Секція:А5Професійна освіта(за спеціалізаціями)	
УДК: 377	
Дата першого надходження статті до видання	2026-09-11
Дата прийняття статті до друку після рецензування	2026-09-30
Дата публікації/оприлюднення	2026-09-30

The Kosichenko Oncology Barrier Index in Esthetician Education: Skin Care Decisions Within Scope of Practice

Anna Kosichenko
Master's degree, Founder and Director,
H&G Advanced Skin Institute by Hush and Glow, LLC, Lutz, Florida, USA
e-mail: skininstitute.hng@gmail.com https://orcid.org/0009-0009-0775-3391

Abstract. The aim of the article is the development of a source-based educational model for teaching and assessing estheticians' facial skin care decisions within the scope of practice for clients in active cancer treatment or soon after its completion, based on version 1.0 of the Kosichenko Oncology Barrier Index (K-OBI). The term esthetician refers to the United States occupational role of a nonmedical skin care practitioner whose permitted activities are set by state law. The study combined documentary analysis of the published K-OBI overview, with explicit criteria for selecting units of analysis, and educational design based on competency-based assessment, G. E. Miller's levels of assessment, and healthcare simulation standards. Twelve units of analysis were identified: five information domains and seven decision functions. Each unit was linked to its page location in the source, an analytic classification, one observable learner action, and one assessment task. Four of the seven decision functions require action at the boundary of the nonmedical role: the initial Safety Stop, mandatory overrides, route selection, and referral for medical review. Three assessment levels were defined (written explanation, simulated performance, and supervised practice), together with the conclusions each level supports. A five-component decision record connects the observation, the professional limit or uncertainty, the selected action, the explanation to the client, and further communication. Numerical K-OBI scoring was excluded from the learning tasks because version 1.0 does not specify an unambiguous computation of the visual domain. The scientific novelty lies in treating a justified modification, postponement, or stop of a procedure and a referral for medical review as a unit of assessment linked to a source provision and a level of evidence of learning. The practical significance lies in the possibility for instructors in vocational skin care training to use the tables and the decision record for lesson planning, simulated consultations, and feedback on documentation. The model does not define legal scope, does not provide medical clearance for a procedure, and contains no evidence of educational effectiveness.

Keywords: cancer treatment, dermatologic adverse events, competency-based training, simulation-based learning, assessment of practical skills, client consultation, referral, documentation, nonmedical services.

Ця робота ліцензується відповідно до Creative Commons Attribution 4.0 International License
e-ISSN: 2786-586X

Онкологічний індекс шкірного бар'єра Косіченко в підготовці естетистів: рішення щодо догляду в межах професійних повноважень

Косіченко Анна
освітній ступінь магістра, засновниця і директорка,
H&G Advanced Skin Institute by Hush and Glow, LLC, Лутц, Флорида, США
e-mail: skininstitute.hng@gmail.com
https://orcid.org/0009-0009-0775-3391

Анотація. Мета статті – розроблення джерельно обґрунтованої освітньої моделі навчання та оцінювання рішень естетистів щодо догляду за шкірою обличчя в межах професійних повноважень для клієнтів, які проходять активне протипухлинне лікування або нещодавно його завершили, на основі Онкологічного індексу шкірного бар'єра Косіченко (K-OBI) версії 1.0. Термін «естетист» (esthetician) позначає професійну роль немедичного фахівця з догляду за шкірою у США, дозволені види діяльності якого визначає законодавство штату. Дослідження поєднує документальний аналіз оприлюдненого огляду K-OBI за визначеними критеріями добору одиниць аналізу та освітнє проєктування на засадах компетентнісного оцінювання, рівнів оцінювання Дж. Е. Міллера (G. E. Miller) і стандартів симуляційного навчання в охороні здоров'я. Виокремлено 12 одиниць аналізу: п'ять інформаційних складників і сім функцій прийняття та реалізації рішень. Кожну одиницю пов'язано з місцем у першоджерелі, аналітичною характеристикою, однією спостережуваною дією здобувача освіти та одним завданням для оцінювання. Чотири із семи функцій вимагають дії на межі немедичної ролі: початкова зупинка з міркувань безпеки, обов'язкові пріоритетні обмеження, вибір маршруту обслуговування та направлення до лікаря. Визначено три рівні оцінювання (письмове обґрунтування, виконання в симуляції, практика під наглядом) і висновки, які підтримує кожен рівень. Запис рішення з п'яти складників поєднує спостереження, професійне обмеження або невизначеність, обрану дію, пояснення клієнтові та подальшу комунікацію. Числове оцінювання за K-OBI вилучено з навчальних завдань, оскільки версія 1.0 не визначає однозначного порядку обчислення візуального складника. Наукова новизна полягає в поданні обґрунтованої адаптації, відкладення чи припинення процедури та направлення до лікаря як одиниці оцінювання, пов'язаної з положенням першоджерела та рівнем доказу навчання. Практичне значення полягає в можливості використання таблиць і запису рішення викладачами професійної підготовки з догляду за шкірою для планування занять, симульованих консультацій і зворотного зв'язку щодо документування. Модель не визначає юридичних меж повноважень, не надає медичного дозволу на процедуру й не містить доказів освітньої ефективності.

Ключові слова: протипухлинне лікування, дерматологічні побічні реакції, компетентнісне навчання, симуляційне навчання, оцінювання практичних умінь, консультування клієнта, направлення до лікаря, документування, немедичні послуги.

Introduction

Relevance of the problem. Clients who are receiving cancer treatment, or who have recently completed it, may request elective facial care from nonmedical skin care practitioners. Current oncology guidelines and reviews assign the evaluation and management of treatment-related skin changes, including dermatologic immune-related adverse events and radiation dermatitis, to medical professionals [1–3]. For vocational education, this creates a specific task: the learner must decide whether an elective facial service can proceed, in what form, or not at all, without performing the medical assessment that such changes require. A curriculum organized around the correct execution of a fixed procedure sequence does not show whether

Ця робота ліцензується відповідно до Creative Commons Attribution 4.0 International License
e-ISSN: 2786-586X

the learner can recognize when a step should be omitted, when an appointment should stop, or how a concern should be communicated without assigning a diagnosis.

The occupational title esthetician (also spelled aesthetician) is used in the United States for nonmedical skin care practitioners. The federal Standard Occupational Classification groups these workers as skincare specialists (code 39-5094) [4], whereas the permitted activities, the required training, and the title of the credential are set by each state. In Florida, where the author practices, cosmetology is defined as treatment of the head, face, and scalp for aesthetic rather than medical purposes; facials form a separate specialty, and registration as a facial specialist requires 220 hours of training focused primarily on sanitation and safety [5]. The statute sets the volume and primary focus of training but does not specify how decisions at the boundary with medical care are to be taught or assessed. In this article, esthetician denotes this United States occupational role, and normative statements refer to Florida law. Whatever the state, the practitioner works at the boundary between nonmedical service decisions and medical diagnosis or treatment, and vocational training has to teach and assess decisions at that boundary.

Competency-based education defines learning outcomes as abilities that graduates must be able to demonstrate [6]. Under this approach, a decision to modify or withhold a service can serve as a learning outcome only when it is expressed as an action that an assessor can observe and verify. The relevance of the problem lies in the absence of such an expression for decisions taken at the boundary of a nonmedical role.

Analysis of recent research and publications. Four groups of publications address parts of this problem, and they differ in their unit of analysis. Clinical guidelines and reviews define the medical side of the boundary. The ASCO guideline update by B. J. Schneider and colleagues [1] and the SITC guideline by J. R. Brahmer and colleagues [2] describe the grading, evaluation, and treatment of immune-related adverse events, including dermatologic toxicities, as clinical tasks. The review by M. V. Krasnoselskyi and colleagues [3] summarizes current approaches to radiation-induced dermatitis, and the randomized trial by Y. Kost and colleagues [7] tested a defined bacterial decolonization regimen for its prevention. These publications share a clinical unit of analysis, the patient and the medical intervention. They establish that treatment-related skin changes require medical interpretation, but none of them addresses what a nonmedical practitioner should decide about an elective service or how that decision should be taught.

Research on patient-reported symptoms shows a different relation between information and action. In the cluster randomized trial by E. Basch and colleagues [8], electronic symptom monitoring in United States community oncology practices was associated with better patient-reported outcomes than usual care; the intervention combined patient reports with defined clinical responses to them. The study by A. C. Dueck and colleagues [9] established the validity and reliability of the PRO-CTCAE, the patient-reported version of the adverse event criteria of the National Cancer Institute. The two studies differ in their object, a care system in one case and a measurement instrument in the other, yet both treat the patient's report as information whose value depends on the professional response it triggers. Neither addresses nonmedical services, and their findings cannot be transferred to an esthetic screening score. For education, they support a narrower principle: a learner must record the client's report separately from the practitioner's observation and must know which response the role allows.

Research on competency-based education supplies the assessment side of the problem. The framework of G. E. Miller [10] separates knowing, knowing how, showing how, and doing, so that a written test, a simulated performance, and observed practice support different conclusions. C. P. M. van der Vleuten and L. W. T. Schuwirth [11] argue that no single method captures professional competence and that assessment has to be designed as a program that combines methods. J. R. Frank and colleagues [6] define competency-based education as an outcomes-based approach in which a program is organized around the abilities that graduates

Ця робота ліцензується відповідно до Creative Commons Attribution 4.0 International License
e-ISSN: 2786-586X

must demonstrate. The guide by O. ten Cate and D. R. Taylor [12] makes such outcomes operational through entrustable professional activities, whose recommended description includes specifications and limitations as well as the potential risks in case of failure. This literature provides units of assessment and levels of evidence. Its limitation for the present problem is that the entrusted unit is an activity the learner will eventually perform with less supervision; decisions that remain outside a role at every stage, such as diagnosis or a change to cancer treatment, appear only as limits of the activity rather than as the object of assessment.

Simulation research describes how such decisions can be practiced and observed. W. C. McGaghie and colleagues [13] identify feedback, deliberate practice, curriculum integration, outcome measurement, and transfer to practice among the features of effective simulation-based education. The 2025 editions of the INACSL standards on prebriefing [14] and debriefing [15] address the preparation of learners before a scenario and the structured analysis of performance after it. These sources describe healthcare simulation, and their use in skin care training requires adaptation to a nonmedical role; they do not confer a healthcare qualification on an esthetics course. They also assume that the scenario defines the expected performance, whereas in the present problem the expected performance may be a decision not to perform the planned service.

The Kosichenko Oncology Barrier Index (K-OBI), developed by the author, addresses nonmedical facial decisions during active or recent cancer treatment [16]. Version 1.0 of its overview, deposited on Zenodo as a preprint that has not undergone peer review, describes an initial stopping screen, five information domains, mandatory overrides, conservative service routes, and follow-through requirements; its scores and thresholds are provisional. The overview is a practice framework. It specifies what a practitioner considers and does during an appointment, but it does not formulate learning outcomes, assessment tasks, or levels of evidence for training.

Comparison of the four groups shows a consistent division of labor. Clinical sources define the medical boundary but not the nonmedical decision; symptom-reporting research links information to a professional response but only within clinical systems; competency-based assessment defines observable units and levels of evidence but treats scope limits as exclusions from the unit; simulation standards provide a format for practice and feedback but assume that the expected performance is the procedure itself. None of these approaches specifies the link between a professional boundary, the decision taken at that boundary, and the evidence by which that decision can be assessed in vocational training.

Identification of the unresolved part of the problem. The unresolved part of the problem is the absence of an educational model that turns a nonmedical practitioner's decision to proceed conservatively, modify, postpone, stop, or recommend medical review, taken at the boundary of the scope of practice and recorded together with its reason, into an assessable learning outcome linked to the provisions of a practice framework.

Aim of the article. The aim of the article is the development of a source-based educational model for teaching and assessing estheticians' facial skin care decisions within the scope of practice for clients in active cancer treatment or soon after its completion, based on version 1.0 of the Kosichenko Oncology Barrier Index (K-OBI).

Scientific novelty. The scientific novelty lies in an educational model in which, unlike the practice-oriented K-OBI version 1.0 and the entrustable professional activity approach, a justified modification, postponement, stop, or referral decision is the unit of assessment and is linked to a source provision, an observable learner action, an assessment task, and a level of evidence.

Practical significance. Instructors in vocational skin care training can use the tables, the assessment levels, and the decision record to plan lessons, build simulated consultations, and give feedback on documentation, while the permitted activities remain those set by the applicable jurisdiction.

Ця робота ліцензується відповідно до Creative Commons Attribution 4.0 International License
e-ISSN: 2786-586X

Methodology

Research methods. The study combines documentary analysis with educational design. Documentary analysis was used to identify the elements of the primary document that require a practitioner's judgment or action and to classify the type of information or decision each element involves. Educational design was used to convert each identified element into an observable learner action, an assessment task, and an assessment level. No data were collected from clients, learners, or instructors. The study is therefore neither a pedagogical experiment nor an expert validation or a systematic review.

The primary document is version 1.0 of the author's K-OBI overview, a ten-page preprint deposited on Zenodo on September 11, 2026 [16]; page numbers refer to the pagination of this version. The unit of analysis was an element of the framework that the overview names as a distinct information domain or as a distinct step of the appointment workflow. An element was included when it met three criteria: it is named as a separate component in the overview; it requires the practitioner to collect information, make a decision, or act during or around an appointment; and it can be carried out within a nonmedical role. Ingredient examples, bibliographic entries, background explanations, and proposals for future validation were excluded because they do not require action by the practitioner. When an element recurred on several pages, the mentions were merged into one unit, and all page locations were retained.

Two classes of units were distinguished. Information domains specify what the practitioner must know before or during the appointment, and decision functions specify what the practitioner must do with that information. Each information domain was then classified by the source of its information (the client's report, the practitioner's observation, or treatment history supplied by the client), and each decision function was classified by the type of decision it involves: a boundary decision, an ongoing decision during the appointment, or a record of the decision.

The educational design followed three rules. First, each unit was expressed as one principal learner action formulated with a verb that describes nonmedical conduct (record, distinguish, describe, identify, explain, demonstrate, document, communicate); verbs that imply medical conduct (diagnose, grade, prescribe, clear) were excluded. Second, each action was assigned an assessment task that produces evidence an instructor can inspect. Third, each task was allocated to the assessment level at which its evidence can be observed, following the levels described by G. E. Miller [10]. The extraction and the design were carried out by the author; no independent second coding was performed.

Data sources. The primary material is version 1.0 of the K-OBI overview [16]. Secondary sources were selected purposively in three groups: clinical guidelines, trials, and reviews on treatment-related skin changes and symptom reporting [1–3, 7–9], used only to delimit medical tasks; peer-reviewed research and standards on competency-based education, assessment, and simulation [6, 10–15], used to design learner actions, tasks, and assessment levels; and the federal occupational classification and Florida statutory text [4, 5], used to tie statements about occupational titles and permitted activities to a jurisdiction.

Selection was based on relevance to the relation between professional boundaries, service decisions, and assessment, and it was limited to peer-reviewed publications, recognized professional standards, and official texts. No database screening protocol was applied, and no counts of retrieved or excluded records are reported, because the purpose of the selection was the delimitation of concepts rather than exhaustive coverage. Clinical sources were used for their reported design, population, and conclusions; detailed treatment instructions were not extracted. No client files, clinical photographs, learner scores, or attendance records were analyzed.

Analytical tools. The analysis was organized in a mapping matrix, a table in which each row corresponded to one unit and the columns recorded the page location, the element as named in the source, the analytic classification, the learner action, the assessment task, and the

Ця робота ліцензується відповідно до Creative Commons Attribution 4.0 International License
e-ISSN: 2786-586X

assessment level. The matrix was used to apply the inclusion and merging rules, to confirm that each unit appeared only once, and to check every learner action against the verb rule. Tables 1–3 and Figure 1 were derived directly from this matrix. No statistical processing was performed because the study involves no quantitative data.

Research limitations. The limitations concern the index, the documentary analysis, and the educational model. K-OBI version 1.0 is a preprint that has not been peer reviewed; its weights and thresholds are provisional, and it has not been validated as a diagnostic or clinical risk instrument. The documentary analysis was performed by one analyst without independent coding or assessment of agreement, and the purposive selection of secondary sources may have omitted relevant literature. The educational model is a design: its tasks have not been reviewed by independent experts or tried with learners, and no evidence of learning, assessment reliability, or client safety is available. The model does not determine which procedures are permitted in a given jurisdiction, does not define a waiting period after treatment, and applies to nonmedical facial care rather than to all aspects of cancer survivorship. The results apply to the vocational training of nonmedical skin care practitioners in the United States, within the activities permitted by the law of the state concerned.

Results

Documentary analysis of K-OBI version 1.0 identified twelve units: five information domains and seven decision functions. Each unit was linked to its page location, an analytic classification, one learner action, and one assessment task. The information domains are presented in Table 1 and the decision functions in Table 2; the allocation of tasks to assessment levels is presented in Table 3, and the structure that connects the tasks is shown in Figure 1.

The five information domains are the components that the overview names as the content of the review preceding service (pp. 4–5). Each met the inclusion criteria because it requires the practitioner to collect a distinct kind of information before deciding on the service. The analysis distinguished three sources of this information: treatment history and exposures reported by the client, symptoms experienced by the client, and findings observed by the practitioner. This distinction determines the corresponding learner action: reported information is recorded as reported, observed information is described without a diagnostic label, and missing information is identified rather than inferred (Table 1).

Table 1. Information domains of K-OBI version 1.0 and the proposed learning tasks

K-OBI element (page)	Documentary analysis: source of information and boundary	Observable learner action	Assessment task
Treatment context (p. 4)	Treatment history reported by the client; the completion date is history, not authorization	Records the type and timing of treatment, including recent completion, and identifies missing information	Prepare an intake summary that records the completion date as history and lists the information still missing
Client-reported comfort (pp. 4–5)	Symptom experienced by the client; appearance neither confirms nor excludes it	Records the client's report separately from visual observations	Record the reported discomfort and explain why a normal appearance does not cancel it

Ця робота ліцензується відповідно до Creative Commons Attribution 4.0 International License
e-ISSN: 2786-586X

K-OBI element (page)	Documentary analysis: source of information and boundary	Observable learner action	Assessment task
Visible barrier review (pp. 4–5)	Finding observed by the practitioner; its cause requires medical interpretation	Describes visible changes in neutral terms without assigning a diagnosis	Write an observation note that describes location and appearance without naming a cause
Home care and external triggers (pp. 4–5)	Exposures reported by the client; prescribed treatment lies outside the nonmedical role	Identifies reported exposures and product intolerance without changing prescribed treatment	Review a home care routine and separate elective cosmetic products from prescribed medicines
Esthetic safety modifiers (pp. 4–5)	Practical restrictions on contact, positioning, and duration	Identifies restrictions relevant to touch, positioning, and appointment length	State the planned adjustments to touch, positioning, or duration and the reason for each

Note. Column 1 gives the element names and page locations of K-OBI version 1.0 [16]. Column 2 records the documentary analysis. Columns 3 and 4 are educational components developed in this article and have not been tested with learners.

In none of the five domains does the learner action include interpretation of cause. The domains differ in what the learner must keep apart: history from authorization in the treatment context domain, the client's experience from the practitioner's observation in the comfort and visible barrier domains, and cosmetic products from prescribed treatment in the home care domain. The esthetic safety modifiers domain is the only one that converts information directly into a practical adjustment of the service.

The seven decision functions are the steps of the appointment workflow that the overview names as requiring action on the collected information: initial stopping, mandatory overrides, route selection, consent, monitoring, documentation, and referral. Each met the inclusion criteria because it specifies an action that the practitioner takes rather than information that the practitioner collects. Four functions are boundary decisions. The initial Safety Stop and the mandatory overrides require the practitioner to stop or restrict the service regardless of other information; route selection requires a choice among proceeding conservatively, modifying, and withholding permitted care; referral requires communication of a concern for medical review without a diagnosis. Consent and monitoring are ongoing decisions that respond to the client's preferences and to new information during the appointment, and documentation records the relation between information, decision, and action (Table 2).

Table 2. Decision functions of K-OBI version 1.0 and the proposed learning tasks

K-OBI element (page)	Documentary analysis: type of decision	Observable learner action	Assessment task
Initial Safety Stop (p. 4)	Boundary decision: a stated stopping condition precludes hands-on care	Identifies a stopping condition before a routine service is considered	Explain in writing why a stated concern prevents the start of hands-on care

Ця робота ліцензується відповідно до Creative Commons Attribution 4.0 International License
e-ISSN: 2786-586X

K-OBI element (page)	Documentary analysis: type of decision	Observable learner action	Assessment task
Mandatory overrides (p. 5)	Boundary decision: a restriction takes precedence over a favorable numerical route	Gives the mandatory restriction priority over the numerical route	Explain why an override governs the action when the numerical route appears less restrictive
Route selection (pp. 5–6)	Boundary decision: choice among proceeding conservatively, modifying, and withholding permitted care	Links the selected action to the collected information and the applicable boundary	Justify the selected route without declaring the client medically fit
Consent (p. 6)	Ongoing decision: the client's preferences and withdrawal of consent govern the service	Confirms preferences and stops or adjusts care when consent is withdrawn	Conduct a simulated consultation in which the client changes a preference about touch
Monitoring (pp. 6–7)	Ongoing decision: new discomfort changes the plan during the appointment	Responds to new discomfort instead of completing a fixed sequence	Demonstrate the action taken when the client's comfort changes during the exercise
Documentation (p. 7)	Record of the relation between information, decision, and action	Records the observations, the decision, and the action consistently	Review whether an appointment note supports the action demonstrated
Referral (pp. 6–7)	Boundary decision: a concern is communicated for medical review without a diagnosis	Communicates the observation and the reason for medical review without diagnosing	Prepare a factual note that states the observation, the action taken, and the reason for medical review

Note. Column structure as in Table 1; source [16].

Taken together, Tables 1 and 2 show that the model assesses the relation between the record and the action rather than either of them separately. A completed symptom field does not show that the learner changed the appointment when this was required, and a postponed service without a recorded reason does not show that the decision followed from the available information.

The analysis of the scoring component produced a methodological constraint on assessment design. Version 1.0 assigns the visual domain a maximum of 25 points and itself identifies the need to standardize how the visual subtotal reaches this maximum (pp. 5 and 7) [16]. Because the overview does not specify an unambiguous computation, the model introduces no formula, weights, or thresholds and excludes the calculation of the visual subtotal and of the K-OBI total from all assessment tasks. Learners are assessed on the recognition and neutral description of visible findings (Table 1) and on the priority of stopping conditions and overrides over any numerical route (Table 2), not on arithmetic.

Ця робота ліцензується відповідно до Creative Commons Attribution 4.0 International License
e-ISSN: 2786-586X

The decision functions differ in the kind of evidence required to assess them. Reasoning about a stopping condition, an override, or a route can be shown in writing, whereas consent and monitoring are responses to a changing situation and can be observed only in performance; documentation and referral acquire their full meaning across actual appointments. On this basis, the tasks in Tables 1 and 2 were allocated to three assessment levels corresponding to the levels of G. E. Miller [10]: written explanation, simulated performance, and supervised practice. Each level is defined by the evidence it produces and by the conclusions that this evidence can and cannot support [11] (Table 3).

Table 3. Assessment levels for the proposed tasks and the limits of interpretation

Assessment level (Miller's level)	**Domains and functions assessed**	**Evidence collected**	**Supported conclusion**	**Conclusion not supported**
Written explanation (knows how)	All five domains; initial Safety Stop, mandatory overrides, route selection	Written identification of relevant information, uncertainty, and the reason for an action	The learner can reason from information to a bounded decision	Performance with a client
Simulated performance (shows how)	Consent, monitoring, route selection, communication for referral	Observed consultation, response to a changed condition, and a consistent written record	The learner can carry out and explain the decision in a defined scenario	Routine independent practice
Supervised practice (does)	Documentation and referral across appointments; all functions in context	Observation across actual permitted appointments with a fixed version of the tasks	The learner applies the decisions in permitted practice, once such data are collected	Client outcomes or client safety

Note. The levels follow G. E. Miller [10]; the allocation of domains and functions was developed in this article. No assessment data were collected.

The decision record connects the three tables in a single structure (Figure 1). It contains five components in a fixed order: the observation, with the client's report and the practitioner's finding recorded separately (Table 1); the professional limit or unresolved question that the observation raises; the selected action; the explanation given to the client; and the communication and follow-up required. Each component corresponds to one or more decision functions in Table 2, and the completed record is the common product assessed at each level in Table 3. When new information appears during the appointment, the record returns to the first component, which corresponds to the monitoring function.

The proposed review criteria distinguish a consequential boundary violation from an incomplete explanation. Proceeding after withdrawal of consent, ignoring a stated stopping condition, or advising a change to cancer medication requires correction before the learner progresses to the next assessment level. A record that states a stopping condition while the demonstrated consultation continues the planned facial unchanged is inconsistent and is treated in the same way. A consistent record with an unclear explanation requires focused

Ця робота ліцензується відповідно до Creative Commons Attribution 4.0 International License
e-ISSN: 2786-586X

feedback on documentation. These categories organize instructional responses; they are not rating scales or passing standards.

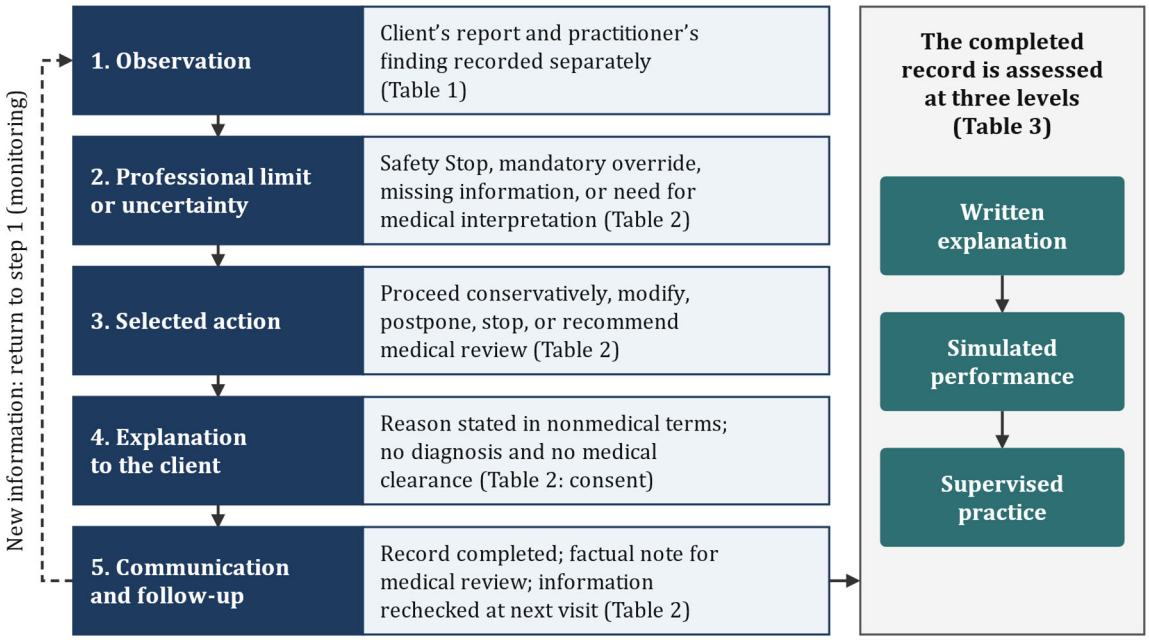

Figure 1. Structure of the proposed decision record and its links to Tables 1–3
Source: developed by the author on the basis of K-OBI version 1.0 [16].

Discussion

Interpretation of results. The results show that the elements of a practice framework can be converted into assessable learning outcomes without transferring clinical judgment to the learner. This is possible because every learner action in Tables 1 and 2 describes observable nonmedical conduct, whereas the medical interpretation on which the conduct depends is named as a limit rather than performed. The decisive mechanism is the separation of information by its source. Once the client's report, the practitioner's observation, and the treatment history are recorded separately, the learner's decision can be checked against the information that was actually available, and the boundary between description and diagnosis becomes visible in the record.

The predominance of boundary decisions among the decision functions (four of seven) explains why completion of a facial cannot serve as the main indicator of competence in this context. In a procedure-oriented lesson, the successful outcome is the completed service; in the proposed model, a withheld, modified, or stopped service is an equally valid outcome when the record and the explanation support it. At the same time, refusal of every appointment does not demonstrate the intended competence, because the learner must still distinguish the relevant information and justify the decision.

The case of a client who has recently completed treatment illustrates the same mechanism. In the model, the completion date is recorded as history (Table 1), and the decision about a routine facial depends on the current report, the current findings, and any instructions the client has received. The model derives no waiting interval and does not treat the completion of treatment as permission to resume routine procedures; when the necessary information is unavailable, postponement is a justified action.

The exclusion of numerical scoring follows from the state of the source rather than from a pedagogical preference. Because version 1.0 does not specify an unambiguous computation of the visual subtotal, a scored examination based on the total would assess the learner's compliance with an undefined rule. Assessing the reasoning that the score is intended to

Ця робота ліцензується відповідно до Creative Commons Attribution 4.0 International License
e-ISSN: 2786-586X

support avoids this problem and keeps the educational model independent of future revisions of the index.

Comparison with other studies. With regard to learning objectives, the model agrees with the outcomes-based orientation of competency-based education described by J. R. Frank and colleagues [6], in which learning is defined by what the learner must demonstrate. The difference lies in the content of the outcome. In competency-based frameworks, outcomes are usually abilities to perform professional activities; in the proposed model, an outcome may be the correct decision not to perform an activity.

With regard to the unit of assessment, the model is closest to entrustable professional activities, whose description includes specifications, limitations, and the risks of failure [12]. Both approaches define a unit of professional work and state what lies outside it. They differ in the direction of development. An entrustable activity is designed to be performed with decreasing supervision as competence grows, whereas the boundary decisions in Table 2 concern actions, such as diagnosis or a change to cancer treatment, that remain outside the esthetician's role at every stage of training. The model therefore assesses the recognition and handling of a permanent limit, which the entrustment approach records only as an exclusion.

With regard to observable evidence of competence, the three levels in Table 3 follow the distinction drawn by G. E. Miller [10] and the argument of C. P. M. van der Vleuten and L. W. T. Schuwirth [11] that competence must be inferred from a combination of methods. The model agrees with both in assigning different conclusions to written, simulated, and workplace evidence. It differs in a specific allocation: consent and monitoring are placed at the level of performance because they are responses to a changing situation and cannot be credited on the basis of a written answer.

With regard to practice and feedback, the model relies on the features that W. C. McGaghie and colleagues [13] identify for effective simulation-based education and on the 2025 INACSL standards on prebriefing [14] and debriefing [15]. The decision record serves as the object of debriefing: the instructor can ask which observation changed the plan, which fact remained unknown, and why the chosen action stayed within the role. The difference from healthcare simulation is that the scenario must allow a correct performance in which the planned procedure does not take place, and the prebriefing must state what information the learner may request and what the learner is not expected to establish medically.

With regard to the documentation of decisions, the model parallels the symptom-reporting research of E. Basch and colleagues [8] and A. C. Dueck and colleagues [9] in one structural respect: reported information is useful only when it is linked to a defined response. The comparison is limited to this point. Those studies evaluated a clinical system and a measurement instrument with patient outcomes and psychometric data, whereas the present model is an unevaluated educational design; none of their findings can be transferred to the K-OBI score or to the effectiveness of the proposed tasks.

With regard to professional limits, the clinical guidelines [1, 2] and the review of radiation dermatitis [3] define the tasks that the model excludes from the learner's role: grading toxicity, determining the cause of a skin change, and selecting treatment. The trial by Y. Kost and colleagues [7] shows why source context must remain visible in teaching, because a decolonization regimen tested as a medical intervention does not justify a salon cleansing protocol. In the model, these sources are used for what they establish, the medical side of the boundary, and not as evidence about esthetic services or about the educational value of the tasks.

Scientific novelty (extended). The educational use of K-OBI has been improved. Version 1.0 [16] describes a practice workflow, whereas the proposed model links each of its twelve elements to an analytic classification, an observable learner action, an assessment task, and an assessment level, and it adds a decision record that unifies these components (Tables 1–3, Figure 1). The domains, functions, scoring, and thresholds of K-OBI belong to the previously

Ця робота ліцензується відповідно до Creative Commons Attribution 4.0 International License
e-ISSN: 2786-586X

published overview; the classification of units, the learner actions, the tasks, the allocation to assessment levels, the decision record, the review criteria, and the exclusion of numerical scoring from assessment are results of this article.

The competency-based approach to the assessment of professional judgment has been further developed by treating a justified decision to modify, postpone, stop, or refer as a unit of assessment rather than as a limitation of an entrusted activity [12]. Unlike the entrustment approach, the model assesses decisions at a boundary that does not shift with training; unlike procedure-oriented assessment, it credits a withheld service when the record and the explanation support it.

The distinction between two evaluation tasks has also been further developed. The index requires investigation of its operational definitions and measurement properties, whereas the educational tasks require examination of their relevance, clarity, assessor agreement, and evidence of learning. Keeping these tasks separate allows the framework and the curriculum to be studied independently and prevents an unvalidated total from being used as an examination answer or a medical risk estimate.

Practical significance (extended). Instructors in vocational skin care training can use the model as a lesson sequence: a review of the practitioner's assigned role and of the information needed for an appointment; preparation of an intake summary (Table 1); a written decision with its reason; a simulated consultation with a change in the client's comfort or consent; and a completed decision record (Figure 1). Before a task is used for assessment, the instructor specifies the information available to the learner and the information the learner may request, in line with prebriefing principles [14]. The tasks do not require the learner to guess an undisclosed diagnosis or to establish a medical fact, and a simulated emergency follows an emergency-response protocol rather than the referral task.

Feedback follows the decision record. When the action is plausible but the reason is missing, the learner revises the explanation; when a boundary has been crossed, the learner revisits the decision before repeating the exercise. Educational institutions can use the three levels in Table 3 to state precisely what a certificate attests: attendance documents participation, whereas a statement about practical ability must name the assessment level and the method used.

Esthetics schools and other providers of vocational skin care training in the United States can incorporate the tasks into existing courses without changing the scope of the credential. The scope within which the tasks are applied is determined by state law, as with the facial specialty registration in Florida [5]; the allocation of specific procedures to nonmedical or medical practice is established by that law and not by the model. The model applies only to activities already permitted to the practitioner and does not replace state training or examination requirements.

Consequential use of the tasks presupposes independent review: medical professionals can review the clinical context and the escalation language, and skin care educators can review whether the tasks are realistic and observable. Recording each revision ensures that assessment uses a defined version of the materials.

Conclusions

1. Documentary analysis of K-OBI version 1.0 established that twelve of its elements, five information domains and seven decision functions, require a practitioner's judgment or action within a nonmedical role; each of them was converted into one observable learner action and one assessment task that assigns the learner no medical interpretation.

2. The five information domains draw on three distinct sources of information: the client's report, the practitioner's observation, and treatment history. Recording these sources separately makes the boundary between description and diagnosis observable in the learner's record.

Ця робота ліцензується відповідно до Creative Commons Attribution 4.0 International License
e-ISSN: 2786-586X

3. Four of the seven decision functions (the initial Safety Stop, mandatory overrides, route selection, and referral) are boundary decisions. For them, the assessable evidence is the consistency between the recorded observation, the selected action, and the explanation to the client, and a justified withheld, modified, or stopped service is a valid outcome.

4. The tasks are allocated to three assessment levels (written explanation, simulated performance, and supervised practice), each supporting a defined conclusion; consent and monitoring can be credited only on the basis of performance. Numerical K-OBI scoring is excluded from assessment because version 1.0 does not specify an unambiguous computation of the visual domain.

5. The five-component decision record integrates the domains, functions, and assessment levels into a single product that can be assessed at each level and used as the object of debriefing.

Further research should include independent expert review of the content and wording of the tasks, clarification of the K-OBI scoring specification in a new version of the index, a study of assessor agreement on decision records, and prospective evaluation of learning and of transfer to supervised practice in esthetics programs in the United States. Each stage should use a defined version of the materials and report educational and client outcomes separately.

Conflict of interest. The author developed K-OBI and is the founder, owner, and director of H&G Advanced Skin Institute by Hush and Glow, LLC (Lutz, Florida, United States). These relationships constitute a potential conflict of interest with respect to the index and its educational application.

Use of artificial intelligence. ChatGPT (OpenAI) was used to assist with source discovery and comparison, organization of the documentary mapping, drafting and revision of the text, translation of the Ukrainian metadata, and document formatting. The revised version of the manuscript, including the restructuring of sections, the wording of the text, the tables, the figure layout, and the Ukrainian-language metadata, was prepared with substantial assistance of Claude (Anthropic) on the basis of the author's framework and the editorial comments. The AI tools did not generate data, observations, or results and did not perform independent expert review. The author is responsible for the entire content of the article.

References

1. Schneider B. J., Naidoo J., Santomasso B. D. et al. Management of immune-related adverse events in patients treated with immune checkpoint inhibitor therapy: ASCO guideline update. *Journal of Clinical Oncology*. 2021. Vol. 39, no. 36. P. 4073–4126. DOI: https://doi.org/10.1200/JCO.21.01440.

2. Brahmer J. R., Abu-Sbeih H., Ascierto P. A. et al. Society for Immunotherapy of Cancer (SITC) clinical practice guideline on immune checkpoint inhibitor-related adverse events. *Journal for ImmunoTherapy of Cancer*. 2021. Vol. 9, no. 6. Art. e002435. DOI: https://doi.org/10.1136/jitc-2021-002435.

3. Красносельський М. В., Артамонова Н. О., Павліченко Ю. В. Радіаційно-індукований дерматит: огляд сучасних уявлень. *Український радіологічний та онкологічний журнал*. 2024. Т. 32, № 1. С. 105–122. DOI: https://doi.org/10.46879/ukroj.1.2024.105-122.

4. Executive Office of the President, Office of Management and Budget. *Standard Occupational Classification Manual: United States, 2018*. Washington, DC, 2018.

5. Florida Legislature. The 2025 Florida Statutes. Title XXXII: Regulation of professions and occupations. Chapter 477: Cosmetology. Tallahassee : Florida Legislature, 2025. URL: https://www.flsenate.gov/Laws/Statutes/2025/Chapter477/All

Ця робота ліцензується відповідно до Creative Commons Attribution 4.0 International License
e-ISSN: 2786-586X

6. Frank J. R., Snell L. S., ten Cate O. et al. Competency-based medical education: theory to practice. *Medical Teacher*. 2010. Vol. 32, no. 8. P. 638–645. DOI: https://doi.org/10.3109/0142159X.2010.501190.

7. Kost Y., Deutsch A., Mieczkowska K. et al. Bacterial decolonization for prevention of radiation dermatitis: a randomized clinical trial. *JAMA Oncology*. 2023. Vol. 9, no. 7. P. 940–945. DOI: https://doi.org/10.1001/jamaoncol.2023.0444.

8. Basch E., Schrag D., Henson S. et al. Effect of electronic symptom monitoring on patient-reported outcomes among patients with metastatic cancer: a randomized clinical trial. *JAMA*. 2022. Vol. 327, no. 24. P. 2413–2422. DOI: https://doi.org/10.1001/jama.2022.9265.

9. Dueck A. C., Mendoza T. R., Mitchell S. A. et al. Validity and reliability of the US National Cancer Institute's Patient-Reported Outcomes version of the Common Terminology Criteria for Adverse Events (PRO-CTCAE). *JAMA Oncology*. 2015. Vol. 1, no. 8. P. 1051–1059. DOI: https://doi.org/10.1001/jamaoncol.2015.2639.

10. Miller G. E. The assessment of clinical skills/competence/performance. *Academic Medicine*. 1990. Vol. 65, no. 9 Suppl. P. S63–S67. DOI: https://doi.org/10.1097/00001888-199009000-00045.

11. van der Vleuten C. P. M., Schuwirth L. W. T. Assessing professional competence: from methods to programmes. *Medical Education*. 2005. Vol. 39, no. 3. P. 309–317. DOI: https://doi.org/10.1111/j.1365-2929.2005.02094.x.

12. ten Cate O., Taylor D. R. The recommended description of an entrustable professional activity: AMEE Guide No. 140. *Medical Teacher*. 2021. Vol. 43, no. 10. P. 1106–1114. DOI: https://doi.org/10.1080/0142159X.2020.1838465.

13. McGaghie W. C., Issenberg S. B., Petrusa E. R., Scalese R. J. A critical review of simulation-based medical education research: 2003–2009. *Medical Education*. 2010. Vol. 44, no. 1. P. 50–63. DOI: https://doi.org/10.1111/j.1365-2923.2009.03547.x.

14. INACSL Standards Committee, Persico L., Ramakrishnan S. et al. Healthcare Simulation Standard of Best Practice® prebriefing: preparation and briefing. *Clinical Simulation in Nursing*. 2025. Vol. 105. Art. 101777. DOI: https://doi.org/10.1016/j.ecns.2025.101777.

15. INACSL Standards Committee, Decker S., Sapp A. et al. Healthcare Simulation Standards of Best Practice®: the debriefing process. *Clinical Simulation in Nursing*. 2025. Vol. 105. Art. 101775. DOI: https://doi.org/10.1016/j.ecns.2025.101775.

16. Kosichenko A. The Kosichenko Oncology Barrier Index (K-OBI): an evidence-informed esthetic decision-support framework for skin barrier screening during active cancer treatment : preprint. Version 1.0. Zenodo, 2026. 10 p. DOI: https://doi.org/10.5281/zenodo.22714343.

References

1. Schneider, B. J., Naidoo, J., Santomasso, B. D., Lacchetti, C., Adkins, S., Anadkat, M., Atkins, M. B., Brassil, K. J., Caterino, J. M., Chau, I., Davies, M. J., Ernstoff, M. S., Fecher, L., Ghosh, M., Jaiyesimi, I., Mammen, J. S., Naing, A., Nastoupil, L. J., Phillips, T., … Bollin, K. (2021). Management of immune-related adverse events in patients treated with immune checkpoint inhibitor therapy: ASCO guideline update. *Journal of Clinical Oncology, 39*(36), 4073–4126. https://doi.org/10.1200/JCO.21.01440

2. Brahmer, J. R., Abu-Sbeih, H., Ascierto, P. A., Brufsky, J., Cappelli, L. C., Cortazar, F. B., Gerber, D. E., Hamad, L., Hansen, E., Johnson, D. B., Lacouture, M. E., Masters, G. A., Naidoo, J., Nanni, M., Perales, M. A., Puzanov, I., Santomasso, B. D., Shanbhag, S. P., Sharma, R., … Ernstoff, M. S. (2021). Society for Immunotherapy of Cancer (SITC) clinical practice guideline on immune checkpoint inhibitor-related adverse events. *Journal for*

Ця робота ліцензується відповідно до Creative Commons Attribution 4.0 International License
e-ISSN: 2786-586X

ImmunoTherapy of Cancer, 9(6), Article e002435. https://doi.org/10.1136/jitc-2021-002435

3. Krasnoselskyi, M. V., Artamonova, N. O., & Pavlichenko, Yu. V. (2024). Radiatsiino-indukovanyi dermatyt: ohliad suchasnykh uiavlen [Radiation-induced dermatitis: A review of current understanding]. *Ukrainian Journal of Radiology and Oncology, 32*(1), 105–122. https://doi.org/10.46879/ukroj.1.2024.105-122

4. Executive Office of the President, Office of Management and Budget. (2018). *Standard occupational classification manual: United States, 2018*.

5. Florida Legislature. (2025). *The 2025 Florida Statutes. Title XXXII: Regulation of professions and occupations. Chapter 477: Cosmetology*. https://www.flsenate.gov/Laws/Statutes/2025/Chapter477/All

6. Frank, J. R., Snell, L. S., ten Cate, O., Holmboe, E. S., Carraccio, C., Swing, S. R., Harris, P., Glasgow, N. J., Campbell, C., Dath, D., Harden, R. M., Iobst, W., Long, D. M., Mungroo, R., Richardson, D. L., Sherbino, J., Silver, I., Taber, S., Talbot, M., & Harris, K. A. (2010). Competency-based medical education: Theory to practice. *Medical Teacher, 32*(8), 638–645. https://doi.org/10.3109/0142159X.2010.501190

7. Kost, Y., Deutsch, A., Mieczkowska, K., Nazarian, R., Muskat, A., Hosgood, H. D., Lin, J., Daily, J. P., Ohri, N., Kabarriti, R., Shinoda, K., & McLellan, B. N. (2023). Bacterial decolonization for prevention of radiation dermatitis: A randomized clinical trial. *JAMA Oncology, 9*(7), 940–945. https://doi.org/10.1001/jamaoncol.2023.0444

8. Basch, E., Schrag, D., Henson, S., Jansen, J., Ginos, B., Stover, A. M., Carr, P., Spears, P. A., Jonsson, M., Deal, A. M., Bennett, A. V., Thanarajasingam, G., Rogak, L. J., Reeve, B. B., Snyder, C., Bruner, D., Cella, D., Kottschade, L. A., Perlmutter, J., … Dueck, A. C. (2022). Effect of electronic symptom monitoring on patient-reported outcomes among patients with metastatic cancer: A randomized clinical trial. *JAMA, 327*(24), 2413–2422. https://doi.org/10.1001/jama.2022.9265

9. Dueck, A. C., Mendoza, T. R., Mitchell, S. A., Reeve, B. B., Castro, K. M., Rogak, L. J., Atkinson, T. M., Bennett, A. V., Denicoff, A. M., O'Mara, A. M., Li, Y., Clauser, S. B., Bryant, D. M., Bearden, J. D., Gillis, T. A., Harness, J. K., Siegel, R. D., Paul, D. B., Cleeland, C. S., … Basch, E. (2015). Validity and reliability of the US National Cancer Institute's Patient-Reported Outcomes version of the Common Terminology Criteria for Adverse Events (PRO-CTCAE). *JAMA Oncology, 1*(8), 1051–1059. https://doi.org/10.1001/jamaoncol.2015.2639

10. Miller, G. E. (1990). The assessment of clinical skills/competence/performance. *Academic Medicine, 65*(9 Suppl.), S63–S67. https://doi.org/10.1097/00001888-199009000-00045

11. van der Vleuten, C. P. M., & Schuwirth, L. W. T. (2005). Assessing professional competence: From methods to programmes. *Medical Education, 39*(3), 309–317. https://doi.org/10.1111/j.1365-2929.2005.02094.x

12. ten Cate, O., & Taylor, D. R. (2021). The recommended description of an entrustable professional activity: AMEE Guide No. 140. *Medical Teacher, 43*(10), 1106–1114. https://doi.org/10.1080/0142159X.2020.1838465

13. McGaghie, W. C., Issenberg, S. B., Petrusa, E. R., & Scalese, R. J. (2010). A critical review of simulation-based medical education research: 2003–2009. *Medical Education, 44*(1), 50–63. https://doi.org/10.1111/j.1365-2923.2009.03547.x

14. INACSL Standards Committee, Persico, L., Ramakrishnan, S., Wilson-Keates, B., Catena, R., Charnetski, M., Fogg, N., Jones, M. C., Ludlow, J., MacLean, H., Simmons, V. C., Smeltzer, S., & Wilk, A. (2025). Healthcare Simulation Standard of Best Practice® prebriefing: Preparation and briefing. *Clinical Simulation in Nursing, 105*, Article 101777. https://doi.org/10.1016/j.ecns.2025.101777

15. INACSL Standards Committee, Decker, S., Sapp, A., Bibin, L., Chidume, T., Crawford, S. B., Fayyaz, J., Johnson, B. K., & Szydlowski, J. (2025). Healthcare Simulation

Ця робота ліцензується відповідно до Creative Commons Attribution 4.0 International License
e-ISSN: 2786-586X

Standards of Best Practice®: The debriefing process. *Clinical Simulation in Nursing, 105*, Article 101775. https://doi.org/10.1016/j.ecns.2025.101775

16. Kosichenko, A. (2026). *The Kosichenko Oncology Barrier Index (K-OBI): An evidence-informed esthetic decision-support framework for skin barrier screening during active cancer treatment* (Version 1.0) [Preprint]. Zenodo. https://doi.org/10.5281/zenodo.22714343

Ця робота ліцензується відповідно до Creative Commons Attribution 4.0 International License
e-ISSN: 2786-586X