The IMI National Guidelines have been prepared as baseline guides on specific aspects of medical illustration activity and provide auditable standards for the future.

The Guidelines can be either implemented in full, or may be amended according to individual requirements.

Copies are available on the IMI website (www.imi.org.uk)
Introduction

These Guidelines, to be used when dealing with children, are intended for the clinical photography of medical conditions generally. Paediatric photography includes children through the age range 0 to 18 years of age. For details about photographing more specific conditions refer also to the relevant IMI National Guidelines, http://www.imi.org.uk/natguidelines/guidelines01.asp

For example:
- Scoliosis
- Non-accidental injury
- Orthodontic
- For Cleft Lip and Palate use the IMI Guidelines for Cleft Lip and Palate Audit as these are the accepted national protocols.

Generally,

- If you undertake a lot of Paediatric work, consider making the reception area as child friendly as possible – provide toys to play with, paper, crayons, and pencils for children to draw with whilst waiting. Low seating should be provided for children to sit on.

- Standardisation of images is essential as some conditions will require photography over many years, even through to adulthood; additionally good record keeping is equally important. Standard ratios of reproduction can be based on the Westminster Scales or magnifications agreed locally with the consultants. However, in paediatrics, the Clinical Photographer must accept that this is not always going to be possible. This can be very difficult to accept when the photographer is accustomed to taking photographs of compliant adults.

- Remember the child’s attention span will not always permit the photographer to obtain perfect photographs. With experience, it is possible to determine the level of acceptability and to learn when the child’s attention span has reached its limit; is too upset and distressed to continue; or is too ill to undertake the full photographic request.

- In extreme cases, photography may need to be abandoned and rescheduled if the child is too distressed or unwell.
The Clinical Photographers’ approach to children

Patient Communication

The ability to photograph children of varying ages successfully relies on the effective communication between the Clinical Photographer, the patient and the parents. Children, especially those who are unwell, can be challenging to photograph; part of the photographer’s skill involves gaining the child’s confidence, explaining procedures in a way that they understand. Involving the parents will help to make the child feel more secure and comfortable. The Clinical Photographer needs to appear efficient without making the parents or patient feel rushed.

Professional etiquette requires the Clinical Photographer to call the patient into the studio by name and to introduce themselves to the patient and parents. It is important to include all parties in communication, but to focus the majority of the conversation towards the child if they are of an age where they are comfortable and able to take direction from the Clinical Photographer. It is important to communicate with the child in a way that is appropriate to their age and development without being patronising or condescending. It is important to explain what will happen during the photography session and where possible show the patient and parents an example of what photographs have been requested, i.e. examples of standard views.

The key is to treat each patient as an individual, each child is different and they are prone to become distracted or upset easily. The Clinical Photographer should be guided by the parents or staff who are familiar with the child, whilst remaining in control of the photographic session.

The initial contact with the child will determine the quality of the photographs that are taken. The photographer must gain the confidence of the child quickly and this can be done in many ways.

- Listening to the sound from the waiting area as you approach will allow the Clinical Photographer to hear if the child is happy, crying, quiet, playful, or noisy.

- Babies can be challenging to photograph and always require the assistance of a parent or nurse. Babies should be photographed lying down when they are too young or unable to support themselves.
When photographing babies it is important to communicate with the parents and the child. Parents are often more responsive if they can see that the Clinical Photographer is comfortable and confident in dealing with their child. New parents may be particularly apprehensive and the Clinical Photographer will need to be very specific about what is required from the parents in terms of assistance and what is required from the photographs. If the photography session runs smoothly the experience for the parents and patient is more positive and they are less likely to be apprehensive of any future visits to the department.

Toddlers – the Clinical Photographer needs to get down to the child’s level and talk to the child as well as the parents. The toddler will look to their parents for guidance in how to respond to this new person talking to them, so chatting with the parents naturally and being friendly will help the situation. Spending a few moments playing with the child will assist in gaining their trust.

Older children – will respond more directly to the Clinical Photographer, ask questions, and expect answers.

The Studio

Keep the room warm for children, particularly those who are required to undress – in particular babies.

Keep the floor clear to prevent children walking into equipment.

Studio lighting that is suspended from the ceiling is preferable.

A range of seating is required for children of different ages: -

1) A soft foam mat with a surface that can be cleaned using alcohol wipes, e.g. a physiotherapy mat, use a new clean white sheet for each session, or use disposable paper roll to lay the baby on.
2) A height adjustable treatment couch for older babies/toddlers who can sit up, but require parent’s support.
3) Rotating height adjustable chair for other children.
4) Box for children to stand with a measuring scale - for whole body views.
5) Specialised chair for some conditions – scoliosis.
In the Studio

The Clinical Photographer should prepare the studio prior to the patient entering. Here is a suggested routine for each age group:

For a baby – aged 0 to 9 months:
Babies can be challenging to photograph and always require the assistance of a parent or nurse. Babies should be photographed lying down when they are too young or unable to support themselves.

When photographing babies it is important to communicate with the parents and the child. Parents are often more responsive if they can see that the photographer is comfortable and confident in dealing with their child. New parents may be particularly apprehensive and the photographer will need to be very specific about what is required from the parents in terms of assistance and what is required from the photographs. If the photography session runs smoothly the experience for the parents and patient is more positive and they are less likely to be apprehensive of any future visits to the department.

1) Prepare the mat or treatment couch
2) Babies can roll around and therefore the Clinical Photographer should use a lighting technique that is flexible and can be moved easily. Consider the use of a hand-held flash, which triggers the studio lights bounced off the ceiling to reduce the harshness of the shadows, rather than direct studio lighting, or even a flash mounted on the camera hot shoe.
3) Ensure the flash is positioned so that the shadows are in the correct orientation i.e. from top to bottom and front to back.
4) Cameras should have either a neck or hand strap, to reduce the possible risk of the camera being dropped, possibly onto the child. Most modern cameras have the facility to attach a hand strap. Neck straps can drop into view very easily, ruining a photograph.
5) Empty shirt pockets of any items – pens, phones, money – to prevent them from falling out when leaning over the child.
6) When photographing the head of a baby, be aware of the shape; some babies may have a distorted head due to their condition, e.g. Sagittal Synostosis. To photograph an AP face may require, either a pad placed under the baby’s shoulders to allow the head to rest back in the correct anatomical position (Figure 1), or photograph the head at an angle to ensure that you are parallel to the Frankfurt plane (Figure 2).
To photograph a lateral of the face, do not get the parents to prop the baby at 90° to the mat, as the baby will invariably turn their face to the mat. Ask the parent to help by supporting the baby, or support for the baby with a rolled white sheet behind their back, so that the baby is lying at an angle of 45° to 60° and then the Clinical Photographer is able to adjust their position accordingly to achieve a lateral view (Figure 3).

7) The Clinical Photographer should position themselves, behind the child when photographing a baby lying on the mat and position the flash so that shadows fall in the correct anatomical orientation. With a hand-held flash, this will mean crossing arms to achieve the correct position for one of the laterals (Figure 4).

8) When changing the magnification for a different view, the Clinical Photographer should step away from the child so that the alterations to lens and aperture can be made safely, when using a hand-held flash.
For babies older than 9 months to toddler: -
Older babies and toddlers can also be challenging to photograph and may require the use of toys to distract them during photography. It is best practice to gain the assistance of parents in these cases as young children tend to respond better to people they are familiar with. The Clinical Photographer must ensure that they are efficient during the photography session as children in this age group have a very short attention span. Toddlers should always be supervised by a parent or other staff member during photography to avoid any potential accidents.

1) The Clinical Photographer needs to enquire of the parents if an older baby can sit with support and use the appropriate seating.
2) For a child who can sit with support, it is best to use the treatment couch rather than a chair with a high back. This allows the Clinical Photographer to obtain photographs without distracting backgrounds or compromised lighting, but the parent is close enough to provide support, reassurance and any necessary distraction, for the child by holding the child around the hips or lower abdomen.
3) A range of toys is useful to act as a distraction for the child to enable the correct photographs. Brightly coloured plastic toys that make a noise are usually the best. Soft toys must not be used as a distraction device, as they gather dust, and cannot be cleaned after use, which compromises infection control guidelines.

4) Only in extreme circumstances, where the child is very ill or distressed, should it be necessary for the child to be seated on their parents lap. If so, position the parent at 90° to the Clinical Photographer and place the child on the parent’s lap facing the direction required to achieve the requested photograph (Figures 5 and 6). Be prepared to accept that sometimes this will not work and the child will want to sit with their back to the parent’s chest. If so try to mask the parent’s clothes with a black velvet cloth.

5) For a full-length photograph – prepare the box and measuring scale.

Children and adolescents
When photographing children, from those who have learnt to talk and are going to play group all the way up to adolescents, it is important to direct communication towards the patient, adjusting the style and content according to their age and development.
With adolescents it is important to remember that they are a young person, not an adult or a child. They are capable of making decisions for themselves and may have consented for their own clinical photographs. It is still important to explain what photographs have been requested and what will happen during the photography session.

There may be occasions where the patient is not comfortable to remove their clothing. In this case, the Clinical Photographer should find a compromise to suit the patient. It may be that the parents have signed the consent form without considering the wishes of their child, the clinician has not explained the photographic request properly, or there may be religious and cultural reasons restricting the removal of clothing.

**In the Studio (continued)**

- Generally, all equipment that may be required should also be prepared prior to the patient entering the studio – e.g. ring-flash, lip retractors, mirrors for dental photography.

- Once the child is in the studio the Clinical Photographer should explain to the parent and child what they have been requested to photograph and how they wish to proceed.

- The Clinical Photographer should carry out the session as quickly as possible as the attention span of young children in particular is short.

- The Clinical Photographer needs to appear confident. Talking constantly to the child, and praising the child for doing what it is being asked to do.

- The Clinical Photographer should talk in a happy sounding voice, ready to laugh with the child.

- The Clinical Photographer should demonstrate what they wish the child to do – holding arm out, turning hands over. This is best done standing in front of the child and getting them to mirror what is being done.

- When a child has to undress for the photograph, keep the amount of undressing to a minimum, to reduce the child’s distress.
In cases where multiple views of the upper and lower body have been requested the patient may feel particularly embarrassed at being asked to be photographed in their underwear. To maintain the privacy and dignity of the patient and to minimise embarrassment, it is preferable to photograph the upper and lower body separately and allow the patient to remain partially clothed.

If a whole body view has been requested it can be done at the end of the photographic session to prevent the patient remaining unclothed for longer than is necessary, and to allow them to get used to the idea of having their photograph taken.

The assistance of the parent, or a second Clinical Photographer, as a distraction will enable the correct images to be produced.

At the end of the session, the Clinical Photographer should thank the child.

If they would normally do so, the Clinical Photographer should not wear a white coat while photographing a child.

Ultimately it may not be possible to meet the full requirements of the photographic request - the quality of images may be affected by the intrusion of clothing, the child may be distressed. In such cases the Clinical Photographer should record this information in their notes and inform the clinician as to the reasons.

Photography on the ward/clinic

Sometimes photographs will have to be taken on the ward or in the clinic. In these situations the Clinical Photographer will not be working in the best environment.

One of the main reasons for the Clinical Photographer to carry out the photographic request on the ward or clinic is that the child has a communicable disease, e.g. Chicken Pox; is MRSA positive; is immuno-suppressed; or is simply too ill to come to the studio.

When arriving at the ward or clinic the Clinical Photographer should report to the nursing staff at the reception/staff desk, announcing whom they have come to photograph and find out who is looking after the child. They then need to follow the hospital’s infectious disease protocols. This will usually involve the wearing of plastic aprons, gloves and occasionally masks.
**Chaperones (See IMI National Guidelines on the Use of Chaperones)**

All children should have a chaperone when being photographed. This will usually be a parent, but may be a nurse from the ward. Consideration should be given to teenagers who may not wish a parent to be present in some situations. If possible, in these situations, the session should be carried out by a Clinical Photographer of the same sex.

**Consent (See IMI National Guidelines on Patient Consent)**

Any photography of a patient requires a process of informed consent, duly recorded on a “Consent Form”. At 16 years of age, the patient themselves can sign the consent form. For patients under the age of 16, informed consent is usually obtained from a parent. However, as a result of the Fraser Guidelines, if a person younger than 16 is considered to be “Fraser competent”, then they can sign the consent for photography themselves, and this can not be overruled by a parent.

Uniquely, the parents’ consent for photography is not needed in cases of suspected non-accidental injury, but the consent form must be signed by the consultant in charge of the patient, or the social worker involved in the case. (See IMI National Guidelines for NAI.)

**Relevant Legislation**

- Children Act 1989  

- Children Act 2004  

- Protection of Children Act 1999  

- Fraser Guidelines  

  [http://www.allchildrenni.gov.uk/index/uncrc.htm](http://www.allchildrenni.gov.uk/index/uncrc.htm)
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