



**“Trust me,  
I’m a trained sedation provider!”**

*Incorporating Entrustable Professional Activities in a  
pediatric sedation curriculum for specialized nurses.*

# Disclosure

- I have no actual or potential conflict of interest in relation to this program/presentation

# Content

Introduction

Pediatric PSA in WKZ and PMC

Conditions and organization

Guidelines

Need for EPA's

Curriculum PSA children

Future plans

Questions

Summary



# Introduction

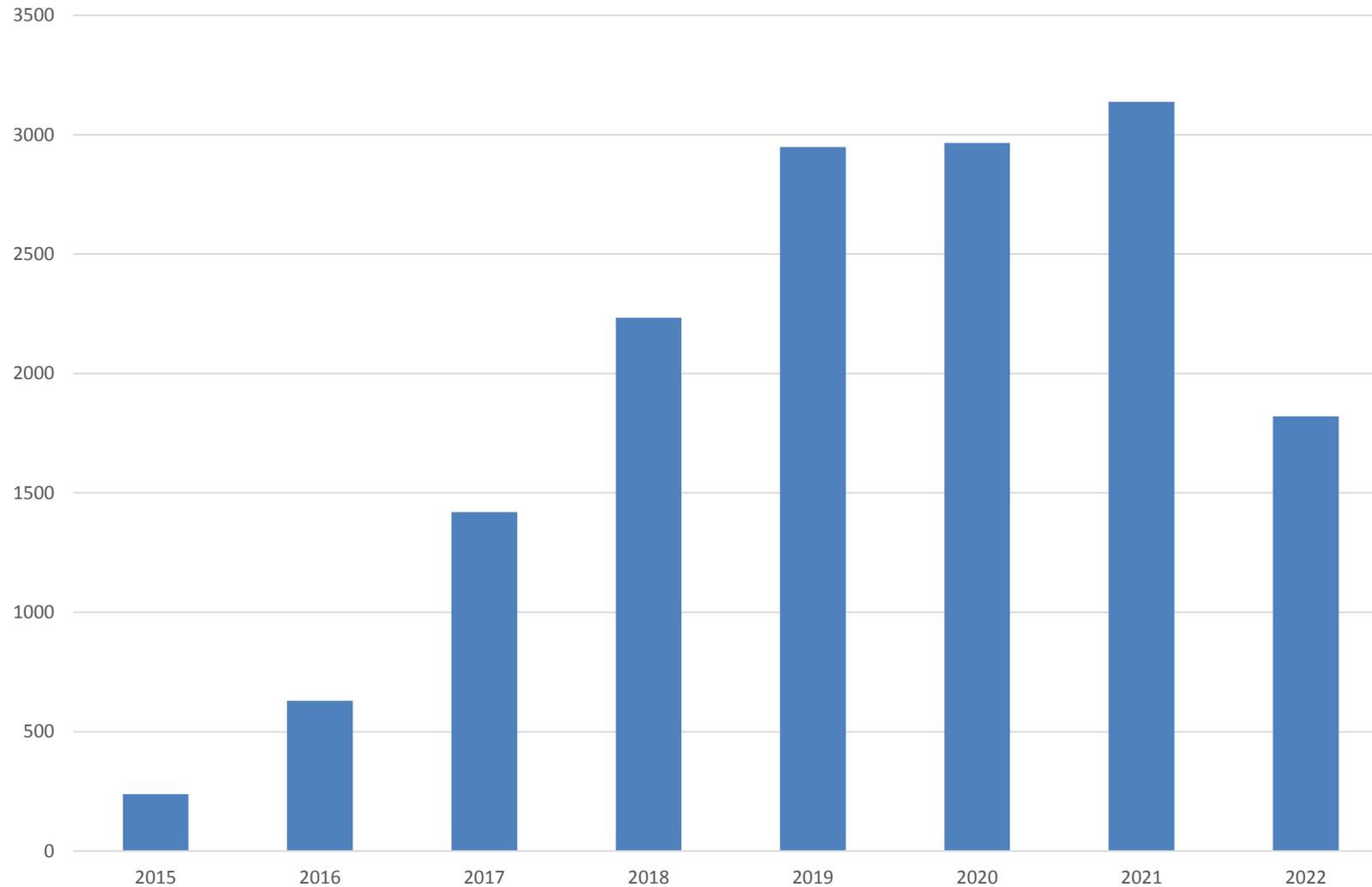
- Marga van Eck-Smaling
- Nurse anesthetist since 2003
- Since 2011 in WKZ
- 2017 course Sedation Practitioner adults
- Prove of competencies for PSA in children
- Responsibility
- Development and Research in pediatric sedation

# Procedural Sedation and Analgesia in the Wilhelmina Children's Hospital

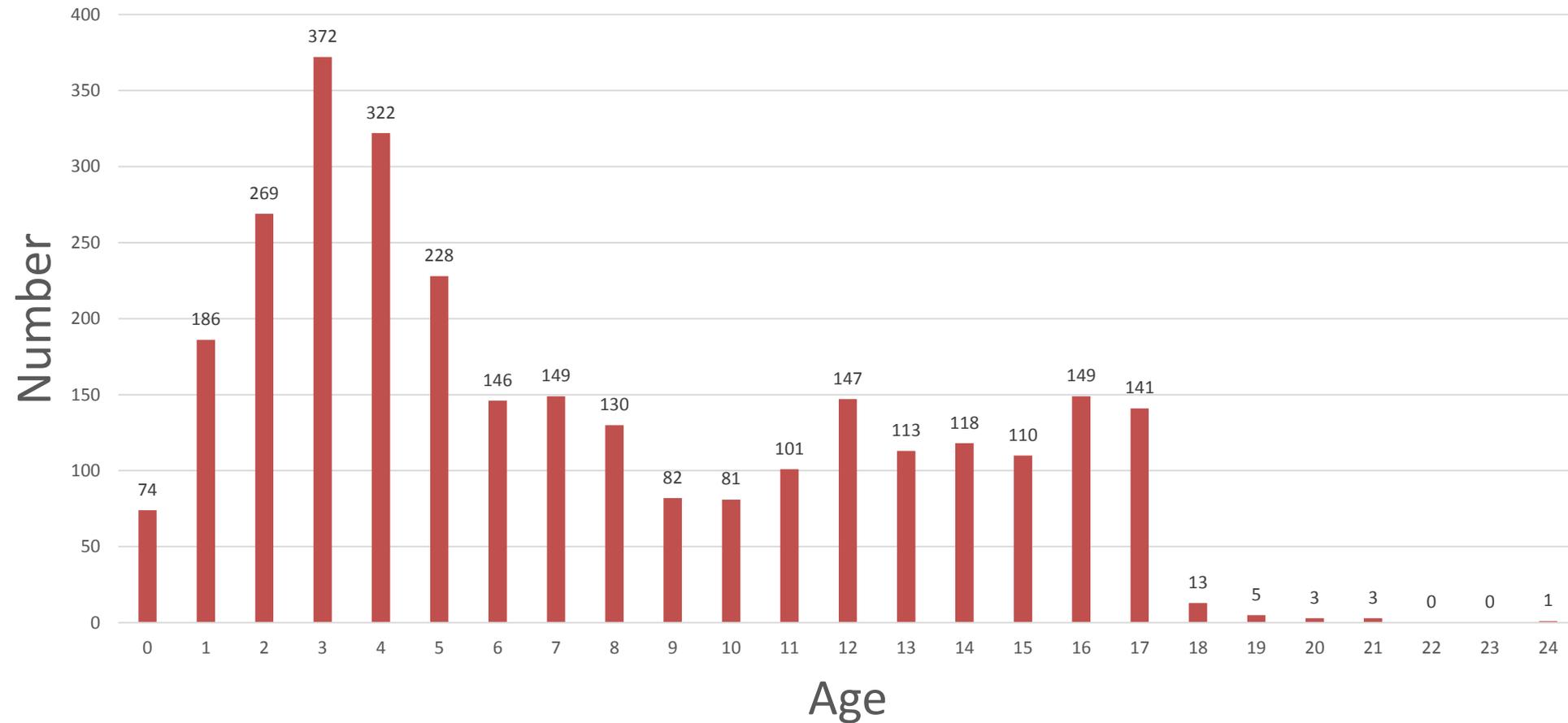
- PSA children in WKZ since 2015
- Nurse anesthetist skilled and competent for providing moderate to deep sedation with children
- Observed, assessments and documented
- Practical Education Curriculum for Pediatric Procedural Sedation and Analgesia
- BLS and ALS training, also PBLS and EPALS.



# Pediatric PSA in WKZ and PMC



# Age children of Pediatric PSA



# Conditions PSA children

- Available SIP team
- Local protocol:
  - Patient selection criteria
  - Responsibilities of sedation committee
- Sedation during whole treatment
- Evaluation quality and safety
- Additional non pharmacologic technics
- Topical technics
- Monitoring facilities during and after the procedure
- Guarded recovery with discharge criteria
- Child friendly room



# Conditions Pediatric PSA

## Outside OR

- ASA- classification: ASA 1, ASA 2, stable ASA 3
- Age: older than 1 year
- Cooperative
- Children or treatment: no need for OR hygiene
- IV-access (PAC of Hickmann in situ)
- Pediatric Anesthesiologist



# Day treatment Kameleon



- Time Out with patient, parents, doctor and the team
- Peripheral IV given by Sedation Practitioner
- Parents stay until child sleeps
- Induction, maintenance sedation and waking up by Sedation Practitioner
- Depth of Sedation and vital parameters in anesthetic report
- Sign out
- Anesthetist is always available, mobile number on the blackboard
- Post sedation recovery
- Parents join the child in recovery room

# National guidelines for healthcare in children

- Well-trained non-doctor professionals may provide PSA to selected children for specific procedures
- Local multidisciplinary Sedation Committee
  - Consults with Board of Directors
  - Implements guideline
  - Responsible for Practical Education Curriculum for PSA
- Sedation Practitioner and Physician Assistant education for adults

# Practical Education Plan for Pediatric Sedation

- Based on the adult education plan for Sedation Practitioner
- EPA – concept

EPA is an **Entrustable Practical Activity** that can be trusted to a **competent professional**

- 1 Key action of the professional skills
- 2 Demands specific qualification and knowledge, skills and attitude
- 3 Risky process with chance of mistakes that can harm the patient
- 4 Independent feasible in limited period
- 5 Leads to recognizable output
- 6 Can be coupled to CanMEDS - competencies
- 7 Observable, measurable and judgeable in process/outcome

# Tools for EPA's and levels of EPA's

- CBD = Case Based Discussion
- 360<sup>0</sup> feedback
- DOPS, Direct Observed Procedural Skills
- KPF = Short practical feedback
- Course Medical Hypnoses with children in the medical setting
- Course ALS and EPALS
- BLS and PBLIS training

1	Trainee observes
2	Trainee execute with direct supervision
3	Trainee execute with indirect supervision
4	Trainee is skilled
5	Trainee gives supervision

# Practical Education Curriculum PSA children

- Recognition of fear and building of trust with children
- Screening of children for PSA
- Minimal and Nitrous oxide Sedation of children
- Moderate to deep Pediatric Sedation and Analgesia (PSAk)
  - Airway management of children
- Post sedation care of children

# EPA 1: Fear reduction and building trust

- Recognizing fear in children
- Connect with children
- Building trust
- Know how to distract the children
- Use positive phrases



# EPA 2: Screening of children for sedation

- Informed consent
- ASA classification
- Explanation of the procedure
- Children have to accept IV
- Patient nil by mouth for 6 hours
- Parents stay until child sleeps

# EPA 3: Minimal and Nitrous Oxide Sedation

- Knowledge
- Indications
- Contra indications

Contra indications:

- OSAS
- ASA 3 or more
- Problems in previous procedures
- Expected airway problems

# EPA 4: Life support and airway management

- Pediatric Basic Life support
- Also the Pediatric Advanced Life Support is mandatory
- Well trained in airway management in children
- Also assisting general anesthesia on OR
- Hood ventilation, laryngeal mask, intubation
- Knowledge of medication used for general anesthesia



# EPA 4: Pediatric Procedural Sedation and Analgesia

Adjust depth of sedation depending on:

- Treatment or intervention
- ASA classification
- Age
- Reaction or movement of the child



# EPA 5: Post sedation care

- Level of consciousness
- Knowledge of vital functions of children
- Knowledge and skills of adequate analgesia and anti-emetics
- Determine vital parameters, Aldrete score before discharge
- Giving instructions and rules to patients and/or to parents
- Transfer to the post anesthetic room

# Personal Portfolio U-learn

- Regular theoretical course for Sedation Practitioners.
- Upload evidence for the EPA 's in digital portfolio U-learn.

## e en Analgesie bij Kinderen (PSAK)



esie bij Kinderen (PSAK)



EPA 1. Het bouwen van vertrouwen en omgaan met procedurele angst en pijn bij kinderen



EPA 2. Screening voor matige tot diepe PSAK



EPA 3. Minimale en-of inhalatiesedatie met een mengsel van lachgas en zuurstof



EPA 4a. Luchtwegmanagement bij kinderen



EPA 4. Matige tot diepe procedurele sedatie (PSAK)



EPA 5. Post sedatiezorg

# Personal Port folio U-learn



Informatie EPA 4



Uploaden verslag Korte Praktijk  
Feedback (KPE)



Uploaden bewijslast DOPS



Uploaden verslag Case Based  
Discussion (CBD)



Uploaden certificaat APLS



Uploaden Feedbackformulieren EPA 4



Aanvragen Eindbeoordeling EPA 4

# Professional competencies of Pediatric PSA

## General

- Knowledge of (contra-) indications and precautions of used medication
- Screening, assessment of risks and informed consent
- Regular basis of providing Pediatric PSA
- Child friendly approach

## Specific for Moderate to deep sedation

- Interpretation sedation depth and monitoring vital parameters
- Airway management, resuscitation skills

# Future Plan

- Educate other Sedation Practitioners
- Share knowledge
- Developing Education Plan PSA children
- Expanding PSA with other specialisms
- Research and investigation



# Questions ?



# Summary

- Sedation Practitioner adult can be well trained and educated in Pediatric PSA
- Documented in EPA's
- Skilled in fear reduction and comfort talk
- Not only ALS and BLS also EPALS and PBLS
- Sedation committee UMCUtrecht



## Every Pediatric Sedation Practitioner;

- “Trust me,  
I’m a trained Sedation Provider!”



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