

Legal and practical aspects of using NIMV - Dutch perspective -

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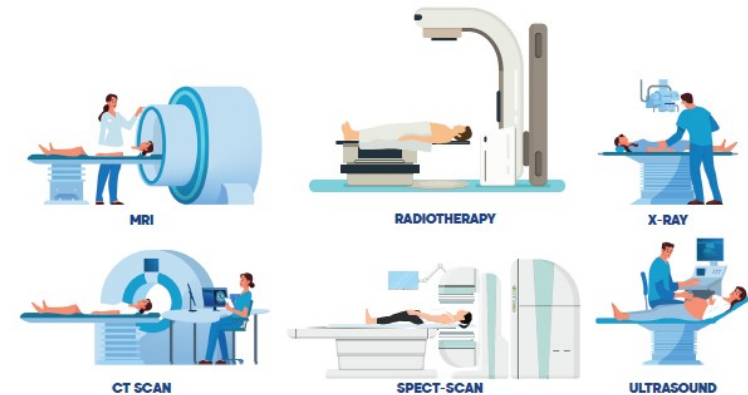
Acknowledgements

Maud Kleuver



- Diagnostic radiographer
- PhD thesis (2021)
“The Legal Position of the Medical Imaging and Radiation Therapy Professional and Their Employer”

De juridische positie van de medisch beeldvormings- en bestralingsdeskundige en zijn werkgever



M. Kleuver



Healthcare Professionals Act (Wet BIG)

Purpose

- to promote and monitor quality in health care
- to protect patients from careless or incompetent treatment by a healthcare professional

Article 34 professions



- have a legally protected title
- cannot register in the BIG-register
- are not subject to disciplinary rules

Including:

- diagnostic radiographer
- therapeutic radiographer



Healthcare Professionals Act (Wet BIG)

- The Wet BIG is lagging current professional practice of Medical Imaging and Radiation Therapy (MIRT) professionals
- MIRT professionals perform preserved acts that fall outside the legally defined areas of competence
- An updated Wet BIG is anticipated; however, its implementation may take at least another two years*



Competencies paramedics @Amsterdam UMC

1. General competencies functions Described for all staff and/or for specific functions
2. Preserved acts / acts with risks Act 'Wet BIG' - Healthcare Professionals Act
Departmental management determines how & what, based on risk analysis
3. Medical equipment determines how & what, based on risk analysis
Departmental management
Training & assessment



Some examples:

Actions legally restricted to professionals

- Inserting an IV
- IV contrast administration
- Image-guided biopsies / punctures
- Radiological interventions
- Complex radiation procedures
- Inserting a rectum cannula
- Inserting a bladder catheter
- Therapeutic radiation
- Dose determination within plan
- Intravenous radioactive isotopes
- Adjusting treatment

Actions not specified as above include the administration of oxygen, and use of a mechanical ventilator



Risk classification

- Hospital-based METC classified our research with NIMV as involving minimal risk

HOWEVER

- Dutch Society of Anesthesiology & Federation of Medical **guidelines** in their guidelines define NIMV as a high-risk procedure



Required training

Delegation of responsibilities



NIMV Training (yesterday's presentation)

- N = 6 RTTs
- N = 2 PhD students
- Project leader

Research

- Healthy volunteers
- Patients

To guarantee research & treatment

- Learning goals
- Knowledge & skills
- Breathing strategy protocols
- Study specific SOP (Standard Operating Procedure)
- Supervision
- Back up support
- Practice skills



Delegation of responsibilities

The delivery of the radiation treatment is delegated by the radiation oncologist

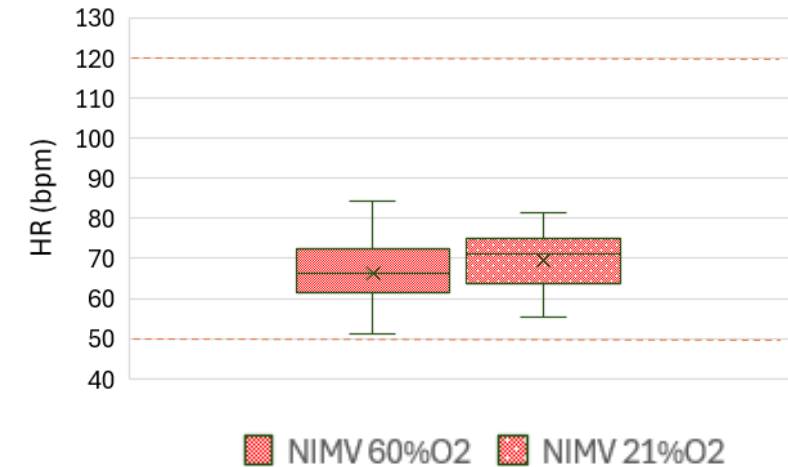
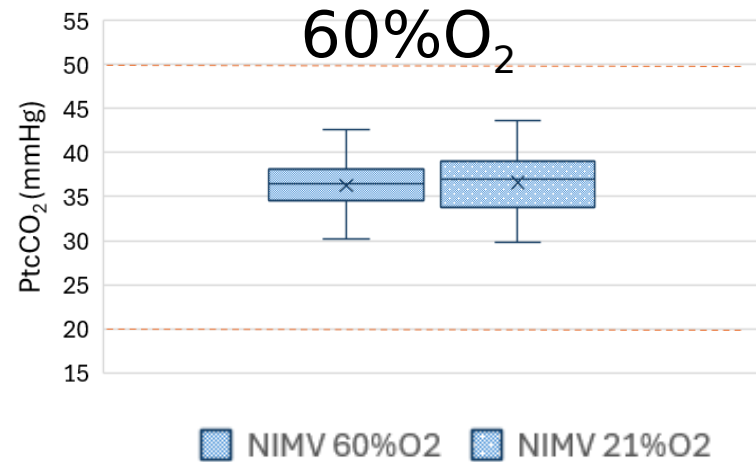
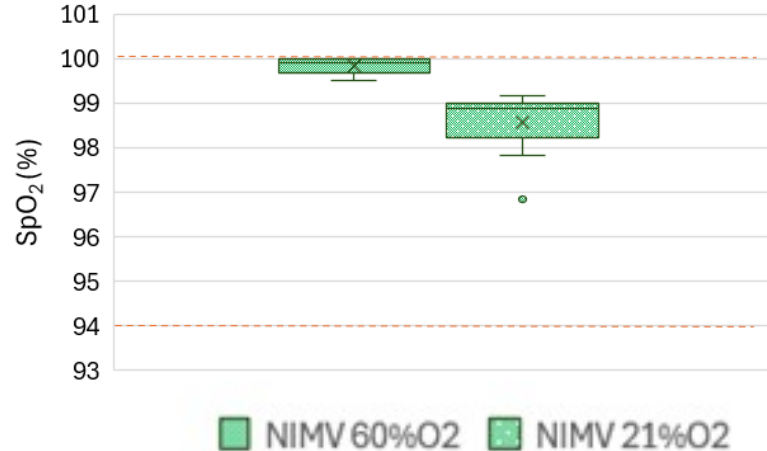
The operation of a mechanical ventilator, i.e. delivery of NIMV, is delegated by the anesthetist

... and what about administration of oxygen?



Administration of oxygen (N=10 healthy volunteers)

NIMV_{60P} with 21%O₂ was equally effective and safe as NIMV with



➤ **60%O₂ is no longer necessary for NIMV-induced regularised breathing**



In summary

- The application of NIMV in radiotherapy introduces complex legal and professional considerations
- Current legislation (Wet BIG) does not fully align with modern professional practice
- Safe implementation of NIMV requires:
 - Clear training programs
 - Well-defined delegation of responsibilities
 - Institutional risk-based competency frameworks
- Further legal clarification and legislative updates are needed to support evolving clinical practice.