PDOPPS

PERITONEAL DIALYSIS OUTCOMES AND PRACTICE PATTERNS STUDY

PDOPPS:
Identifying optimal practices in PD

EDTNA

Sunday 10th September, 2017

Krakow, Poland

Jennie King - on behalf of the PDOPPS team

Acknowledgments

Special thanks for PDOPPS support to:

Baxter Healthcare

Japanese Society for Peritoneal Dialysis

Canadian Institute for Health Research

National Health and Medical Research Council of Australia

Research for Patient Benefit programme, National Institute for Health Research, UK

Thailand Research Foundation, National Research Council of Thailand, Chulalongkorn University

We're grateful for these organizations and their commitment to fulfilling the mission of PDOPPS

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Arbor Research conducts the PDOPPS in close collaboration with the International Society for Peritoneal Dialysis (ISPD)

ARBOR RESEARCH COLLABORATIVE FOR HEALTH

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PDOPPS:
Primary and Secondary Outcomes

Primary Outcome:

- All Cause PD Technique Failure

Secondary Outcomes:

- All-cause mortality
- Cause specific PD technique failure:
  - Inadequate clearance
  - Infection-related
  - Psychosocial-related
  - Catheter-related*
  - Mechanical-related*

Secondary Outcomes:

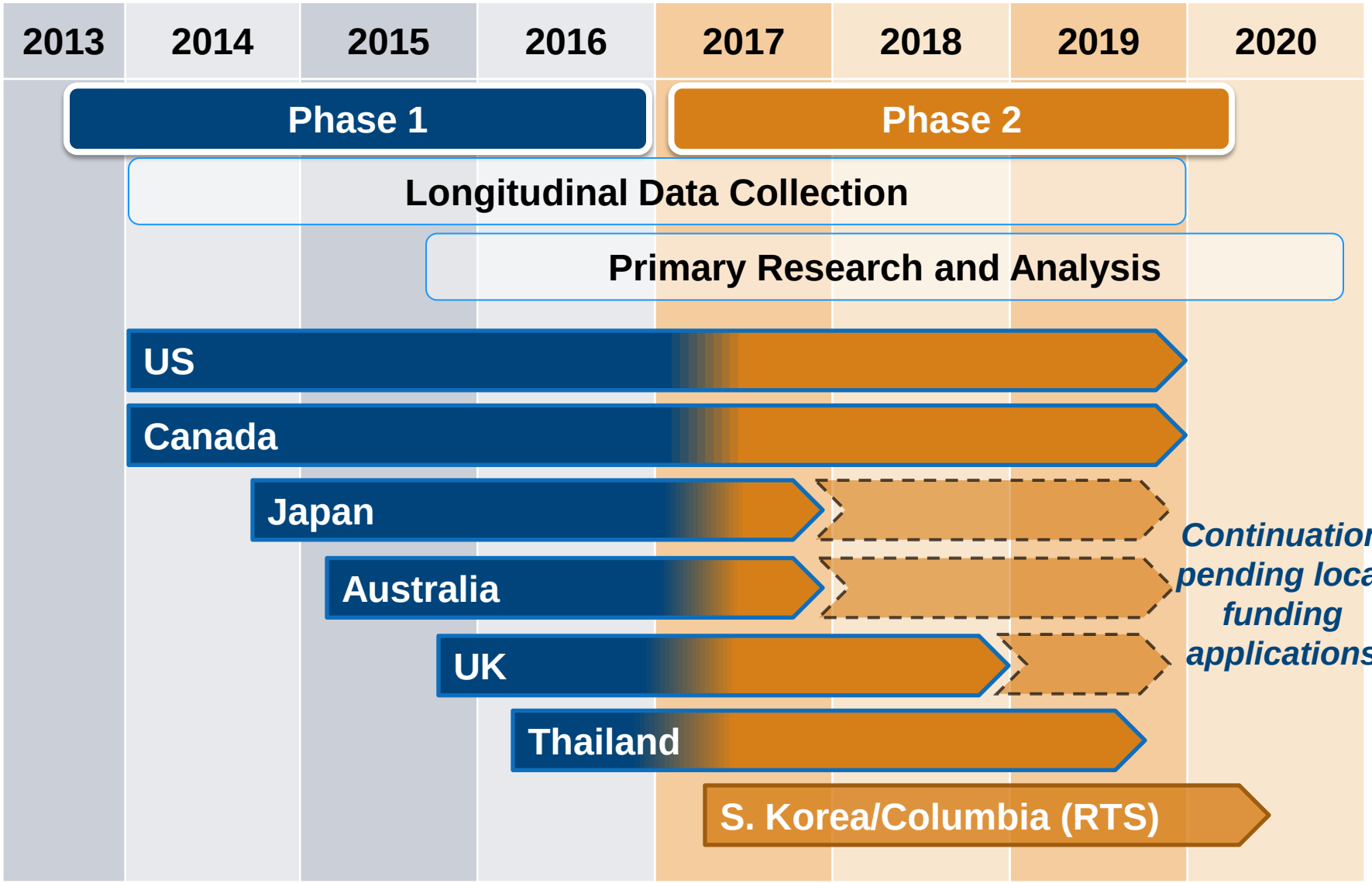
- PD related complications:
  - Hospitalizations
  - PD-related infections
  - Residual kidney function decline/anuria
  - PD access intervention
- Patient-reported outcomes (PRO)
- Clinical/laboratory measures:
  - Peritoneal membrane function: transport Status, UF capacity
  - Metabolic/inflammatory: Lipids, HbA1C, CRP

** Will miss some early failures*

Patient Enrollment

Patient Enrollment Status			
	Census (N)	Selected (N)	Consented (N)
United States	8002	3808	3400
Canada	3077	1295	924
Japan	1586	1005	891
Australia	1962	819	435
United Kingdom	1978	614	304
New Zealand	316	116	66
Thailand	3995	712	610
Total:	20,916	8369	6630

International PDOPPS Timeline



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Facility Characteristics

Characteristic	A/NZ	Canada	Japan	Thailand	UK	US
# of facilities	17	20	26	21	18	81
Facility structure						
Facility location within a hospital	31%	69%	100%	94%	94%	2%
Facility affiliated with a university	50%	37%	35%	5%	50%	15%
PD facility age, mean years (std)	27(9)	26(13)	26(6)	10(7)	31(6)	17(11)
Physician patient ratio, median	1:9	1:20	1:9	1:100	1:33	1:8
Nurse patient ratio, median	1:11	1:16	1:6	1:50	1:9	1:17
In-center HD provided on site	41%	95%	92%	91%	89%	71%
Home HD care provided on site	88%	70%	35%	0%	78%	67%
Routine multidisciplinary review	18%	5%	62%	33%	0%	3%
Laboratory program on site	47%	40%	69%	43%	83%	77%
Percentage of nurses who care for PD patients also provide care for in-center HD patient						
None	47%	70%	8%	24%	72%	76%
<10%	29%	10%	4%	19%	22%	15%
10-60%	6%	15%	27%	24%	6%	6%
>60%	18%	5%	62%	33%	0%	3%

* Preliminary data as of February 2017
Results are shown as mean (standard deviation), %

Patient Characteristics*

PDOPPS initial cross-section of sampled patients (2014-2017)

Characteristic	A/NZ	Canada	Japan	Thailand	UK	US
# of facilities	20	20	31	21	18	106
# of selected pts	320	403	623	536	182	2470
Demographics						
Male	64%	57%	63%	51%	64%	55%
Age, years						
<45	9%	13%	8%	18%	17%	19%
45-59	24%	28%	25%	38%	21%	33%
60-74	44%	39%	44%	38%	41%	35%
75+	23%	20%	23%	6%	20%	13%
BMI, kg/m^2	27.6(4.9)	27.0(5.6)	23.0(3.5)	22.6(4.1)	26.7(5.6)	28.5(6.3)
Comorbidities						
Cause of ESRD						
Diabetes	31%	36%	32%	48%	20%	36%
Glomerulonephritis	22%	21%	32%	4%	22%	13%
Other	48%	43%	35%	48%	58%	51%
CAD	32%	29%	18%	8%	29%	25%
Diabetes	44%	47%	40%	52%	28%	54%

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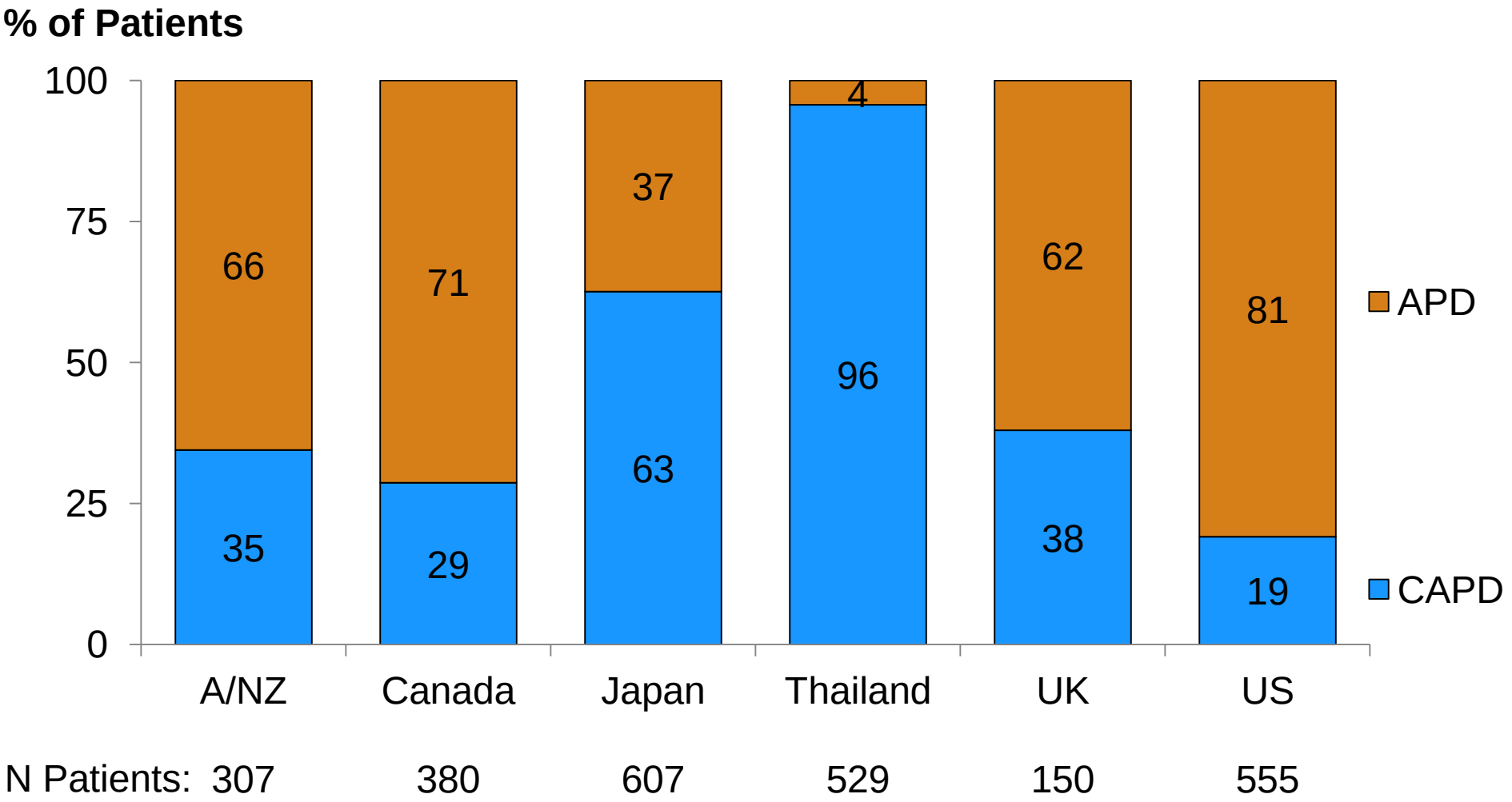
* Preliminary data as of February 2017 among patients with baseline chart abstraction
Results are shown as mean (standard deviation), %

PD Type

PDOPPS initial cross-section of sampled patients (2014-2017)



* Preliminary data as of February 2017

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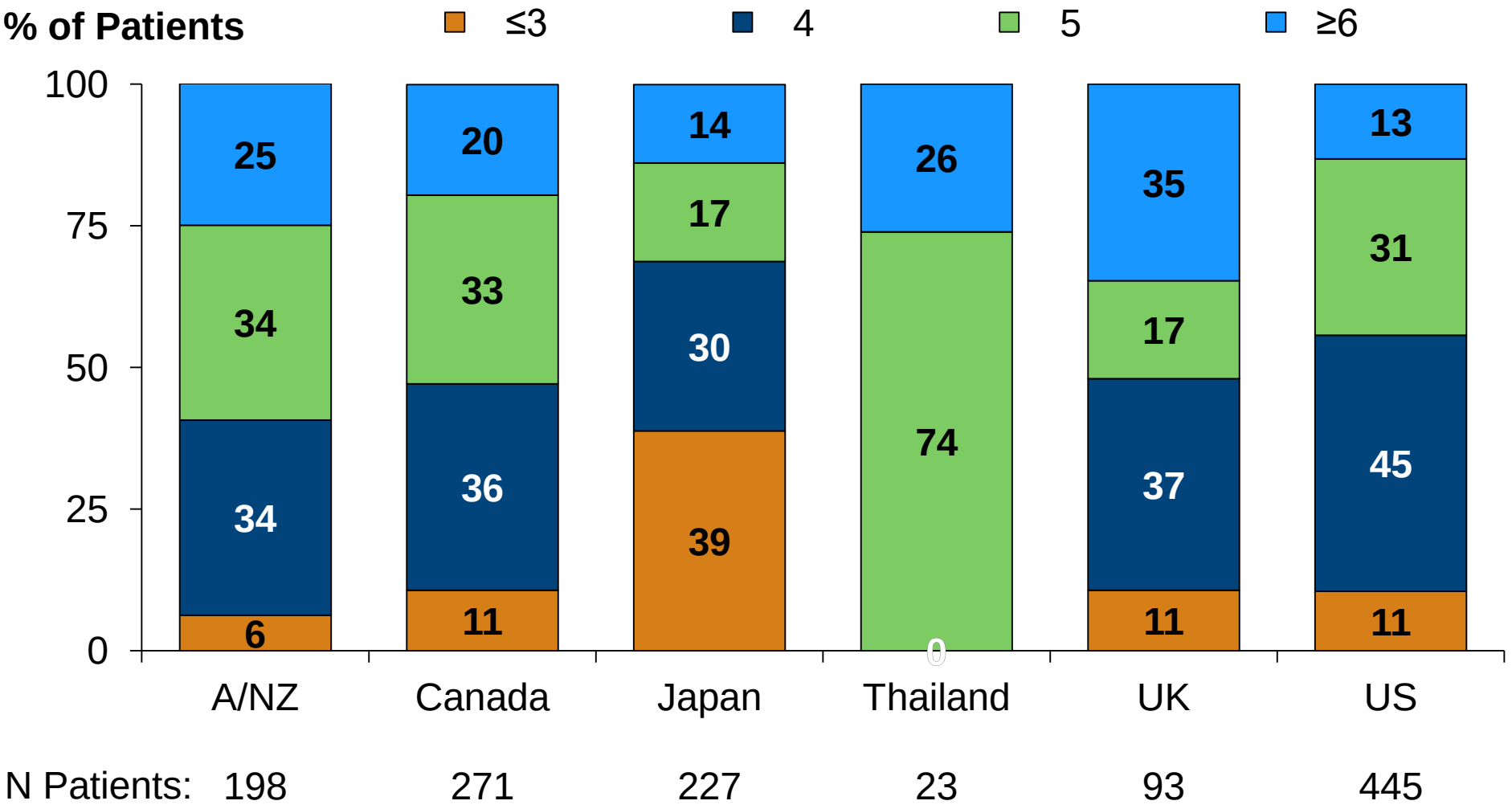
of overnight changes for APD patients



* Preliminary data as of February, 2017;

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Adapted from Davies et al. EDTA abstract (2016)

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PERITONEAL DIALYSIS OUTCOMES AND PRACTICE PATTERNS STUDY

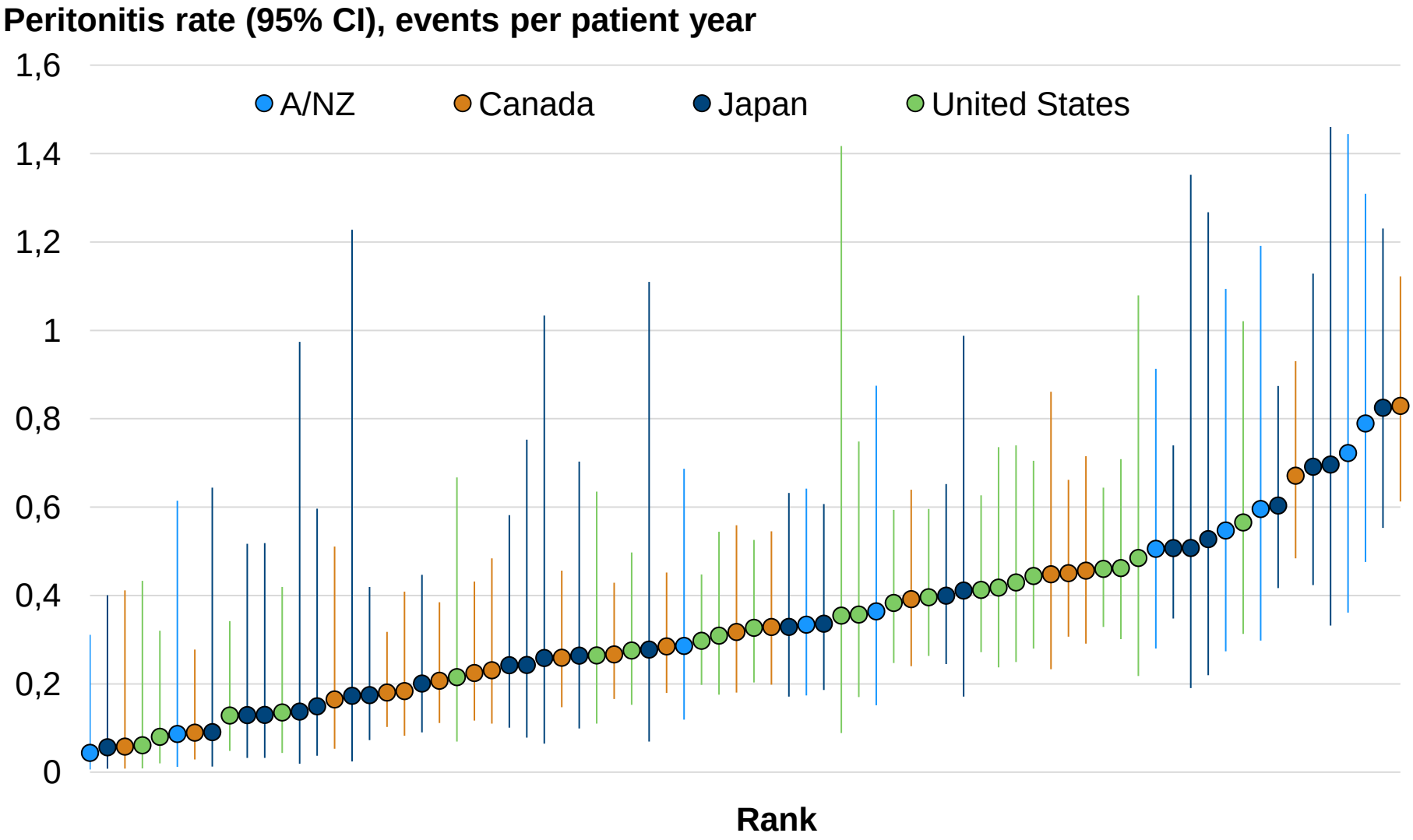
Peritonitis Treatment and Prevention Strategies: Results from the PDOPPS

Infection Prevention & Management Workgroup

Manuscript in Preparation

Neil Boudville, David Johnson, Beth Piraino, Judith Bernardini, Sharon Nessim, Yasuhiko Ito, Graham Woodrow, Fiona Brown, John Collins, Talerngsak Kanjanabuch, CC Szeto, Jeff Perl

Facility peritonitis rates*



* Restricted to facilities with at least 5 patient years of follow-up (n=79); US large dialysis organization facilities not included

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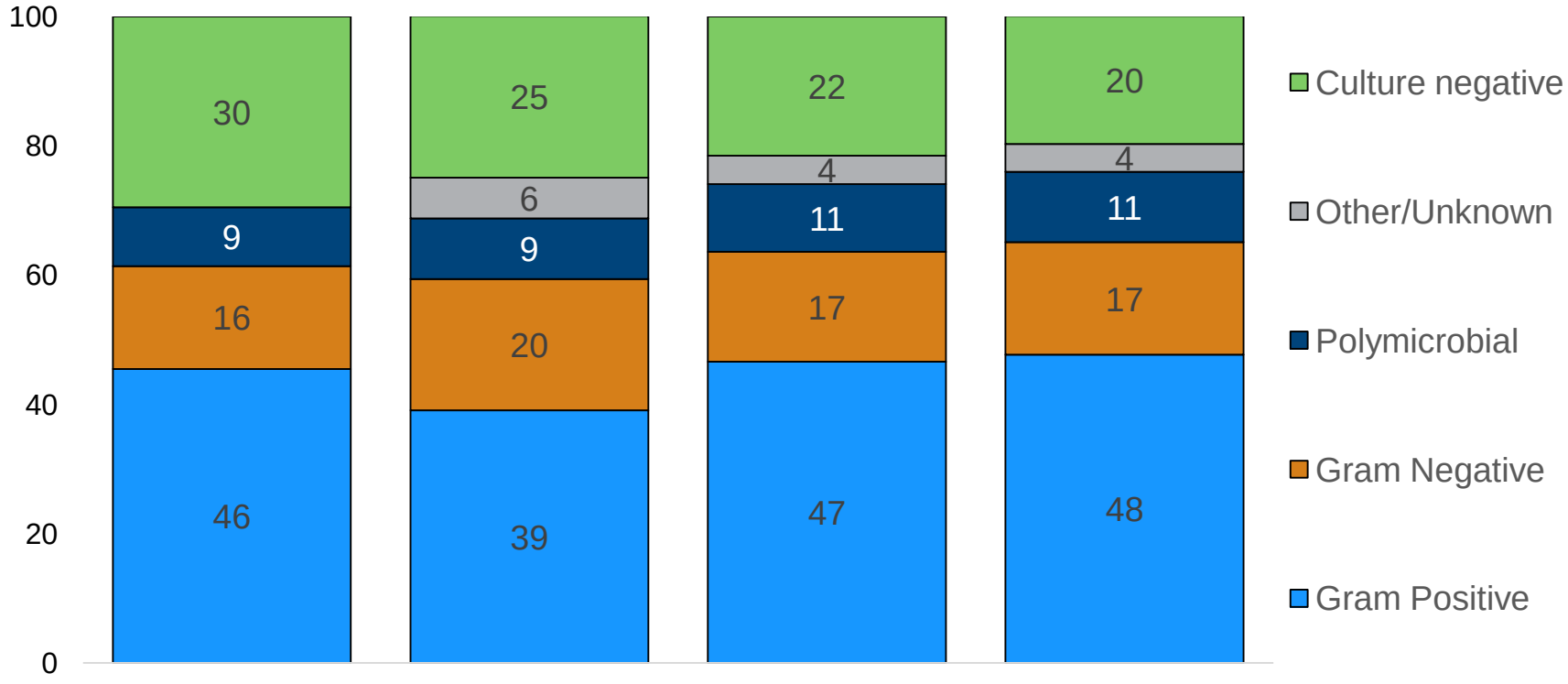
Perl et al. ASN oral abstract (2016)

Peritonitis organism category, by country

% of peritonitis episodes



	Jpn	A/NZ	US	Can
n Events:	176	64	247	258
n Patients:	96	46	137	145

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< 5% yeast in each country – combined with other/unknown

Perl et al. ASN oral abstract (2016)

Events associated with peritonitis episodes

	A/NZ	Canada	Japan	US
Sample				
Facilities, N	14	20	27	26
Patients, N	237	723	585	736
Peritonitis episode details				
Concurrent exit site/tunnel infection	1%	6%	9%	4%
Hospitalized during peritonitis episode	64%	47%	87%	48%
PD catheter removed	15%	18%	20%	17%
Death within 90 days of diagnosis	7%	5%	4%	5%

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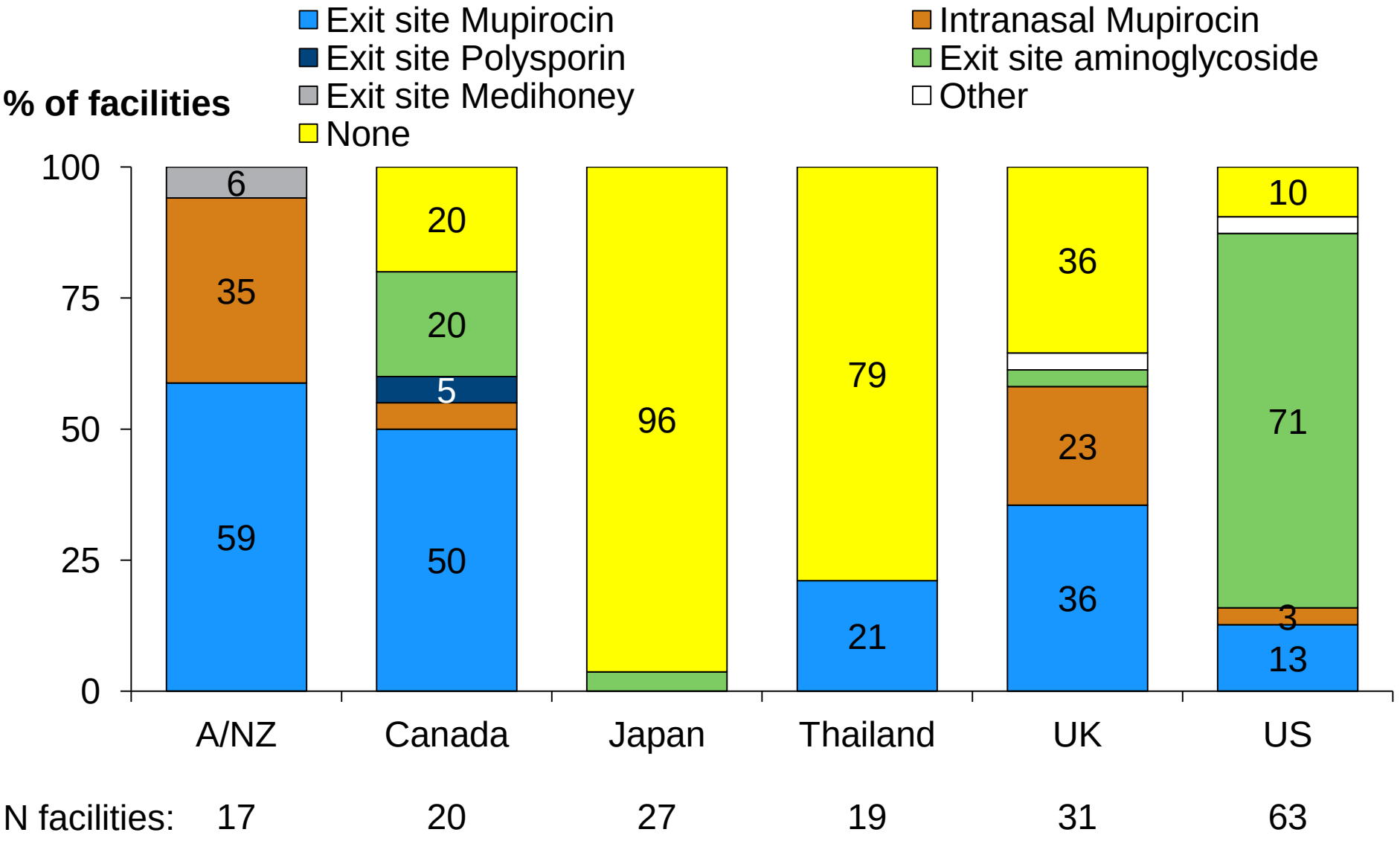
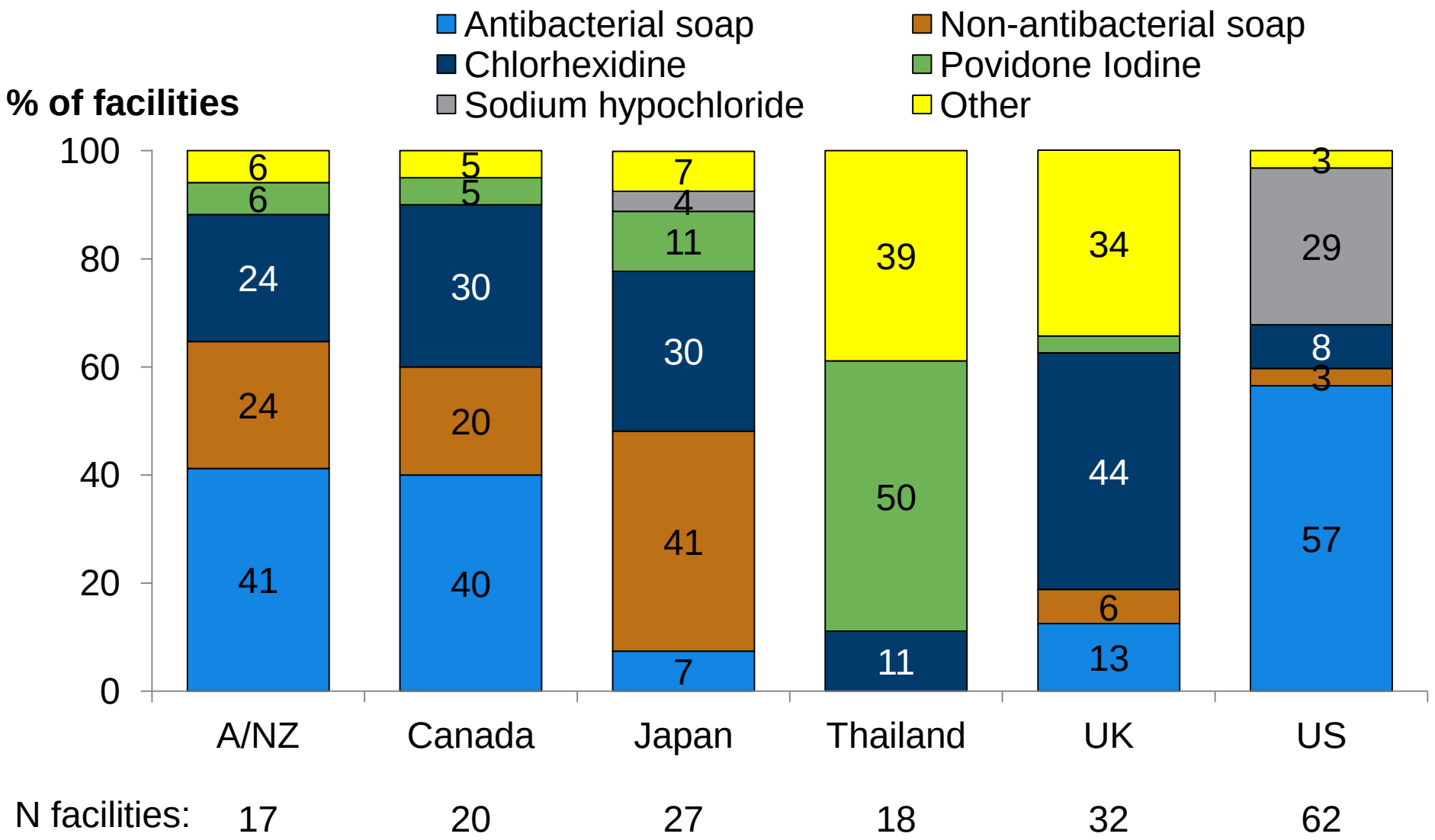
Perl et al. ASN oral abstract (2016)

Exit Site Antimicrobial Prophylaxis



Exit Site Cleaning Strategy

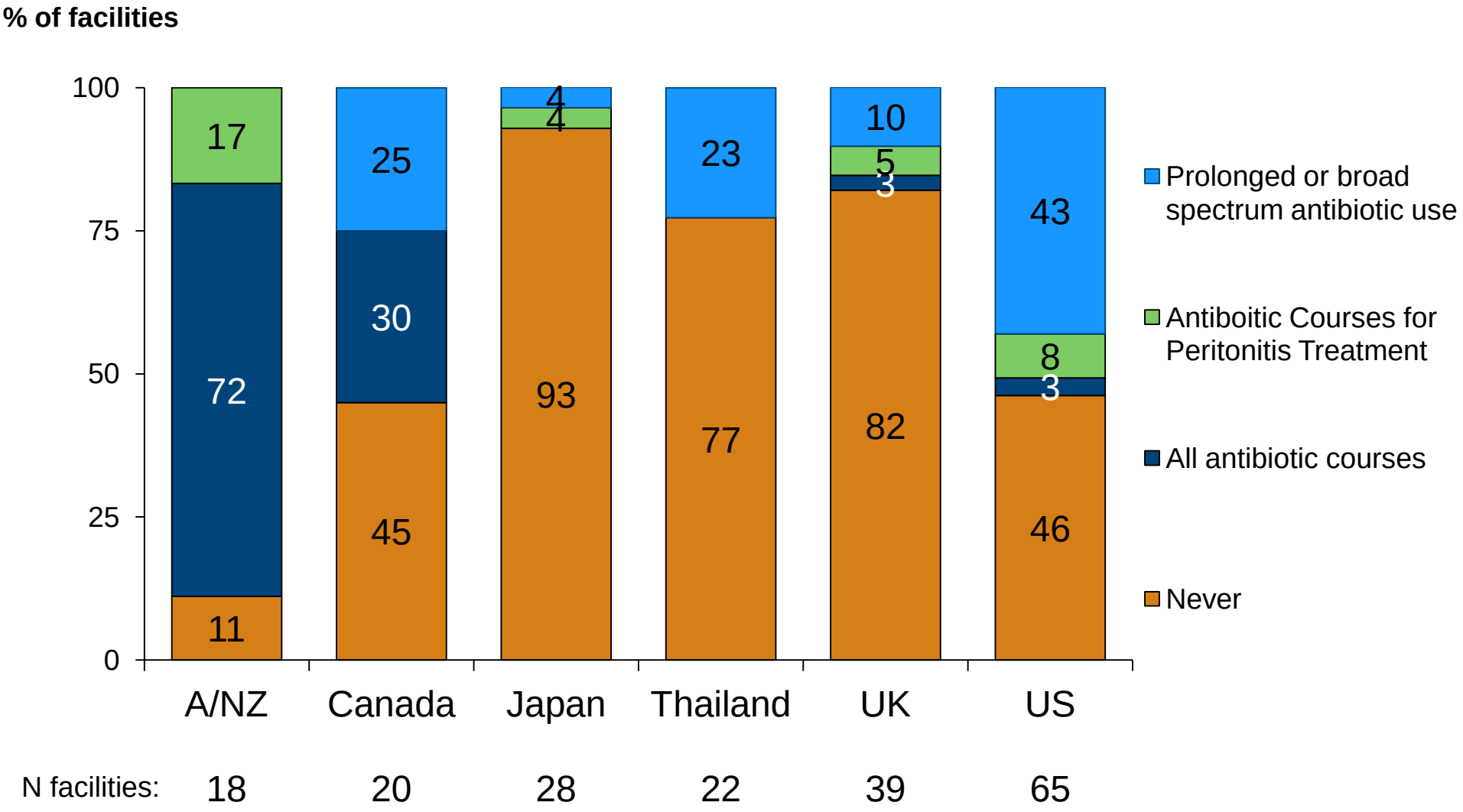


N facilities:	17	20	27	18	32	62

PDOPPS Preliminary data as of February 2017

Medical Director Survey (MDS)

Antifungal prophylaxis during antibiotic therapy



PDOPPS Preliminary data as of July 2017

Medical Director Survey (MDS)

Antibiotic prescription, prophylaxis, and treatment as reported by PDOPPS medical directors

	A/NZ (17)	Canada (20)	Japan (28)	Thailand (19)	UK (32)	US (64)
Antibiotic prophylaxis for: (%)						
PD catheter insertion	82	**100**	89	**90**	**100**	64
Complicated dental procedures	59	70	68	44	34	**84**
Genitourinary procedures	50	35	41	39	38	**54**
Gynecological procedures	56	40	32	44	38	**66**
Lower endoscopy	59	65	36	35	**66**	67
Wet contamination	**94**	**90**	68	63	78	**91**

Preliminary data as of February 2017

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Adapted from Perl et al. EDTA abstract (2016)

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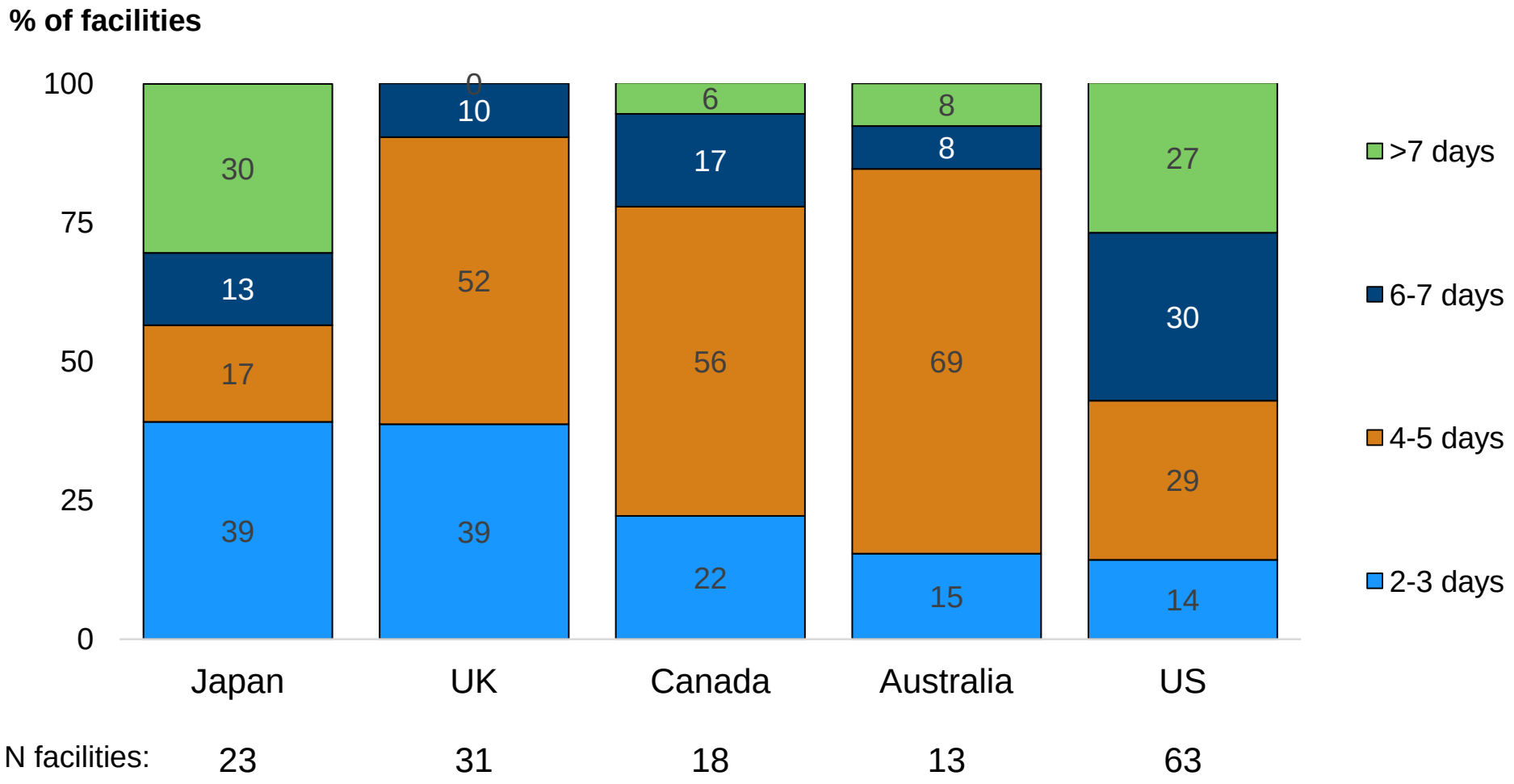
PERITONEAL DIALYSIS OUTCOMES AND PRACTICE PATTERNS STUDY

PDOPPS: Variability in Peritoneal Dialysis Patients' Training

Patient Training and Education Workgroup
Manuscript in Preparation

Ana Figueiredo, Junhui Zhao, Brian Bieber, Judith Bernardini, Helen Hurst, Francesca Tentori

Typical duration of PD training



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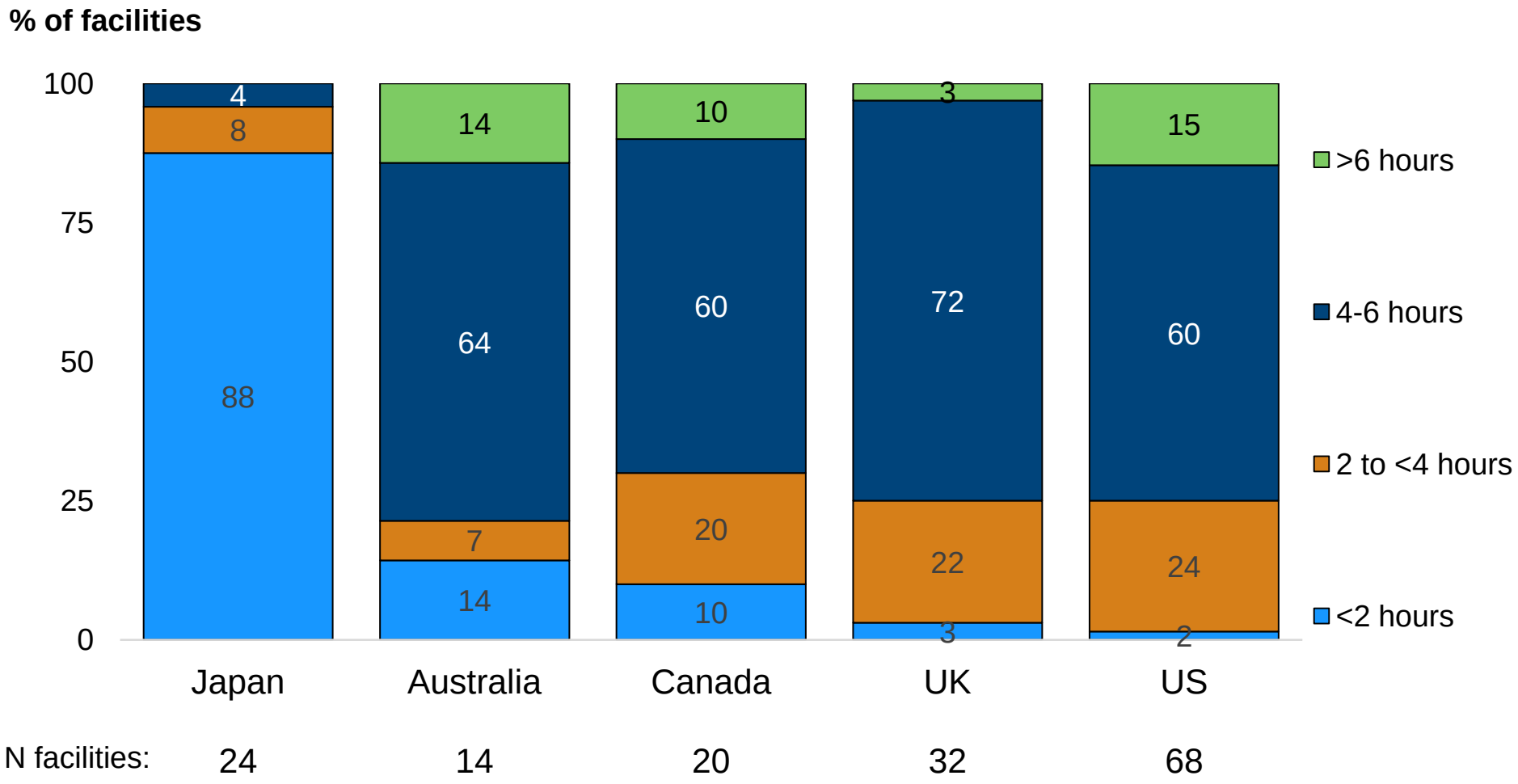
Figueiredo et al. ASN oral abstract (2016)

Typical duration of PD training sessions



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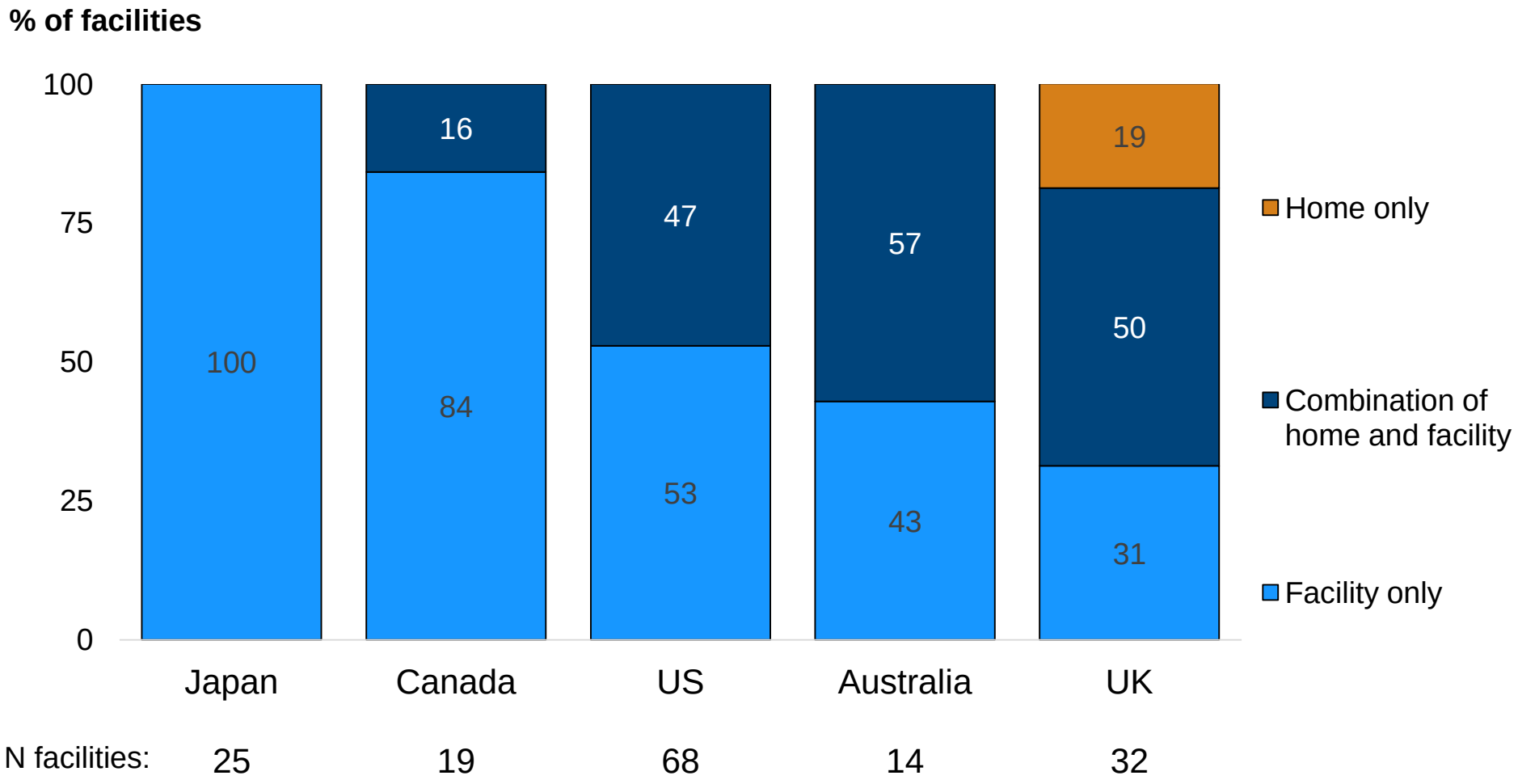
Figueiredo et al. ASN oral abstract (2016)

PD training location



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Figueiredo et al. ASN oral abstract (2016)

PDOPPS : predictors of early successful use

1. We are beginning to see the potential from PDOPPS
2. Wide variations are seen in peritonitis prevention and training practices (others like PD prescription and catheter insertion practices not shown)
3. Future analyses will explore the relationship between variation and outcome after making the appropriate adjustments
4. This project has enormous potential to explore issues that are important and cannot be resolved by RCTs
5. It is important to continue investment in this area of research to the benefit of the dialysis population.

PDOPPS
Peritoneal Dialysis Outcomes and Practice Patterns Study

Arbor Research Collaborative for Health

THANK YOU!

Participating facility medical directors, nurses, administrators

17th Congress of the
International Society for Peritoneal Dialysis
VANCOUVER, CANADA | MAY 5-8, 2018