Increasing PD Utilization
A Global Perspective

23rd Asian Pacific Congress of Nephrology
December 5, 2025

UNIVERSITY of WASHINGTON

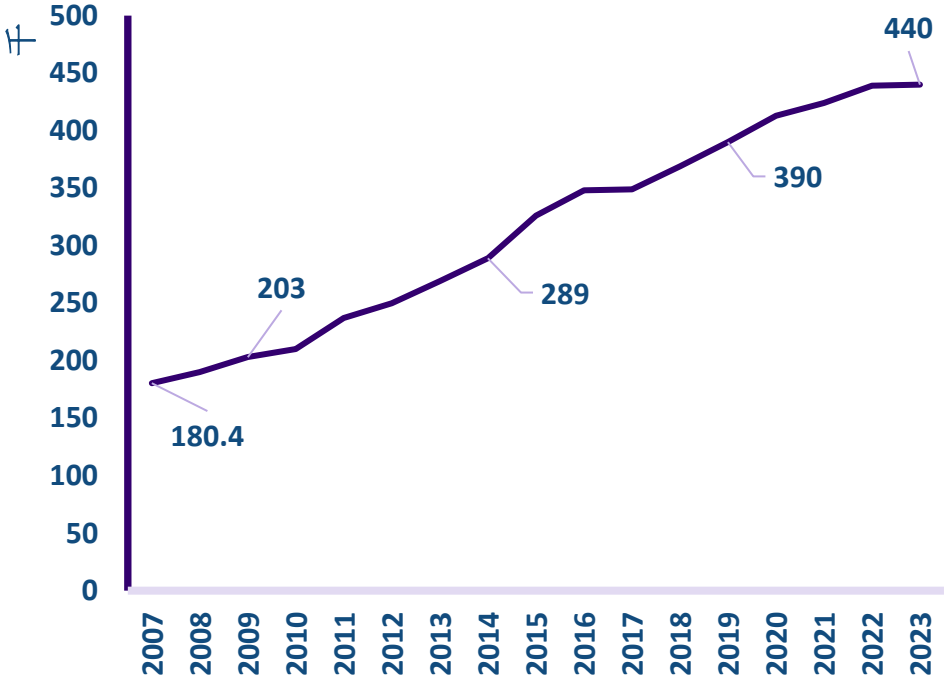
ISPD

Hundred Years of PD

50 years of CAPD

1923	First attempt at PD in humans (Georg Ganter, Germany)	Post-partum AKI, improved chemistry, pt sent home and died
1938	First patient AKI treated with PD that lived (Wear, Sisk, Tinkle in WI, USA)	AKI from obstructive uropathy, maintained on PD until obstruction resolved
1975	First successful application of CAPD to treat patient with kidney failure (Popovich and Moncrief in Austin, TX)	Exhausted vascular access; Popovich trained with Scribner in Seattle, used applied physics to craft the first CAPD Rx

Millions of Lives Saved with PD



Data Source: Fresenius Medical Care Annual Reports 2009-2023

In the last 10 years, > 50% increase in no. of patients treated with PD worldwide

- Increased access to dialysis itself
- Increased access to PD
- Longer time on PD
- Lower mortality

Rapid growth in three countries, in part driven by public policy

- China, United States, Thailand

UNIVERSITY of WASHINGTON

Why Equity in PD Access?

Consider the lived experience of patients with kidney failure

High burden of disease

- Often with several co-existing illnesses
- High hospitalization rate and frequent readmissions
- Numerous dietary restrictions or expectations

- Very high pill burden
- High symptom burden

Why Equity in PD Access?

Consider the lived experience of patients with kidney failure

High burden of disease

High burden of treatment

- Different but high with every dialysis modality
- Each modality has its own complications – post-dialysis fatigue or hypotension with HD, abd. symptoms or peritonitis with PD

Treatment of no chronic disease requires as much adjustment to patients' lifestyle for as long a time

Why Equity in PD Access?

Consider the lived experience of patients with kidney failure

High burden of disease

High burden of treatment

Dialysis modality has a profound effect on the lived experience of patients

Who can do PD?

***ANYONE* who *WANTS* to do it**

Few medical contra-indications

For equity in access to PD:
Dialysis units have to fit therapy to patient, rather than asking patient to fit to therapy

Modality choice should belong to the patient, resources permitting

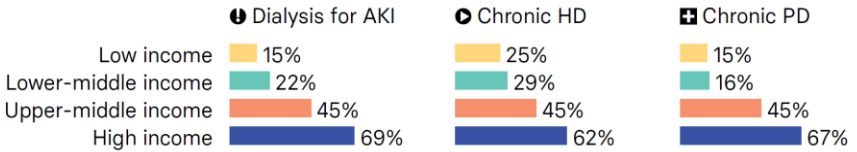
Equity in PD Access

Resource-Limited Restriction to Dialysis Care

Universal Access to Dialysis Care

Inequities in access to PD

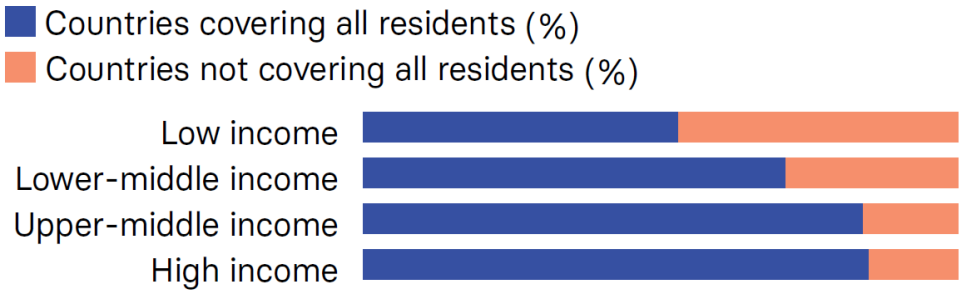
- By far, the most important barrier is affordability of care:
  - Dialysis care is expensive!
- PD is publicly funded and free at point of care in only 42% of countries (HD, 45%)
  - Varies by world region and country's income



ISN Global Kidney Health Atlas, 2023

UNIVERSITY of WASHINGTON

Not All Residents are Covered



Any dialysis care – HD or PD

It is estimated that nearly 2 million people with kidney failure die every year due to limited access to KRT care

Put in context: every year, more people die of kidney failure than start dialysis care

We need to leverage PD to cover this continued global gap in access to care

ISN Global Kidney Health Atlas, 2023

UNIVERSITY of WASHINGTON

Yet many inequities remain

- People in much of the world don't have access to lifesaving dialysis care, particularly PD
  - Especially dialysis care that is (1) publicly funded; (2) equally available to all residents: and (3) free at point of care
  - When nations and communities expand access to dialysis, leading with PD offers many advantages (PD First or PD Preferred)

Lead with PD

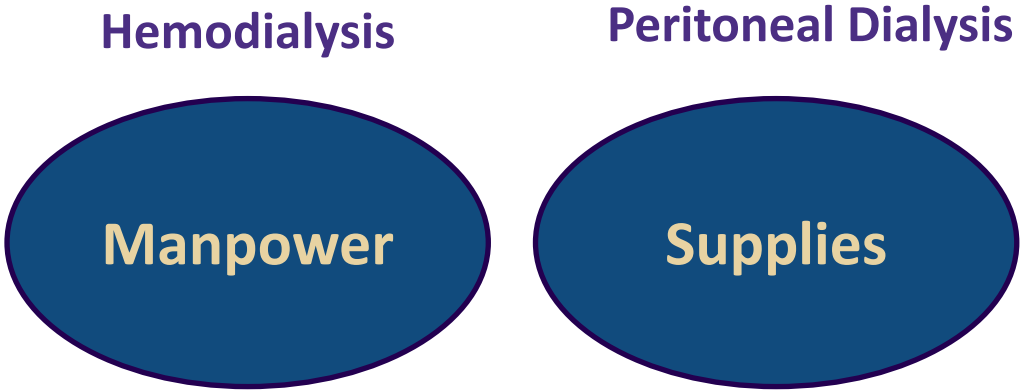
- HD is personnel intensive, PD is personnel efficient:
  - For any given population, fewer people need to be trained
  - Faster to stand up and create access
- Allows for a lower density of dialysis units
  - Fewer dialysis units can treat more patients
  - Substantially reduces transportation burden on patients
- Much smaller carbon footprint

PD: smaller carbon footprint

Contributor to greenhouse gases emissions	
Hemodialysis	**Peritoneal Dialysis**
• Electricity • Natural Gas • Water • Supplies • Transportation (Pt/Staff) • Biohazard waste • Landfill waste	• PD solutions • Disposables • Transport of supplies • Electricity (APD) • Drain bag (APD)
Estimated emissions per Rx, kg CO_2 eq	**58.9**	
Estimated emissions per year per patient	9214	CAPD, 1245 APD, 1992

Sehgal et al, JASN 2022; 33; 1790-1795
McAlister et al, JASN 2024; 35: 1095-1103

Cost considerations PD vs HD



Relative costs of manpower and supplies determines which therapy is cheaper

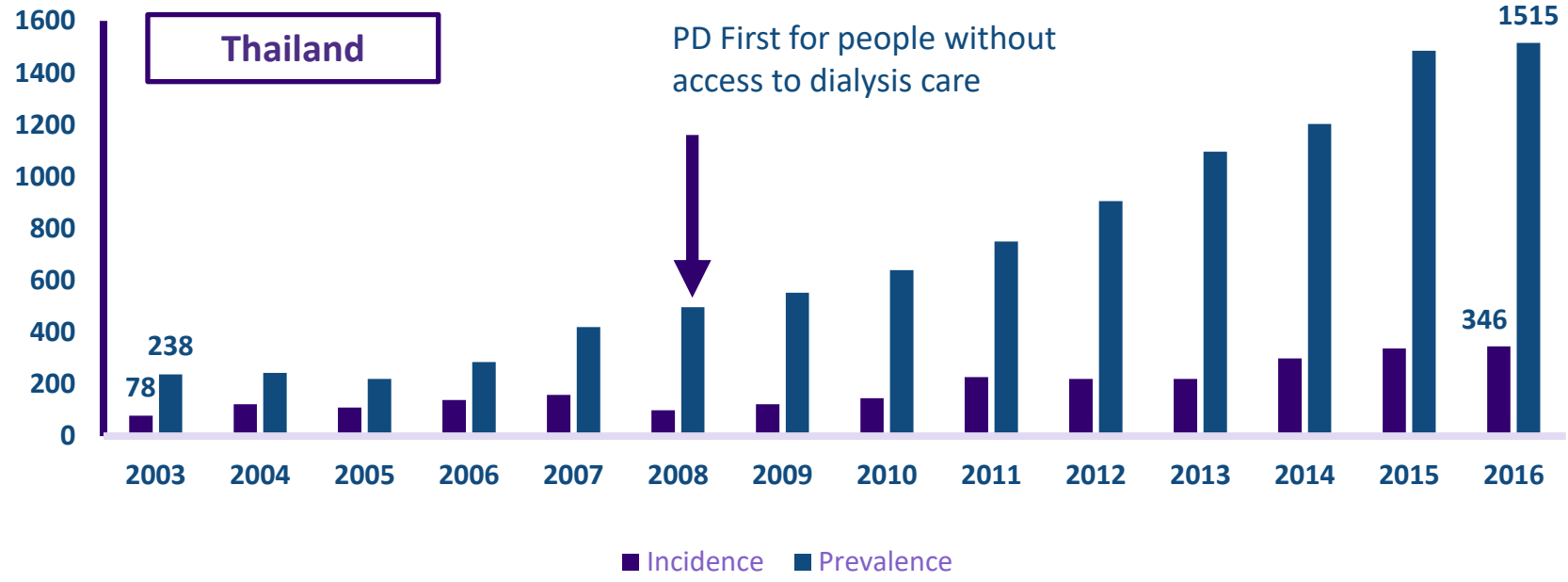
- Local manufacture of PD solutions by multinational and/or local manufacturers
- Governmental procurement and distribution of PD solutions
- Cost-effectiveness of in-home production of dialysate?

Global trends and dialysis care

- As communities and societies get prosperous and expand access to dialysis, PD offers many advantages:
  - Simpler, fewer trained personnel, fewer dialysis units to be stood up
  - Smaller carbon footprint

- Whether PD is cheaper or more expensive in a society, depends upon labor costs:
  - As labor costs increase in a society, PD becomes cheaper relative to HD

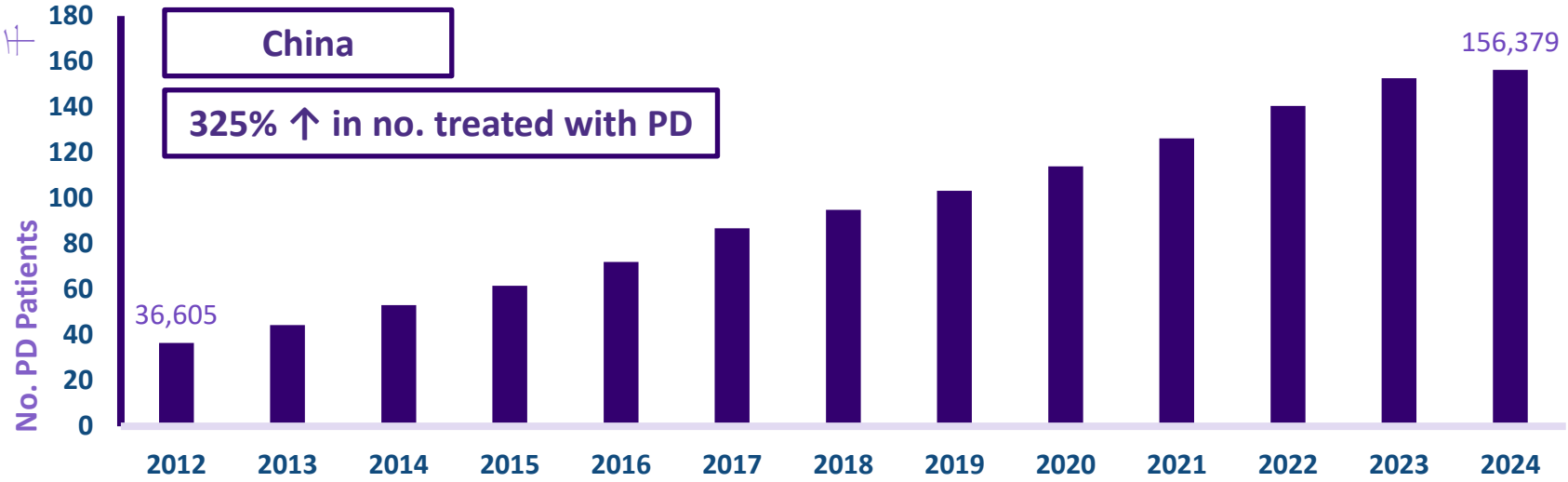
PD-led closure of coverage gap



US Renal Data System Annual Data Report 2018

UNIVERSITY of WASHINGTON

PD Part Of Expanding Access



Data Presented at Chinese Soc of Nephrology, Tiajnjin 2025

UNIVERSITY of WASHINGTON

Equity in PD Access

Resource-Limited Restriction to Dialysis Care

Universal Access to Dialysis Care

Use of PD varies between countries – this likely does NOT reflect choice made by patients

Within countries, PD use varies from:
- One center to another and
- Between demographic groups and regions

Modality choice BELONGS to patient, not physicians or health systems

Promoting Equity in PD Access

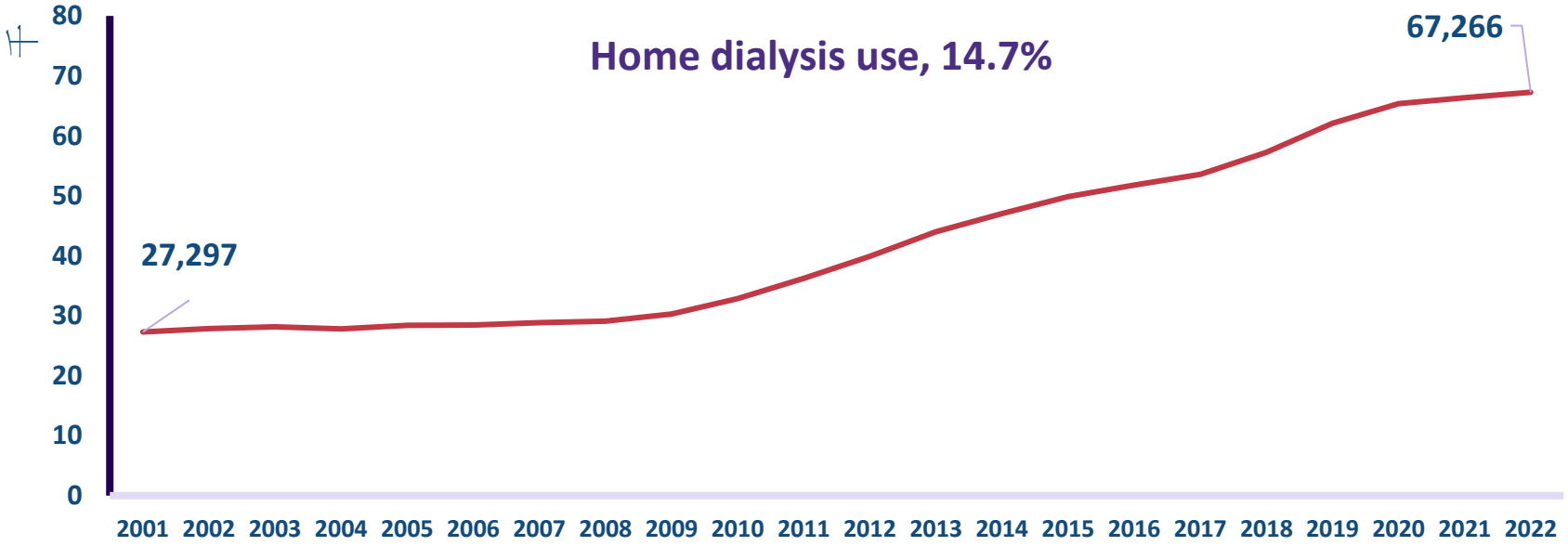
Amplify patient voice

- Healthcare providers
- Funders of dialysis care (usually govt)

Influence public policy

- Align financial incentives to enhance person-centered care:
  - Eliminate financial incentives for payments to physicians
  - Increase financial incentives to support home-based care

PPS Catalyzed PD Use



US Renal Data System Annual Data Report 2024

UNIVERSITY of WASHINGTON

Promoting Equity in PD Access

- There are large segments of the world without access to dialysis care:
  - Expanding PD care is an effective way to close coverage gap for KRT

- There is large variability in use of PD where dialysis care is otherwise accessible:
  - It is the patient's right to have the choice in dialysis modality and
  - Public policy can be a useful lever to align incentives to make care more person-centered

30 September – 3 October 2026

ISPD 2026 CONGRESS

Cape Town International Convention Centre (CTICC)

Cape Town, South Africa

www.ispd2026.org.za