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Outpatient Scheduling for an Endocrinology Clinic

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Outpatient Scheduling for an Endocrinology Clinic

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Collaborators

Faculty and Staff

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Background

- 14.5% US adults moderately or severely obese (NHANES 2011 – 2012)
- High risk of chronic diseases
 - Diabetes, hypertension, coronary artery disease
- High cost
 - \$245 billion for diagnosed diabetes (ADA 2012)
 - Over 1 of 5 health care dollars in US

Weight Management Program (WMP)

- 2-year program led by Amy Rothberg, MD
- Partnership with Blue Care Network
- Eligibility
 - BMI ≥ 32 kg/m² with 1 or more comorbidities
 - BMI ≥ 35 kg/m²





WMP Protocol

- Regimented recurrent MD and Dietitian visits
 - Intensive caloric restriction for 12 weeks
 - Weight maintenance for rest of program
- Strict visit schedule for effectiveness



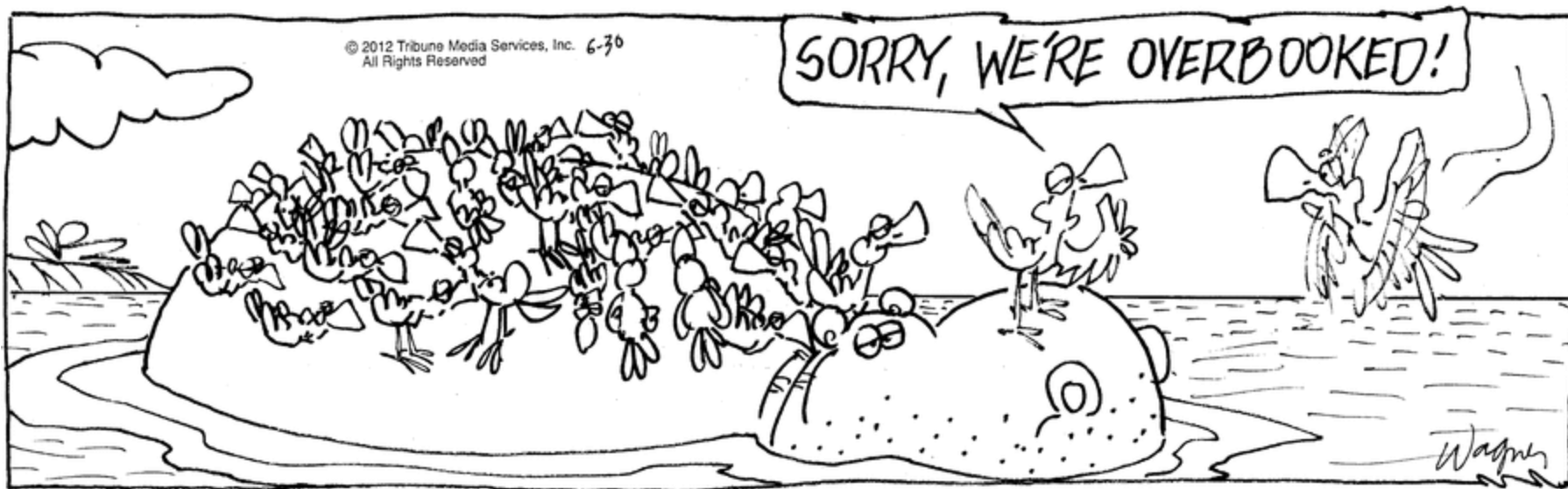


Current Scheduling Procedure

- Schedule one appointment at a time
- Schedule next appointment at check out

Challenges of Scheduling

- MDs booked 3 weeks out
- Patients not seen according to protocol



Retrieved from <http://classroomtogo.blogspot.com/2012/07/prefixes-over.html>



Goal

Ensure timely access

AND

Provide adequate capacity for patients
to adhere to the program



Solution Approach

- Collected snapshots of appointment calendar
 - Since 07/2014
- Designed relational database
- Dynamically captured progression of patient appointments

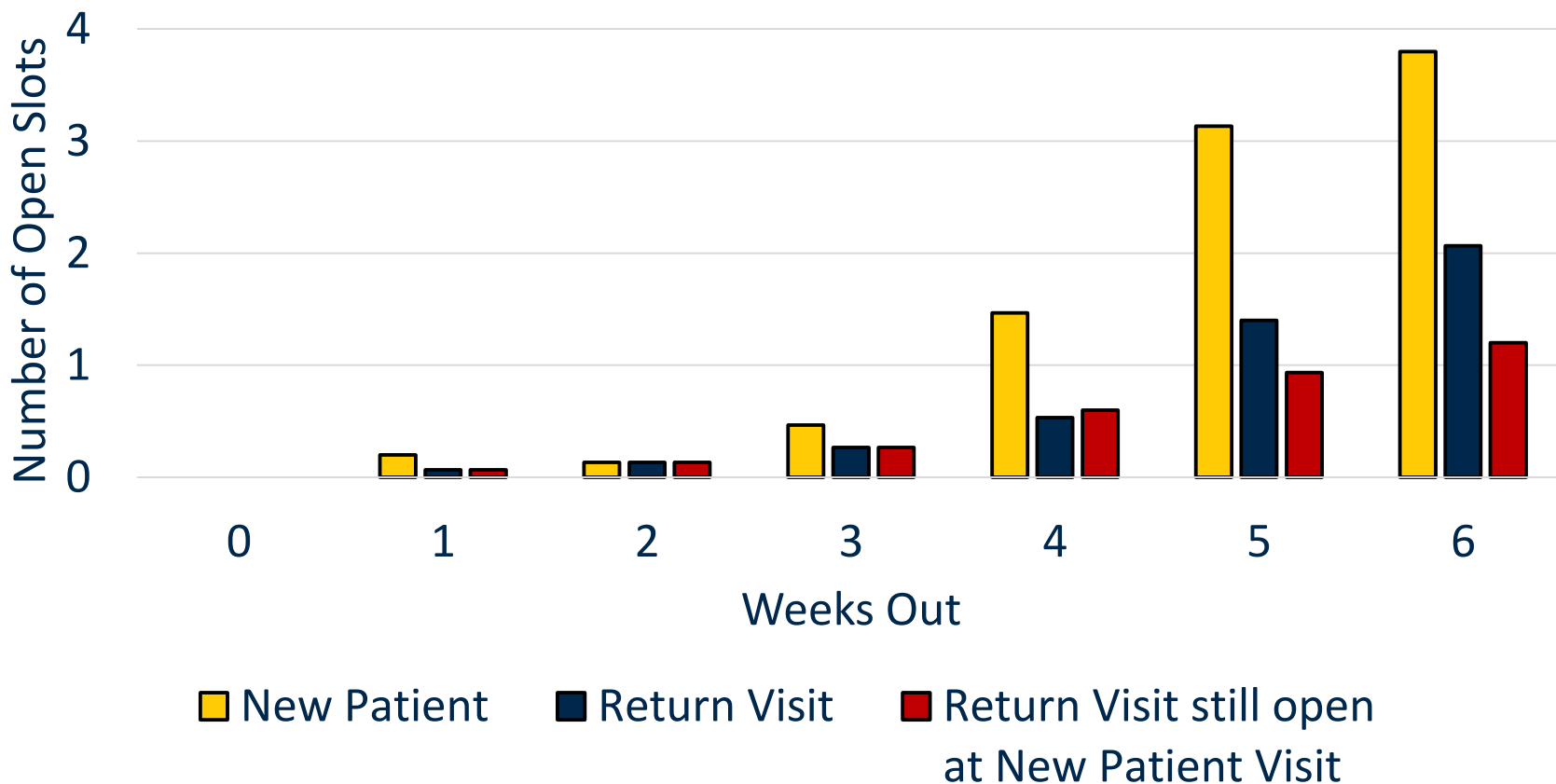


Database Design

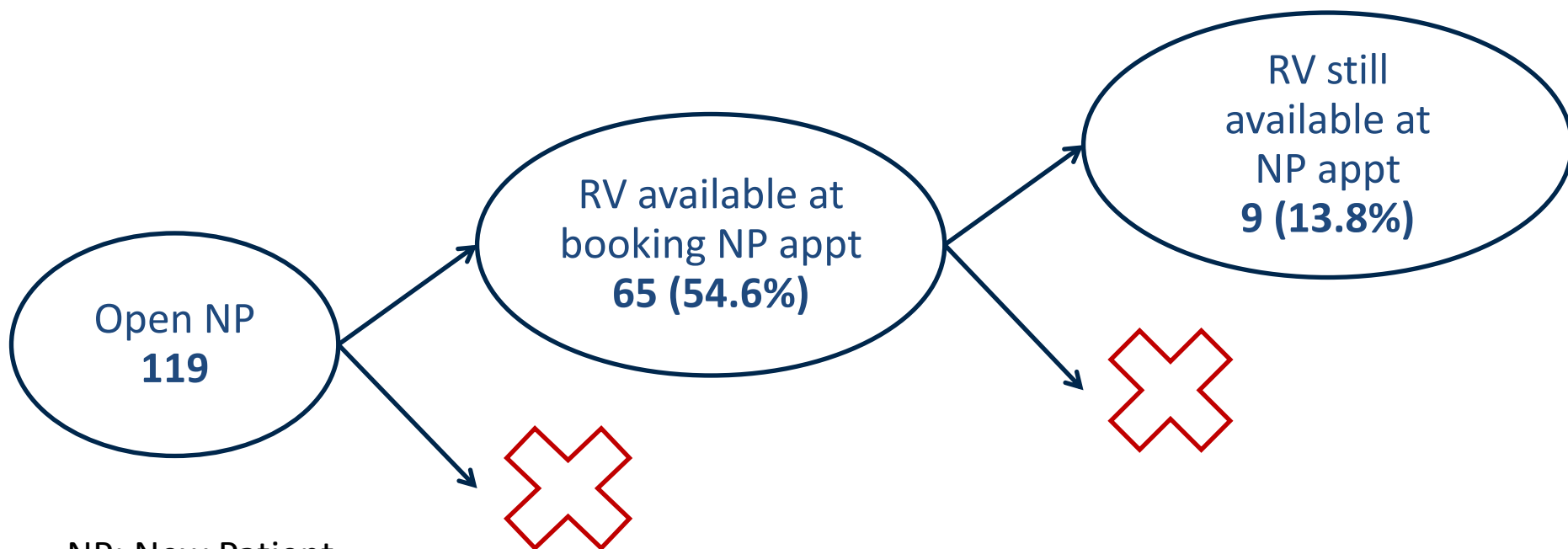
Appointment		View Date			
Date	Time	5/25	5/26	5/27	5/28
6/2	09:00	A New Patient	Cancelled	C New Patient Created	C New Patient
	09:15				
	09:30				
	09:45	B Return Visit	B Return Visit	Cancelled	
	10:00	Break			
	10:15			B Return Visit Created	B Return Visit



Average Provider Capacity to Accept New Patient (01/01/2015 – 04/06/2015)



How many patients can follow the protocol schedule for the first two visits?



NP: New Patient

RV: Return Visit

(Data: 08/01/2014 – 02/01/2015)



Goal

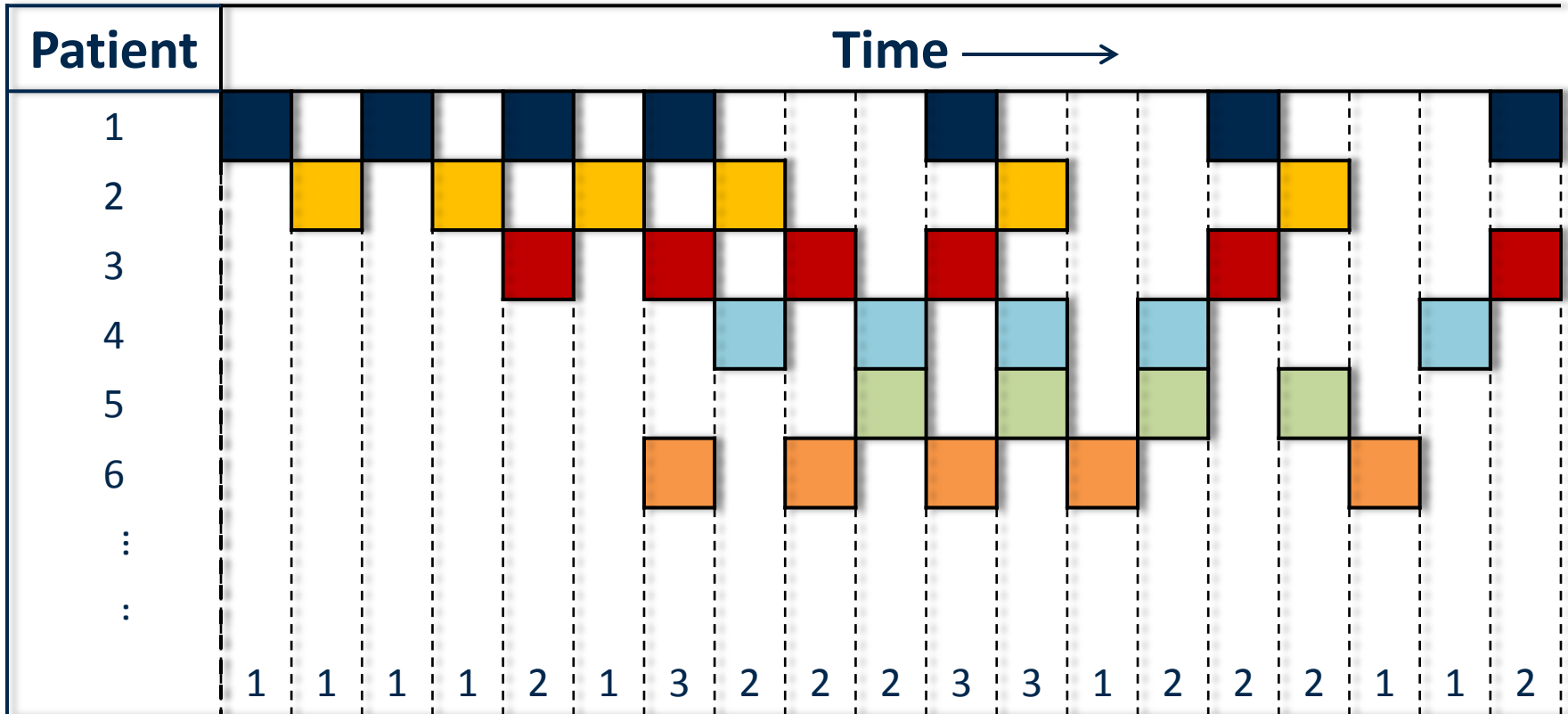
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Patient Templating





Tag-on Scheduling

Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Visit 6
Dark Blue	Dark Blue	Dark Blue	Dark Blue		
		Cancellations?			
Light Blue with Green Checkmark	Dark Blue	Dark Blue	Dark Blue	Dark Blue	
Light Blue with Green Checkmark	Light Blue with Green Checkmark	Dark Blue	Dark Blue with Red X	Dark Blue	Dark Blue

Ongoing Research/Next Steps

- Understand dynamics of proposed scheduling guidelines
 - Simulation and Analysis
- Develop scheduling guideline
 - Covering cancellation and no-show
- Develop training materials
- Provide training to schedulers
- Implement proposed scheduling model



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- Bonder Foundation
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THANK YOU!

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