	0.714	0.14286						
A2.5 Training needs for policies and norms in TCM nursing	0.714	0.14286						
A3 Industry and Policy Background			3	0	0.52	0	Pass	
A3.1 Overall training objectives	0.6	0.2						
A3.2 Training objectives at each stage	1.2	0.4						
A3.3 Training objectives for specialized fields	1.2	0.4						
B1 Curriculum Construction			5.078	0.019	1.12	0.017	Pass	
B1.1 Degree of Match between Course Objectives and Training Objectives	1.409	0.28181						
B1.2 Degree of Rationality in Course Arrangement	0.816	0.16313						
B1.3 Clinical Rotation Plan and Standards	0.816	0.16313						
B1.4 Training Methods(Applicability and Diversity)	1.409	0.28181						
B1.5 Assessment Methods(Applicability and Diversity)	0.551	0.11013						
B2 Teaching Conditions			4.083	0.028	0.89	0.031	Pass	
B2.1 Emergency Response Plan Development	0.43	0.1075						
B2.2 Teaching Facilities and Equipment	1.063	0.26569						
B2.3 Library Resources and Electronic Information Resources	0.43	0.1075						
B2.4 Teaching Management Level	2.077	0.5193						
B3 Faculty Team			6.083	0.017	1.26	0.013	Pass	
B3.1 Teaching Quality (Teaching Attitude and Skills)	1.476	0.24592						
B3.2 Teaching Ability	1.476	0.24592						
B3.3 Practical Skills Level of the Supervising Teachers	1.476	0.24592						
B3.4 Professional Title Structure and Proportion	0.317	0.05281						
B3.5 Educational Level Structure and Proportion	0.403	0.06712						
B3.6 Ratio of Teachers and Students	0.854	0.14232						
B4 Rules and Regulations			5.133	0.033	1.12	0.03	Pass	
B4.1 Management Regulations for Training Fees	0.252	0.05039						
B4.2 Regulations for Training Time Arrangement and Scheduling	0.567	0.1134						
B4.3 Management and Assessment Standards for Training Attendance	0.974	0.19484						
B4.4 Operating and Management Norms of Practice Bases	1.826	0.36521						
B4.5 Clinical Supervision System	1.381	0.27615						
B5 Management Mechanism			3.004	0.002	0.52	0.004	Pass	
B5.1 Sound Organization Structure	0.329	0.10959						
B5.2 Feedback and Suggestion Mechanism	1.744	0.58126						

### Supplementary File 3. AHP Judgment Matrices and Consistency Testing Results

B5.3 Continuous Support for Traditional Chinese Nursing Education and Career Development	0.927	0.30915					
C1 Training Content			5.013	0.003	1.12	0.003	Pass
C1.1 Evaluation of the Nursing Laws and Regulations Course	0.445	0.08895					
C1.2 Evaluation of the Theory Knowledge Course for TCM Nursing Specialization	1.488	0.29762					
C1.3 Evaluation of the Nursing Practice Skills Course for TCM Nursing Specialization	1.488	0.29762					
C1.4 Evaluation of the Advanced Nursing Practice Course	0.79	0.1579					
C1.5 Evaluation of the Research Course	0.79	0.1579					
C2 Teaching Evaluation			5.085	0.021	1.12	0.019	Pass
C2.1 Evaluation of Teaching Supervision	0.815	0.16305					
C2.2 Feedback Evaluation from TCM specialist nurses	1.732	0.34649					
C2.3 Peer Evaluation among Teachers	0.322	0.06433					
C2.4 Classroom Participation	0.815	0.16305					
C2.5 Implementation of Feedback Loop	1.315	0.26307					
C3 Learning Layer Evaluation			6.336	0.067	1.26	0.053	Pass
C3.1 Attendance Rate	0.322	0.05368					
C3.2 Theory Examination Scores	1.298	0.21628					
C3.3 Examination Scores for TCM Appropriate Techniques	2.018	0.33634					
C3.4 Completion Number of Group Plans	0.951	0.15852					
C3.5 Number of Nursing Cases Completed	0.951	0.15852					
C3.6 Pass Rate of TCM specialist nurses' Graduation Examination	0.46	0.07667					
D1 Behavioral Layer Evaluation			8.152	0.022	1.41	0.015	Pass
D1.1 Work Attitude	1.083	0.13537					
D1.2 Competency in Syndrome Differentiation Nursing	1.083	0.13537					
D1.3 Ability in Handling Difficult and Critical Cases	1.083	0.13537					
D1.4 TCM Health Education	1.083	0.13537					
D1.5 Clinical Critical Thinking Ability in TCM	1.868	0.23347					
D1.6 Teaching Ability	0.733	0.09162					
D1.7 Frequency of Participation in Continuing Education and Professional Development Activities for TCM Nursing by TCM specialist nurses	0.582	0.07279					
D1.8 Number of Adverse Events Related to TCM Nursing Operations by TCM specialist nurses after Training	0.485	0.06066					
D2 Result Layer Evaluation			13.498	0.042	1.56	0.027	Pass
D2.1 Patient Satisfaction	1.225	0.09421					
D2.2 Clinical Implementation Cases of TCM Nursing Techniques	2.104	0.16187					
D2.3 Outpatient Visits in TCM Nursing Clinics	2.104	0.16187					
D2.4 Number of Outgoing Lecturers	1.558	0.11981					
D2.5 Number of Completed Cases of TCM Nursing Plans for Specialized Diseases	1.558	0.11981					
D2.6 Proportion of Published Papers	0.606	0.04665					
D2.7 Proportion of Project Applications	0.606	0.04665					
D2.8 Proportion of Obtained Patents	0.606	0.04665					
D2.9 Satisfaction of the Original Unit's Department	0.387	0.02978					

### **Supplementary File 3. AHP Judgment Matrices and Consistency Testing Results**

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D2.10 Satisfaction of Colleagues	0.31	0.02383
D2.11 Self-satisfaction	1.225	0.09421
D2.12 Satisfaction of TCM Health Education	0.264	0.02028
D2.13 Promotion Rate of Position	0.447	0.03437

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## Supplementary File 4.Results of the First Round of Inquiry

### Results of the First Round of Inquiry

The first round of the inquiry questionnaire includes 4 primary indicators, 12 secondary indicators, and 57 tertiary indicators.

#### 1.1 Results of the Primary Indicators Inquiry

No changes were made. Experts suggested evaluating overall strategic direction or resource allocation, but the research team concluded these were already covered by existing secondary and tertiary indicators, see Table S4.1.

**Table S4.1** Results of the First-Round Delphi Survey on Primary Indicators

First Level Indicators	The mean importance scores	Standard deviation of importance score	CV	Agreement rate	Results
A.Context valuation	4.73	0.594	0.126	93.33%	retain
B.Input evaluation	4.47	0.743	0.166	86.67%	retain
C.Process evaluation	4.93	0.258	0.052	100.00%	retain
D.Product valuation	5.00	0.000	0.000	100.00%	retain

#### 1.2 Secondary Indicators

Results of the First-Round Delphi Survey on Secondary Indicators are shown in table S4.2.

##### Notes on adjustments based on expert consensus:

##### Added (n=1):

Experts recommended including a new secondary indicator under "A. Context Evaluation" to reflect the policy background. After discussion, the research team added the indicator "A3 Industry and Policy Background."

##### Modified (n=2):

C2 Quality Assurance" was renamed to "C2 Teaching Evaluation" to better reflect its tertiary indicators.

"D1 Learning Level Evaluation" was relocated to Process Evaluation and renamed "C3 Learning Level Evaluation", as theoretical learning occurs early in training.

**Unmodified Indicators:** Some experts suggested that the naming of training outcome evaluation indicators should be more substantive and practical—for example, suggesting that the reaction level reflect training attitudes, the learning level reflect knowledge and skills, the behavior level refer to clinical application and practice, and the results level reflect output performance. However, after discussion, the research team determined that these naming suggestions neither encompassed the indicators already listed nor aligned

**Supplementary File 4. Results of the First Round of Inquiry**  
directly with the application of Kirkpatrick’s model.

**Table S4.2** Results of the First-Round Delphi Survey on Secondary Indicators

Second Level Indicators	The mean importance scores	Standard deviation of importance score	CV	Agreement rate	Results
A1 Training Needs	4.40	0.910	0.207	86.67%	retain
A2 Training Objectives	4.73	0.799	0.169	93.33%	retain
B1 Curriculum Construction	4.93	0.258	0.052	100.00%	retain
B2 Teaching Conditions	4.87	0.352	0.072	100.00%	retain
B3 Faculty Team	4.93	0.258	0.052	100.00%	retain
B4 Rules and Regulations	4.87	0.352	0.072	100.00%	retain
B5 Management Mechanism	4.87	0.352	0.072	100.00%	retain
C1 Training Content	4.87	0.516	0.106	93.33%	retain
C2 Teaching Evaluation	4.87	0.516	0.106	93.33%	retain
C3 Learning Layer Evaluation	4.93	0.258	0.052	100.00%	retain
D1 Behavioral Layer Evaluation	4.80	0.414	0.086	100.00%	retain
D2 Result Layer Evaluation	5.00	0.000	0.000	100.00%	retain
A3 Industry and Policy Background	—	—	—	—	add

### 1.3 Tertiary Indicators

Results of the First-Round Delphi Survey on Tertiary Indicators are shown in table S4.3.

Notes on adjustments based on expert consensus:

**Deleted (n=2):** “B2.1 Implementation Barriers” and “B3.5 Age Structure and Ratio” (due to CV > 0.25 and expert recommendation).

**Modified Indicators (n=19):**

**① Clarification of Scope/Subject(n=3):**

“D2.7 Number of Adverse Events Related to TCM Nursing Operations after Training” -> Specified the subject and timing to address a CV > 0.25.

#### **Supplementary File 4.Results of the First Round of Inquiry**

“D1.2 Homework completion grade” -> Clarified and split into specific group plans and nursing case reports.

“D1.5 Pass Rate of Graduation Examination” -> Refined to clarify the evaluation target (TCM specialist nurses).

#### **②Terminology Refinement(n=4):**

“D2.3 The ability to inherit traditional Chinese medicine culture” -> Renamed to “TCM Health Education”.

“D3.5 Satisfaction of TCM culture inheritance” -> Renamed to “Satisfaction with TCM Health Education”.

“D3.2 Satisfaction of leaders” -> Redefined to clarify the leadership level (Department Heads).

“D3.6 Promotion Rate of Position” -> Refined for improved academic terminology.

#### **③Reclassification/Repositioning(n=3):**

“B1.4 Dialectical nursing with teachers” -> Repositioned to Product Evaluation as competency in syndrome differentiation.

“B1.5 Scientific research courses” -> Reclassified to Process Evaluation under Training Content.

“B2.3 Practical Skills Level” -> Repositioned to Faculty Team to clarify it refers to instructors.

#### **④Standardization of Naming (Systems & Policies)(n=3):**

“B4.1 Training fee system” -> Standardized to “Regulations on Training Fees Management”.

“B4.2 Training time arrangement system” -> Standardized to “Regulations on Training Time Arrangement and Scheduling”.

“B4.3 Training attendance and assessment system” -> Standardized to “Regulations on Attendance Management and Assessment”.

#### **⑤Learner-Centered & Specific Course Evaluation Shift(n=4):**

“C1.1 Nursing Laws and Regulations Course” -> Renamed to reflect specific course evaluation.

“C1.2 Theory Knowledge Course for TCM Nursing Specialization” -> Renamed to reflect specific course evaluation.

“C1.3 Nursing Practice Skills Course for TCM Nursing Specialization” -> Renamed to reflect specific course evaluation.

#### Supplementary File 4. Results of the First Round of Inquiry

“C2.2 Feedback Evaluation from TCM specialist nurses” -> Renamed to reflect learner-centered evaluation.

#### ⑥ Removal of Redundancies & Splitting (n=2):

“A1.1 Basic Training Needs in Traditional Chinese Medicine” -> Removed redundant descriptions in parentheses.

“D2.5 The proportion of published papers and patents” -> Split into separate indicators for papers, project applications, and patents.

#### Unmodified (n=3):

Additions rejected:

Expert proposals to add new needs under A1 were deemed redundant with existing A1.2.

Deletions rejected:

B1.2 Rationality of Curriculum Arrangement: Retained despite subjective concerns, citing the value of qualitative indicators in CIPP evaluation.

C2.3 Peer Evaluation among Instructors: Retained despite limited implementation, emphasizing its role in improving teaching quality.

**Added (n=8):** ① A3.1 Increasing Demand for TCM Specialist Nurses in Society; A3.2 National Policy Support. ② B4.4 Regulations on the Operation and Management of Practice Bases. ③ C1.4 Evaluation of Advanced Nursing Practice Courses. ④ To enhance outcome-level evaluation, the following indicators were added: D2.2 Number of Clinical Cases Utilizing TCM Nursing Techniques; D2.3 Number of TCM Nursing Outpatient Visits; D2.4 Number of External Teaching Assignments; D2.5 Number of Completed TCM Nursing Plans for Specialized Diseases.

**Table S4.3** Results of the First-Round Delphi Survey on Tertiary Indicators

Third Level Indicators	The mean importance scores	Standard deviation of importance score	CV	Agreement rate	Results
A1.1 Basic Training Needs in Traditional Chinese Medicine	4.80	0.561	0.117	93.33%	modify
A1.2 Training Needs for Specialist Nurse Positions in Traditional Chinese Medicine	4.80	0.561	0.117	93.33%	retain
A2.1 Overall Training Objectives	4.67	0.816	0.175	93.33%	retain

**Supplementary File 4.Results of the First Round of Inquiry**

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A2.2 Stage - specific Training Objectives	4.80	0.775	0.161	93.33%	retain
A2.3 Specialized Training Objectives	4.80	0.775	0.161	93.33%	retain
B1.1 Degree of Match between Course Objectives and Training Objectives	4.80	0.561	0.117	93.33%	retain
B1.2 Rationality of Course Arrangement	4.73	0.594	0.126	93.33%	retain
B1.3 Clinical Rotation Plan and Standards	4.73	0.594	0.126	93.33%	retain
B1.4 Dialectical nursing with teachers	4.67	0.724	0.155	93.33%	modify
B1.5 Scientific research courses	4.33	0.900	0.208	73.33%	modify
B1.6 Training Methods (Applicability and Diversity)	4.60	0.632	0.137	93.33%	retain
B1.7 Assessment Methods (Applicability and Diversity)	4.40	0.737	0.168	86.67%	retain
B2.1 Barriers to implementation	3.93	1.100	0.280 <sup>#</sup>	73.33%	delete
B2.2 Emergency Response Plan Development	4.27	0.799	0.187	80.00%	retain
B2.3 Practical Skills Level	4.67	0.617	0.132	93.33%	modify
B2.4 Teaching Facilities and Equipment	4.53	0.743	0.164	86.67%	retain
B2.5 Library Resources and Electronic Information Resources	4.13	0.743	0.18	80.00%	retain
B2.6 Teaching Management Level	4.67	0.617	0.132	93.33%	retain
B3.1 Teaching Quality (Teaching Attitude and Skills)	4.87	0.516	0.106	93.33%	retain
B3.2 Teaching Ability	4.87	0.516	0.106	93.33%	retain
B3.3 Professional Title Structure and Proportion	4.13	0.834	0.202	73.33%	retain
B3.4 Educational Level Structure and Proportion	4.13	0.990	0.240	73.33%	retain
B3.5 Age structure ratio	3.93	1.223	0.311 <sup>#</sup>	73.33%	delete
B3.6 Ratio of Teachers to Students	4.40	0.828	0.188	80.00%	retain
B4.1 Training fee system	3.80	0.676	0.178	66.67%	modify
B4.2 Training time arrangement system	4.27	0.799	0.187	80.00%	modify
B4.3 Training attendance and assessment system	4.47	0.743	0.166	86.67%	modify
B4.4 Clinical teaching system	4.73	0.594	0.126	93.33%	retain
B5.1 Sound Organization Structure	4.47	0.743	0.166	86.67%	retain

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**Supplementary File 4.Results of the First Round of Inquiry**

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B5.2 Feedback and Suggestion	4.67	0.617	0.132	93.33%	retain
B5.3 TCM nursing support system after training	4.40	0.632	0.144	93.33%	retain
C1.1 Nursing Laws and Regulations Course	4.27	0.594	0.139	93.33%	modify
C1.2 Theory Knowledge Course for TCM Nursing Specialization	4.93	0.258	0.052	100.00%	modify
C1.3 Nursing Practice Skills Course for TCM Nursing Specialization	4.93	0.258	0.052	100.00%	modify
C2.1 Evaluation of Teaching Supervision	4.53	0.640	0.141	93.33%	retain
C2.2 Feedback Evaluation from TCM specialist nurses	4.60	0.632	0.137	93.33%	modify
C2.3 Peer Evaluation among Teachers	4.00	0.655	0.164	80.00%	retain
C2.4 Enthusiasm in class	4.53	0.640	0.141	93.33%	retain
C2.5 Implementation of Feedback Loop	4.73	0.594	0.126	93.33%	retain
D1.1 Attendance Rate	4.87	0.516	0.106	93.33%	retain
D1.2 Homework completion grade	4.87	0.516	0.106	93.33%	modify
D1.3 Theory Examination Scores	5.00	0.000	0.000	100.00%	retain
D1.4 Examination Scores for TCM Appropriate Techniques	4.87	0.516	0.106	93.33%	retain
D1.5 Pass Rate of Graduation Examination	4.67	0.617	0.132	93.33%	modify
D2.1 Work Attitude	4.80	0.561	0.117	93.33%	retain
D2.2 Syndrome Differentiation - based Nursing	4.80	0.561	0.117	93.33%	retain
D2.3 The ability to inherit traditional Chinese medicine culture	4.73	0.594	0.126	93.33%	modify
D2.4 Teaching Ability (Teaching, Tutoring, Training, and Professional Guidance)	4.60	0.632	0.137	93.33%	retain
D2.5 The proportion of published papers and patents	4.13	0.915	0.222	80.00%	modify
D2.6 Frequency of Participation in Continuing Education and Professional Development Activities for TCM Nursing by TCM specialist nurses	4.60	0.632	0.137	93.33%	retain
D2.7 Number of Adverse Events Related to TCM Nursing Operations after Training	4.27	1.335	0.313 <sup>#</sup>	73.33%	modify

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**Supplementary File 4. Results of the First Round of Inquiry**

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D3.1 Patient Satisfaction	4.53	0.640	0.141	93.33%	retain
D3.2 Satisfaction of leaders	4.27	0.704	0.165	86.67%	modify
D3.3 Satisfaction of Colleagues	4.40	0.632	0.144	93.33%	retain
D3.4 Self - satisfaction	4.53	0.640	0.141	93.33%	retain
D3.5 Satisfaction of TCM culture inheritance	4.00	1.134	0.284 <sup>#</sup>	73.33%	modify
D3.6 Promotion Rate of Position	3.87	0.834	0.216	73.33%	modify
A3.1 Increasing Social Demand for Specialist Nurses in Traditional Chinese Medicine	—	—	—	—	add
A3.2 Relevant Policies Issued by the Government	—	—	—	—	add
B4.4 Operating and Management Norms of Practice Bases	—	—	—	—	add
C1.4 Evaluation of the Advanced Nursing Practice Course	—	—	—	—	add
D2.2 Clinical Implementation Cases of TCM Nursing Techniques	—	—	—	—	add
D2.3 Outpatient Visits in TCM Nursing Clinics	—	—	—	—	add
D2.4 Number of Outgoing Lecturers	—	—	—	—	add
D2.5 Number of Completed Cases of TCM Nursing Plans for Specialized Diseases	—	—	—	—	add

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**Note: # indicates a coefficient of variation (CV) > 0.25.**

## Supplementary File 5.Results of the Second Round of Inquiry

### Results of the Second-Round Delphi Survey

#### 1.1 First Level Indicators

**Table S5.1** Results of the Second-Round Delphi Survey on Primary Indicators

First Level Indicators	The mean importance scores	Standard deviation of importance score	CV	Agreement rate	Results
A.Context evaluation	4.87	0.352	0.072	100.00%	retain
B.Input Evaluation	4.80	0.414	0.086	100.00%	retain
C.Process evaluation	4.93	0.258	0.052	100.00%	retain
D.Product evaluation	5.00	0.000	0.000	100.00%	retain

#### 1.2 Second Level Indicators

**Table S5.2** Results of the Second-Round Delphi Survey on Secondary Indicators

Second Level Indicators	The mean importance scores	Standard deviation of importance score	CV	Agreement rate	Results
A1 Training Needs	4.80	0.561	0.117	93.33%	retain
A2 Training Objectives	4.87	0.516	0.106	93.33%	retain
A3 Industry and Policy Background	5.00	0.000	0.000	100.00%	retain
B1 Curriculum Construction	4.93	0.258	0.052	100.00%	retain
B2 Teaching Conditions	4.93	0.258	0.052	100.00%	retain
B3 Faculty Team	4.93	0.258	0.052	100.00%	retain
B4 Rules and Regulations	4.93	0.258	0.052	100.00%	retain
B5 Management Mechanism	4.87	0.352	0.072	100.00%	retain
C1 Training Content	4.87	0.516	0.106	93.33%	retain
C2 Teaching Evaluation	4.87	0.516	0.106	93.33%	retain
C3 Learning Layer Evaluation	4.93	0.258	0.052	100.00%	retain
D1 Behavioral Layer Evaluation	4.87	0.352	0.072	100.00%	retain

## Supplementary File 5. Results of the Second Round of Inquiry

D2 Evaluation	Result Layer	5.00	0.000	0.000	100.00%	retain
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### 1.3 Third Level Indicators

**Revisions(n=3):** Experts suggested that “A1.2 Training Needs for Traditional Chinese Medicine (TCM) Specialist Nurses” was not clear enough. After discussion, the research team decided that training needs under the background evaluation should be preparatory for the training. Therefore, the general “meeting the training needs of TCM specialist nurses” was split into five dimensions: knowledge, skills, resources, mentorship, and policies, covering the complete chain of job needs. “A1.1 Meeting the TCM Basic Theory or Skills Training Needs” was revised to “A1.1 TCM Specialist Nursing Knowledge Training Needs” and “A1.2 TCM Specialist Nursing Skills Training Needs.” “A1.2 Meeting the TCM Specialist Nurse Job Training Needs” was revised to “A1.3 Rational Allocation of Clinical Practice Base Resources,” “A1.4 Clinical Mentorship Models and Effectiveness Needs,” and “A1.5 TCM Nursing Policies and Standards Training Needs.” Experts recommended adding a feasibility assessment regarding the support level from training project leaders and funding. After discussion, “A3.2 National Policies in Place” was revised to “A3.2 Government Policies in Place” and “A3.3 Availability of Funding Support for Training Projects.”

**Reordering(n=3):** The order of “A1 Training Needs, A2 Training Objectives, A3 Industry and Policy Background” was adjusted to “A1 Industry and Policy Background, A2 Training Needs, A3 Training Objectives,” along with the corresponding reordering of tertiary indicators.

**Table S5.3** Results of the Second-Round Delphi Survey on Tertiary Indicators

Third Level Indicators	The mean importance scores	Standard deviation of importance score	CV	Agreement rate	Results
A1.1 Basic Training Needs in Traditional Chinese Medicine	4.93	0.258	0.052	100.00%	modify
A1.2 Training Needs for Specialist Nurse Positions in Traditional Chinese Medicine	4.80	0.561	0.117	93.33%	modify
A2.1 Overall Training Objectives	4.80	0.561	0.117	93.33%	retain
A2.2 Stage - specific Training Objectives	4.87	0.516	0.106	93.33%	retain
A2.3 Specialized Training Objectives	4.87	0.516	0.106	93.33%	retain
A3.1 Increasing Social Demand for Specialist Nurses in Traditional Chinese Medicine	4.80	0.414	0.086	100.00%	retain
A3.2 Relevant Policies Issued by the Government	4.80	0.414	0.086	100.00%	modify
B1.1 Degree of Match between Course Objectives and Training Objectives	4.80	0.561	0.117	93.33%	retain
B1.2 Rationality of Course Arrangement	4.73	0.594	0.126	93.33%	retain

**Supplementary File 5.Results of the Second Round of Inquiry**

B1.3 Clinical Rotation Plan and Standards	4.73	0.594	0.126	93.33%	retain
B1.4 Training Methods (Applicability and Diversity)	4.80	0.561	0.117	93.33%	retain
B1.5 Assessment Methods (Applicability and Diversity)	4.67	0.617	0.132	93.33%	retain
B2.1 Emergency Response Plan Development	4.13	0.834	0.202	73.33%	retain
B2.2 Teaching Facilities and Equipment	4.53	0.640	0.141	93.33%	retain
B2.3 Library Resources and Electronic Information Resources	4.13	0.834	0.202	73.33%	retain
B2.4 Teaching Management Level	4.80	0.561	0.117	93.33%	retain
B3.1 Teaching Quality (Teaching Attitude and Skills)	4.87	0.516	0.106	93.33%	retain
B3.2 Teaching Ability	4.87	0.516	0.106	93.33%	retain
B3.3 Practical Skills Level of Supervising Teachers	4.87	0.516	0.106	93.33%	retain
B3.4 Professional Title Structure and Proportion	4.27	0.884	0.207	73.33%	retain
B3.5 Educational Level Structure and Proportion	4.33	0.900	0.208	73.33%	retain
B3.6 Ratio of Teachers to Students	4.67	0.617	0.132	93.33%	retain
B4.1 Management Regulations for Training Fees	3.93	0.704	0.179	73.33%	retain
B4.2 Regulations for Training Time Arrangement and Scheduling	4.53	0.743	0.164	86.67%	retain
B4.3 Management and Assessment Standards for Training Attendance	4.73	0.704	0.149	86.67%	retain
B4.4 Operating and Management Norms of Practice Bases	4.87	0.516	0.106	93.33%	retain
B4.5 Clinical Supervision System	4.80	0.561	0.117	93.33%	retain
B5.1 Sound Organization Structure	3.93	0.799	0.203	73.33%	retain
B5.2 Feedback and Suggestion Mechanism	4.80	0.561	0.117	93.33%	retain
B5.3 Continuous Support for Traditional Chinese Nursing Education and Career Development	4.67	0.617	0.132	93.33%	retain
C1.1 Evaluation of the Nursing Laws and Regulations Course	4.67	0.617	0.132	93.33%	retain
C1.2 Evaluation of the Theory Knowledge Course for TCM Nursing Specialization	5.00	0.000	0.000	100.00%	retain
C1.3 Evaluation of the Nursing Practice Skills Course for TCM Nursing Specialization	5.00	0.000	0.000	100.00%	retain

## Supplementary File 5. Results of the Second Round of Inquiry

C1.4 Evaluation of the Advanced Nursing Practice Course	4.80	0.561	0.117	93.33%	retain
C1.5 Evaluation of the Research Course	4.80	0.561	0.117	93.33%	retain
C2.1 Evaluation of Teaching Supervision	4.80	0.414	0.086	100.00%	retain
C2.2 Feedback Evaluation from TCM specialist nurses	4.93	0.258	0.052	100.00%	retain
C2.3 Peer Evaluation among Teachers	4.33	0.816	0.188	80.00%	retain
C2.4 Classroom Participation	4.80	0.561	0.117	93.33%	retain
C2.5 Implementation of Feedback Loop	4.87	0.516	0.106	93.33%	retain
C3.1 Attendance Rate	4.40	0.632	0.144	93.33%	retain
C3.2 Theory Examination Scores	5.00	0.000	0.000	100.00%	retain
C3.3 Examination Scores for TCM Appropriate Techniques	5.00	0.000	0.000	100.00%	retain
C3.4 Completion Number of Group Plans	4.87	0.516	0.106	93.33%	retain
C3.5 Number of Nursing Cases Completed	4.87	0.516	0.106	93.33%	retain
C3.6 Pass Rate of TCM Specialist Nurses' Graduation Examination	4.53	0.640	0.141	93.33%	retain
D1.1 Work Attitude	4.87	0.516	0.106	93.33%	retain
D1.2 Syndrome Differentiation - based Nursing	4.87	0.516	0.106	93.33%	retain
D1.3 Ability in Handling Difficult and Critical Cases	4.87	0.516	0.106	93.33%	retain
D1.4 TCM Health Education	4.87	0.352	0.072	100.00%	retain
D1.5 Clinical Critical Thinking Ability in TCM	5.00	0.000	0.000	100.00%	retain
D1.6 Teaching Ability (Teaching, Tutoring, Training, and Professional Guidance)	4.80	0.561	0.117	93.33%	retain
D1.7 Frequency of Participation in Continuing Education and Professional Development Activities for TCM Nursing by TCM specialist nurses	4.73	0.594	0.126	93.33%	retain
D1.8 Number of Adverse Events Related to TCM Nursing Operations by TCM specialist nurses after Training	4.67	0.900	0.193	86.67%	retain
D2.1 Patient Satisfaction	4.80	0.561	0.117	93.33%	retain
D2.2 Clinical Implementation Cases of TCM Nursing Techniques	5.00	0.000	0.000	100.00%	retain
D2.3 Outpatient Visits in TCM Nursing Clinics	5.00	0.000	0.000	100.00%	retain
D2.4 Number of Outgoing Lecturers	4.93	0.258	0.052	100.00%	retain
D2.5 Number of Completed Cases of TCM Nursing Plans for Specialized	4.93	0.258	0.052	100.00%	retain

## Supplementary File 5. Results of the Second Round of Inquiry

### Diseases

D2.6 Proportion of Published Papers	4.47	0.640	0.143	93.33%	retain
D2.7 Proportion of Project Applications	4.47	0.640	0.143	93.33%	retain
D2.8 Proportion of Obtained Patents	4.47	0.640	0.143	93.33%	retain
D2.9 Satisfaction of the Original Unit's Department	4.27	0.799	0.187	80.00%	retain
D2.10 Satisfaction of Colleagues	4.20	0.676	0.161	86.67%	retain
D2.11 Self - satisfaction	4.80	0.561	0.117	93.33%	retain
D2.12 Satisfaction of TCM Health Education	4.13	0.640	0.155	86.67%	retain
D2.13 Promotion Rate of Position	4.33	0.816	0.188	80.00%	retain

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# Supplementary Figure S1.(Round 1)Questionnaire

## Questionnaire for Screening Evaluation Indicators of Training Effects for Specialist Nurses in Traditional Chinese Medicine Based on the CIPP Model and Kirkpatrick Model (Round 1)

Dear Experts,

Hello! In view of your extensive academic achievements and practical experience in this field of research, we cordially invite you to participate in the first round of expert consultation in this study. Your valuable comments will help us to identify the indicators, and we hope that you can give us guidance for our research. Based on the theoretical framework of CIPP model and Kirkwall model, this study constructs an evaluation index system for the training effect of Traditional Chinese Medicine (TCM) specialist nurses that conforms to the development of the discipline and meets the clinical needs, in order to provide a reference for the evaluation of the training effect of TCM specialist nurses and promote the continuous improvement of the training quality of TCM specialist nurses.

The CIPP model consists of four evaluation stages: Context, Input, Process and Product. Kirkpatrick model is used to evaluate the effect of training activities and test whether the expected goal is achieved. It mainly includes four dimensions: reaction layer, learning layer, behavior layer and result layer. CIPP model emphasizes the evaluation of the whole training process, but the descriptive evaluation is more, and the outcome level evaluation is not subdivided into content and level. Kirkpatrick model pays more attention to the evaluation of the effect after training, but lacks the evaluation of the pre-training and training process. This study combined the application of CIPP model and Kirkpatrick model, combined the reaction layer of Kirkpatrick model with the process evaluation of CIPP model, and the result evaluation combined with the learning layer, behavior layer and result layer of Kirkpatrick model, so as to achieve the scientific and comprehensive evaluation.

Thank you for your guidance and help in your busy schedule! We would appreciate your reply within 7 days. If you have any questions about the questionnaire, please feel free to contact us.

**Contact Person: Qi Yanhuan (Instructor: Zhong Yinqin)**

**Contact Number: 13670090629**

**Email: 914560662@qq.com**

**Contact Unit: Shenzhen Hospital of Guangzhou University of Chinese Medicine (Futian)  
Part I Expert consultation form**

The preliminary evaluation index framework included 4 first-level indicators, 12 second-level indicators and 57 third-level indicators. After the research group discussion, the expert consultation table was finally formed. The consultation content included whether the indicators were scientific, the importance of indicators; What you need to change, add, and delete. The importance of indicators is expressed by Likert5 scoring method: "5= very important, 4= important, 3= generally important, 2= not important, 1= very unimportant", please mark "√" on the corresponding value.

Table 1 First - level Indicator Consultation Form

First - level Indicator	Indicator Explanation	Importance Level	Modification Suggestions
		5 = very important, 4 = important, 3 = moderately important, 2 = not very important, 1 = not important	
A Context Evaluation	Analyze and determine training needs and objectives		
B Input Evaluation	Evaluate the software and hardware inputs of trainin		
C Process Evaluation	Track the implementation process of the plan		
D Product Evaluation	Evaluate the impact of training		
Other Suggestions:			

Table 2 Second - level Indicator Consultation Form

First - level Indicator	Second - level Indicator	Importance Level	Modification Suggestions
		5 = very important, 4 = important, 3 = moderately important, 2 = not very important, 1 = not important	
Context Evaluation	A1 Training Needs		
	A2 Training Objectives		
Input Evaluation	B1 Curriculum Construction		
	B2 Teaching Conditions		
	B3 Faculty Team		
	B4 Rules and Regulations		
	B5 Management Mechanism		
Process Evaluation	C1 Training Content		
	C2 Quality assurance		
Product Evaluation	D1 Learning Layer Evaluation		
	D2 Behavioral Layer Evaluation		
	D3 Result Layer Evaluation		
Second - level Indicators You Think Need to Be Added:			



## Supplementary Figure S1.(Round 1)Questionnaire

First - level Indicator	Second - level Indicator	Third - level Indicator	Importance Level					Modification Suggestions
			5 = very important, 4 = important, 3 = moderately important, 2 = not very important, 1 = not important					
		inheritance						
		D3.6 Promotion Rate of Position						
Third - level Indicators You Think Need to Be Added:								

### Part 2 Expert Information Survey Form

((Your information is only used for us to study the authority of experts, and we will keep it strictly confidential!))

Please fill in your information in the corresponding columns or mark "√" in the corresponding option numbers.

Initials of Name		Gender		Age		Highest Academic Degree	
Work Unit		Professional Title		Position		Positions in Industry Associations	
Research Direction		Specialty		Number of Years Engaged in TCM (years)			
Preferred Contact Method	Contact Phone Number E-mail: QQ/Wechat:						

### Part 3 Expert self-evaluation form

1. Your familiarity with the content of the form :

How familiar you are with the content	<input type="checkbox"/> very familiar	<input type="checkbox"/> familiar	<input type="checkbox"/> fairly familiar	<input type="checkbox"/> less familiar	<input type="checkbox"/> unfamiliar
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2. The judgment basis for your choice of the importance of the index (Note: the following four aspects may affect your judgment of the index, and the influence of each aspect on your judgment can be divided into three degrees: large, medium and small) :

Judgment Basis	Influence degree
Work experience	<input type="checkbox"/> Large <input type="checkbox"/> Medium <input type="checkbox"/> Small
Theoretical analysis	<input type="checkbox"/> Large <input type="checkbox"/> Medium <input type="checkbox"/> Small
Reference	<input type="checkbox"/> Large <input type="checkbox"/> Medium <input type="checkbox"/> Small
Intuitionistic choice	<input type="checkbox"/> Large <input type="checkbox"/> Medium <input type="checkbox"/> Small

**Thank you again, wish you a happy life! Good health! Good work!**

# Supplementary Figure S2.Results of the Second Round of Inquiry

## Questionnaire for Screening Evaluation Indicators of Training Effects for Specialist Nurses in Traditional Chinese Medicine Based on the CIPP Model and Kirkpatrick Model (Round 2)

Dear Expert:

Greetings! With your strong support, the first - round expert consultation of the "Questionnaire for Screening Evaluation Indicators of Training Effects for Specialist Nurses in Traditional Chinese Medicine Based on the CIPP Model and Kirkpatrick Model" was successfully completed. We sincerely appreciate the help and guidance you provided during the first - round inquiry! A total of 16 experts participated in the first - round expert consultation of this study, and 15 valid questionnaires were retrieved. Based on the valuable suggestions put forward by the experts, the research team members sorted and summarized them. When the arithmetic mean of the importance of an item is > 3.5 and the coefficient of variation is < 25%, it indicates that the indicator has a good correlation with the measured content. Considering the actual situation of the project, after collective evaluation and discussion by the coordination team, the second - round expert consultation questionnaire was formed. This second - round expert consultation questionnaire consists of two parts. The first part is the consultation form for evaluation indicators of the training effects of specialist nurses in Traditional Chinese Medicine, and the second part is the survey form for experts' basic information. Now, we sincerely invite you to evaluate the revised content again. If you have any questions about the issues involved in the questionnaire, please feel free to contact us.

Thank you again for your guidance and help in your busy schedule! We would be extremely grateful if you could reply within 7 days. We wish you every success in your work and good health!

Contact Person: Qi Yanhuan (Instructor: Zhong Yanqin)

Contact Number: 13670090629

Email: 91456062@qq.com

Contact Unit: Shenzhen Hospital of Guangzhou University of Chinese Medicine (Futian)

### Part 1 Expert Consultation Form

Based on the valuable suggestions put forward by the experts in the first - round inquiry, the research team members sorted and summarized them, and formed an evaluation index framework, including 4 first - level indicators, 13 second - level indicators, and 67 third - level indicators. After discussion by the research team, the expert consultation form was finally formed. The consultation content includes the scientific nature of the indicators, the importance of the indicators, and the content you think needs to be modified, added, or deleted. The importance of the indicators is represented by the Likert 5 - level scoring method: "5 = very important, 4 = important, 3 = moderately important, 2 = not very important, 1 = not important". Please select the corresponding value from the drop - down list.

Table 1 First - level Indicator Consultation Form

First - level Indicator	Indicator Explanation	Importance Level	Modification Suggestions
		5 = very important, 4 = important, 3 = moderately important, 2 = not very important, 1 = not important	
A Context Evaluation	Analyze and determine training needs and objectives		
B Input Evaluation	Evaluate the software and hardware inputs of training		
C Process Evaluation	Track the implementation process of the plan		
D Product Evaluation	Evaluate the impact of training		
Other Suggestions:			

Table 2 Second - level Indicator Consultation Form

First - level Indicator	Second - level Indicator	Importance Level	Modification Suggestions
		5 = very important, 4 = important, 3 = moderately important, 2 = not very important, 1 = not important	
Context Evaluation	A1 Training Needs		
	A2 Training Objectives		
	A3 Industry and Policy Background		
Input Evaluation	B1 Curriculum Construction		
	B2 Teaching Conditions		
	B3 Faculty Team		
	B4 Rules and Regulations		
	B5 Management Mechanism		
Process Evaluation	C1 Training Content		
	C2 Teaching Evaluation		
	C3 Learning Layer Evaluation		
Product Evaluation	D1 Behavioral Layer Evaluation		
	D2 Result Layer Evaluation		
Second - level Indicators You Think Need to Be Added:			

Table 3 Third - level Indicator Consultation Form

First - level Indicator	Second - level Indicator	Third - level Indicator	Importance Level	Modification Suggestions
			5 = very important, 4 = important, 3 = moderately important, 2 = not very important, 1 = not important	
A Context Evaluation	A1 Training Needs	A1.1 Basic Training Needs in Traditional Chinese Medicine		C1
		A1.2 Training Needs for Specialist Nurse Positions in Traditional Chinese Medicine		C2
	A2 Training Objectives	A2.1 Overall Training Objectives		C3
		A2.2 Stage - specific Training Objectives		C4
		A2.3 Specialized Training Objectives		C5
	A3 Industry and Policy Background	A3.1 Increasing Social Demand for Specialist Nurses in Traditional Chinese Medicine		C6
		A3.2 Relevant Policies Issued by the Government		C7
Third - level Indicators You Think Need to Be Added:				
B Input Evaluation	B1 Curriculum Construction	B1.1 Degree of Match between Course Objectives and Training Objectives		C8
		B1.2 Rationality of Course Arrangement		C9
		B1.3 Clinical Rotation Plan and Standards		C10
		B1.4 Training Methods (Applicability and Diversity)		C11
		B1.5 Assessment Methods (Applicability and Diversity)		C12
		B1.6 Emergency Response Plan Development		C13
	B2 Teaching Conditions	B2.1 Teaching Facilities and Equipment		C14
		B2.2 Library Resources and Electronic Information Resources		C15
		B2.4 Teaching Management Level		C16
	B3 Faculty Team	B3.1 Teaching Quality (Teaching Attitude and Skills)		C17
		B3.2 Teaching Ability		C18
		B3.3 Practical Skills Level of Supervising Teachers		C19
		B3.4 Professional Title Structure and Proportion		C20
		B3.5 Educational Level Structure and Proportion		C21
		B3.6 Ratio of Teachers to Students		C22
	B4 Rules and Regulations	B4.1 Management Regulations for Training Fees		C23
		B4.2 Regulations for Training Time Arrangement and Scheduling		C24
		B4.3 Management and Assessment Standards for Training Attendance		C25
		B4.4 Operating and Management Norms of Practice Bases		C26
		B4.5 Clinical Supervision System		C27
	B5 Management Mechanism	B5.1 Sound Organization Structure		C28
B5.2 Feedback and Suggestion Mechanism			C29	
B5.3 Continuous Support for Traditional Chinese Nursing Education and Career Development			C30	

## Supplementary Figure S2.Results of the Second Round of Inquiry

	B5 Management Mechanism	B5.2 Feedback and Suggestion Mechanism			C29		
		B5.3 Continuous Support for Traditional Chinese Nursing Education and Career Development			C30		
		Third - level Indicators You Think Need to Be Added:					
C Process Evaluation	C1 Training Content	C1.1 Evaluation of the Nursing Laws and Regulations Course			C31		
		C1.2 Evaluation of the Theory Knowledge Course for TCM Nursing Specialization			C32		
		C1.3 Evaluation of the Nursing Practice Skills Course for TCM Nursing Specialization			C33		
		C1.4 Evaluation of the Advanced Nursing Practice Course			C34		
		C1.5 Evaluation of the Research Course			C35		
	C2 Teaching Evaluation	C2.1 Evaluation of Teaching Supervision				C36	
		C2.2 Feedback Evaluation from TCM specialist nurses				C37	
		C2.3 Peer Evaluation among Teachers				C38	
		C2.4 Classroom Participation				C39	
		C2.5 Implementation of Feedback Loop				C40	
	C3 Learning Layer Evaluation	C3.1 Attendance Rate				C41	
		C3.2 Theory Examination Scores				C42	
		C3.3 Examination Scores for TCM Appropriate Techniques				C43	
		C3.4 Completion Number of Group Plans				C44	
		C3.5 Number of Nursing Cases Completed				C45	
C3.6 Pass Rate of TCM Specialist Nurses' Graduation Examination					C46		
		Third - level Indicators You Think Need to Be Added:					
D Product Evaluation	D1 Behavioral Layer Evaluation	D1.1 Work Attitude				C47	
		D1.2 Competency in Syndrome Differentiation Nursing				C48	
		D1.3 Ability in Handling Difficult and Critical Cases				C49	
		D1.4 TCM Health Education				C50	
		D1.5 Clinical Critical Thinking Ability in TCM				C51	
		D1.6 Teaching Ability (Teaching, Tutoring, Training, and Professional Guidance)				C52	
		D1.7 Frequency of Participation in Continuing Education and Professional Development Activities for TCM Nursing by TCM specialist nurses				C53	
		D1.8 Number of Adverse Events Related to TCM Nursing Operations by TCM specialist nurses after Training				C54	
	D2 Result Layer Evaluation	D2.1 Patient Satisfaction					C55
		D2.2 Clinical Implementation Cases of TCM Nursing Techniques					C56
		D2.3 Outpatient Visits in TCM Nursing Clinics					C57
		D2.4 Number of Outgoing Lecturers					C58
		D2.5 Number of Completed Cases of TCM Nursing Plans for Specialized Diseases					C59
		D2.6 Proportion of Published Papers					C60
		D2.7 Proportion of Project Applications					C61
		D2.8 Proportion of Obtained Patents					C62
		D2.9 Satisfaction of the Original Unit's Department					C63
		D2.10 Satisfaction of Colleagues					C64
		D2.11 Self - satisfaction					C65
		D2.12 Satisfaction of TCM Health Education					C66
D2.13 Promotion Rate of Position					C67		
		Third - level Indicators You Think Need to Be Added:					

### Part 2 Expert Information Survey Form

**(Your information is only used for us to study the authority of experts, and we will keep it strictly confidential!)**

**Please fill in your information in the corresponding columns or mark "√" in the corresponding option numbers.**

Initials of Name		Gender		Age		Highest Academic	
Work Unit		Professional Title			Position		Positions in Industry
Research Direction		Specialty			Number of Years Engaged in this Specialty (years)		
Preferred Contact Method	Contact Phone Number E-mail : QQ/Wechat:						

