

## Acute Zorg Euregio

Manon Bruens – Manager Acute Zorg Euregio (AZE)

Network organisation (ROAZ) with a coordinating function with regard to accessibility and availability of

acute care both for individual patients as in crisis situations

#### Main tasks

- Facilitating cooperation
- Coordinating
- Training
- Research

#### **ZORGGEBIED** IN DE EUREGIO Acute zorg stopt niet bij de landsgrens. In Twente, de Oost-Achterhoek en een deel van Duitsland is Bureau Acute Zorg Euregio op vele terreinen actief. ACUTEZORG TURI GIO Nordhorn Almelo Osnabrück Hengelo Rheine Enschede NEDERI AND Gronau Ahaus DUITSLAND Bocholt Borken

## Regional hospitals

Ziekenhuisgroep Twente – ZGT

Level 2 hospital

24 ED places

3 - 10 ED nurses

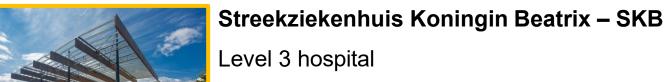


#### **Medisch Spectrum Twente – MST**

Level 1 hospital

23 ED places

3 – 10 ED nurses



12 ED places

2 – 5 ED nurses

## Shortages of nurses in the Emergency Department

- National problem
- Stress
  - Extra hours
  - Work pressure
- **Freelancers**

NOS Nieuws • Maandag 17 juli, 19:45

# Spoedeisende hulp VUmc 's nachts dicht door

De spoedeisende hulp van het Amsterdamse ziekenhuis VUmc gaat vanaf volgende week maandag dagelijks dicht van 20.00 uur tot 07.30 uur. Er is te weinig personeel om de afdeling dag en nacht open te houden. Patiënten die met spoed hulp nodig hebben, moeten uitwijken naar het AMC, meldt AT5 2.



Groot personeelstekort op spoedeisende hulp: UMC vraagt andere afdelingen bij te springen

GEZONDHEID

31 mei 2023, 11.55 uur · Aangepast 31 mei 2023, 13.04 uur · Door Robin Antonisse & Maarten Westerduin

Het Amsterdam UMC kampt op de locaties AMC en VUmc met een groot tekort aan verpleegkundigen op de spoedeisende hulp voor aankomende zomer. Dat blijkt uit een interne e-mail aan medewerkers die in het bezit is van AT5. In de mail wordt aan het personeel gevraagd om extra diensten te draaien. Medewerkers van andere afdelingen moeten bijspringen om de gaten in de roosters op te vullen.

## Float pool

- Unfilled shifts
- Job enrichment
- Care load
  - Variable
  - Hard to predict
- Responses
  - Buffers
  - Extra capacity → pressure

Opportunity: move decision making closer to demand realisation

#### Two Master thesis

1. Qualitative research:

Opinions of nurses regarding a regional float pool



2. Quantitative research:

Creating a simulation model to underpin the added value of a regional float pool



## Study 1

The perspective of emergecy department workers on flexible deployment: A qualitative research – Sofie Weelink (Master Health Sciences)

Aim of this study was to identify the impeding and facilitating factors expected by emergecy department workers related to flexible deployment in the hospitals MST, ZGT and SKB.

Link to thesis: <a href="https://purl.utwente.nl/essays/94488">https://purl.utwente.nl/essays/94488</a>



#### Method

- Semi-structured individual interviews (n=16)
- Interview schemes based on the Social Cognitive Theory (SCT) and Job Characteristics model (JCM)
- Interview data was transcribed and coded (open, axial and selective)
- Topics (main subjects) were created
- The impeding and facilitating factors were conducted based on different topics

#### Results I

Influence of home

Knowledge

Topic	Facilitating factors	Impeding factors	Impeding and facilitating factors
Attitude to a float pool	Positive attitude	Negative attitude	
Importance of own team			
Cooperation in region			
Freelancer			

#### Results II

-	Горіс	Facilitating factors	Impeding factors	Impeding and facilitating factors
	Skills	Need time to settle down	Language	Experience as nurse
				Practicing skills
	Personal experience as float pool worker			
	Personal factors			
	Schedule and			
ı	peripheral matters			

#### Advice

- 1. Provide adequate knowledge about the hospitals and protocols used in the hospitals
- 2. Create a buddysystem
- 3. Give nurses a voice in a regional float pool
- 4. Make use of a role model
- 5. Increase travel allowance
- 6. Provide a good management team
- 7. Create balance between de amount of float workers and the other nurses
- 8. Start with a regional float pool during internships

#### Study 2 quantitative research

'Exploring the possibilities for an emergency department nurses float pool in the Euregio using stochastic programming' – Daniël Snieder (Master Industrial Engineering & Management)

Aims to answer the main research questions:

'At which planning level and with which design choices will instating a float pool be beneficial for the

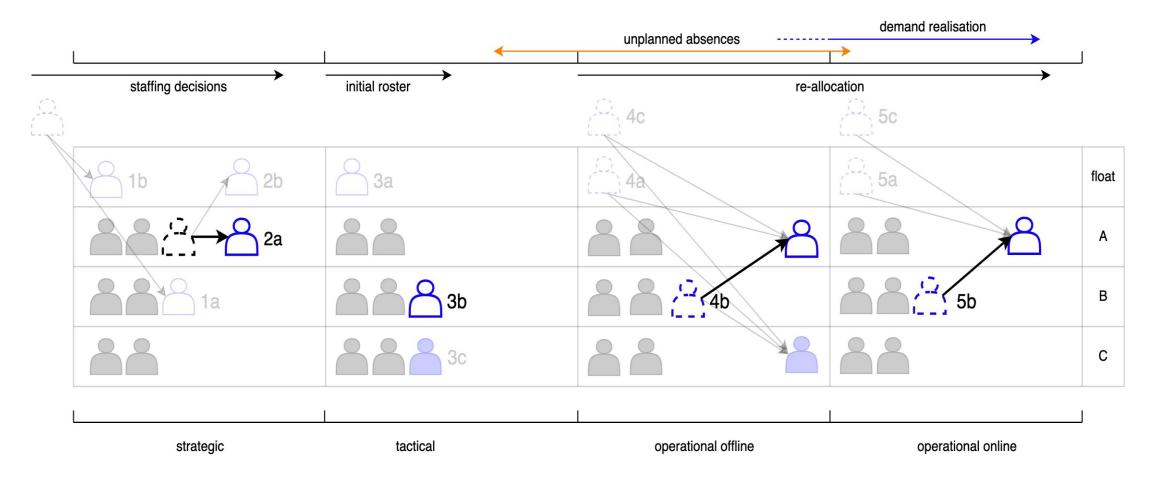
ACUTEZORG

Emergency Departments (EDs) that are part of AZE?'

Link to thesis: <a href="https://essay.utwente.nl/97156/">https://essay.utwente.nl/97156/</a>

## What options do we have?

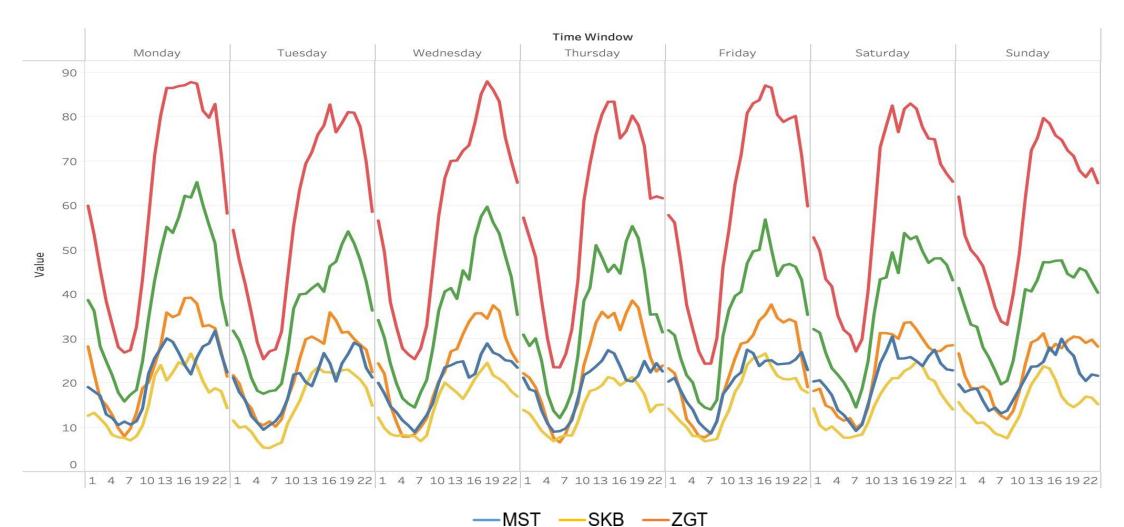
(Literature)



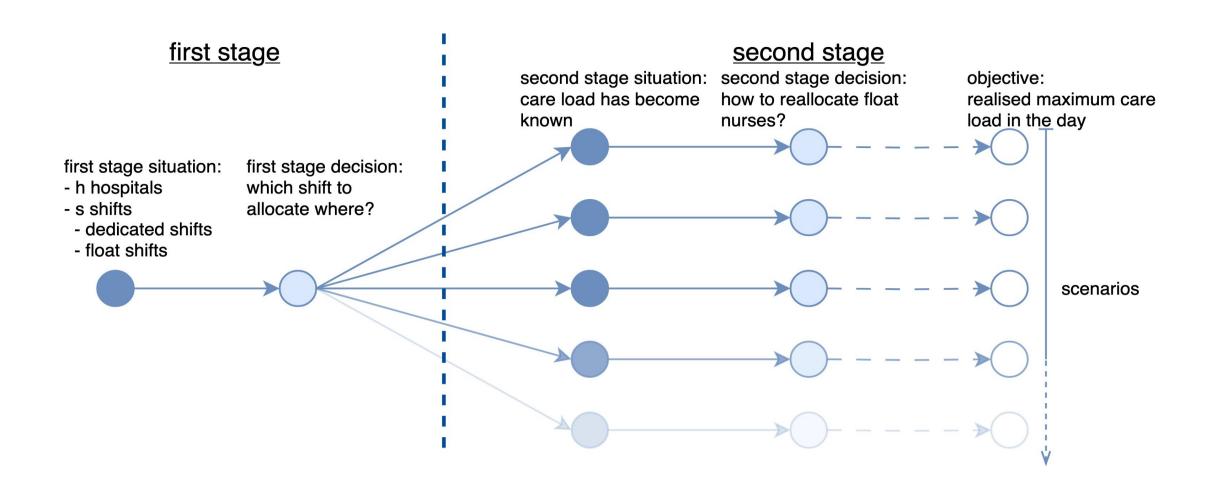
Flexibility ratio (5-15%)

#### Where would we need it?

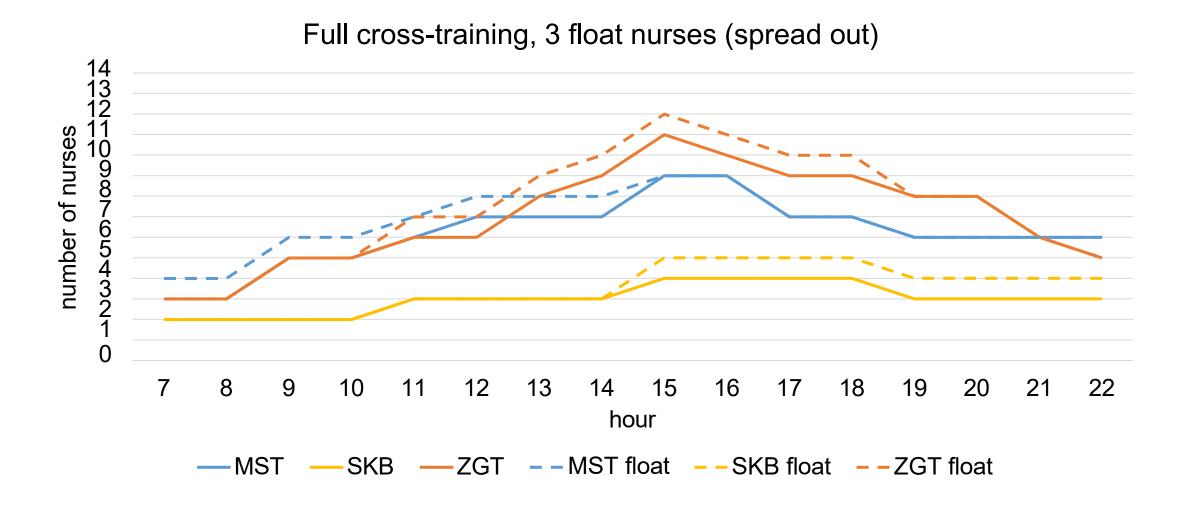
(Data Analysis: variability)



#### Two-Stage Stochastic Programming



#### Results



#### Follow-up

- Currently exploring regional possibilities, workgroup with delegates from the 3 hospitals
- Preferable: start with ED students in all hospitals

#### **Future research**

Schedule generation

How should the actual schedules look in detail?

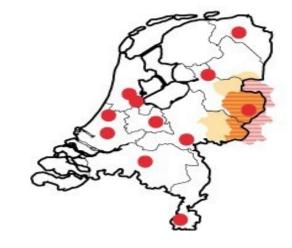
Operational functioning

How should the float pool function on a day-to-day basis?

Qualitative aspects

How should we organise it all?





#### Thank you for your attention

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