In a cross-sectional and observational study performed in Brazil as late as 2013, it was found that out of 360 respondents, who were all health care professionals:

- 142 had in the past year captured patient images
- 312 had reported seeing images of patients being captured by other healthcare practitioners.

Whilst this in itself is not concerning and is in fact a positive finding, the fact that 12.2% of these images were shown to friends and relatives outside the professional circuit and 0.7% of these were published in the public arena is certainly reason for concern. Almost 42% of images were captured for the purpose of clinical use\(^1\).

The advent of digital photography has made the use of photographs common for the management of patients, be it in terms of case discussions, monitoring of disease progression or the keeping of accurate medical records. However, in light of the advances in digital technology this has also led to a gamut of legal, psychosocial and ethical issues.

Burns and Belton in their article entitled \textit{Click first care second photography}\(^2\) noted that “clinical photography has become an essential component in patient care”. In the sense that a picture is worth a thousand words, this relatively new method of medical record keeping has become invaluable.
The Health Professions Council of South Africa states in its preamble to the booklets which makes part of the Guidelines on Ethical Rules, Regulations and Policy that “practice as a health care professional is based upon a relationship of mutual trust between patients and health care practitioners. The term “profession” means “a dedication, promise or commitment publicly made”\(^3\).

In terms of the health care professional fulfilling his/her obligations regarding patient care, the keeping of accurate patient records is imperative. However, this should occur in line with the four generally accepted principles of biomedical ethics, which are autonomy, beneficence, non-maleficence and justice (Beauchamp and Childress)\(^4\).

Respect for autonomy refers to the patient’s role in make decisions regarding his/her own health, which tie in with informed consent, a major issue in terms of photography. The second principle is that of beneficence, meaning that in considering the benefits in treatment (or photography, in this case) against the risk, the health care practitioner should act in such a manner to benefit the patient. Non-maleficence deals with the avoidance of harm, which can be quite substantial when taking into account unwarranted distribution of photographic and other records. Lastly, justice guarantees that patient are all treated equally, as enshrined in the Constitution of the Republic of South Africa, 1996\(^5\).

It is thus important that the patient’s right to autonomy is considered against the benefits of clinical photography. Each case needs to be assessed based on its own merits with specific sensitivity towards patients in the case of photographs involving the face and genital area.

“Every human being of adult years and sound mind has a right to determine what shall be done with his own body; and a surgeon who performs an operation without his patient’s consent commits an assault, for which he is liable in damages”, Justice Benjamin Cardozo, 1914\(^6\).
Medical consent aims to certify that a patient has been adequately informed about the treatment offered by the physician, the existence of alternative strategies, as well as the associated risks and benefits of each of the options.\textsuperscript{7} At its heart lies the possibility of incurring risk, which is defined as the likelihood of injury or loss occurring. There are two distinct constituents to risk, which are: (1) the odds of incurring an injury or loss and (2) the real injury or loss\textsuperscript{8}.

The patient’s risk for breach of privacy is much different in the case of actual photographs compared with that of simple medical records. Central to this is the issue of the patient being identified by means of photographs. When medical records are presented for whatever reason, it is easy to mask the identity of the person being discussed, by using acronyms instead of the name etcetera. This is not the case with photographs\textsuperscript{7}. Even blacking out the eyes, does not effectively prevent a patient from being identifiable, as is argued by Slue\textsuperscript{9}. It is thus of critical importance that the minimum body surface area is photographed, whilst still retaining the diagnostic value of the image\textsuperscript{7}.

Of further concern to patients is the unauthorised distribution of images outside the scope of their consent or the bounds of medical care. This unprincipled utilisation of images may affect the relationship between health care practitioner and patient, as well as violating ethical codes of conduct with the possibility of legal implications for the offending practitioner\textsuperscript{10}. In fact, Mahar \textit{et al} noted that medical indemnity providers in Australia and the United Kingdom have identified the utilisation and misappropriation of these images as a medico-legal risk\textsuperscript{11}.

Contrary to one’s initial reaction, it was found by Tomlinson \textit{et al} that patient were markedly positive regarding the use of digital photography (camera-phones, in this case) as an aid in their medical care. In this study 97\% of patients surveyed agreed or strongly agreed that the use of the captured images could assist in the consultation process related to their specific problem.

There was not a single patient that either disagreed or strongly disagreed with this practice\textsuperscript{12}. 
It is, however, crucial that consent is obtained in such a manner that both patient and health care provider are comfortable. This would include, at least, a specific description of the aim of the photography, the risk of failure to consent to having photographs taken and also clarification of issues regarding safekeeping and privacy. In addition, the patient needs to be aware that the medical care afforded them will not be influenced by their denial of consent. Furthermore, consent can be withdrawn at any time, and for any or all of the intended applications. And crucially, the patient needs to realise that once the images have been utilised (either through their publication or for teaching purposes), it is part of the public realm, making it practically impossible to delete.

In terms of the practical applications of obtaining consent, it is advised that consent to being photographed be recorded on a separate document. It is also important that the focus of the photograph is identified, as well as permitting the patient to choose the images which will be used. Lastly, the purported use of the photographs needs to be specified, be it for medical record keeping purposes, teaching purposes or to be published.

An example of such a form is depicted in Appendix A.

It is of the utmost importance that the medical practitioner has in place, specific measures to ensure the safekeeping of these records. If not being used for the intended purpose, these images should be deleted as soon as possible. In line with legislation, medical records (inclusive of photographs) should be kept for the prescribed minimum period of time.

Specified mention needs to be made of children and patients not able to consent. In terms of the Children’s’ Act 38 of 2005, the age of majority in South Africa is determined to be 18. Therefore, it is the responsibility of the legal guardian (in the case of a person unable to consent) or parent (in the case of a child) to sign informed consent on behalf of the patient.

Mostly, this process will be uncomplicated, but the situation might chance once the child reaches the age of majority or the patient gains capacity.
In an emergency situation, such as where a patient is unconscious, and where photographs would be beneficial, not only in terms of patient management, but also in terms of the judicial process, images may be captured without the consent of the patient. Once the patient is conscious and able to understand, this needs to be explained to the patient\textsuperscript{14}. This, again, is acting in the best interest of the patient (beneficence, non-maleficence and justice).

Once the patient gains capacity or the child reaches majority, he/she attains the right to revoke consent which was previously obtained. It is noted by Lakdawal \textit{et al} that by including the child from the onset of the discussion pertaining to consent, a situation would ideally be created where the chances of the patient revoking consent is minimalised. Whilst this discussion needs to be conducted in an age-appropriate manner, it builds a positive relationship between clinician and patient and allows the child to participate in choices relating to his/her own health\textsuperscript{7}.

Finally, explicit photography needs to be addressed pertinently. This would include images of the genital area(s), as well as full-body images. Imaging of these areas could lead to a psychological impact on the patient, more so than other photographs, both as a result of capturing the image and due to the image itself. This situation would require sensitivity on the part of the clinician\textsuperscript{7}.

In conclusion, photographic record-keeping has many benefits in terms of patient care.

However, there are significant risks associated with the attaining and retention of such images. Bear in mind the specific mention being made of this by the Health Professions Council in the Guidelines on Ethical Rules, Regulations and Policy: “12.1.5 Effective safeguards against unauthorised use or retransmission of confidential patient information must be assured before such information was entered on the computer disc. The right of patients to privacy, security and confidentiality must be protected at all times”\textsuperscript{3}.
In order to minimise undue strain on the patient, attention to the following would be beneficial:

1. Obtaining informed consent.
2. Creation of an environment which is set up in a standardised and professional manner, and is private.
3. Having staff which is sensitive to the patient’s anxieties.
4. Use of a chaperone appropriate to the patient’s situation.
5. Exposure of the smallest body surface area during photography.
6. Photographing of the minimal necessary area.
7. Avoiding photographing the face, if possible.

This should ideally lead to a situation where the benefit to the patient far outweighs the risk and assist greatly in optimised patient care.

SHORT SUMMARY

- The advent of the digital era has made access to digital images an essential part of medical management.
- This is fraught with legal, psychosocial and ethical issues.
- The patient and his/her concerns need to be approached in a sensitive manner.
- Consent and the ethical accountability is of the utmost importance.
- The security of the images needs to be ensured.

SUGGESTED READING MATERIAL

REFERENCES

6. Schloendorff v the Society of the New York Hospital. 211 NY 125 105 NE 92 1914 LEXIS 1028 (1914).
Appendix A. Standard Consent for Clinical Photography

I, ______________________, agree to permit medical photographs to be taken of me. By signing, I acknowledge that the terms of this consent have been explained to me in a clear and understandable manner. I am aware that the photographs will become a part of my medical record, and may also be used for medical teaching, or published in medical textbooks or journals, dependent upon the authorisation I provide below. I am aware that refusal to agree to permit medical photographs to be taken of me will in no way affect the medical care that will be provided to me. I further acknowledge that consenting to have photographs taken of me in no way entitles me to any form of compensation from their potential future use. In addition, I understand that I may withdraw or modify this consent at any time, with the realisation that once these images are published, either in written or electronic format, they will remain a part of the public domain despite any modifications I may choose to make. 1) I agree that these photographs may be used for teaching purposes, as well as become a part of my medical record. In addition, I consent to the use of these photographs in medical publications, including medical textbooks, journals and electronic media. I am aware that members of the general public may view these images, as well as medical researchers, professionals, and scientists. Despite assurances that every effort will be made to remove any identifying elements from the photographs, I acknowledge that it is possible that someone may recognise me.

____________________________  ______________________  ______________________
Patient/ Witness  Date

2) I consent to the use of these photographs as a part of my medical record and for teaching, but NOT for medical publication in any format.

____________________________  ______________________  ______________________
Patient/ Witness  Date

3) I agree that these photographs shall be used only as a part of my medical record.

____________________________  ______________________  ______________________
Patient/ Witness  Date

These images will be stored and/or utilised in the following location(s):
_____________________________________________________________________________________________________

_____________________________________________________________________________________________________

________________________________

Patients ages 7 through 17 years old: I understand the terms above, and also understand that I may withdraw this consent once I reach 18 years of age.

Print Name: ___________________ Date: ________  Sign Name: ___________________

Adapted from Lakdawala

Extracted from HPCSA Guidelines for good practice in the health care professions. Guidelines on the keeping of patient records

9 DURATION FOR THE RETENTION OF HEALTH RECORDS

9.1 Health records should be stored in a safe place and if they are in electronic format, safeguarded by passwords. Practitioners should satisfy themselves that they understand the HPCSA’s guidelines with regard to the retention of patient records on computer compact discs.

9.2 Health records should be stored for a period of not less than six (6) years as from the date they became dormant.