

PROGRAMMA: POLI PLANNING

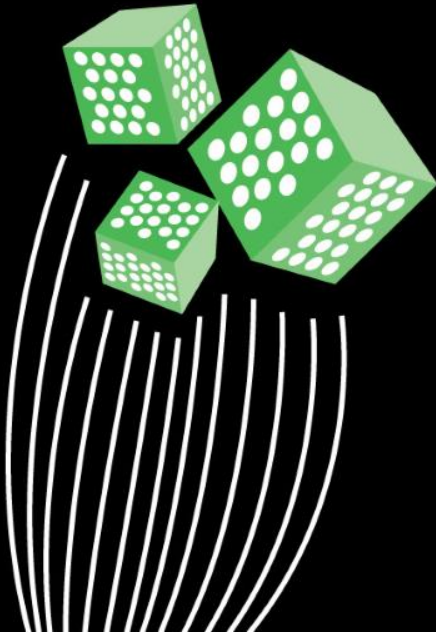
- 10:00 - 10:15: Eline Tsai
- 10:15 - 10:40: Saskia Vertregt
- 10:40 - 11:05: Maartje Zonderland
- *11:05 - 11:20: pauze*
- 11:20 - 11:45: Marjolein van Swinderen
- 11:45 - 12:05: Gréanne Leeftink

- **Volgend seminar: 4 oktober 2019**

UNIVERSITY OF TWENTE.

POLI PLANNING: EEN INTRODUCTIE

ELINE TSAI



CHOIR



WAAROM ÜBERHAUPT PLANNEN VAN DE POLI?

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Voordelen plannen:

- Verdeling werkdruk
- Beheersen **wachttijd** en **toegangstijd**
- Beheersen **overwerk**
- Voorbereiding zorgverlener mogelijk omdat je weet wie er komt
- Beheersen productierealisatie i.r.t. –afspraken
- Etc.

WAAROM ÜBERHAUPT PLANNEN VAN DE POLI?

Nadelen plannen:

- Creëert management-last
- Administratie-druk (afpraakbevestiging, etc.)
- Veel gedoe met herplannen van afspraken
- Plan versus realiteit
- No-shows en annuleringen leiden tot leegstand
- Creëert toegangstijd

Alternatief: **inloop** (evt. gecombineerd met afspraken)

- Geen administratie nodig
- Vrijheid patiënt
- Geen **toegangstijd**

SOORTEN AFSPRAKENSHEMA'S

8:00	1	10	2
8:30	1	0	1
9:00	1	0	1
9:30	1	0	1
10:00	1	0	1
10:30	1	0	0

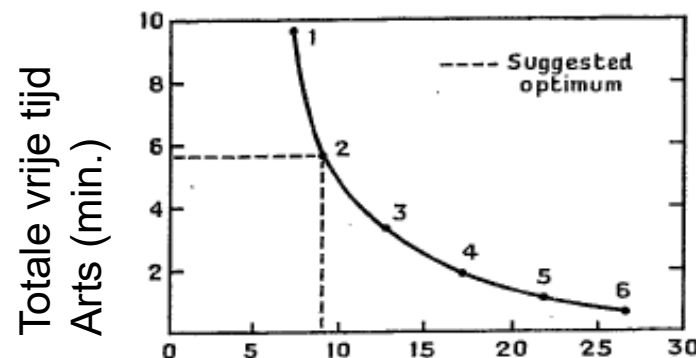
Bailey-Welch
regel

SOORTEN AFSPRAKENSHEMA'S

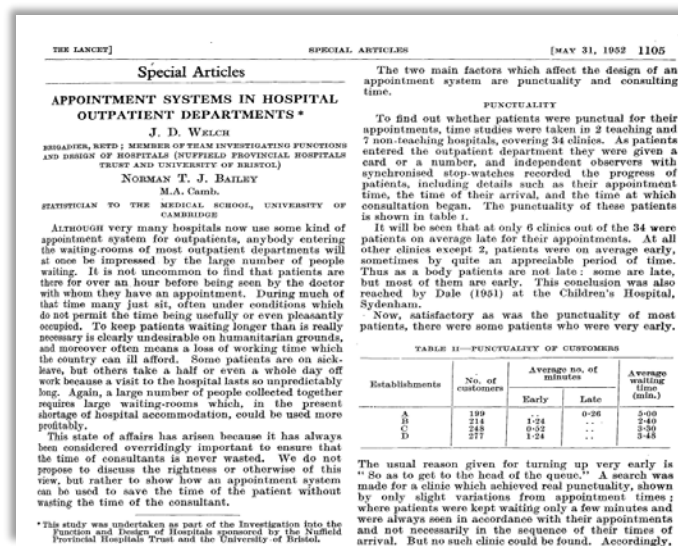
8:00	1	10	2
8:30	1	0	1
9:00	1	0	1
9:30	1	0	1
10:00	1	0	1
10:30	1	0	0

Bailey-Welch
regel
(1952)

Aantallen op de curve → aantal patiënten te boeken tijdens eerste consult

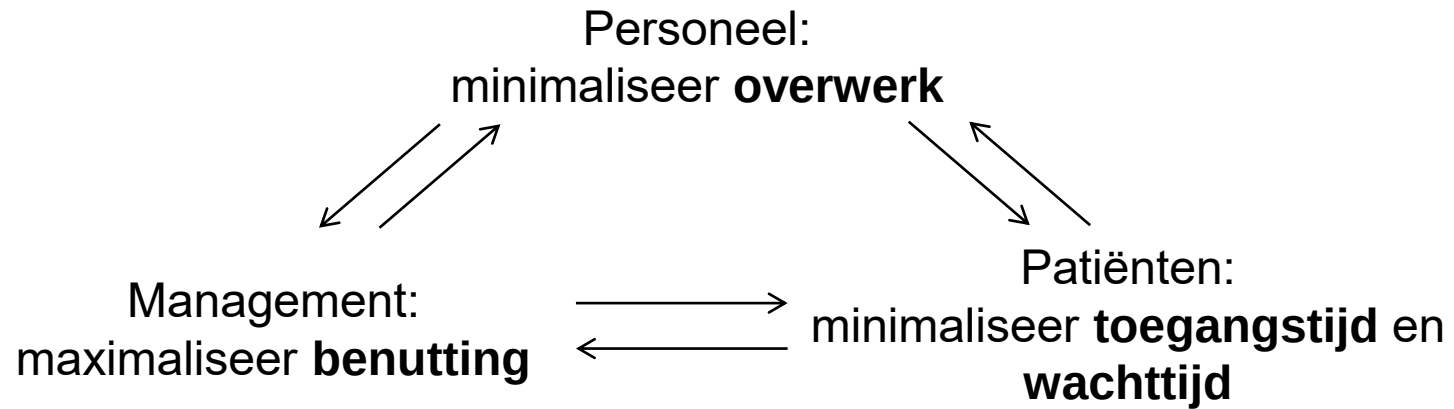


Wachttijd patient (min.)

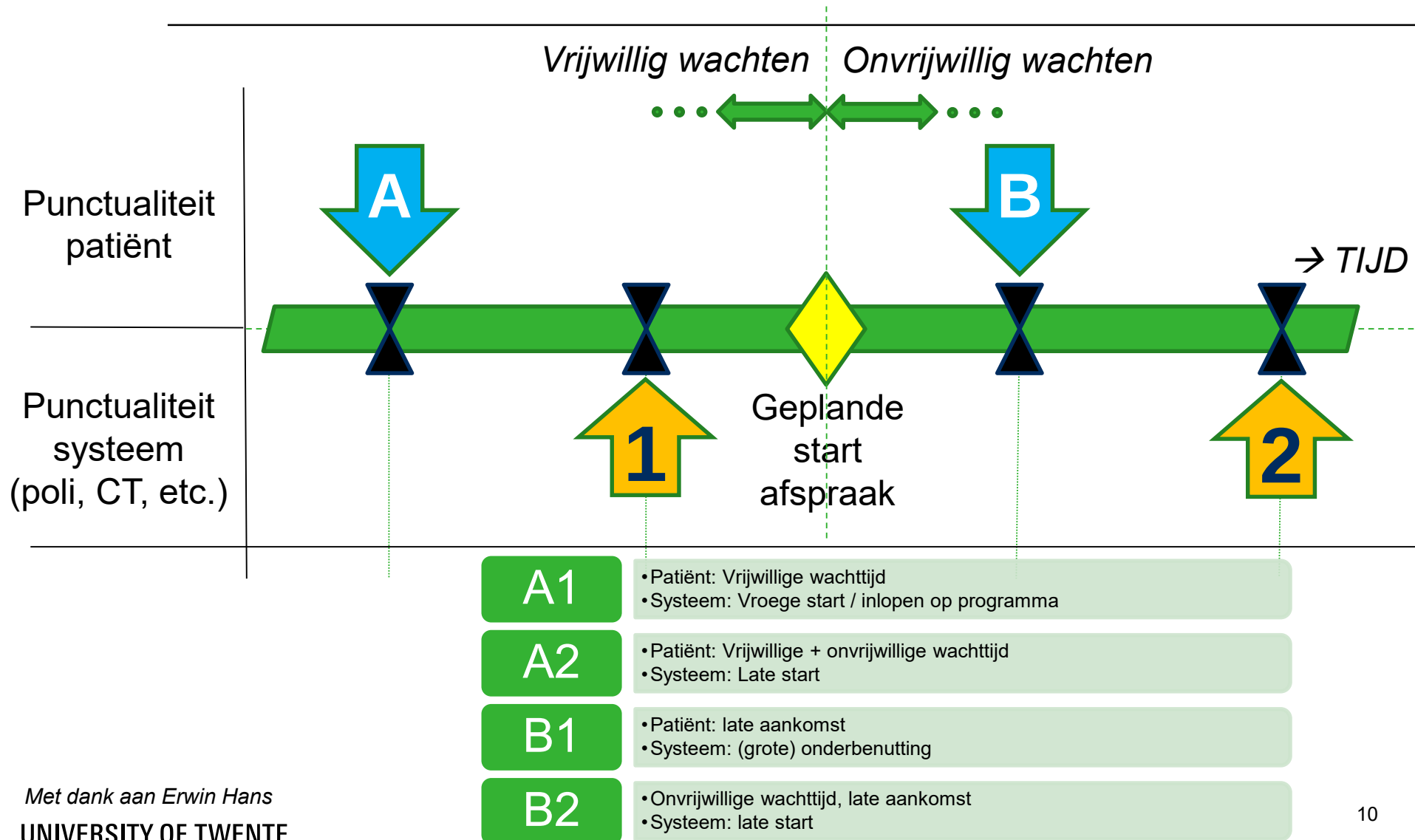




TEGENSTRIJDIGE DOELSTELLINGEN?



WACHTTIJD BIJ AFSPRAAK



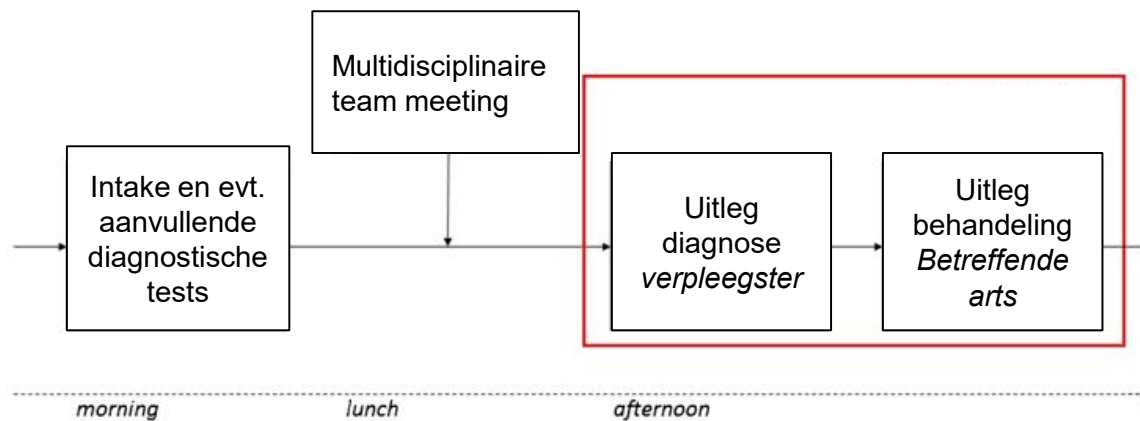
INTEGRAAL PLANNEN: EFFECT POLIPLANNING OP...

- Effect op andere afdelingen



INTEGRAAL PLANNEN: MULTI-DISCIPLINAIRE ZORG

One-stop-shop gewenst en mogelijk?



Multidisciplinaire kanker kliniek



Revalidatiezorg

WAAROM LASTIG?

- Tegenstrijdige doelstellingen en belangen
 - Integrale planning
 - Zoveel mogelijkheden dat “optimaliteit” nooit bewezen kan worden
 - Selectie patiënten van de wachtlijst kan op heel veel manieren
- X
- Volgorde van afspraken kan op heel veel manieren

WAAROM LASTIG?

- Tegenstrijdige doelstellingen en belangen
- Integrale planning

$$\binom{200}{20}$$

x

X

20!

=

Zoveel mogelijkheden dat “optimaliteit” nooit bewezen kan worden

- Selectie patiënten van de wachtlijst kan op heel veel manieren

- Volgorde van afspraken kan op heel veel manieren

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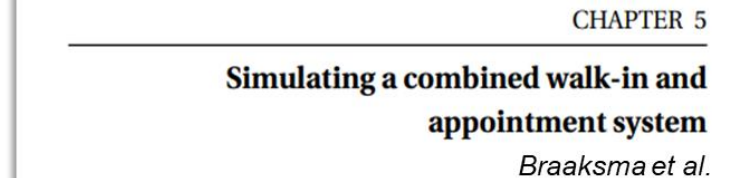
VEEL MOGELIJKHEDEN...

- Inloop versus afspraak



Designing cyclic appointment schedules for outpatient clinics with scheduled and unscheduled patient arrivals

Nikky Kortbeek^{a,b,c,*}, Maartje E. Zonderland^{a,b}, Aleida Braaksma^{a,b,c}, Ingrid M.H. Vliegen^{b,d}, Richard J. Boucherie^{a,b}, Nelly Litvak^{a,b}, Erwin W. Hans^{b,d}



5.1 Introduction

Enabling patients to walk in for their diagnostic examination without an appointment has considerable potential in terms of quality of care, patient service, and sys-



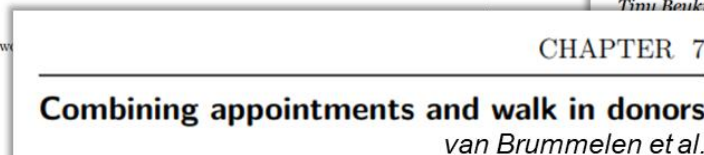
Acknowledgments: The authors wish to thank the reviewers for their valuable comments.

1 Introduction

Care pathways have gained popularity as a management tool to coordinate care characteristics (i.e., disease symptoms, in the care process [1] and routes pa-

Verbeterde afsprakenplanning voor patiënt en gipsverbandmeester

Maartje van de Vrugt, Petra Matel, Richard J. Boucherie, Peter van Engelen, Tim Reukman en John de Laat.



7.1 Introduction

Previous chapters discussed methods to compute and decrease waiting times by using the available capacity at the collection site as efficiently as possible. Chapter 5 specifically dealt with the problem of assigning staff such that the number of available staff members matches the number of expected arrivals. This chapter will address essentially the same problem, but will do this by altering the arrival process instead of the service process.

esters van het Jeroen Bosch Ziekenhuis (JBZ) ervaren een sterk wisselende werkdruk en moeten geregeld over verschillende poli's afhankelijk zijn van de dienstverlening van de gipskamer, hebben lange wachttijden bij negatieve gevolgen elders in huis. Met behulp van een computersimulatiemodel zijn verschillende scenario's in de aankomstmomenten van patiënten geoptimaliseerd. De gipsverbandmeesters onderzoeken momenteel van de resultaten.



VEEL MOGELIJKHEDEN...

- Inloop versus afspraak
- Integrale planning – multidisciplinaire zorg – One-stop-shop



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Integral multidisciplinary rehabilitation treatment planning

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Stochastic integer programming for multi-disciplinary outpatient clinic planning

A. G. Leeftink^{1,2} · I. M. H. Vliegen³ · E. W. Hans¹

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Abstract Scheduling appointments in a multi-disciplinary clinic is complex, since coordination between disciplines is required. The design of a blueprint schedule for a multi-disciplinary clinic with open access requirements requires an integrated optimization approach, in which all appoint-

average approximation approach. Numerical experiments evaluate the performance of the sample average approximation approach. We test the suitability of the hospital's problem at hand, compare current hospital schedules, and present a

CASE STUDY

Organizing multidisciplinary care for children with neuromuscular diseases at the Academic Medical Center, Amsterdam

Nikky Kortbeek^{1,2,3,4}
M. F. van der Velde^{1,2} and
N. Litvak^{1,2}

¹ Center for Healthcare Operations Improvement and Research (CHOIR), University of Twente, Drienerloolaan 5, 7500 AE Enschede, The Netherlands; ² Stochastic Operations Research, Department of Applied Mathematics

Abstract

The Academic Medical Center (AMC) in Amsterdam, The Netherlands, recently opened the 'Children's Muscle Center Amsterdam' (CMCA). The CMCA diagnoses and treats children with neuromuscular diseases. The patients with such diseases require care from a variety of clinicians. Through the establishment of the CMCA, children and their parents will generally visit the hospital only once a year, while previously they used to visit on average six times a year. This is a major improvement, because the hospital visits are both physically and psychologically less burdensome for the patients and their parents.

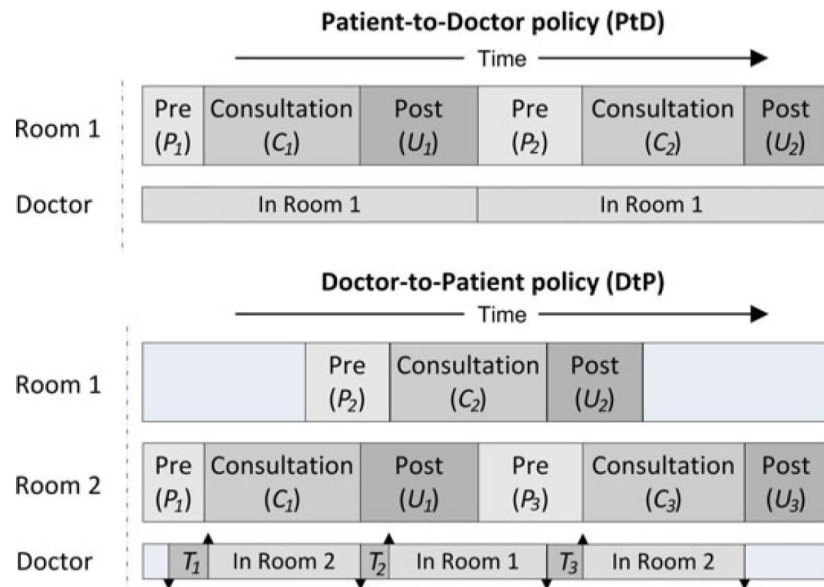


Organizing timely treatment in multi-disciplinary care

Ingeborg A. Bikker

VEEL MOGELIJKHEDEN...

- Inloop versus afspraak
- Integrale planning
 - One-stop-shop
- Patiënt-naar-arts of arts-naar patiënt



Analytical models to determine room requirements in outpatient clinics

Peter J. H. Hulshof · Peter T. Vanberkel · Richard J. Boucherie ·
Erwin W. Hans · Mark van Houdenhoven ·
Jan-Kees C. W. van Ommeren

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Abstract Outpatient clinics traditionally organize processes such that the doctor remains in a consultation room while patients visit for consultation, we call this the Patient-to-Doctor policy (PtD-policy). A different approach is the Doctor-to-Patient policy (DtP-policy), whereby the doctor travels between multiple consultation rooms, in which patients prepare for their consultation. In the latter approach, the doctor saves time by consulting fully prepared patients. We use a queueing theoretic and a discrete-event simulation approach to provide generic models that enable performance evaluations of the two policies for different parameter settings. These models can be used by managers of outpatient clinics to compare the two policies and choose a particular policy when redesigning the patient process. We use the models to analytically show that the DtP-policy is superior to the PtD-policy under the condition that the

VEEL MOGELIJKHEDEN...

- Inloop versus afspraak
- Integrale planning
 - One-stop-shop
- Patiënt-naar-arts of arts-naar patiënt
- Boekingshorizon

CHAPTER 5

Scheduling window under no-shows and cancellations

Leeftink et al.

5.1 Introduction

No-shows and cancellations for outpatient clinic appointments result in adverse outcomes, both for the clinics as well as for their patients. In order to mitigate the effects of no-shows and cancellations, this chapter analyzes the no-show and cancellation behavior of outpatient clinic patients, as well as a queuing approach to incorporate this behavior in the design of these clinics.

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BEDANKT!

CHOIR

