



QUALITY ASSURANCE

Reduce mistakes!

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In this text the words Quality Requirements and Control are used. These have become common in Finnish, being linguistically adapted from translations of the words standard and criterium. The former word standard has in many texts been translated to Finnish as Quality Requirement. The author has personally used the words Quality goal, because in have created a Quality Requirement sets a goal for good Health care.

In general the term standard means: norm, normal type, common or normal model or type, etc. With standardisation one means taking measures to assure



*5 year old child sustained this burn/cut after cast split due to neurovascular complications.

that a product or an intended goal are uniform and thus improve general comparative quality. (Definitions from The New Conversation Dictionary.) Standards and Quality Requirements are also general patient expectations concerning quality in Health care. Standards are thus the demands which Health care is required to meet and are commonly accepted when it concerns a qualitative high standard care. (According to Kalkas compendium, 1980.)

It is just not enough that we set up a goal. It is very important we also check that we have reached that goal. Therefore one must make an instrument for measurement, a form, a balance sheet, a criteria meter for Quality Requirements. *Criteria are known quantities, the conditions of object or a meaning which definitely sets it apart from all others. (*According to the New Conversation Dictionary, 1968.) In other words the criteria, quality measurements are a method to judge the quality of care. An example of Quality Requirement is an operation is successful when the patient does not get a hospital infection. A Quality Control would then be that a patient did not get an infection.

One learns that it is easier to organise Quality Requirements if you begin every statement (sentence) with the words: "Care is good, when..." Quality Control is easy to implement, you only need to check if the care is as good as one would wish.

The most important thing with Quality Requirements is the quantitative increase in the quality of care and the creation of a general satisfaction with your work. A job well done is always a reward in itself.

If we begin to demand Quality Requirement, it would be ideal if there were International Quality Requirements for Health Care for the world, and similar Quality Requirements for Finnish

Plan

- Age of patient
- Fracture type
- Work situation
- W.B. or N.W.B.
- Swelling
- Incontinent
- Diabetic
- Splint/Full cast?
- Split cast
- Extra padding
- POP or Synthetic
- Window needed later
- Moulding

Excerpt from 'Introduction To Casting'. John Kinealy 1997.

Prepare

- Patient comfort
- Applicator comfort
- Bed height
- Patient position
- Limb stands
- Draping of patient
- Materials at arms length
- Equipment (scissors etc)
- Water (right temperature)
- Correct parameters
- Moulded properly
- Correct bandage width

Technique

- Speed
- Dexterity
- Even consistent bandages
- Smooth inner layers
- Smooth outer layers
- Cool or tepid water

Follow Up

- Neurovascular check
- Check edges
- Check mobility of all joints
- Check for dents or defects
- Verbally explain cast & limb care
- Provide written instructions on limb & cast care
- If sling provided explain any exercises
- Mark cast for any future windows
- Arrange cast check for following day
- If Total Contact Cast- Cast must be marked clearly with the words "Unpadded cast".

One of the consequences of cast application!

Taken from Mail Online.
To read the full article go to- www.dailymail.co.uk/news/article-1035568/Man-suffers-broken-ankle-LOSES-leg-doctors-make-plaster-cast-tight.html

* Images taken from R.Vragovski & J. Kinealy Casting Power Point presentation.

The screenshot shows a news article from Mail Online. The headline is "Man suffers broken ankle and LOSES a leg after doctors make plaster cast too tight". The article is by JAYA NARAIN, last updated at 4:04 PM on 16th July 2008. The text describes how a pensioner, Tom Talks, 80, fractured his ankle while walking his dog and was taken to hospital where he was fitted with a cast. However, his leg swelled up and he was left in agonising pain, forcing him to return several times to ask doctors to loosen the cast. They refused, and Mr Talks eventually collapsed and was rushed to hospital by ambulance, where surgeons told him he was lucky to be alive. An image shows Mr Talks in a hospital bed, looking distressed. The article also includes a sidebar with a "Pick a card, any card" promotion and a "FEMALE T" section.

care as well as your own hospital's Quality Requirement based on a world standard. There are no known International Quality Requirements as yet but one can begin to apply the principles to ones own work in the clinic. If there is not sufficient interest for Quality Requirement in your own clinic, the individual members of the staff

can make a Quality Requirement for their own area of treatment and carry it out alone. It is often enough that in the beginning that one starts following more carefully Health care's most important principles such as attention to the individual, safety and antiseptic factors, co-operation and interpersonal relations.

Casting is one of a technicians main tasks, so QR (Quality Requirement) has been initially applied to these areas. Hopefully, what follows below may be an example of how one can create Quality Requirement and Quality Control.

QUALITY REQUIREMENT NO 1

The cast is good when it is correctly applied anatomically and physiologically, that is it fulfills its task.

- it immobilises the injury in the correct position.
 - it is the correct size.(dimensioned)
 - it does not restrict movement in those joints in which this is permitted.
 - it does not apply unnecessary pressure during movement or cause skin sores.
 - it is correctly padded.
 - it gives sufficient support but is neither too tight, giving rise to undue pressure, or too loose.
 - it does not interfere with daily activity more than is necessary.
 - it allows sufficient movement and use limb of the limb.
 - it does not "point-pressure" against the skin.
 - it does not have "fingerprints" or edges pressing into the skin.
 - it is as painless as possible.
 - The patient complains no more than "normal" over the pain.
- With a good cast both the patient and the doctor are satisfied.

QUALITY REQUIREMENT NO 2

The cast is good when it is aesthetic

- it looks good
- its surface is smooth
- it looks professional
- its distal and proximal ends are suitable and well-fitting.
- its colour suits the situation.

QUALITY REQUIREMENT NO 3

The cast is good when its material is correctly chosen.

- it remains intact during the immobilisation period.
- it permits personal hygiene and rehabilitation, even for bed-ridden patients.
- the initial "primary" cast makes allowance for swelling.
- this form of treatment does not cause more problem than the injury
- the material is chosen with due consideration to both economic and environmental points of view.
- the choice should be for every individual case taking into account both the medical praxis and social considerations, e.g. social groups, children, and those who have "difficulty in understanding their situation."

QUALITY REQUIREMENT NO 4

The cast is good when the patient has been given sufficient advice:

- one explains to the patient why just this type of cast has been used.
- one tells the patient about the fracture and the casting position.
- one informs the patient about fluctuations in swelling and that the cast may become "loose" periodically.
- one describes to the patient the drying period of the material and precautions to observe at this time.
- one warns the patient not to get the cast wet and what happens should this occur.
- one alerts the patient about pain, and the degree of pain that is considered normal and when this level is exceeded who they should contact.
- One makes clear for the patient about how they should use the extremity in the cast. Applying light weight-bearing. How to use the hand while doing housework, etc.)
- One gives advice about elevating the extremity to reduce swelling.
- One recommends measures for rehabilitating a casted extremity during the period of immobilization.

Conclusion

I hope this article makes you think before and after applying, modifying or removing any cast or splint.



*Child presented with pain in antecubital fossa. Cast applied in extension then flexed causing this crease.



*2 day post ORIF of Weber B Fx. Pt complained of pain and intense burning. Applicator used thumb to hold ankle in plantargrade position.



*Adult with B/K F/G cast. Same problem as image 1. Pressure area from padding and material applied with foot plantarflexed, then extended.



*Thumb spica slab applied with two separate pieces. POP slab allowed to crease over already wrinkled and poorly applied padding.