# IMPROVING TRACEABILITY OF WEIGHT AND RENAL CLEARANCE OF ELDERLY RESIDENTS IN NURSING HOMES



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## **OBJECTIVE**

Elderly patients are more likely to have decreased renal function, which can require adjustment of therapeutic treatment. The aim of the present study was to assess medication management quality by monitoring weight and renal clearance of elderly population living in one of the 584 nursing homes of the region, especially people with chronic renal failure and to raise health care professionnals' awareness on the importance of weight and renal clearance's traceability.

## **METHODS**

A retrospective professional practice assessment was conducted in early 2014

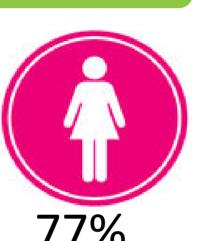
- Voluntary nursing homes of the region
- People of 75 years old or more
- Living in a nursing home for more than a year

Traceability of weight and renal clearance were collected in the resident's file.

## **RESULTS**

# STUDY PARTICIPANTS

- 84 (14%) nursing homes
- 3063 resident's files
- Mean age = 88 yrs



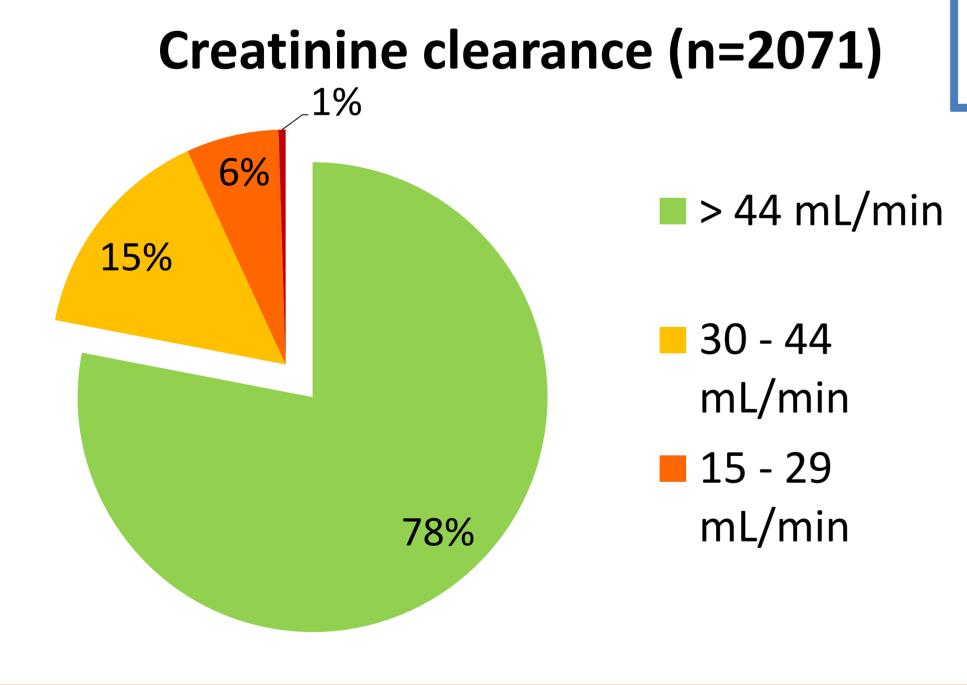


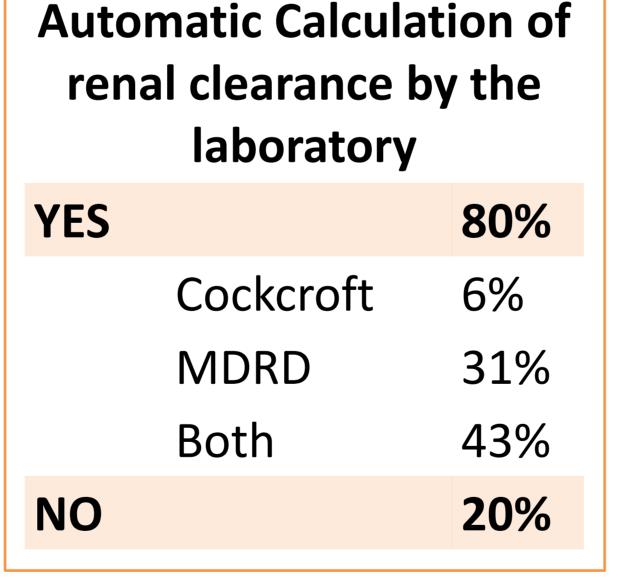
- Mean number of residents:
- 108/nursing home
- 76 included/nursing home

# WEIGHT AND RENAL CLEARANCE

Percentage of residents with at least one measure during the past year:

Serum creatinine	76,0%	1/3 of residents
Weight	99,2%	don't have any
Serum creatinine AND weight	75,4%	renal clearance
Renal clearance	67,6%	registered during
		the year





22% of residents had chronic renal failure with a renal clearance < 45 mL/min

> 50% of them had a correct biological follow-up according to French guidelines

# Training of healthcare professionals

1. Information leaflet:

# omedet Les bons réflexes Suivi de la fonction rénale

PRATIQUE GÉRIATRIQUE

#### Généralités

Chez la personne âgée, le suivi de la fonction rénale et du poids est nécessaire. A partir de 60 ans, la créatininémie doit être dosée 1 fois/an. Après 75 ans, elle est dosée plus fréquemment et au moins tous les 3 mois dans certaines circonstances : anticoagulants oraux directs, patient insuffisant rénal sous diurétiques. Différentes méthodes d'estimation de la fonction rénale sont disponibles. Dans cette population, le choix se porte sur la formule de :

#### Cockcroft et Gault (CG)

#### Justification

- Prise en compte du poids
- Préférable à MDRD qui sous-estime la fonction rénale réelle de la personne âgée
- Permet l'adaptation posologique des médicaments

#### Formules

Clairance CG en mL/min = Poids (kg) x (140-âge) 0,814 x créatinine en µmol/L

Chez la femme le résultat est multiplié par 0,85.

Estimation plus précise du débit de filtration glomérulaire à l'aide de la formule de Cockcroft et Gault corrigée :

Clairance CGc en mL/min/1,73m<sup>2</sup> = Clairance calculée (mL/min) x 1,73 Surface corporelle

Médicaments avec recommandations en cas d'insuffisance rénale

(contre-indication, adaptation posologique)

# Metformine

- Allopurinol, colchicine
- Héparines de bas poids moléculaire
   Médicaments à marge thérapeutique
- Antibiotiques et Antiviraux
- étroite (méthotrexate, digoxine)
- Anticoagulants oraux directs
- Antihypertenseurs...

# 2. E-learning training:



## It includes:

- **Commented video**
- Quiz
- Clinical case

# **CONCLUSION**

Nursing homes encounter difficulties to collect and record their residents' data and to standardize their practices. To improve traceability of weight and renal clearance, a free e-learning training and an information leaflet are proposed to healthcare professionals. A second measure of data will be conducted in early 2017.



Loire-Atlantique et Vendée

