

Patient Access to Specialty Endocrinology Care

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The Team

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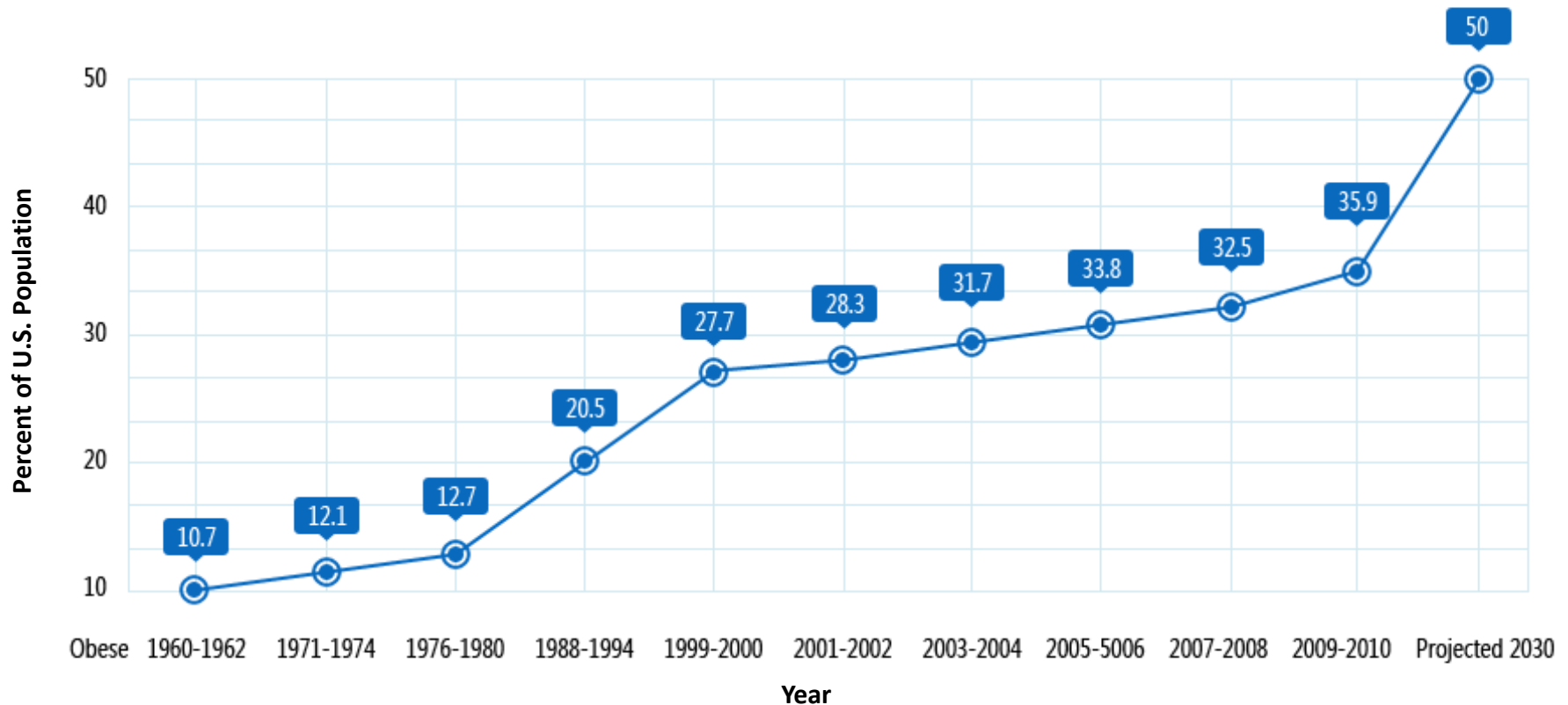
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4: Department of Literature, Science & the Arts, University of Michigan

Motivation

Prevalence of Obesity Among U.S. Adults Aged 20-74



Derived from NHANES data (<http://www.cdc.gov/nchs/nhanes/>)

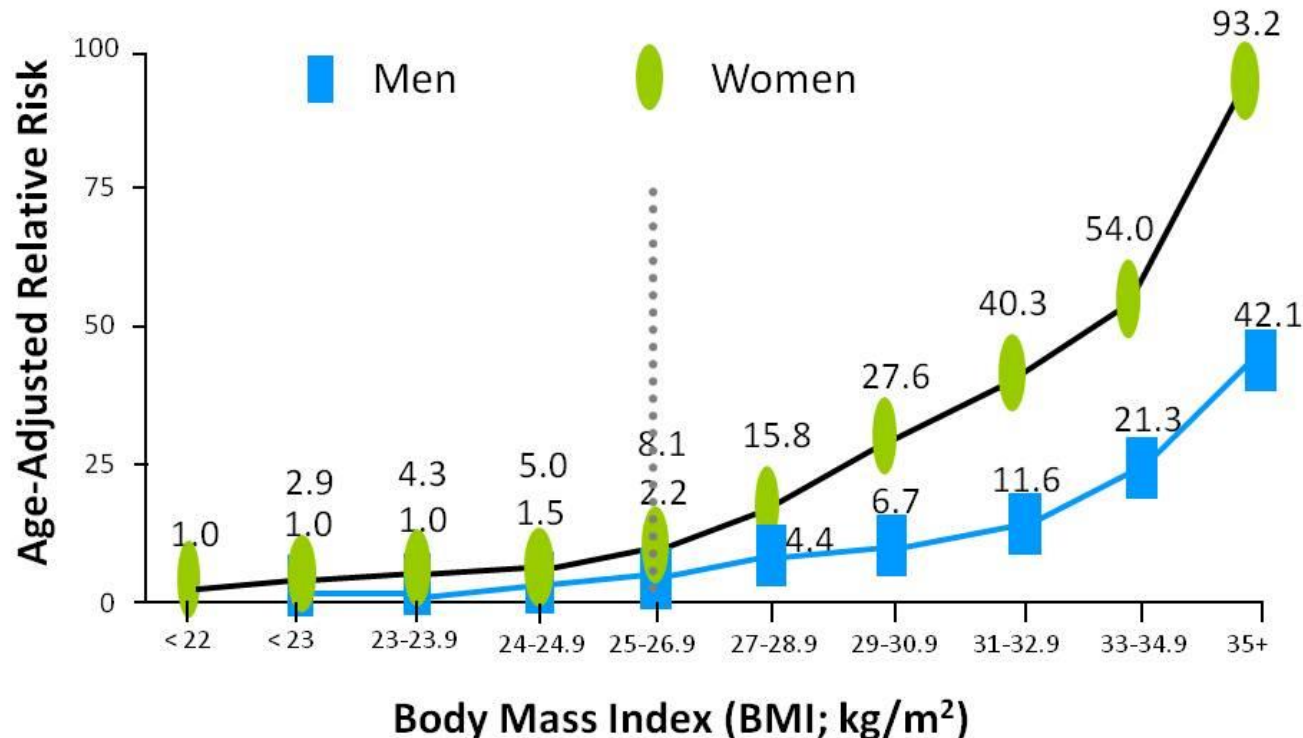
- More than one-third (35.7 percent) of American adults are considered **obese**^[1]
- High risk for many serious health problems^[2]
 - Diabetes, hypertension, heart disease

1: <https://www.niddk.nih.gov/health-information/health-statistics/Pages/overweight-obesity-statistics.aspx>

2: <https://www.hsph.harvard.edu/obesity-prevention-source/obesity-consequences/health-effects/>

Type II Diabetes

Relationship Between BMI and Risk for Type 2 Diabetes Mellitus



Chan J, et al. *Diabetes Care*. 1994;17:961-969.

Colditz G, et al. *Ann Intern Med*. 1995;122:481-486.

Medscape CME

Metabolism, Endocrinology & Diabetes (MEND) Clinic

- Specializes in treating endocrine and metabolic disorders
- Receives about 10,000 patient visits annually
- Administers weight management program



Scheduling: Problem & Goals

- Problem statement
 - Patient appointment waiting times are long due to busy provider schedules
- Goals
 - Ensure patient access
 - Enhance provider satisfaction



- Receive 2 spreadsheets for every working day
 - Prospective appointment
 - Provider availability
- Store information in a database
- Compare consecutive appointment calendar snapshots to capture and evaluate scheduling dynamics

Appointment Snapshots

Appointment		Snapshot Date		
<i>Date</i>	<i>Time</i>	7/26	7/27	7/28
7/28	10:00	A	A <i>Cancelled</i>	D <i>Created</i>
	10:15	A	A <i>Cancelled</i>	D <i>Created</i>
	10:30	A	A <i>Cancelled</i>	Empty
	10:45	<i>Buffer</i>	<i>Buffer</i>	<i>Buffer</i>
	11:00	B	B	B

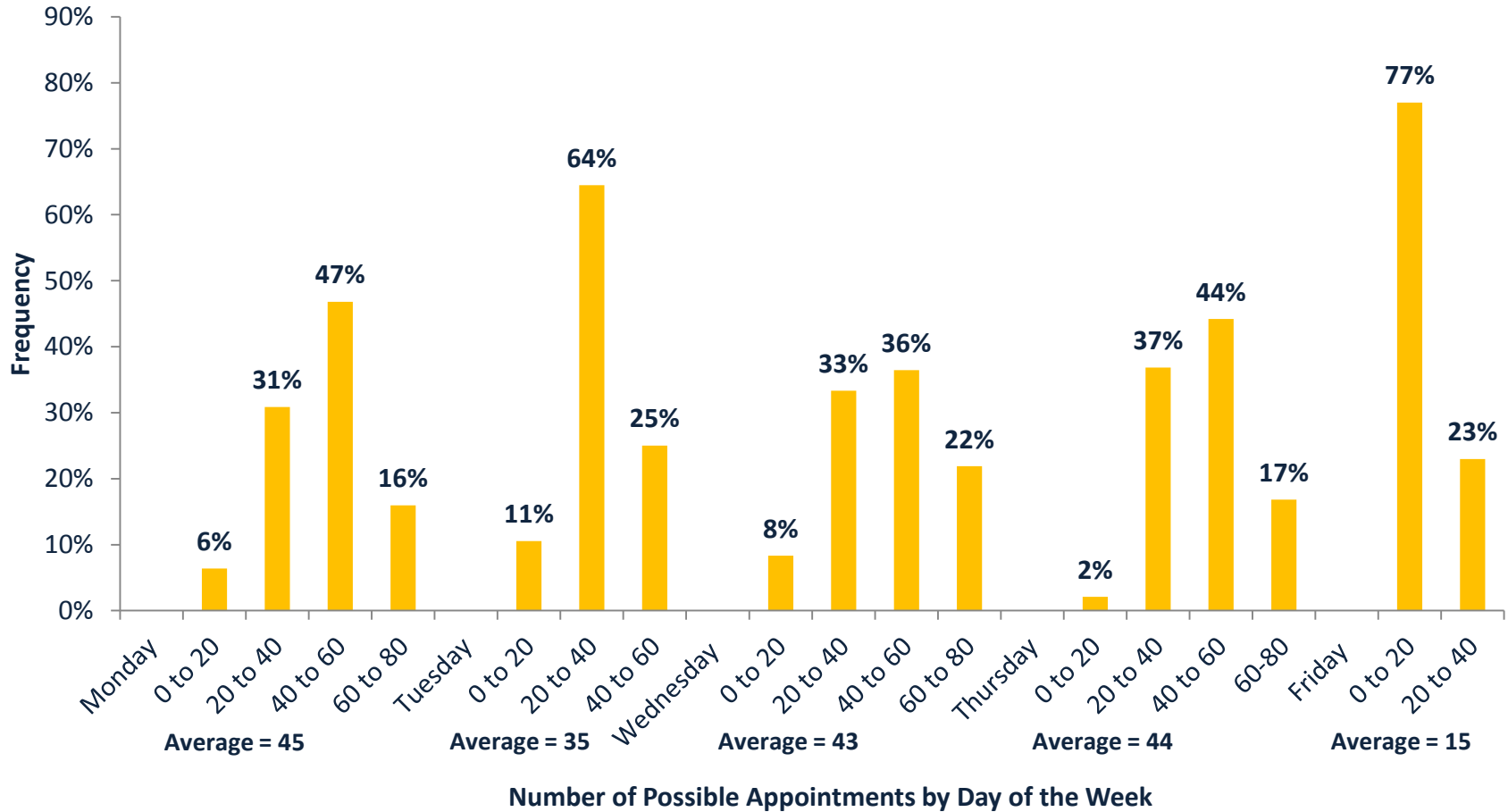
Analysis



- Clinic capacity
- Capacity utilization
- Appointment and slot changes
- Appointment cancellations
- Filling cancelled appointments

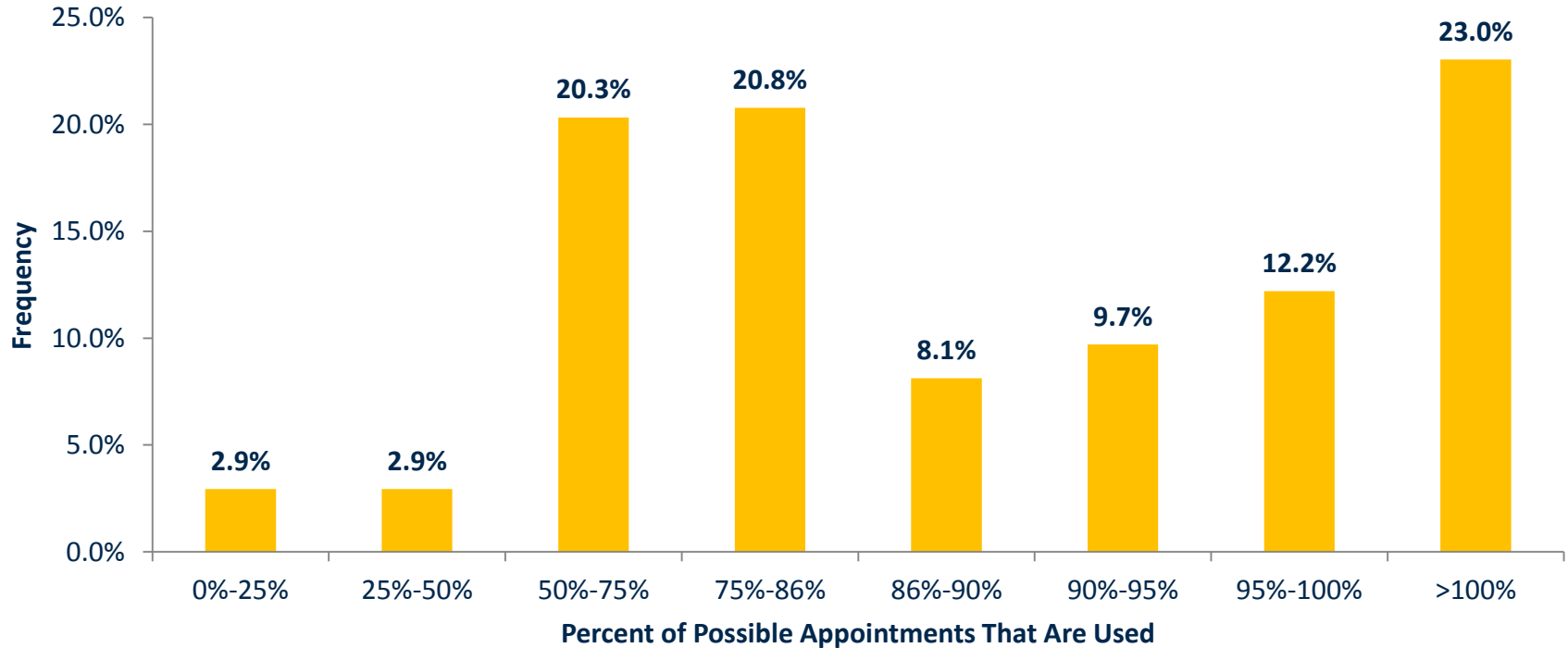
Total Clinic Capacity

Appointment Opportunities



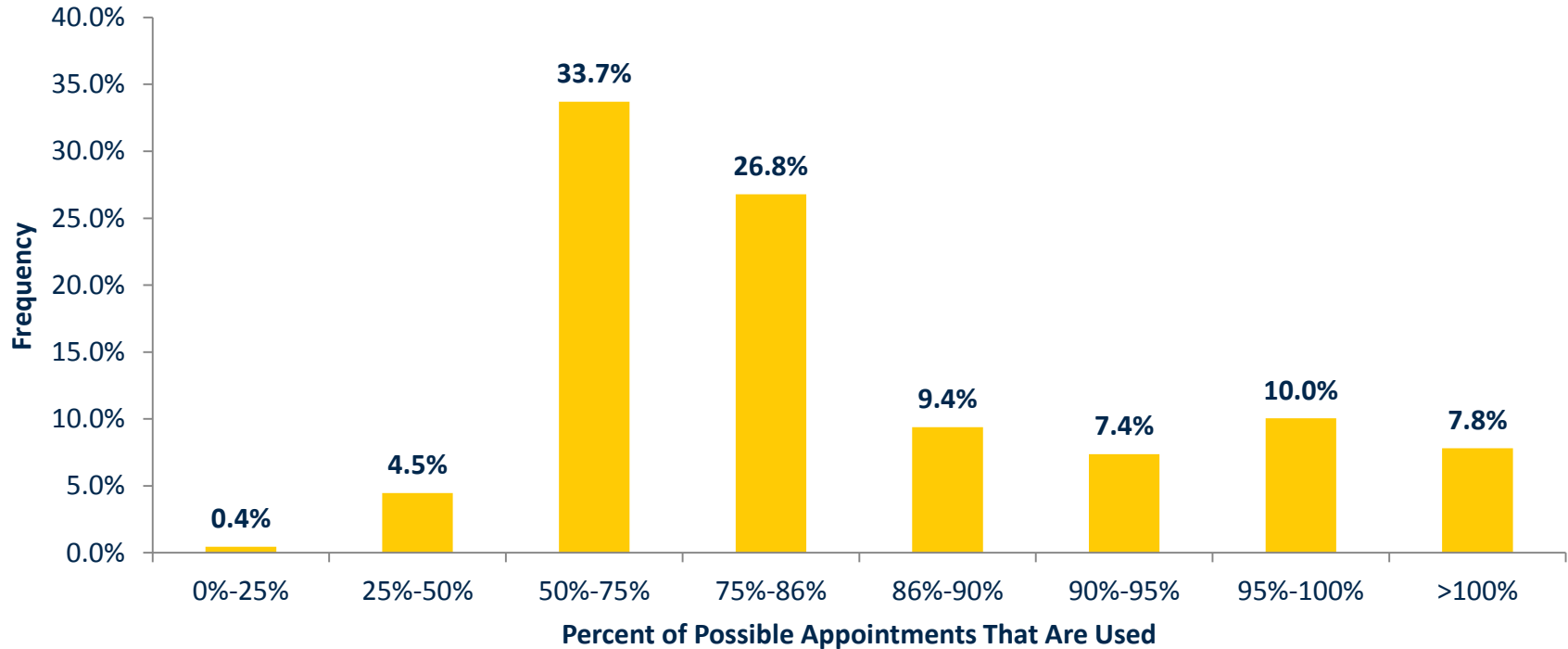
Capacity Utilization

Utilization Ratios: Viewed one week up to the appointment



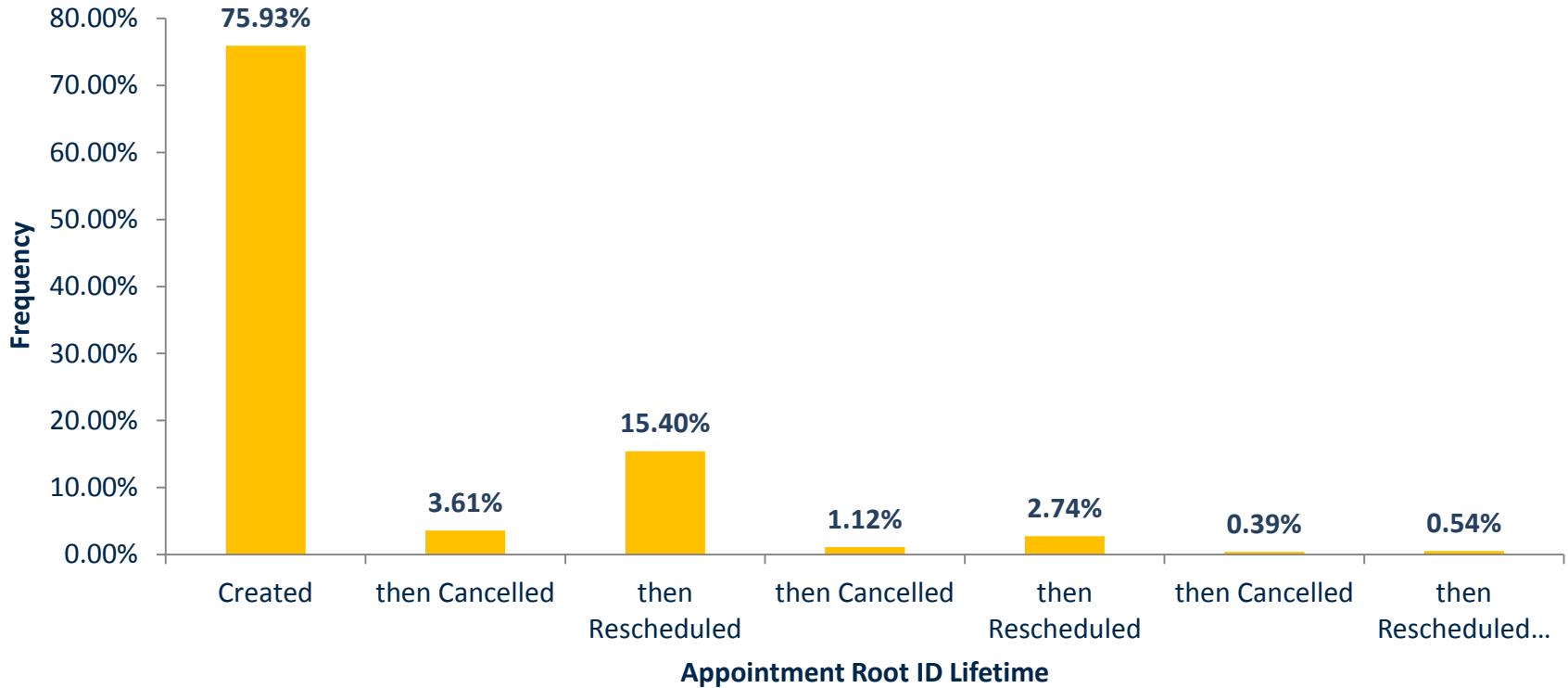
Capacity Utilization

Utilization Ratios: Viewed on the day of the appointment



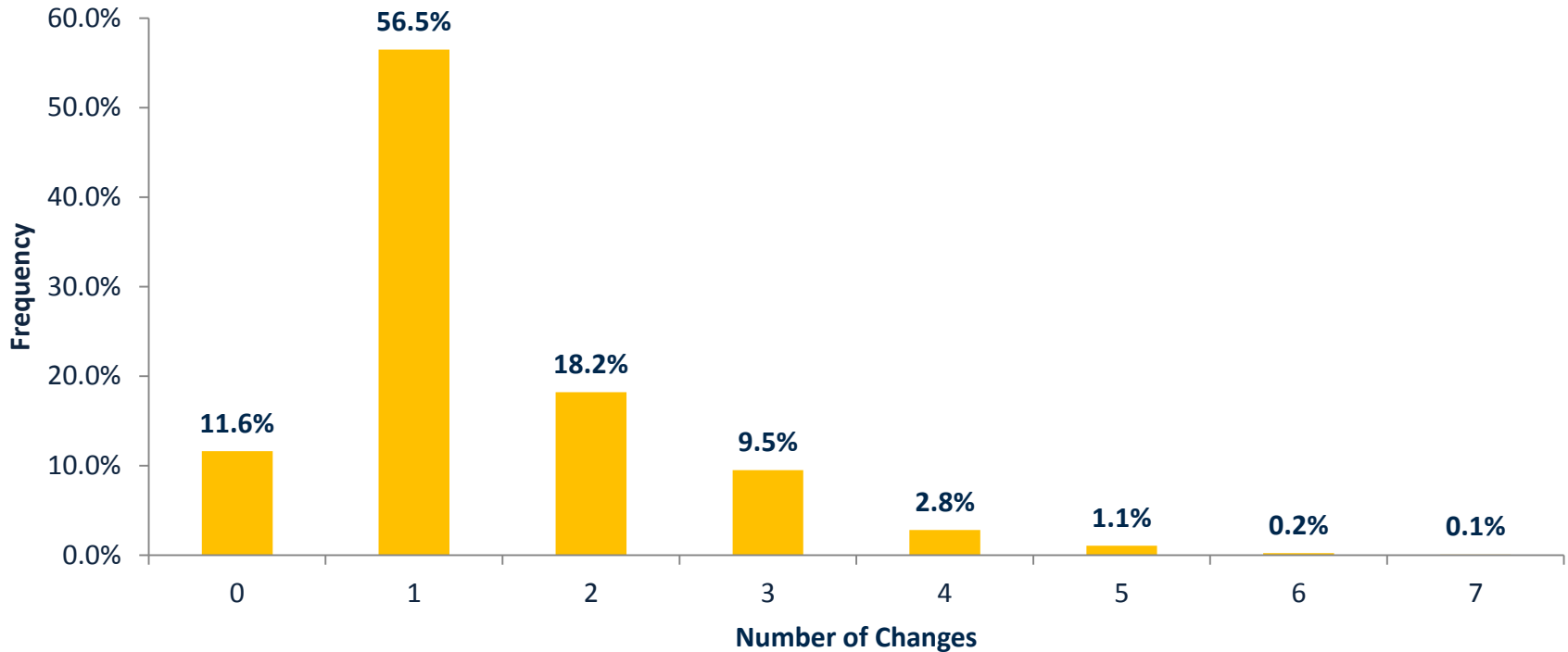
Appointment Changes

Average Number of Changes to an Appointment



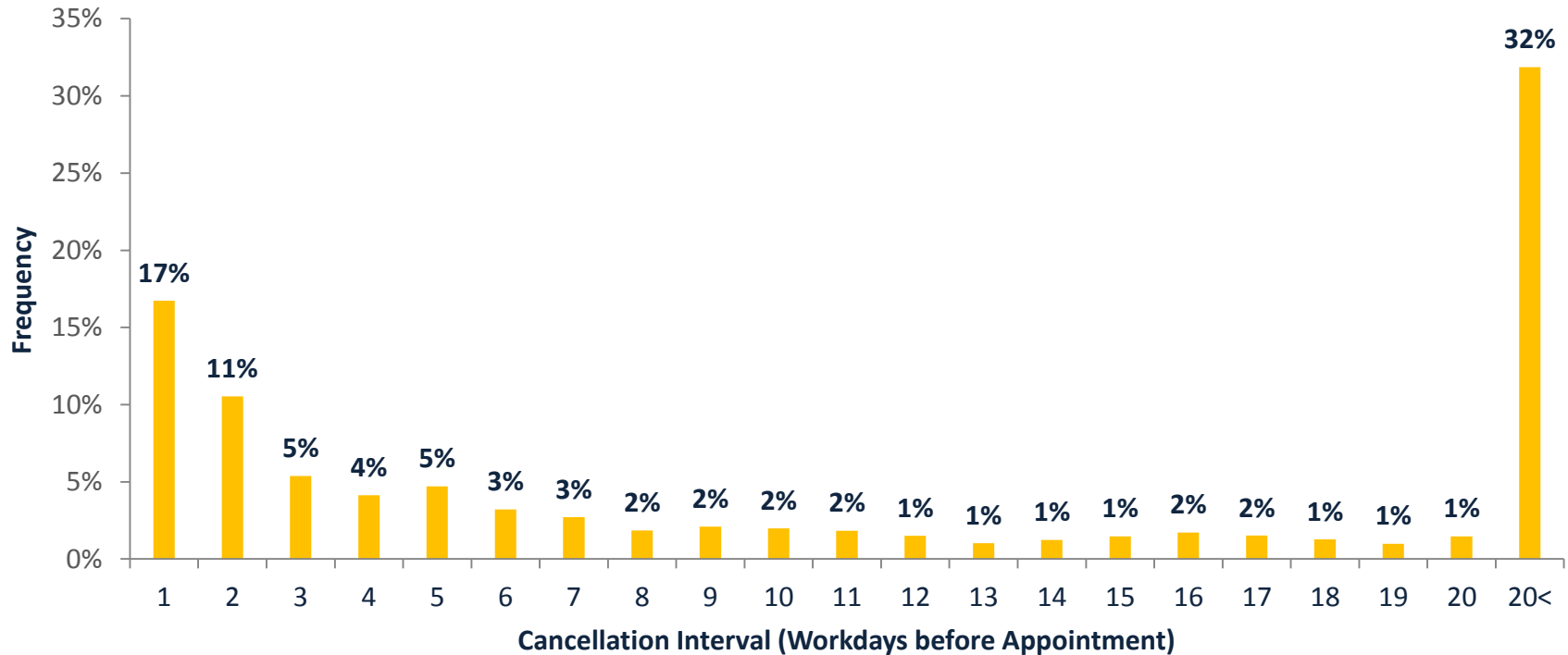
Slot Changes

Average Number of Changes to an Individual Slot



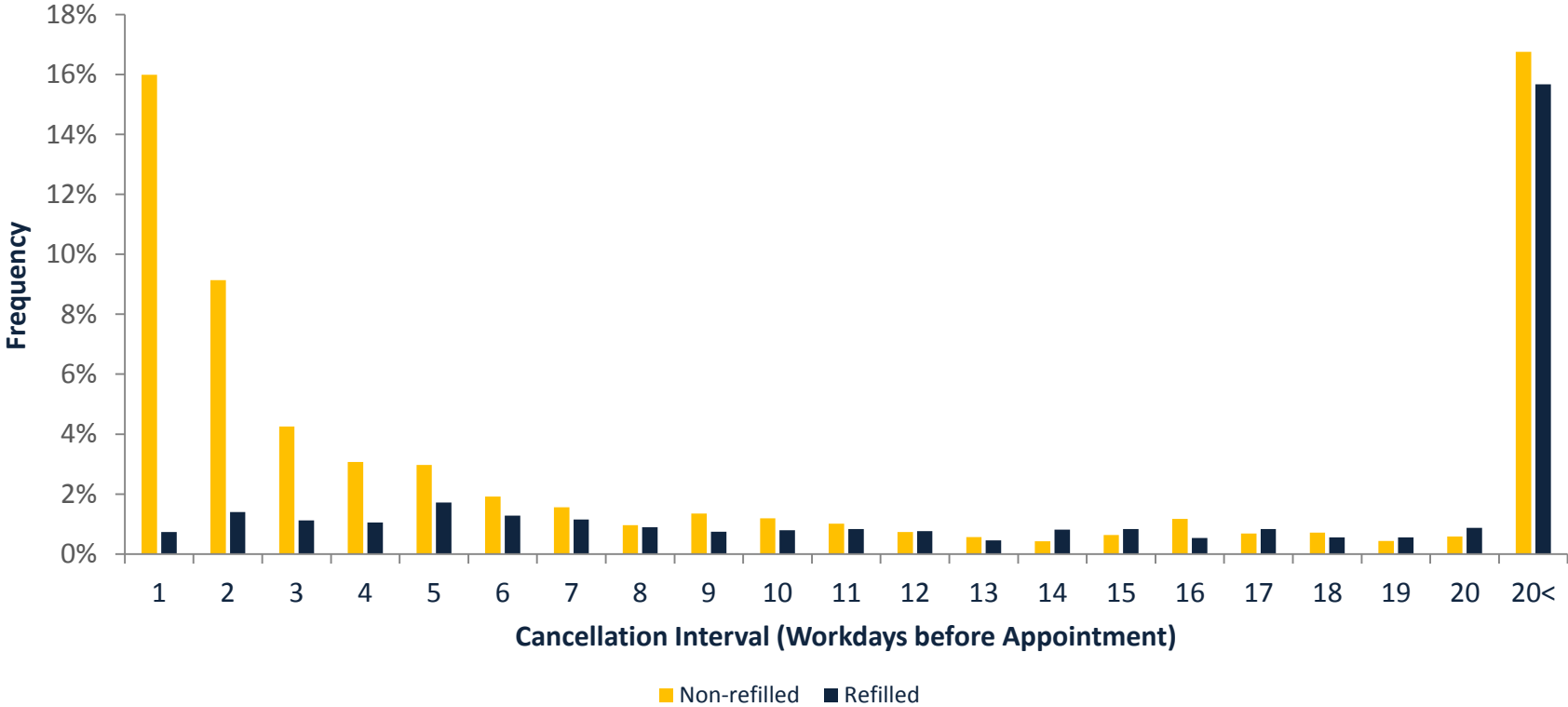
Cancellations

When do patients cancel their appointments?



Refilling Cancellations

Do emptied slots due to cancellations get refilled?



Conclusions

- Patients frequently change their appointments
- Cancellations are more likely to occur closer to the scheduled appointment date
- Appointments cancelled closer to the scheduled appointment date are less likely to be refilled

- Current
 - Measuring patient access to appointments
 - Evaluating provider satisfaction with schedules
- Future
 - Wait list management
 - Scheduling protocol

Acknowledgement

- The Seth Bonder Foundation
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- The MEND Project Team, all past and present students

The End

Thank you!

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