Level 5 Certificate in Tattoo Fade and Removal

Level 4 Award in Laser Core of Knowledge

Specification (For Centres)

May 2025

Contents

About QUALIFI

QUALIFI is recognised and regulated by Ofqual (Office of Qualifications and Examinations Regulator). Our Ofqual reference number is RN5160. Ofqual regulates qualifications, examinations, and assessments in England.

As an Ofqual recognised Awarding Organisation, QUALIFI is required to carry out external quality assurance to ensure that centres approved for the delivery and assessment of QUALIFI's qualifications meet the required standards. This comprises centre approval, qualification approval and ongoing monitoring through our External Quality Assurance and annual centre monitoring processes.

Why Choose QUALIFI Qualifications?

QUALIFI qualifications aim to support learners to develop the necessary knowledge, skills and understanding to support their professional development within their chosen career and/or to provide opportunities for progression to further study.

Our qualifications provide opportunities for learners to:

- apply analytical and evaluative thinking skills
- develop problem solving and creativity to tackle problems and challenges
- exercise judgement and take responsibility for their decisions and actions
- develop the ability to recognise and reflect on personal learning and improve their personal, social, and other transferable skills.

Employer Support for the Qualification Development

During the development of this qualification QUALIFI consulted with a range of employers, providers and existing centres (where applicable) to ensure rigour, validity and demand for the qualification and to ensure that the development considers the potential learner audience for the qualification and assessment methods.

Equality, Diversity and Inclusion (EDI)

QUALIFI qualifications are developed to be accessible to all learners who are capable of attaining the required standard. QUALIFI promotes equality, diversity and inclusion across all aspects of the qualification process. Centres are required to implement the same standards of EDI and ensure teaching and learning are free from any barriers that may restrict access and progression. For further details please refer to QUALIFI's *Equality, Diversity and Inclusion Policy*.

Learners with any specific learning needs should discuss this in the first instance with their approved centre who will refer to QUALIFI's *Reasonable Adjustment and Special Consideration Policy*.

Qualification Title and Accreditation Number

This qualification has been accredited to the Regulated Qualification Framework (RQF) and has its own unique Qualification Accreditation Number (QAN). This number will appear on the learner's final certification document. Each unit within the qualification has its own RQF code. The QAN for each of these qualifications is as follows:

Qualifi Level 5 Certificate in Tattoo Fade and Removal 610/5707/1

Qualifi Level 4 Award in Laser Core of Knowledge 610/5706/X

Qualification Aims and Learning Outcomes

Aims of the QUALIFI Level 5 Certificate in Tattoo Fade and Removal

The aim of the QUALIFI Level 5 Certificate in Tattoo Fade and Removal and the Level 4 Award in Laser Core of Knowledge is to provide learners with an understanding of the procedures and essential underpinning knowledge associated to perform tattoo fade and removal safely and their role in field of non-surgical cosmetic procedures. Learners will develop practical skills for a career specialising in Tattoo Fade and Removal.

Successful completion of the QUALIFI Level 5 Certificate in Tattoo Fade and Removal provides learners with the opportunity to progress to further study or employment within the Aesthetics industry.

Learning Outcomes of the QUALIFI Level 5 Certificate in Tattoo Fade and Removal

The overall learning outcomes of the qualification are for learners to:

- **Consultation and Advanced Skin Analysis using Technologies** – learners will be able recognise skin types and skin lesions using skin analysis technologies. Learners will be able to analyse, evaluate, determine and manage skin conditions within their scope of practice.
- **Complication Management for Aesthetics Practice -** learners will be able to manage non-surgical cosmetic procedure complications. This unit also requires learners to carry out post-procedure evaluation and reflection for continuous improvement.
- **Laser Core of Knowledge** – learners will be able to understand the core principles of laser safety when carrying out a laser procedure within aesthetic practice.
- **Tattoo Fade and Removal using Q-Switched Laser Systems** – learners will be able to remove or fade pigments for cosmetic and decorative tattoos using Q-Switched Lasers, whilst following safe working practices and identifying and controlling hazards. The learners will be able to identify the skin condition, the tattoo colour pigments and where possible, the type of pigment to be removed.

The learning outcomes and assessment criteria for each unit are outlined in the unit specifications.

Delivering the Qualification

All centres are required to complete an approval process to be recognised as an approved centre. Centres must have the ability to support learners and:

- have in place qualified and experienced assessors. All assessors are required to undertake regular continued professional development (CPD)
- access to the physical resources needed to support the delivery of the qualification and learner achievement.

Centres must commit to working with QUALIFI and its team of External Quality Assurers (EQAs). Approved centres will be monitored by QUALIFI EQAs to ensure compliance with QUALIFI requirements and to ensure that learners are provided with appropriate learning opportunities, guidance, and formative assessment.

QUALIFI, unless otherwise agreed:

- sets all assessments;
- quality assures assessments prior to certification;
- provides the criteria to award the final mark and issues certificates.

Centre staffing

Staff delivering this qualification should:

- be occupationally competent and technically knowledgeable in the area[s] they are assessing
- have recent relevant experience in the specific area they will be assessing and quality assuring.
- hold, or be working towards, the relevant Assessor/ Internal Quality Assurers (IQAs) qualification (s).

Assessors are assessing learner performance in a range of tasks to ensure the evidence they produce meets the requirements of the unit assessment criteria. To do this effectively assessors need a thorough understanding of assessment and quality assurance practices, as well as in-depth technical understanding related to the qualifications they are assessing.

To support assessors and the centre's internal quality systems, IQAs must have appropriate teaching and vocational skills, knowledge and expertise and be familiar with the occupation and technical content covered within the qualification.

Continuing professional development (CPD)

Centres are expected to support the CPD of their staff to maintain current and up-to-date knowledge of the occupational area and ensure best practice in delivery, mentoring, training, assessment and quality assurance.

For the delivery of the QUALIFI Level 5 Certificate in Tattoo Fade and Removal qualification the following centre requirements need to be in place:

Trainer Requirements

Trainers must be appropriately qualified and occupationally competent in the areas they are training. They must have:

- A minimum of 2 years' experience in the procedures for which they will be training and supervising.
- A Level 4 Certificate in Education and Training or equivalent.
- Appropriate indemnity insurance
- Undertaken 30 hours Continued Professional Development (CPD) relating to aesthetic practice to maintain and update their skills and knowledge within the last year
- Current and valid Basic Life Support (BLS) and anaphylaxis management qualification

Assessor Requirements

Assessors must be appropriately qualified and occupationally competent in the areas they are assessing. They must have:

- A minimum of 2 years' experience in the procedures for which they will be assessing.
- A Level 4 Certificate in Education and Training or equivalent.
- A Level 3 Certificate in Assessing Vocational Achievement or be working towards
- Appropriate indemnity insurance
- Undertaken 30 hours Continued Professional Development (CPD) relating to aesthetic practice to maintain and update their skills and knowledge within the last year
- Current and valid Basic Life Support (BLS) and anaphylaxis management qualification

Internal Quality Assurer Requirements

Internal Quality Assurers (IQAs) must be appropriately qualified and occupationally competent in the areas they are internally quality assuring. They must have:

- A minimum of 2 years' experience in the procedures for which they will be internally quality assuring.
- A Level 3 Certificate in Assessing Vocational Achievement
- A Level 4 Award in the Internal Quality Assurance of Assessment Processes and Practice and/or Level 4 Certificate in Leading the Internal Quality Assurance of Assessment Processes and Practice or be working towards
- Appropriate indemnity insurance
- Undertaken 30 hours Continued Professional Development (CPD) relating to aesthetic practice to maintain and update their skills and knowledge within the last year.

Quality assurance

Approved Centres must have effective quality assurance systems in place to ensure robust qualification delivery and assessment, which includes internal monitoring and review procedures.

Qualifi will appoint approved External Quality Assurers (EQAs) to monitor the assessment and internal quality assurance carried out by centres and ensure that assessment is valid and reliable. Please see QUALIFI's *External Quality Assurance Policy.*

Learner Recruitment, Induction and Registration

Recruitment

Approved Centres are responsible for reviewing and making decisions as to the applicant's ability to complete the learning programme successfully and meet the demands of the qualification. The initial assessment by the centre will need to consider the support that is readily available or can be made available to meet individual learner needs as appropriate.

During recruitment, approved centres need to provide learners with accurate information on the title and focus of the qualification for which they are studying.

The qualification has been designed to be accessible without artificial barriers that restrict access. For this qualification, applicants must be aged 19 or over.

In the case of applicants whose first language is not English, then IELTS 6 (or equivalent) is required. International qualifications will be checked for appropriate enrolment to UK higher education postgraduate programmes where applicable. The applicants are normally required to produce two supporting references, at least one of which should preferably be academic.

Entry Criteria

The qualification has been designed to be accessible without artificial barriers that restrict access and progression. Entry to the qualifications will be through centre interview and learners will be expected to hold the following:

- QUALIFI Level 4 Certificate in Anatomy and Physiology for Aesthetics Practice or equivalent
- QUALIFI Level 4 Certificate in Laser, Light and Energy-Based Procedures or equivalent

Or

- QUALIFI Level 4 Diploma in Aesthetic Procedures for Skin Rejuvenation including unit AP412: Skin rejuvenation using laser, light and energy-based devices.

Or

- QUALIFI Level 4 Diploma in Micropigmentation or equivalent

Plus:

- Current and valid Basic Life Support (BLS) and anaphylaxis management qualification

Learner induction

Approved Centres should ensure all learners receive a full induction to their study programme and the requirements of the qualification and its assessment.

All learners should expect to be issued with the course handbook and a timetable and meet with their personal tutor and fellow learners. Centres should assess learners carefully to ensure that they can meet the requirements of the qualification and that, if applicable, appropriate pathways or optional units are selected to meet the learner's progression requirements.

Centres should check the qualification structures and unit combinations carefully when advising learners. Centres will need to ensure that learners have access to a full range of information, advice and guidance to support them in making the necessary qualification and unit choices.

All learners must be registered with QUALIFI within the deadlines outlined in the QUALIFI *Registration, Results and Certification Policy and Procedure*.

Recognition of Prior Learning

Recognition of Prior Learning (RPL) is a method of assessment (leading to the award of credit) that considers whether learners can demonstrate that they can meet the assessment requirements for a unit through knowledge, understanding or skills they already possess and so do not need to develop through a course of learning.

QUALIFI encourages centres to recognise learners' previous achievements and experiences whether at work, home or at leisure, as well as in the classroom. RPL provides a route for the recognition of the achievements resulting from continuous learning. RPL enables recognition of achievement from a range of activities using any valid assessment methodology. Provided that the assessment requirements of a given unit or qualification have been met, the use of RPL is acceptable for accrediting a unit, units, or a whole qualification.

Evidence of learning must be valid and reliable. For full guidance on RPL please refer to QUALIFI's *Recognition of Prior Learning Policy*.

Data Protection

All personal information obtained from learners and other sources in connection with studies will be held securely and will be used during the course and after they leave the course for a variety of purposes and may be made available to our regulators. These should be all explained during the enrolment process at the commencement of learner studies. If learners or centres would like a more detailed explanation of the partner and QUALIFI policies on the use and disclosure of personal information, please contact QUALIFI via email support@QUALIFI-international.com

Learner Voice

Learners can play an important part in improving the quality through the feedback they give. In addition to the ongoing discussion with the course team throughout the year,

centres will have a range of mechanisms for learners to feedback about their experience of teaching and learning.

Professional Development and Training for Centres

QUALIFI supports its approved centres with training related to our qualifications. This support is available through a choice of training options offered through publications or through customised training at your centre.

The support we offer focuses on a range of issues including:

- planning for the delivery of a new programme
- planning for assessment and grading
- developing effective assignments
- building your team and teamwork skills
- developing learner-centred learning and teaching approaches
- building in effective and efficient quality assurance systems.

Please contact us for further information.

Progression and Links to other QUALIFI Programmes

Completing the **QUALIFI Level 5 Certificate in Tattoo Fade and Removal** will enable learners to progress to:

- QUALIFI Level 5 Certificate or Diploma in Aesthetic Practice
- QUALIFI Level 6 Certificate or Diploma in Aesthetic Practice
- Employment in an associated profession.

Qualification Structure and Requirements

Credits and Total Qualification Time (TQT)

The QUALIFI Level 5 Certificate in Tattoo Fade and Removal is made up of **30** credits which equates to **300** hours of TQT.

Total Qualification Time (TQT): is an estimate of the total amount of time that could reasonably be expected to be required for a learner to achieve and demonstrate the achievement of the level of attainment necessary for the award of a qualification.

Examples of activities that can contribute to Total Qualification Time include: guided learning, independent and unsupervised research/learning, unsupervised compilation of a portfolio of work experience, unsupervised e-learning, unsupervised e-assessment, unsupervised coursework, watching a prerecorded podcast or webinar, unsupervised work-based learning.

Guided Learning Hours (GLH): are defined as the time when a tutor is present to give specific guidance towards the learning aim being studied on a programme. This definition

includes lectures, tutorials and supervised study in, for example, open learning centres and learning workshops, live webinars, telephone tutorials or other forms of e-learning supervised by a tutor in real time. Guided learning includes any supervised assessment activity; this includes invigilated examination and observed assessment and observed work-based practice.

Rules of Combination for QUALIFI Level 5 Certificate in Tattoo Fade and Removal

To achieve this qualification a learner must successfully complete the **four** mandatory units – **30** credits

Unit Reference	Mandatory/Optional Units	Level	TQT	Credit	GLH
K/651/6012	Consultation and Advanced Skin Analysis using Technologies	5	100	10	75
L/651/6013	Complication Management for Aesthetic Practice	6	40	4	20
J/651/6011	Laser Core of Knowledge	4	10	1	8
M/651/6014	Tattoo Fade and Removal using Q-Switched Laser Systems	5	150	15	110
		Total	**300**	**30**	**208**

Rules of Combination for QUALIFI Level 5 Award in Laser Core of Knowledge

To achieve this qualification a learner must successfully complete the **one** mandatory unit – **1** credit.

Unit Reference	Mandatory/Optional Units	Level	TQT	Credit	GLH
J/651/6011	Laser Core of Knowledge	4	10	1	8
		Total	**10**	**1**	**8**

Achievement Requirements

Learners must demonstrate they have met all learning outcomes and assessment criteria for all the required units to achieve these qualifications. QUALIFI will issue e-certificates directly to all successful learners registered with an approved QUALIFI centre.

Awarding Classification/Grading

This qualification grading is: **Pass/Fail**

All units will be internally assessed through practical observation, underpinning knowledge assessments and professional discussion. Assessments will be internally marked by the QUALIFI approved centre and subject to external quality assurance by QUALIFI.

Assessment Strategy and Methods

QUALIFI will provide the assessment methodology and marking guidelines for each unit of this qualification. Assessments will address all learning outcomes and related assessment criteria, all of which must be demonstrated/passed in order to achieve the qualification.

Assessments will enable learners to draw on case studies and clinical practice related information and/or examples wherever possible. Practical skills will need to be demonstrated in a real or simulated clinical environment and observation by an assessor, see Assessment Guidance for further information.

The assessment tasks will require learners to draw on real organisational information or case studies to illustrate their answers. To support this activity during the programme of learning, centres are required to make sure that they mandatory case study requirements are met and wherever possible, encourage learners to draw on work-place opportunities to undertake research and investigation to support their learning.

QUALIFI provides a user-friendly e-portfolio system for candidates to upload their assessment evidence and assignments for Assessors to mark and IQAs to quality assure. Approved centres should undertake the QUALIFI centre development courses to understand how to use the e-portfolio and the benefits to learners and the centre.

Learner assessments will be internally marked by the approved centre and will be subject to external quality assurance by QUALIFI prior to certification.

1: Formative Assessment

Formative assessment is an integral part of the assessment process, involving both the Tutor/Assessor and the learner about their progress during the course of study. Formative assessment takes place prior to summative assessment and focuses on helping the learner to reflect on their learning and improve their performance and does not confirm achievement of grades/pass-mark at this stage.

The main function of formative assessment is to provide feedback to enable the learner to make improvements to their work. This feedback should be prompt, so it has meaning and context for the learner and time must be given following the feedback for actions to be complete. Feedback on formative assessment must be constructive and provide clear guidance and actions for improvement. All records should be available for auditing purposes, as QUALIFI may choose to check records of formative assessment as part of our ongoing quality assurance. Formative assessments will not contribute to the overall mark/achievement of the units.

2: Summative Assessment

Summative assessment is used to evaluate learner competence and progression at the end of a unit or component. Summative assessment should take place when the assessor deems that the learner is at a stage where competence can be demonstrated.

Learners should be made aware that summative assessment outcomes are subject to confirmation by the Internal Quality Assurer (IQA) and External Quality Assurer (EQA) and thus is provisional and can be overridden. Assessors should annotate on the learner work where the evidence supports their decisions against the assessment criteria. Learners will need to be familiar with the assessment and grading/marking criteria so that they can understand the quality of what is required.

Formative Assessment	**Summative Assessment**
used during the learning process	used at the end of the learning process
provides feedback on learning-in-process	evaluates achievement against learning outcomes and assessment criteria
dialogue-based, ungraded	graded Pass / Refer

Evidence of both formative and summative assessment MUST be made available at the time of external quality assurance – EQA.

Unit Specifications

Unit CO501: Consultation and Advanced Skin Analysis using Technologies

Unit code:

RQF level: Level 5

Unit Aim and NOS

(NOS: SKCANSC14 Carry out a thorough skin analysis using technologies)

- This unit is for aesthetic practitioners to recognise skin types, skin conditions and skin lesions using technologies. The rationale is to conduct a detailed and accurate assessment for aesthetic procedures for effective outcomes and client satisfaction.
- This unit is based on the NOS standard, part of the non-surgical cosmetic national occupational standards suite, which includes standards related to non-surgical cosmetic procedures to rejuvenate skin.
- Aesthetic practitioners will need to follow the non-surgical cosmetic procedure protocol, legislative, regulatory and organisational requirements to identify, assess and implement safe, hygienic and effective working practices.
- Aesthetic practitioners must have a valid First Aid at Work or Basic Life Support and Management of Anaphylaxis qualification to be able to: carry out basic life support and have access to life support equipment as identified in the complication management and/or emergency plan.

This unit coexists alongside Qualifi units:

CO401: Health, safety and hygiene for aesthetic procedures

CO402: Client consultation for aesthetic procedure.

NOS Performance Criteria (PC)

1. follow legal requirements and other relevant standards, insurance guidelines and, organisational protocols when carrying out a **skin analysis**
2. maintain your responsibilities for the health, safety, hygiene and welfare of the individual and yourself before, during and after the **skin analysis**
3. carry out a concise and comprehensive skin consultation to inform the **skin analysis**.
4. discuss and provide the rationale for the proposed **skin analysis** and the protocols for undertaking them.
5. ensure the individual's understanding and obtain informed consent for the proposed investigative procedure
6. identify and select the technology equipment to be used to carry out the skin analysis to determine, review and monitor the presenting skin condition, following organisational protocols

7. record and securely store visual media for future reference and monitoring purposes in accordance with legislative, regulatory and indemnity requirements
8. evaluate the presenting **skin type** and **skin condition** against known **skin classifications**
9. collate, analyse and evaluate the information gathered from the skin consultation, the **skin analysis** and available evidence base relating to the presenting skin condition to inform the treatment plan
10. discuss, formulate and agree with the individual the outcome based on the conclusion of the skin analysis to include:

    10.1. the best interests of the individual

    10.2. ethical responsibilities working within your scope of practice

    10.3. adapting communication styles to meet the individuals needs

    10.4. contraindications and potential comorbidities
11. refer to other professionals where indicated by the outcome of the **skin analysis**
12. record the information gathered and the outcomes of the skin analysis to meet legal requirements and organisational protocols
13. review and reflect on your performance to inform continuous professional development

NOS Knowledge and Understanding (KU)

1. the legal requirements and other relevant standards, insurance guidelines and, organisational protocols when carrying out a **skin analysis**
2. how to maintain your role and responsibilities for the health, safety and welfare of the individual and yourself before, during and after the **skin analysis**
3. the importance of working within the scope of your practice
4. the rationale for the proposed skin analysis, expected findings in different skin types and the role of evidence-based practice
5. the protocols for the correct and safe use of skin analysis technologies
6. how to interpret outcomes from the skin analysis procedure
7. how to review and monitor the presenting skin condition, following organisational protocols
8. the importance and requirements of gaining informed consent
9. the reasons for taking consensual visual media of the individual's treatment area and storing in accordance with the service, legislative, insurance and organisational requirements
10. how to evaluate the features and severity of presenting skin conditions in relation to known skin classifications
11. how the skin consultation, initial assessment, available evidence and the skin analysis outcomes collectively inform a bespoke treatment plan

12. how to critically evaluate the evidence base
13. the **anatomy and physiology** relevant to this standard
14. the normal and adverse **signs and patterns** of skin conditions across all skin types
15. the importance of recognising suspicious skin irregularities and lesions, and referring to a relevant healthcare professional
16. the biological variables, associated symptoms, physiological indicators and comorbidities that can contribute to the pathophysiology of the observed skin changes
17. the biochemical markers that can result in skin changes
18. how to develop an agreed treatment plan with the individual based on the conclusion of the skin analysis, to include:
    18.1. the impact on the prognosis
    18.2. the variety of options available for management
19. how to complete accurate, secure and contemporaneous records of the information gathered and the outcomes of the skin analysis to meet legal requirements and organisational protocols, considering:
    19.1. the rights of the individual
    19.2. audit and accountability
20. the importance of collaboration with competent professionals to support effective and safe working practices
21. the importance to engage in and document continuous professional development, up-to-date information policies, procedures and best practice guidance.

Learning Outcomes, and Assessment Criteria

Learning Outcomes. To achieve this unit a learner must be able to:		**Assessment Criteria: Assessment of these outcomes demonstrates a learner can:**		**NOS Ref:**
LO1	Prepare for advanced skin analysis using technologies.	1.1	Understand and follow the scope of practice, legal requirements, standards and protocols for carrying out an **advanced skin analysis**.	PC1 KU1, KU3
		1.2	Understand and maintain responsibility for health, safety and welfare of the client and practitioner throughout the **advanced skin analysis.**	PC2 KU2
		1.3	Outline the rationale for the proposed **advanced skin analysis**,	PC4

			expected findings in **different skin types** and the role of evidence-based practice.	KU4
LO2	Conduct a thorough consultation and advanced skin analysis using technologies.	2.1	Carry out a concise and comprehensive consultation to inform the **advanced skin analysis**.	PC3
		2.2	Ensure the client's understanding and obtain informed consent for the proposed investigative procedure.	PC5 KU8
		2.3	Explain the reasons for gaining and storing consensual visual media in accordance with legal, insurance and organisational requirements.	KU9
		2.4	Outline the protocols for the correct and safe use of **advanced skin analysis** technologies.	KU5
		2.5	Use equipment for **advanced skin analysis** to determine the presenting skin condition and interpret the outcomes.	PC6 KU6 KU7
		2.6	Explain the **anatomy and physiology** relevant to the treatment area and the procedure	KU13
		2.7	Describe the normal and adverse **signs and patterns** of skin conditions across all skin types.	KU14
		2.8	Explain the importance of recognising suspicious skin irregularities and lesions and referring to a healthcare professional.	KU15
		2.9	Explain the biological variables, associated symptoms, physiological indicators and comorbidities that can contribute to the pathophysiology of the observed skin changes.	KU16
		2.10	Describe the biochemical markers that can result in skin changes.	KU17

LO3	Complete the consultation and evaluate the advanced skin analysis.	3.1	Record, maintain and store, detailed procedure records and visual media to meet legal and organisational requirements and considering: • the client's rights • audit and accountability	PC7 KU19
		3.2	Evaluate the features and severity of the presenting **skin type** and **skin condition** against known **skin classifications.**	PC8 KU10
		3.3	Collate, analyse, and critically evaluate the information from the consultation and **skin analysis** to inform procedure plan.	PC9 KU11 KU12
		3.4	Document the outcomes of the consultation and **skin analysis** according to legal requirements and organisational protocols.	PC12
LO4	Plan the course of procedures based on consultation and advanced skin analysis.	4.1	Develop and agree a personalised procedure plan based on: • the skin analysis outcome and impact on the prognosis • the options available for procedure management • the client's best interests • ethical responsibilities working within scope of practice • adapting communication styles to meet client's needs • contraindications and potential comorbidities	PC10 KU18
		4.2	Explain the importance to collaborate with and to refer to other professionals where indicated through the consultation and **skin analysis.**	PC11 KU20
		4.3	Summarise the importance of engaging in and documenting continuous professional	PC13 KU21

			development, having up-to-date information, policies, procedures and best practice guidance	

Behaviours

The following behaviours underpin the delivery of services in the aesthetic sector. These behaviours ensure that clients receive a positive impression of both the organisation and the aesthetic practitioner:

1. Meeting the organisation's standards of behaviour
2. Greeting the client respectfully and in a friendly manner
3. Communicating with the client in a way that makes them feel valued and respected
4. Treating the client courteously and helpfully at all times
5. Adapting behaviour to respond effectively to different client behaviour
6. Checking with the client that you have fully understood their expectations
7. Responding promptly and positively to the client's questions and comments
8. Recognising information that the client might find complicated and checking whether they fully understood
9. Explaining clearly to the client any reasons why their needs or expectations cannot be met
10. Maintaining effective, hygienic and safe working methods
11. Adhering to workplace, supplier's and manufacturers' instructions for the safe use of equipment, materials and products
12. Meeting both organisational and industry standards of appearance.

Indicative Content

Skin analysis

1. visual examination of the skin
2. manual examination of the skin
3. magnifying light
4. Woods lamp
5. digital skin scanner
6. derma scope
7. hydration monitor/scanner

Skin classification

1. Fitzpatrick scale
2. Glogau scale photo-damage
3. Lancer scale
4. Phenotype and genotype
5. Monk skin tone scale
6. Rubins scale

Skin condition

1. lax elasticity
2. hyper and hypo pigmentation
3. congested
4. pustular
5. fragile
6. vascular
7. sensitised
8. sensitive
9. dehydrated
10. photo-sensitive
11. photo-aged
12. lack-lustre

Skin type

1. dry
2. oily
3. combination
4. balanced

Anatomy and Physiology

1. anatomy and physiology of the skin
2. interdependence of body systems and organs, tissues and cellular organisation and homeostasis,
3. the skin barrier function, regulation and impact of wound healing
4. relative and absolute contraindications and related pathologies
5. intrinsic and extrinsic factors that affect skin condition
6. acne grading criteria

Signs and patterns

1. the presence, extent and location of erythema
2. vascular patterns within the skin
3. signs indicative of scarring and fibrosis
4. discolouration, hyper or hypopigmentation of the skin
5. primary and secondary skin lesions
6. benign and suspicious skin lesions
7. presence of contact irritant or allergy response
8. presence of infection or infestation
9. hyper or hypo secretion of sebum and sweat

Glossary:

- **Woods lamp/light. -** a tool used to examine the skin, hair and scalp. The lamp emits an ultraviolet light, or black light. This makes certain types of cells glow or change colour. It is quick and painless and is used to identify skin conditions and bacterial, fungal and parasitic conditions.

- **Digital Skin scanner** – this tool is a device that can take photographs of the skin and allows it to be viewed at a microscopic level. It can identify many different skin conditions and supports the recommendation of the correct skin care, with a customised treatment and homecare plan.
- **Derma scope** – a handheld device used to magnify the skin, up to 10 times larger than the view from the naked eye, to help identify skin conditions. Used by dermatologists for example to identify skin cancers, skin infestations and hair loss.
- **Hydration monitor/scanner** - a device that takes precise measurements of the hydration status of the skin.
- **Skin Types and Skin Classification**: The Fitzpatrick skin classification was developed to predict a person's lifetime risk of developing skin cancer. This used a scale (typically I – VI) to judge how skin reacts to light, in particular whether it is likely to burn or tan. Most practitioners use a combination of hair and skin colour, eye colour and burn/tan response to determine the initial test patch and treatment settings.
- **Glogau Scale** - a classification system used to measure the severity of photoaging, wrinkles, to help the practitioner to pick the most appropriate procedure for their client.
- **Lancer Scale** – a type of skin classification used based on an individual's ancestry and geography, as appearances can be deceiving, helping to reduce the risk of adverse reactions.
- **Genotype** - inherited genes responsible for characteristics and traits from parent to offspring, based on the dominant and recessive genes, traits that are unlikely to change or can predispose to conditions e.g., eye/hair colour and texture/skin type - ethnicity/blood type/diabetes/heart disease/cancer.
- **Phenotype** - observable physical characteristics and appearance that can change in response to genotype, evolution, the environment and the aging process - nature (inherited genes) and nurture (lifestyle impact): e.g., weight/height/health/disposition/ skin type - characteristics/hair type.
- **Monk skin tone scale** – developed by Dr Ellis Monk in partnership with Google's AI Team. It is a 10-shade scale used to improve the representation of skin tone in technology and products by examining skin tone, stratification and colourism.
- **Rubins scale -** is used to classify signs of skin aging. It recognises skin changes in texture and pigment and changes in pigment related to ultraviolet damage. E.g. ephelides in young people and lentigines in older individuals.
- **Evidence-based practice -**evidence-based practice is based on the best available, current, valid and relevant evidence.
- **Informed consent -** permission for the practitioner to provide care, treatment or other services given by the individual, or someone acting on their behalf, after receiving all the information they reasonably need to make that decision.
- **Refer –** to refer is to ask someone else to provide care, treatment or other services which are beyond the scope of the practitioner's practice, or where relevant because the individual has requested a second opinion.
- **Scope of practice -** scope of practice is the procedures, actions and processes that a practitioner is allowed to undertake according to their specific education, level of expertise and competency.
- **Visual media -** visual media is used to cover all images recorded including video,

photography and digital microscopic images of the hair and/or scalp. This must be carried out with the individual's consent.

Suggested Resources

- Beauty Therapist's Guide to Professional Practice and Client Care Andrea Barham Nov 2020
- https://www.hse.gov.uk/
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Unit CO602: Complication Management for Aesthetic Practice

Unit code:

RQF level: Level 6

Unit Aim and NOS

(NOS: SKANSC15 Complication management for non-surgical cosmetic procedures)

- This unit is for aesthetic practitioners to manage aesthetic procedure complications. They will also be required to do a post-procedure evaluation and reflection for continuous improvement.
- This unit is based on the NOS standard, part of the non-surgical cosmetic national occupational standards suite, which includes standards related to non-surgical cosmetic procedures to rejuvenate skin.
- Aesthetic practitioners will need to follow the non-surgical cosmetic procedure protocol, legislative, regulatory and organisational requirements to identify, assess and implement safe, hygienic and effective working practices.
- Aesthetic practitioners must have a First Aid at Work qualification or equivalent and be able to carry out the functions within SFHCHS36: Basic life support and have access to life support equipment as identified in the complication management and/or emergency plan.

This unit coexists alongside Qualifi units:

CO401: Health, safety and hygiene for aesthetic procedures

CO402: Client consultation for aesthetic procedure.

NOS Performance Criteria (PC)

1. ensure there are protocols in place to deal with the range of emergencies/ complications
2. check the suitability and effectiveness of systems and protocols required to prevent and deal with emergencies associated with non-surgical cosmetic procedures
3. analyse the need for methods of monitoring post non-surgical cosmetic procedures communication and providing post instructions to individuals
4. Identify signs and symptoms of the potential risks and complications with non-surgical cosmetic procedures and refer to the emergency plan including: -

   4.1 undertake observations, physical examinations and oral questioning to complete an assessment to determine a potential complication.

   4.2 categorise risk in order to select appropriate risk management protocols.
5. manage the **risks** and **complications** associated with nonsurgical cosmetic procedures including: -

   5.1 analyse the options available in the event of an adverse reaction post non-surgical cosmetic procedure

5.2 recommend strategies for dealing with common side effects of non-surgical cosmetic procedures

6. manage emergencies when carrying out a non-surgical cosmetic procedure
7. ensure continuous monitoring of the individual during and immediately after the non-surgical cosmetic procedure.
8. complete the individual's non-surgical cosmetic procedure records and store in accordance with data legislation.
9. in the event of an adverse reaction or incident, take prompt corrective action as set out within the emergency plan to include:

   9.1 seek and implement immediate medical intervention from the identified healthcare professional trained to deal with complications as set out in the emergency plan

10. report and record using the agreed reporting systems/mechanisms
11. review **risks** and **complications** protocols and documentation through reflective practice and audit
12. Provide all relevant information and **instructions** when handing over care to another professional

NOS Knowledge and Understanding (KU)

1. anatomy and physiology relevant to this standard
2. signs and symptoms of short-term, medium-term and long-term complications arising from non-surgical cosmetic procedures
3. the types of complications that may arise and the action to take
4. the range of healthcare professionals available and the complications they are trained to deal with
5. how to reduce risk and complications associated with non-surgical cosmetic procedures through individual selection and assessment through consultation, assessment and medical history
6. safe working practices to limit risk
7. prescribed and non-prescribed drug, herbal and supplement interactions with cosmetic treatments and emergency medications
8. pre-existing medical (physical, social and mental health) conditions that could increase risk and complications and affect administration of emergency medications and interventions
9. information and aftercare advice constructed to minimise risk and complications
10. how to manage the risks and complications associated with nonsurgical cosmetic procedures

11. why you must comply with ethical practice and work within the health and safety responsibilities in line with legislation
12. the importance of collaboration with competent professionals to support effective and safe working practices
13. how to manage emergencies when performing non-surgical cosmetic procedures
14. the protocols and action to take in the event of a medical emergency that presents a risk to life.
15. the protocols and action to take in the event of a medical emergency that does not present a risk to life
16. the importance of obtaining and following instructions from the identified healthcare professional in the event of an adverse reaction
17. the importance of referring and reporting the complication to a healthcare professional, supplier and manufacturer
18. how and when to seek further advice and support outside the practitioner's remit
19. the importance of discussing, reflecting, evaluating and recording the outcomes with the regulated healthcare professional to inform further action and future procedures
20. your responsibility and the reporting procedures for suspected malpractice
21. the importance of adhering to the emergency plan in the event of an adverse reaction
22. the legislative, insurance and organisational requirements for taking and storing visual media of the individual's treatment area
23. the legislative and regulatory requirements of completing and storing the individual's non-surgical cosmetic procedure records
24. the systems and processes that support quality assurance and non-surgical cosmetic procedure improvements
25. the importance of monitoring the health and wellbeing of the individual

Learning Outcomes, and Assessment Criteria

Learning Outcomes. To achieve this unit a learner must be able to:		**Assessment Criteria: Assessment of these outcomes demonstrates a learner can:**		**NOS Ref:**
LO1	Plan how to manage emergencies and complications within aesthetic practice.	1.1	Ensure there are protocols in place to deal with the range of emergencies and complications.	PC1
		1.2	Check the suitability and effectiveness of systems and protocols required to prevent and deal with emergencies associated with aesthetic practice.	PC2

		1.3	Analyse the need for methods of monitoring post-procedure communication and providing client aftercare instructions	PC3
		1.4	Explain the **anatomy and physiology** relevant to complication management for the aesthetic practice	KU1
LO2	Recognise the potential risks, complications and emergencies associated with aesthetic practice.	2.1	Identify the relevant risks, complications and emergencies associated with aesthetic practice.	PC4
		2.2	Identify and describe the signs and symptoms of common side effects, potential risks, short, medium and long-term complications and emergencies associated with aesthetic practice.	PC4 KU2, KU10 KU13
		2.3	Refer to the emergency plan, undertaking observation, physical examination and oral questioning to assess a potential complication and to determine the action to take.	PC4 KU3
		2.4	Refer to the emergency plan to categorise the risk in order to select appropriate risk management protocols.	PC4
LO3	Manage the risks, complications and emergencies associated with aesthetic practice.	3.1	Identify the range of healthcare professionals available and the complications they are trained to handle.	KU4
		3.2	Explain how to reduce and manage risks and complications associated with aesthetic practice.	PC5 KU5, KU6 KU9
		3.3	Recommend strategies for dealing with common side effects and analyse the options available in the event of a post-procedure adverse reaction.	PC5
		3.4	Explain the prescribed and non-prescribed drug, herbal and supplement interactions with aesthetic procedures and emergency medications.	KU7

		3.5	Describe pre-existing medical (physical, social and mental health) conditions that could increase risk and complications and affect administration of emergency medications and interventions.	KU8
		3.6	Ensure continuous monitoring of the client during and immediately after the aesthetic procedure.	PC7
		3.7	Take prompt corrective action, in the event of an adverse reaction or incident including: • following the emergency plan • immediate intervention from the identified healthcare professional, trained to deal with such complications	PC6 PC9 KU21
		3.8	Complete and store the client's aesthetic procedure records following data legislation.	PC8
LO4	Review, record and report, the risks, complications and emergencies associated with aesthetic practice.	4.1	Record and report the risks and complications using the agreed reporting systems and mechanisms.	PC10
		4.2	Explain the importance of collaboration with competent professionals and compliance with ethical practice, health and safety responsibilities and legislation.	KU11 KU12
		4.3	Review the **risks** and **complications** protocols and documentation through reflective practice and audit.	PC11
		4.4	Explain the protocols and actions to take in the event of medical emergencies that do and do not present a risk to life.	KU14 KU15
		4.5	Explain the importance of obtaining and following instructions from the identified healthcare professional in the event of an adverse reaction.	KU16

		4.6	Explain the importance to provide all relevant information and **instructions** when handing over care to another professional	PC12
		4.7	Explain the importance of referring and reporting the complication to a healthcare professional, supplier and/or manufacturer.	KU17
		4.8	Explain how and when to seek further advice and the importance to review, evaluate and record the outcomes with healthcare professionals to inform further actions and procedures.	KU18 KU19
		4.9	Define responsibilities and the reporting procedures for suspected malpractice.	KU20
		4.10	Outline the legal and organisational requirements for taking and storing client records and visual media.	KU22 KU23
		4.11	Explain the systems and processes that support quality assurance and aesthetic practice improvements.	KU24
		4.12	Explain the importance of monitoring the client's health and wellbeing throughout the aesthetic procedure.	KU25

Behaviours

The following behaviours underpin the delivery of services in the aesthetic sector. These behaviours ensure that clients receive a positive impression of both the organisation and the aesthetic practitioner:

1. Meeting the organisation's standards of behaviour
2. Greeting the client respectfully and in a friendly manner
3. Communicating with the client in a way that makes them feel valued and respected
4. Treating the client courteously and helpfully at all times
5. Adapting behaviour to respond effectively to different client behaviour
6. Checking with the client that you have fully understood their expectations
7. Responding promptly and positively to the client's questions and comments
8. Recognising information that the client might find complicated and checking whether they fully understood
9. Explaining clearly to the client any reasons why their needs or expectations cannot be met
10. Maintaining effective, hygienic and safe working methods

11. Adhering to workplace, supplier's and manufacturers' instructions for the safe use of equipment, materials and products
12. Meeting both organisational and industry standards of appearance.

Indicative Content

Risks and complications - ***Immediate medical intervention requiring urgent attention***

1. Anaphylaxis – severe allergic reaction – acute systemic toxicity
2. Vascular occlusion/compression occlusion
3. Severe unremitting pain
4. Difficulty speaking or swallowing
5. Respiratory distress
6. Arterial puncture
7. Severe abnormal oedema/swelling
8. Severe burn
9. Severe cuts
10. Severe infection - systemic/topical
11. Severe haematoma
12. Migraine/severe headache
13. Severe Nausea/sickness
14. Necrosis
15. Compromised capillary refill
16. Blindness - Bi lateral and unilateral
17. Immediate and delayed visual disturbances/double vision
18. Vasovagal response/fainting
19. Seizures
20. Severe injury to eyes

Immediate intervention

1. Mild bleeding
2. Moderate to mild swelling
3. Moderate to mild allergic reactions
4. Moderate to mild burn
5. Moderate to mild Infection
6. Abscess formation
7. Cuts and abrasions
8. Delayed wound healing response
9. Onset delayed auto immune
10. Inflammation
11. Hives
12. Nerve damage
13. Hypersensitivity
14. Headache
15. Biofilm formation
16. Mild feeling of nausea
17. Flu-like symptoms or respiratory infection

18. Erythema/irritation/tenderness of tissues
19. Dry eyes/mouth
20. Temporary and moderate symptoms or impairment to periocular or perioral areas
21. Changes in skin texture/appearance in adjacent areas
22. Pruritus - Mild itchy skin
23. Needle stick injuries

Cosmetic Complications Requiring Action

1. Sub-optimal cosmetic outcome/asymmetry
2. Contour irregularities
3. Worsening of cosmetic appearance
4. Non-responder/short lived duration
5. Migration of product
6. Scarring
7. Bruising - transitory or definite
8. Prolonged/chronic oedema
9. Nodule/granuloma formation
10. Tyndall effect - dyspigmentation
11. Hyper/hypo pigmentation
12. Telangiectasia/neovascularisation
13. Transitory or definite change of skin colour – hemosiderin
14. Transitory or definite skin textural changes
15. Transitory or definite formation of skin disorder
16. Muscle atrophy
17. Petechiae - Small blood blisters

Instructions

1. The individual and aesthetic practitioner's legal rights and responsibilities
2. Immediate and ongoing support and advice
3. Complication management and/or emergency plan
4. Post-procedure expectations and associated time frames
5. Pre and post-procedure instructions and care
6. Restrictions and associated risks
7. Future procedures
8. Complaints procedure or concerns protocol

Glossary

Adverse reaction - an adverse reaction is an 'unexpected' reaction or outcome following a service, i.e. fainting.

Contra action - a contra-action is an 'expected' reaction or outcome following a service, i.e. erythema

Emergency plan - an emergency plan is a structured set of procedures and guidelines designed to be implemented in response to unexpected and potentially dangerous situations or events. The primary purpose of an emergency plan is to ensure the safety and well-being of individuals.

Evidence-based practice - evidence-based practice is based on the best available, current, valid and relevant evidence.

First aid - first aid can refer to first aid at work qualifications or equivalent and first aid mental health awareness.

Infection Prevention and control measures - refers to evidence-based practices and procedures that, when applied consistently in treatment settings, can prevent or reduce the risk of transmission of microorganisms.

Microbial contamination - microbiological contamination refers to the presence of unwanted microbes such as bacteria, fungi, viruses and spores.

Protocol - a protocol is a standard procedure to ensure best practice and compliance when providing services, i.e. follow manufacturer's instructions.

Risks and complications - an unanticipated problem that arises following, and is a result of, a procedure or treatment.

Universal precautions and standard precautions - universal precautions are relevant if the practitioner is exposed to blood and/or some bodily fluid. It is the responsibility of the practitioner to implement infection prevention and control measures to prevent exposure to blood borne pathogens or Other Potentially Infectious Materials (OPIM). Standard precautions are the basic level of infection control that should be used at all times within the working environment, such as hand hygiene, personal protective equipment, prevention of needle stick and injuries from sharps, risk assessment, respiratory hygiene and cough etiquette, environmental cleaning and waste disposal.

Suggested Resources

Aesthetic Complications and Other Interesting Cases by Dr Patrick Treacy January 2023

Unit CO403: Laser Core of Knowledge

Unit code:

RQF level: Level 4

Unit Aim

- Learners will be able to understand the core principles of laser safety when carrying out a laser procedure within aesthetic practice.
- Learners will gain knowledge of laser and light including safety legislation, electromagnetic radiation, and tissue interaction.
- This unit has been mapped against the MHRA Guidance on the safe use of lasers, intense light source systems and LEDs in medical, surgical, dental, and aesthetic practices.

Fundamentals of optical radiation devices and their interaction with tissue

- Understand how the different types of optical radiation are produced, what types of active media are used, and emission modes and delivery systems.
- Understand the characteristics of optical radiation emitted from different types of equipment.
- Be familiar with the intended purpose of the optical radiation equipment.
- Understand the effects of optical radiation exposure to eyes, skin and other tissue.

Hazards and how to control them

- Understand the principles of risk assessment.
- Be aware of the effects of exposure and health hazards, including eye, skin and tissue, which can arise from the use of laser, IPL or other optical radiation equipment.
- Be aware of the basic principles of the maximum permissible exposure levels and how to keep exposure of unprotected skin and eyes below these levels.
- Understand the hazards from optical radiation equipment, including optical beams, electrical hazards, equipment malfunctions, fire risks and smoke plume effects.
- Understand the hazards to patients and clients and the methods of minimising risks.
- Understand the hazards associated to the different staff groups and methods for minimising risks.
- Understand the hazards from reflections or absorption of the optical radiation beam with respect to instruments, or reflective surfaces, or other equipment.
- Understand the hazard control procedures, including the use of personal protection.
- Be familiar with the additional precautions that may be necessary when undertaking non-routine activities with the equipment.

Safety management

- Be familiar with the basic principles of the administration of safety.
- Be aware of the relevant legislation, standards and hazard classifications relevant to lasers, IPLs and LEDs.

- Understand the safety procedures and policies governing optical radiation equipment use, including the local rules, and controlled area.
- Understand the role of the laser protection adviser, laser protection supervisor, authorised users and assisting staff.
- Be aware of the principles and requirements of equipment quality assurance processes and procedures.
- Be aware of the meaning of the warning labels and signs associated with optical radiation equipment.
- Understand the general principles of emergency action and how to report accidents.

https://assets.publishing.service.gov.uk/media/5a75936f40f0b6360e475291/Laser_guidance_Oct_2015.pdf MHRA Lasers, intense light source systems and LEDs – guidance for safe use in medical, surgical, dental and aesthetic practices.

Learning Outcomes, and Assessment Criteria

Learning Outcomes. To achieve this unit a learner must know and understand:		**Assessment Criteria: Assessment of these outcomes demonstrates a learner can:**	
LO1	The fundamentals of optical radiation devices (laser and Light technologies) and their interaction with tissue.	1.1	Appraise how the different types of optical radiation are produced, the types of active media used, and emission modes and delivery systems.
		1.2	Compare the characteristics of optical radiation emitted from different types of equipment.
		1.3	Describe the intended purpose of the optical radiation equipment.
		1.4	Examine the effects of optical radiation exposure to eyes, skin and other tissues.
LO2	Hazards and how to control them when using laser and light technologies in a laser clinic.	2.1	Determine the principles of a risk assessment.
		2.2	Explain the effects of exposure and the potential hazards to health, including eye, skin and tissues, from using laser, IPL or other optical radiation equipment.
		2.3	Describe the basic principles of the maximum permissible exposure levels

		2.4	Describe the hazards from optical radiation equipment, including optical beams, electrical hazards, equipment malfunctions, fire risks and smoke plume effects.
		2.5	Explain the hazards to clients and the methods used to minimise risks.
		2.6	Explain the hazards associated to the different staff groups and methods for minimising risks when using laser or light technologies.
		2.7	Understand the hazards from reflections or absorption of the optical radiation beam with respect to instruments, or reflective surfaces, or other equipment.
		2.8	Explain the hazard control procedures in place within the laser clinic, including the use of personal protection.
		2.9	Explain the additional precautions that may be necessary when undertaking non-routine activities with laser and light technologies.
LO3	Safety measures, legislation and management in a laser clinic.	3.1	Explain the basic principles of the administration of safety.
		3.2	Describe relevant legislation, standards and hazard classifications relevant to
		3.3	Outline the safety procedures and policies governing optical radiation equipment use, including the local rules, and controlled area
		3.4	Evaluate the role of the laser protection adviser, laser protection supervisor, authorised users and assisting staff.
		3.5	Outline the principles and requirements of equipment quality assurance processes and procedures

		3.6	Explain the meaning of the warning labels and signs associated with optical radiation equipment.
		3.7	Explain the general principles of emergency action and how to report accidents.

Indicative Content

Laser output mechanisms

- Continuous wave
- Gated or chopped CW mode
- Q-switched

Types of lasers used in medical applications

- Excimer
- Ruby
- Alexandrite
- Diode
- Nd:YAG
- CO2

Laser delivery systems for medical, surgical, dental, or aesthetic application:

- Beam delivery systems
- Fibre delivery systems

Typical clinical applications for Laser:

- Dentistry
- Dermatology
- General surgery

Intense pulsed light (IPL) applications

- Clinical applications
- Aesthetic applications

Electromagnetic spectrum and where Laser and IPLs appear on the spectrum

- Types of electromagnetic radiation
- Wavelength in nanometres
- Frequency

Effects of optical radiation on tissue

- Photo-thermal effect
- Photo-mechanical effect
- Photo-chemical effect
- Photo-ablative effect

Classification of Lasers and IPL

- **Laser classification scheme (Class 1-4)** including the types of lasers within each class and the hazard to eyes or skin
- **IPL classification scheme**. The standard IEC 62471 Photobiological safety of lamps and lamp systems provides information on lamp classification that includes IPL systems

Nature of hazards

The dangers to patients and clients

- Stray optical radiation (laser/IPL)
- Eye injury
- Skin burn from damaged external filter (IPL)
- Skin burn from hot spots on filter (IPL)
- Burn/infection risk from broken optical fibres
- Risk of fire
- External (endotracheal tube ignition) and internal (body cavity)
- Risk of mistreatment

Dangers to staff

- Risk of fire
- Laser plume emissions
- Unexpected adverse events

Safety Administration

The legal requirement of a risk assessment under regulation 3 of the Management of Health and Safety at Work Regulations 1999

The principles of risk assessment. (Risk assessments should include determining the hazards associated with these 4 areas:

1. Equipment (purchased/loan/demonstration)

2. Personnel who may be at risk:

- Authorised user
- Patients/clients

- Other staff who work in the area – cleaners
- Maintenance staff
- Contractors
- Visitors
- Others

3. Procedure(s)

4. Location

Safety Mechanisms and Controlling Hazards

The Laser controlled area and the safety measures to be taken into consideration for controlling safety:

- Principles of maximum permissible exposure (MPE)
- Nominal ocular hazard distance (NOHD)
- Blinds and barriers
- Door interlocks/keypad locks
- No reflective surfaces
- Restrictive access to area

Awareness of Laser and IPL equipment safety

- Safety key or smart card
- Password protected
- If a foot switch is required, standby and ready mode

Protective eyewear, PPE and uniform

- Endoscopes
- Laparoscopes
- Slit lamp
- Sterile disposable gloves (latex free)
- Specialised hand and clothing protection
- The importance of wearing white/pale uniforms
- Covering clients' dark clothing

The key areas for preventing fires when using laser/IPL equipment

- Electrical hazards of Laser and IPL
- Surgical fires

Other thermal and operational issues that can cause serious burns to people.

- Laser thermal and operating issues such as optical fibres,
- Aiming beam
- Mirrors
- Beam stops
- Endoscopic sheath
- Metallic tubing, and instruments.
- It can also include IPL thermal and operational issues such as applicator cleaning and heat effects

Laser Safety Legislation

Specific legislation relating to Class 3B, and 4 medical lasers are followed. Specific legislation of the country you are working in is of the utmost importance. The list of legislation below is not an exhaustive list:

- The Control of Artificial Optical Radiation at Work Regulations
- Care Standards Act 2000 and the bodies responsible for the enforcement of this Act in England, Scotland, Wales, and Northern Ireland. (Healthcare Commission in England, the Independent Healthcare Inspectorate Wales, the Care Commission in Scotland, and in Northern Ireland, regulation is covered under The Health and Personal Social Services (Quality, Improvement and Regulation) (Northern Ireland) Order 2003
- Control of Substances Hazardous to Health Regulations 2002 (COSHH)
- Electricity at Work Regulations
- Health and Safety at Work etc. Act 1974. Note: known in Northern Ireland as the Health and Safety at Work (Northern Ireland) Order 1978
- Health and Safety (Safety Signs and Signals) Regulations 1996
- Management of Health and Safety at Work Regulations 1999
- Council licencing in England
- The Medical Devices Directive: Includes most other medical devices, ranging from first aid bandages to X-ray equipment. Lasers, IPLs and LEDs are covered by this Directive. National Minimum Standards – introduced in 2002 by the department of Health. They are essential standards that ensure patients/clients receive treatment in accordance with safe and proper procedures from a trained and competent operator in a safe environment. National minimum standards in Wales are regulated by the Healthcare Inspectorate Wales (HIW), in Northern Ireland it is overseen by RQIA, the CQC in England, and the Healthcare improvement in Scotland
- Personal Protective Equipment at Work Regulations 1992. These regulations require the employer to provide appropriate and adequate protective equipment to their employees where the risk to the employee cannot be adequately controlled by any other means (for example, protective eyewear)

- Personal Protective Equipment Regulations 2002. Regulations cover CE marking and supply issues. Compliance with BS EN 207 and BS EN 208 are a requirement under these regulations
- Private and Voluntary Healthcare Regulations (England) 2001. These cover several issues including the regulation of Class 3B and 4 lasers as well as IPL systems that may be used in the private healthcare sector. Regulations with a similar scope have been drafted by the Welsh, Scottish and Northern Ireland Authorities
- Provision and Use of Work Equipment Regulations 1998
- Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) 1995

Safety Standards

- BS EN 60601-1: Medical electrical equipment (General)
- BS EN 60601-2-22: Medical electrical equipment (Laser)
- BS 60601-2-57: Medical electrical equipment (IPL)
- BS EN 60825-1: Safety of laser products and the recommendation of appointing an LSO

Equipment Management

The importance of pre-use checks (not all checks apply to every device):

- Electrical safety
- Output parameters (energy, wavelength, beam profile, temporal pulse shape, etc.)
- Beam alignment
- Beam stop, shutter or attenuator
- Aiming beam
- Accuracy of timer (if applicable)
- Interlock operation
- Filters
- Emergency cut-off
- Warning lights
- Footswitch operation
- Protective eye-wear assessment
- Equipment accessories assessment
- Fibre connectors
- Full and accurate records should be kept of the above checks

The importance of keeping equipment records and ensuring that machinery is serviced by an appropriate professional, on a regular basis checks should be undertaken daily/weekly by the authorised users. Examples of checks can include:

- Check the laser/IPL output stops when the footswitch or finger-switch is released
- Check the device's alignment of the aiming beam with the therapeutic beam
- Check filters for scratches or wear and tear. Clean or replace if appropriate
- Check all system alarms and lights are operating appropriately
- Assess all device accessories such as cables and connectors ensuring they are undamaged and fit for purpose
- Check for scratches or signs of wear and tear on the lenses of protective eye wear
- All protective blinds, windows and doors are working correctly and are undamaged
- Warning lights are in good working order
- All warning signs are undamaged and illuminated signs work correctly
- Interlock operations are working correctly
- Annual or bi-annual checks should also be carried out. They will be like the initial pre-use tests

Glossary

Beam delivery system: describes the way that the laser or light beam is 'delivered' to the client. Methods include fibre optics or an articulated arm with a 'handpiece' or light guide.

Broad spectrum light: light that contains a wide range of 'colours' or wavelengths. The sun and intense pulsed light systems produce broad spectrum light.

Care Standards Act 2000: an Act of Parliament that came into effect in April 2002 (in England and Wales). The CSA2000 replaced the Nursing Homes Act 1984 which previously regulated the use of lasers. CSA2000 was introduced to improve the old Act and to bring the management, interpretation and inspection under the authority of the National Care Standards Commission (NCSC).

Chromophore: a 'target' such as melanin, water or haemoglobin that can absorb light of the appropriate wavelength. The chromophore for hair removal is melanin in the hair follicle and possibly the stem cells in the bulge.

Coherent/Coherence: a property of laser light that describes the way that the light waves travel 'in phase' or in step with each other.

Electromagnetic spectrum: the range of energies or radiations that include gamma rays, X rays, ultraviolet, visible, infrared and radio waves. Lasers and intense pulsed light systems used for hair removal typically emit beams in the visible or infrared part of this spectrum.

Fluence (J/cm-2): the amount of light energy delivered over a given treatment area. Quoted as Joules per square metre (J/cm2 or J/cm-2). It may also be referred to as energy density.

Intense Pulsed Light (IPL) System: a system that uses a powerful flash of 'light' of broad spectrum, non-coherent light. Filters are used in front of the flashlamp to remove unwanted wavelengths of light and pass through only those needed for treatment. Light from an

intense pulsed light system can be used to target a range of chromophores in the skin making them suitable for hair removal and/or skin photo-rejuvenation.

Interlock connector: a socket on a laser/intense pulsed light system that allows a switch (interlock) to be connected to a door/entrance. Opening the door will pause the laser/intense pulsed light system.

Laser : an acronym that describes the way that laser light is produced: **L**ight **A**mplification by the **S**timulated **E**mission of **R**adiation. A device which amplifies light and usually produces an extremely narrow beam of a single wavelength (one colour).

Laser Classification: the 'class' allocated to a laser (not intense pulsed light systems) from BSEN60825-1:1994. Medical laser devices are typically Class 4 (the highest classification) carrying the greatest risk of eye and skin injury.

Light Energy: with a laser or intense pulsed light system this refers to the emitted beam of light and its capacity to do work. Light is radiation that causes the sensation of vision. Even though some lasers and intense pulsed lights emit invisible radiation it is generally still referred to as light or light energy. Energy is expressed in Joules (J). Energy is the product of power (W) multiplied by pulse duration (typically milliseconds). See also Fluence.

Light Guide: the glass or quartz block used to deliver the light energy to the treatment site. Light guides are most commonly used on intense pulsed light systems.

Local Rules: local rules should be written for each specific application of a laser or intense pulsed light equipment. They should include details about the actual equipment in use, hazards or risks from the equipment, details of authorised users, methods of safe working and normal operating procedures, contact details of the LPA or LPS, accident procedures, safety checks and use of any safety equipment. Your LPA should be able to support you in writing and implementing local rules.

Maintenance (of equipment): tasks undertaken by the practitioner to maintain the correct performance of the system. This can include handpiece cleaning, cooling water top-up, cleaning display screens, checking filters.

Maximum Permissible Exposure (MPE) : the level of radiation (light) to which, under normal circumstances, a person may be exposed without suffering adverse effects, e.g., how much laser light can be withstood by the eye or skin before tissue damage occurs.

Monochromatic: light that contains a single wavelength or 'colour'. Laser light is described as monochromatic.

Pulse delay: a short delay, often variable, between the emitted pulses of light. Typically quoted in milliseconds (ms).

Pulse duration: the duration or 'length' of the pulse of light energy. Hair removal typically uses pulses that last for milliseconds (ms). The pulse duration determines how the tissues of

the skin and hair react to the light – ranging from heat damage through to total destruction of cells.

Pulse repetition frequency (PRF) or pulse repetition rate: the rate or 'frequency' at which pulses of light energy are emitted. Measured in Hertz (Hz).

Radiation: the process of emitting energy as waves or particles. Radiation is the correct term for invisible wavelengths that do not cause the sensation of vision.

Selective Photo thermolysis: a theory used to describe the selective absorption of light energy by a target chromophore without damaging the surrounding tissue.

Service (of equipment): tasks normally undertaken by a specialist or service engineer to ensure product performance. This can include: flashlamp replacement, calibration, realignment, changing or cleaning optical parts.

Specifications and variables: the controls or settings on a laser or light system that might be varied by the practitioner in order to deliver the correct amount of light energy in the right quantity and speed to bring about an effective treatment. Variables can include the size of the treatment spot, the pulse duration, pulse delay, the strength of cooling, pulse repetition frequency.

Spot size: the size of the beam used for treatment. Typically quoted in millimetres (mm). Circular beams refer to the diameter of the spot in mm, whereas intense pulsed light systems often have rectangular or square shaped beams. Some systems offer different spot sizes for treating larger or smaller areas. Larger spot sizes also allow deeper penetration of light energy into the skin. The area of the spot size is used in the calculation of fluence.

Thermal Relaxation Time (TRT): a theory used to describe the time taken for a target chromophore to lose a given percentage of the heat caused by the absorption of light energy. Many systems allow the user to vary pulse duration to 'match' the TRT of different hair types and thickness for optimum treatment outcomes.

Wavelength: a term to describe the 'length' of a light wave measured between successive peaks or crests of the wave. Typically quoted in nanometres(nm) or micrometres (µ). Certain 'targets' within the skin are known to absorb energy of particular wavelengths – the basis of selective photo thermolysis. The wavelength determines the 'colour' of the beam and the type of interaction with different materials.

Suggested Resources

https://www.hee.nhs.uk/sites/default/files/documents/HEE%20Cosmetic%20publication%20part%20one.pdf

Unit AP504: Tattoo Fade and Removal using Q-Switched Laser Systems

Unit code:

RQF level: Level 5

Unit Aim and NOS

(NOS SKABT31 Remove or fade tattoos using Q-Switched Laser systems)

- This unit is based on the NOS for removing or fading pigments used for cosmetic and decorative tattoos using Q-Switched Lasers.
- This unit is for advanced beauty therapists and aesthetic practitioners. It stresses the need for safe working practices and controlling hazards. Emphasis is placed on the importance of a thorough client consultation to identify the skin condition, tattoo colour pigments, and where possible the type of pigment to be removed.
- Aesthetic practitioners will formulate an individual procedure plan, provide procedure and aftercare advice, and do a post-procedure evaluation and reflection for continuous improvement.
- The aesthetic practitioner must have a Basic Life Support and Anaphylaxis Management or a First Aid at Work qualification or equivalent and be able to carry out the functions within SFHCHS36: Basic life support and have access to life support equipment as identified in the complication management plan.
- To achieve this unit Aesthetic practitioners will need to ensure that their practices reflect up-to-date information, policies, procedures and best practice guidance.

This unit coexists alongside Qualifi units:

CO401: Health, safety and hygiene for aesthetic procedures

CO402: Client consultation for aesthetic procedures

CO403: Laser Core of Knowledge

The main outcomes are:

1. Maintain safe and effective methods of working when removing or fading tattoo pigments using Q-Switched Laser
2. Consult, plan and prepare for treatment
3. Carry out tattoo pigment removal or fading using Q-Switched Laser

NOS Performance Criteria (PC)

Maintain safe and effective methods of working when removing or fading tattoo pigments using Q-Switched Laser

1. maintain your responsibilities for health and safety throughout the treatment
2. prepare and protect your client and yourself with personal protective equipment within the **controlled area**
3. maintain your client's modesty and privacy at all times
4. position your client to meet the needs of the service without causing them discomfort
5. ensure your own posture and working methods minimises fatigue and the risk of injury to yourself and others

6. ensure environmental conditions are suitable for the client and the treatment
7. use working methods that minimise the risk of cross-infection
8. ensure the use of clean equipment and materials
9. promote environmental and sustainable working practices
10. follow workplace and suppliers' or manufacturers' instructions for the safe use of equipment, materials and products
11. dispose of waste materials to meet legal requirements
12. complete the treatment within a commercially viable time

Consult, plan and prepare for treatments

13. use **consultation techniques** to determine the client's treatment plan
14. recognise any contra indications and take necessary actions
15. agree the treatment and outcomes that meet the client's needs
16. obtain signed, informed consent from the client prior to carrying out each treatment
17. identify the client's medical history, skin classification, pigment colours**, type of tattoo** and where possible, the type of pigment to be removed
18. take pre-treatment photographs of the **area to be treated** following organisational practices
19. explain the physical sensation created by the treatment to the client
20. set up the **controlled area** to meet legal and organisational requirements
21. prepare the **area to be treated** and carry out a test patch to establish response and suitability for treatment
22. ensure the client signs for the receipt of written aftercare procedures following the test patch
23. identify and agree achievable outcomes based on the assessment of the treatment area

Carry out tattoo pigment removal or fading using Q-Switched Laser

24. illuminate the **area to be treated** to ensure maximum visibility
25. ensure the **area to be treated** is shaved and dry prior to treatment
26. mark out the **area to be treated** to ensure treatment precision
27. carry out cooling methods
28. enable and set the equipment **specifications and variables** to meet the agreed treatment plan
29. apply the laser at the correct angle and work systematically to cover the **area to be treated**
30. check your client's wellbeing and monitor the level of skin reaction throughout the treatment
31. conclude treatment by returning the equipment into stand-by mode
32. take post-treatment photographs of the treated areas following organisational practices
33. ensure the treated area is cooled, soothed and dressed
34. give your client **advice and recommendations** on the treatment provided
35. ensure the client's records are completed and signed by you and the client

NOS Knowledge and Understanding (KU)

Maintain safe and effective methods of working when removing or fading tattoo pigments using Q-Switched Laser

1. your responsibilities for **health and safety** as defined by any specific legislation covering your job role
2. the importance and reasons for adhering to **organisational and treatment protocols**
3. the responsibilities under local authority licensing regulations for yourself and your premises and the importance of following local rules, where applicable
4. your responsibilities for following organisational procedures for the delivery of laser treatments
5. your legal responsibilities for checking current insurance guidelines for the delivery of laser treatments
6. the importance of undertaking the Core of Knowledge to meet with insurance guidelines
7. the causes and hazards of accidental exposure to optical radiation and the importance of wearing personal protective equipment and the principles of Maximum Permissible Exposure
8. the legal and organisational requirements for client protection and preparation
9. why it is important to maintain client's modesty and privacy
10. how the position of your client, yourself and your working methods can affect the desired outcome and reduce fatigue and the risk of injury
11. the necessary environmental conditions for treatments such as heating and ventilation and why these are important
12. methods of cleaning, disinfection and sterilisation
13. why it is important to avoid direct and indirect cross-infection by working safely and hygienically
14. the hazards and risks which exist in your workplace and the safe working practices which you must follow
15. the different types of working methods that promote **environmental and sustainable working practices**
16. suppliers' and manufacturers' instructions for the safe use of equipment, materials and products which you must follow
17. the causes and hazards of accidental exposure to clinical waste such as razor blades
18. the legal requirements for waste disposal the areas to be treated
19. the reasons for completing the service in a commercially viable time

Consult, plan and prepare for treatments

20. the importance of communicating with clients in a professional manner
21. how to complete a consultation taking into account client's **diverse needs**
22. why tattoo removal treatments must not be carried out on minors under 18 years of age
23. the importance of agreeing the treatment that meets the client's needs
24. the legal significance of gaining signed, informed client consent to treatment
25. the importance of recognising any contra-indications and taking the necessary action
26. the legislative requirements for storing and protecting client data

27. the **contra-indications** that would prevent or restrict the treatment and why
28. the importance of and reasons for not naming specific contra-indications when referring clients
29. the reasons for identifying the client's medical history, previous treatments, sun exposure and types of tattoos, pigments and pigment colours
30. how to match treatment specifications and variables to suit skin classifications and different types of tattoos and colours
31. how to describe the physical sensation created by the treatment to the client
32. why it is important to carry out a test patch prior to initial treatment
33. the reasons for providing written aftercare instructions immediately after test patch and why the client must sign for receipt of these
34. the client's skin classification using the Fitzpatrick and ethnic colour scales
35. how to prepare **consultation records**

Carry out tattoo removal or fading using Q-Switched Laser

36. the importance of good lighting in the controlled area and illuminating the area to be treated
37. the characteristics of light and how it interacts with skin, hair and pigment colours
38. the correct marking out tool and techniques to be used
39. the different types of cooling methods used and when and how to use them
40. the specifications and variables and terminology of lasers in relation to treatment practice
41. the implications of not applying the laser treatments at the correct angle
42. how to work systematically, avoiding excessive treatment overlap across the areas to be treated
43. the different types of **Q-Switched Laser equipment** to treat different pigments
44. the different types of pigments such as organic, inorganic, titanium oxide, iron, carbon, Indian ink and the implications of working on these pigments
45. what type of pigments and pigment colours can be treated with **Q-Switched Laser equipment**
46. why the results of some treatments may be more successful than others
47. the importance of understanding the warning labelling on **Q-Switched Laser equipment**
48. the effects of laser light on the eye and skin
49. the electromagnetic spectrum
50. the **anatomy and physiology** of the skin
51. monitoring procedures for checking the client and the treatment area
52. possible **contra-actions** which may occur, how to deal with them and what advice to give to clients
53. the **advice and recommendations** on products and services

Learning Outcomes, and Assessment Criteria

The following unit has been mapped to the National Occupational Standard

NOS - SKABA31 Remove or Fade Tattoos using Q-Switched Laser systems

Please refer to the NOS in full to support unit delivery

Learning Outcomes. To achieve this unit a learner must be able to:		**Assessment Criteria: Assessment of these outcomes demonstrates a learner can:**		**NOS / KSB Ref:**
LO1	Maintain safe and effective working methods for tattoo fade or removal using Q-Switched Laser systems.	1.1	Manage and maintain a safe working environment within the **controlled area**	PC 1, 2, 7, 8 B1,10,11,12
		1.2	Manage client's modesty, privacy and position for the procedure without causing discomfort or injury to the client or self.	PC 3,4,5 B1,2,3,4,5,11
		1.3	Promote environmental and sustainable working practices.	PC 6, 9 B1, 10.11
		1.4	Follow workplace and suppliers' or manufacturers' instructions for the safe use of equipment, materials and products.	PC 10 B11
		1.5	Dispose of waste materials in line with legal and environmental requirements.	PC11 B10,11
		1.6	Complete the procedure within a commercially viable time.	PC12 B1
LO2	Carry out a consultation for tattoo fade and removal using a Q-Switched Laser system.	2.1	Formulate the procedure plan to meet the client's needs using thorough consultation techniques.	PC13 B1,2,3,4,5,6,7,8,9
		2.2	Recognise any contraindications and take necessary actions.	PC14 B3,4,6,7,8,9,1
		2.3	Agree the procedure plan and outcomes and obtain the client's signed, informed consent.	PC15, PC16 B1,3,4,5,6,7,8,9,11
		2.4	Identify the client's medical history, skin classification, pigment colours**, type of tattoo,** and (if possible) the type of pigment to be removed.	PC17 B1,2,3,4,5,6,7,8,9,11
		2.5	Take pre-procedure photographs of the **area to be treated** following organisational protocol and **GDPR**.	PC18 B 1, 11
		2.6	Explain the physical sensation created by the procedure to the client.	PC19 B3,6,7,8,9

		2.7	Set up the **controlled area** to meet legal and organisational requirements.	PC20 B1,10,11,12
		2.8	Prepare the **area to be treated** and carry out a test patch to establish response and suitability for the procedure.	PC21 B1,3,4,5,6,7,8,9
		2.9	Obtain the client's signature for receipt of written aftercare instructions following the test patch.	PC22 B1,3,4,5,6,7,8,11
		2.10	Identify and agree achievable outcomes with the client based on the assessment of the **area to be treated**	PC23 B1,3,4,5,6,7,8,9,11
LO3	Carry out tattoo fade or removal using a Q-Switched Laser system	3.1	Illuminate the **area to be treated** to ensure maximum visibility.	PC24 B11
		3.2	Ensure the **area to be treated** is shaved and dry prior to the procedure.	PC25 B1, 11
		3.3	Mark out the **area to be treated** to ensure precision of the procedure.	PC26 B1,11
		3.4	Carry out cooling methods.	PC27 B1,11
		3.5	Enable and set the equipment **specifications and variables** to meet the agreed procedure plan.	PC28 B1,11
		3.6	Apply the laser at the correct angle and work systematically to cover the **area to be treated.**	PC29 B1,11
		3.7	Check your client's wellbeing and monitor the level of skin reaction throughout the procedure.	PC30 B1,3,4,5,6,7,8
LO4	Complete the procedure for tattoo fade and removal using a Q-Switched Laser system.	4.1	Conclude the procedure by returning the equipment to standby mode	PC31 B11
		4.2	Take post-procedure photographs of the treated areas following organisational practices and **GDPR**	PC32 B11

		4.3	Ensure the treated area is cooled, soothed and dressed.	PC33 B11
		4.4	Provide client **advice and recommendations** following the procedure.	PC34 B1,3,4,5,6,7,8
		4.5	Complete and sign the procedure records and obtain the client's signature.	PC35 B1,11
		4.6	Review and reflect on performance for continuous improvement.	

Learning Outcomes. To achieve this unit a learner must be able to:		**Assessment Criteria: Assessment of these outcomes demonstrates a learner can:**		**NOS / KSB Ref:**
LO5	Understand how to maintain safe and effective working methods for tattoo fade and removal using Q-Switched Laser systems.	5.1	Outline **health and safety,** legal and insurance responsibilities and requirements for carrying out procedures using Q-Switched Lasers.	KU1, KU5
		5.2	Explain the importance and reasons for adhering to **organisational and procedure protocols.**	KU2
		5.3	Clarify your responsibilities and the importance of following local authority licensing regulations for the practitioner and the premises.	KU3
		5.4	Explain the importance of following local rules, organisational protocols for procedures using laser	KU4
		5.5	State the importance of undertaking the Core of Knowledge to meet with insurance guidelines.	KU6
		5.6	Explain the causes and hazards of accidental exposure to optical radiation, the importance of wearing **PPE** and the principles of Maximum Permissible Exposure (**MPE**).	KU7
		5.7	Clarify the legal and organisational requirements for client preparation and protection.	KU8

		5.8	Explain the importance of maintaining the client's modesty and privacy.	KU9
		5.9	Explain how posture, working methods and the client's position can affect the desired outcome and reduce the risk of fatigue and injury.	KU10
		5.10	Describe the necessary environmental conditions for the procedure such as heating and ventilation and explain why these are important.	KU11
		5.11	Explain the methods of cleaning, disinfection and sterilisation.	KU12
		5.12	Clarify why it is important to avoid direct and indirect cross-infection by working safely and hygienically.	KU13
		5.13	Explain the hazards and risks in the workplace and the safe working practices to follow.	KU14
		5.14	Describe the different types of working methods that promote **environmental and sustainable working practices.**	KU15
		5.15	Explain the suppliers' and manufacturers' instructions for the safe use of equipment, materials and products.	KU16
		5.16	Explain the causes and hazards of accidental exposure to clinical waste such as razor blades.	KU17
		5.17	Explain the legal requirements for waste disposal after the procedure.	KU18
		5.18	Explain the reasons for completing the service in a commercially viable time.	KU19
LO6	Understand how to carry out a consultation for tattoo fade and removal using a Q-Switched laser system.	6.1	Explain the importance of communicating with clients in a professional manner.	KU20
		6.2	Explain how to carry out a consultation taking into account the client's **diverse needs** and complete **consultation records** .	KU21, KU35

		6.3	Explain why tattoo removal treatments must not be carried out on minors under 18 years of age.	KU22
		6.4	Explain the importance of agreeing the procedure meets the client's needs.	KU23
		6.5	Explain the legal significance of gaining signed, informed client consent.	KU24
		6.6	Explain the importance of recognising any contra-indications and taking the necessary action.	KU25
		6.7	Clarify the legislative requirements for storing and protecting client data.	KU26
		6.8	Describe the **contra-indications** that would prevent or restrict the treatment and why.	KU27
		6.9	Explain the importance of and reasons for not naming specific contra-indications when referring clients.	KU28
		6.10	Clarify the reasons for identifying the client's medical history, previous treatments, sun exposure and types of tattoos, pigments and pigment colours.	KU29
		6.11	Explain how to match procedure specifications and variables to suit skin classifications and different types of tattoos and colours.	KU30
		6.12	Describe the physical sensation created by the procedure to the client.	KU31
		6.13	Explain why it is important to carry out a **test patch** prior to the initial treatment.	KU32
		6.14	Explain the reasons for providing written aftercare instructions following the test patch and why the client must sign for receipt of these.	KU33
		6.15	Explain how to apply the Fitzpatrick and ethnic colour scales to classify a client's skin	KU34

LO7	Understand how to carry out tattoo fade and removal using a Q-Switched Laser system.	7.1	Explain the importance of good lighting in the controlled area and illuminating the area to be treated.	KU36
		7.2	Describe the characteristics of light and how it interacts with skin, hair and pigment colours.	KU37
		7.3	Explain the correct marking out tool and techniques to be used.	KU38
		7.4	Describe the different types of cooling methods used and when and how to use them.	KU39
		7.5	Explain the specifications, variables and terminology of lasers relating to the procedure.	KU40
		7.6	Explain the implications of not applying the laser at the correct angle.	KU41
		7.7	Explain how to work systematically, avoiding excessive treatment overlap across the areas to be treated.	KU42
		7.8	Describe the different types of **Q-Switched Laser equipment** to treat different pigments.	KU43
		7.9	Describe the different types of pigments such as organic, inorganic, titanium oxide, iron, carbon, Indian ink and the implications of working on these pigments.	KU44
		7.10	List the type of pigments and pigment colours that can be treated with **Q-Switched Laser equipment.**	KU45
		7.11	Explain why the results of some procedures may be more successful than others.	KU46
		7.12	Explain the importance of understanding the warning labelling on **Q-Switched Laser equipment.**	KU47
		7.13	Explain the effects of laser light on the eyes and skin.	KU48
		7.14	Describe the electromagnetic spectrum.	KU49

		7.15	Understand the **anatomy and physiology** of the skin.	KU50
LO8	Understand how to complete the tattoo fade and removal using a Q-Switched Laser system	8.1	Explain monitoring procedures for checking the client and the treatment area.	KU51
		8.2	Describe the possible **contra-actions** which may occur, how to deal with them and what advice to give to clients.	KU52
		8.3	Explain the **advice and recommendations** on products and services.	KU53

Behaviours

The following behaviours underpin the delivery of services in the aesthetic sectors. These behaviours ensure that clients receive a positive impression of both the organisation and the aesthetic practitioner:

1. Meeting the organisation's standards of behaviour
2. Greeting the client respectfully and in a friendly manner
3. Communicating with the client in a way that makes them feel valued and respected
4. Treating the client courteously and helpfully at all times
5. Adapting behaviour to respond effectively to different client behaviour
6. Checking with the client that you have fully understood their expectations
7. Responding promptly and positively to the client's questions and comments
8. Recognising information that the client might find complicated and checking whether they fully understood
9. Explaining clearly to the client any reasons why their needs or expectations cannot be met
10. Maintaining effective, hygienic and safe working methods
11. Adhering to workplace, supplier's and manufacturer's instructions for the safe use of equipment, materials and products
12. Meeting both organisational and industry standards of appearance.

Indicative Content

Controlled area

1. enclosed area
2. lockable entry and exit points
3. signage
4. minimum reflective surfaces
5. suitable window coverage
6. adequate fire precautions and suitable services
7. adequate ventilation

Consultation techniques

1. questioning
2. listening
3. visual
4. physical examination
5. written

Type of tattoo

1. permanent
2. semi-permanent

Colour of tattoo

1. black
2. blue
3. green
4. red
5. deep purple
6. pink
7. yellow

Tattoo size

1. extra small - up to 3 x 3 centimetres
2. small – up to 5 x 5 centimetres
3. medium – up to 10 x 10 centimetres
4. large - up to 15 x 15 centimetres
5. extra-large – More than 15 x 15 centimetres

Test patch -This is a test(s) to determine **Types of Tattoos**

1. a cosmetic tattoo - is professional and semi-permanent (micro-pigmentation).
2. a decorative tattoo - is permanent but can be either professional or amateur.
3. other types are medicinal or traumatic.
4. cosmetic.
5. permanent.
6. semi-permanent.

Area to be treated

1. arm
2. leg
3. chest
4. back
5. face or neck
6. eyebrow (micro-pigmentation make-up)

Specifications and variables

1. wavelength(s)
2. active Q-Switched laser
3. passive Q-Switched laser
4. nanosecond pulses – ns
5. picosecond pulses – ps
6. power

7. energy
8. fluence
9. pulse duration or width
10. pulse repetition rate
11. spot size
12. cooling devices
13. test shot

Advice and recommendations

1. suitable aftercare products and their uses
2. avoidance of activities which may cause contra-actions
3. time intervals between treatments
4. present and future products and treatments

Glossary:

Absorbed/Absorption: the 'taking in' of light energy. Absorption of light energy can produce heating effects in the tissues which can interrupt the hair growth cycle.

Beam delivery system: describes the way that the laser or light beam is 'delivered' to the client. Methods include fibre optics or an articulated arm with a 'handpiece' or light guide.

Broad spectrum light: light that contains a wide range of 'colours' or wavelengths. The sun and intense pulsed light systems produce broad-spectrum light.

Core of knowledge -this course, approved by the British Medical Laser Association - BMLA, is intended for operators and other staff in Clinics using Lasers and Intense Pulsed Light systems for hair removal, skin toning, dentistry, tattoo removal and other similar procedures. It is designed both to provide a grounding in the basics of the safe use of lasers and IPL systems, and to satisfy the training requirements contained in the MHRA Device Bulletin DB2008(03) "Guidance on the safe use of lasers, intense light source systems and LEDs in medical, surgical, dental and aesthetic practice".

Care Standards Act 2000: an Act of Parliament that came into effect in April 2002 (in England and Wales). The CSA2000 replaced the Nursing Homes Act 1984 which previously regulated the use of lasers. CSA2000 was introduced to improve the old Act and to bring the management, interpretation and inspection under the authority of the National Care Standards Commission (NCSC).

Chromophore: a 'target' such as melanin, water or haemoglobin that can absorb light of the appropriate wavelength. The chromophore for hair removal is melanin in the hair follicle and possibly the stem cells in the bulge.

Coherent/Coherence: a property of laser light that describes the way that the light waves travel 'in phase' or in step with each other.

Contra-indication: 'contra' – meaning opposed or against. 'indication' – meaning the basis or rationale for using a particular treatment. Contra-indications for hair removal treatments may include pregnancy, certain skin disorders, use of certain medications or drugs or certain medical conditions.

Electromagnetic spectrum: the range of energies or radiations that include gamma rays, X rays, ultraviolet, visible, infrared and radio waves. Lasers and intense pulsed light systems used for hair removal typically emit beams in the visible or infrared part of this spectrum.

Energy - energy is measured in Joules (J) and is the product of laser power (watts) and time (seconds).

Ethnic colour scale - the ethnic colour scale is a measure of the degree of natural pigment in the skin of clients of ethnic origin.

Evidence: information that you can present to an NCSC Inspector to demonstrate your compliance with the National Minimum Standards. Evidence can include written policies, medical protocols, client records, client information leaflets, equipment maintenance logs, training certificates, or records of meetings.

Fitzpatrick classification system - devised in 1975 at Harvard University, this is a skin classification scale of 1-6 based on photosensitivity reaction to ultraviolet radiation.

Fluence - fluence is the treatment variable set by the laser practitioner according to patient evaluation and skin type and determines the effectiveness of the treatment.

GDPR - General Data Protection Regulation

Informed consent: voluntary consent given by a person (or responsible proxy) for participation in a treatment regime after being informed of the purpose, methods, procedures, benefits and risks of the treatment.

Intense Pulsed Light (IPL) System: a system that uses a powerful flash of 'light' of broad spectrum, non-coherent light. Filters are used in front of the flashlamp to remove unwanted wavelengths of light and pass through only those needed for treatment. Light from an intense pulsed light system can be used to target a range of chromophores in the skin making them suitable for hair removal and/or skin photo-rejuvenation.

Interlock connector: a socket on a laser/intense pulsed light system that allows a switch (interlock) to be connected to a door/entrance. Opening the door will pause the laser/intense pulsed light system.

Laser: an acronym that describes the way that laser light is produced: Light Amplification by the Stimulated Emission of Radiation. A device which amplifies light and usually produces an extremely narrow beam of a single wavelength (one colour).

Laser Classification: the 'class' allocated to a laser (not intense pulsed light systems) from BSEN60825-1:1994. Medical laser devices are typically Class 4 (the highest classification) carrying the greatest risk of eye and skin injury.

Laser Protection Adviser (LPA): a competent person able to evaluate, monitor and enforce the control of laser safety hazards.

Laser Protection Supervisor (LPS): a competent person to help with local supervision in the controlled area to ensure that local rules, policies or procedures are implemented. Often

the LPS is the practitioner responsible for the use of the laser or intense pulsed light equipment or a member of staff closely involved in the work.

Laser/Intense Pulsed Light Controlled Area: an area where laser/intense pulsed light safety controls must be applied. The controlled area is often the treatment room, and this should not be readily accessible to unauthorised staff/clients.

Light Energy: with a laser or intense pulsed light system this refers to the emitted beam of light and its capacity to do work. Light is radiation that causes the sensation of vision. Even though some lasers and intense pulsed lights emit invisible radiation it is generally still referred to as light or light energy. Energy is expressed in Joules (J). Energy is the product of power (W) multiplied by pulse duration (typically milliseconds). See also Fluence.

Light Guide: the glass or quartz block used to deliver the light energy to the treatment site. Light guides are most commonly used on intense pulsed light systems.

Local Rules: local rules should be written for each specific application of a laser or intense pulsed light equipment. They should include details about the actual equipment in use, hazards or risks from the equipment, details of authorised users, methods of safe working and normal operating procedures, contact details of the LPA or LPS, accident procedures, safety checks and use of any safety equipment. Your LPA should be able to support you in writing and implementing local rules.

Maintenance (of equipment): tasks undertaken by the practitioner to maintain the correct performance of the system. This can include handpiece cleaning, cooling water top-up, cleaning display screens, checking filters.

Marking out: the use of coloured pens or inks touched lightly on the skin to show the region or limits of the treatment area. Care must be taken to choose the correct inks/colours so that the beam does not react with the inks and cause skin damage.

Maximum permissible exposure (MPE) - the level of radiation (light) to which, under normal circumstances, a person may be exposed without suffering adverse effects, e.g., how much laser light can be withstood by the eye or skin before tissue damage occurs.

Monochromatic: light that contains a single wavelength or 'colour'. Laser light is described as monochromatic.

Nanosecond - one billionth of a second.

National Care Standards Care Commission (NCSC): the NCSC is the body responsible for the regulation and inspection of social services and the private and voluntary health care sector in England. Equivalent bodies will be created in Scotland, Wales and Northern Ireland. The NCSC will inspect against the National Minimum Standards to make sure the clinic or salon delivers the service they claim to offer.

National Minimum Standards (NMS)- Independent Health Care: these are the statements or criteria that your clinic or salon must meet and – against which your service is graded. There are 32 Core ('C') Standards:

‘C’ standards

C1 Information Provision

C2 – C7 Quality of Treatment & Care

C8 – C13 Management & Personnel

C14 – C16 Complaints Management

C17 – C19 Premises, Facilities & Equipment

C20 – C28 Risk Management Procedures

C29 – C31 Records & Information Management

C32 Research

There are also ‘Service-Specific Standards’ which include the use of laser and intense pulsed light systems:

P1-3 Prescribed Techniques and Technologies

Each ‘Standard’ has an ‘Outcome’ and ‘Assessment Criteria’. For example: Standard C1

OUTCOME – Patients receive clear and accurate information about their treatment and its likely costs.

C1.1 The establishment or agency has available for prospective patients and their families a patients’ guide expressed in clear, relevant language etc.

All of the Core and Laser/Intense Pulsed Light Standards must be met in order to comply with the regulations.

Criteria are the individual elements of the NMS against which your service is judged and graded.

Personal Protective Equipment (PPE): safety equipment designed to protect the client, practitioner and others from laser or light beams and other hazards in the controlled area. It may include protective eyewear, gloves, laser masks, overalls, etc.

Photo-rejuvenation: a non-ablative procedure using low level light energy to rejuvenate and improve the appearance of photo-aged skin, remove age spots (sun induced freckles), most benign brown pigments and redness caused by broken capillaries. Light based treatments may be combined with chemical peels or micro-dermabrasion to increase the effectiveness of treatment. Treatments typically use broad spectrum light to treat the face, chest, neck and hands – or anywhere that sun damage shows. A course of treatments typically consists of four to six treatments administered at approximately four-week intervals. May also be known as photo facial or skin rejuvenation.

Picosecond - a period of time equal to 10^{-12} .

Power - rate at which we deliver the energy, measured in watts (w).

Protocol: a precise and detailed plan that is followed when undertaking a treatment. It must set out the necessary pre-treatment checks and tests, the manner in which the procedure is to be applied, the acceptable variations in the equipment settings used and when to abort a treatment.

Protective eyewear/goggles: glass or plastic goggles designed to protect the eyes against accidental exposure to light energy. They must be specifically matched to the wavelength and output of the laser/light system in order to provide effective protection.

Pulse delay: a short delay, often variable, between the emitted pulses of light. Typically quoted in milliseconds (ms).

Pulse duration: the duration or 'length' of the pulse of light energy. Hair removal typically uses pulses that last for milliseconds (ms). The pulse duration determines how the tissues of the skin and hair react to the light – ranging from heat damage through to total destruction of cells.

Pulse repetition frequency (PRF) or pulse repetition rate: the rate or 'frequency' at which pulses of light energy are emitted. Measured in Hertz (Hz).

Private and Voluntary Health Care (England) Regulations 2001 – (PVHC Regulations): these Regulations give meanings and definition of various terms and care requirements set out in the CSA2000. The Regulations give full details about the records you must keep; information you must give the NCSC and include the 'schedules' that tell you what to include in the 'Statement of Purpose' and 'The Patients' Guide'.

Radiation: the process of emitting energy as waves or particles. Radiation is the correct term for invisible wavelengths that do not cause the sensation of vision.

Selective photo thermolysis: a theory used to describe the selective absorption of light energy by a target chromophore without damaging the surrounding tissue.

Service (of equipment): tasks normally undertaken by a specialist or service engineer to ensure product performance. This can include: flashlamp replacement, calibration, realignment, changing or cleaning optical parts.

Skin Types and Skin Classification: the Fitzpatrick skin classification was developed to predict a person's lifetime risk of developing skin cancer. This used a scale (typically I – VI) to judge how skin reacts to light, in particular whether it is likely to burn or tan. Most practitioners use a combination of hair and skin colour, eye colour and burn/tan response to determine the initial test patch and treatment settings.

Specifications and variables: the controls or settings on a laser or light system that might be varied by the practitioner in order to deliver the correct amount of light energy in the right quantity and speed to bring about an effective treatment. Variables can include the size of the treatment spot, the pulse duration, pulse delay, the strength of cooling, pulse repetition frequency.

Spot size: the size of the beam used for treatment. Typically quoted in millimetres (mm). Circular beams refer to the diameter of the spot in mm, whereas intense pulsed light systems often have rectangular or square shaped beams. Some systems offer different spot sizes for treating larger or smaller areas. Larger spot sizes also allow deeper penetration of light energy into the skin. The area of the spot size is used in the calculation of fluence.

Test patch: a test or trial exposure of a small area of representative skin to determine the degree of skin reaction and skin sensitivity. A test patch is used to test the degree of heat sensitivity, pain response and skin reaction as well as to identify the correct starting parameters.

Thermal Relaxation Time (TRT): a theory used to describe the time taken for a target chromophore to lose a given percentage of the heat caused by the absorption of light energy. Many systems allow the user to vary pulse duration to 'match' the TRT of different hair types and thickness for optimum treatment outcomes.

Wavelength: a term to describe the 'length' of a light wave measured between successive peaks or crests of the wave. Typically quoted in nanometres (nm) or micrometres (µ). Certain 'targets' within the skin are known to absorb energy of particular wavelengths – the basis of selective photo thermolysis. The wavelength determines the 'colour' of the beam and the type of interaction with different materials.

Suggested Resources

https://www.hee.nhs.uk/sites/default/files/documents/HEE%20Cosmetic%20publication%20part%20one.pdf

Nd:YAG Laser Technology Book: Tattoo Removal and More by Lurinda Swanepoel April 2025

Assessment Guidance

All assessment of occupational competence will be conducted in a realistic work i.e., salon or clinic environment. Simulation is not allowed. Learners' competence will be assessed using methods that are appropriate for the assessment of skills, knowledge and understanding.

Assessment observations of **practical performance** will be recorded and will confirm that **all** the competence-based assessment criteria have been met. Observation records may include oral questioning and learner responses. Observations will be signed and dated by the learner and assessor and recorded on the unit assessment checklist. Supporting evidence of learner competency e.g., client case studies/before and after procedure photographs, tasks, assignments etc. should be referenced and retained in learners' portfolios of evidence.

Holistic assessment is encouraged, and one piece of evidence may be used to meet the requirements of more than one learning outcome/unit or assessment criterion.

For the assessment of knowledge and understanding criteria, learners are required to provide oral or written responses to questions, tasks and assignments. Questions, tasks and assignments provided by Qualifi are listed below.

Written Assessments and Tasks:

Practical Assessments and SAQs are graded: Pass/Fail

MCQs and Tasks are graded: <69% = Fail, >70% = Pass

Assessment Criteria:

- **Unit CO501: Consultation and Advanced Skin Analysis Using Technologies**
    - LO1 – LO4 Performance criteria outcomes will require practical competency to be observed by the Assessor on at least **4** occasions.
    - LO1 – LO4 will be assessed through one Assignment to create a Consultation Support brochure
    - LO1 – LO4 knowledge and understanding will be assessed through 1 x SAQ – short answer question paper.
- **Unit CO602: Complication Management for Aesthetic Practice**
    - LO1- LO4 will be assessed by 1 tasks: create a complications management form and develop complication protocols
    - LO1-LO4 Performance criteria outcomes will require learner practical competency to be observed by the Assessor via successfully completing the client's complications management form and implementing their protocols via simulation

- LO1 – LO4 knowledge and understanding will be assessed through 1 x SAQ – short answer question paper.

- **Unit CO403: Laser Core of Knowledge**:
  - 1 LO1 – LO4 knowledge and understanding will be assessed through 1 x MCQ - multiple choice question paper

- **Unit AP504: Tattoo Fade and Removal using Q-Switched Laser Systems:**
  - LO1 – LO4 Performance criteria outcomes will require practical competency to be observed by the Assessor on at least **4** occasions on different clients, which includes tattoos of more than one colour, all sizes of tattoo must be covered in at least 3 different areas.
  - Case Studies - An additional **12** tattoo fade or remove procedures must be recorded for **3** clients that should be treated a minimum of 4 times each.

    All client evidence needs to include a full medical history of the client, before and after photographs and a full description of the tattoo to be removed or faded including size type and site. A detailed description of the removal techniques used, treatment parameters and duration of the treatment must also be provided. Each treatment must also include an evaluation of the treatment and its outcomes.
  - LO1 – LO8 will be assessed through three tasks:
    - to produce a brochure to introduce clients to tattoo fade and removal
    - to produce a client aftercare leaflet
    - to design and implement as risk assessment for using a Q-Switched Laser system
  - LO5 – LO7 knowledge and understanding will be assessed through 1 x SAQ – short answer question paper.
  - LO1 – LO8 knowledge and understanding will be assessed through professional discussion.

Special Considerations and Reasonable Adjustments

This qualification and its assessments have been designed to best support accessibility and inclusion for all learners. In the design and development of qualifications and assessment Qualifi complies with the requirements of the Equality Act 2010 and the appropriate Ofqual general conditions of regulation. In some instances individuals will have diverse learning needs and need reasonable adjustments to be able fully participate in the qualification and have fair access to assessment. Reasonable adjustments, including additional time or alternative evidence formats, are intended to enable learners with individual needs to demonstrate their skills and knowledge without changing the demands of the assessment. Centres are responsible for making sure that learners can access the requirements of the qualification at the start of a programme of learning.

Special consideration can be given after an assessment has taken place for learners who have been affected by adverse circumstances, such as illness. Special considerations can be in relation to the amount of time given for evidence to be provided or the format of the assessment as long as this is equally valid. However, centres must not agree to the use of alternative forms of evidence to those stipulated in a unit, or to the omission of any assessment criteria when judging attainment.

For further details please see QUALIFI's *Reasonable Adjustment and Special Consideration Policy* and *Access to Fair Assessment Policy and Procedure.*

Malpractice and Maladministration

Centre or learner malpractice undermines the integrity and validity of assessment and/or the certification of qualifications and can arise or be suspected in relation to any unit or type of assessment within the qualification.

Centres are required to take steps to prevent malpractice and to investigate instances of suspected malpractice. Centres will investigate the allegation in compliance with their own published and QUALIFI approved policy and procedures.
Incidents of maladministration, unintentional errors in the delivery or assessment of QUALIFI qualifications that may affect the assessment of learners, should also be reported in the same way.

QUALIFI may conduct an investigation if we believe that internal assessment and/or internal quality assurance is not being carried out in line with our policies. QUALIFI reserves the right to withhold the issuing of results and/or certificates while an investigation is in progress.

For further details regarding malpractice and how to report suspected malpractice please see QUALIF's *Malpractice and Maladministration Policy* and *Plagiarism, Collusion and Cheating Policy.*
Where centres have concerns about learner use of Artificial Intelligence (AI) please refer to the QUALIFI *Guidance statement to centres on the risk of AI.*

Contact Details

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