



Can New Approaches to Estimating Dynamic Efficiency Help to Maintain Both Access and Innovation in Pharmaceutical Markets?

ISPOR2026

Issue Panel

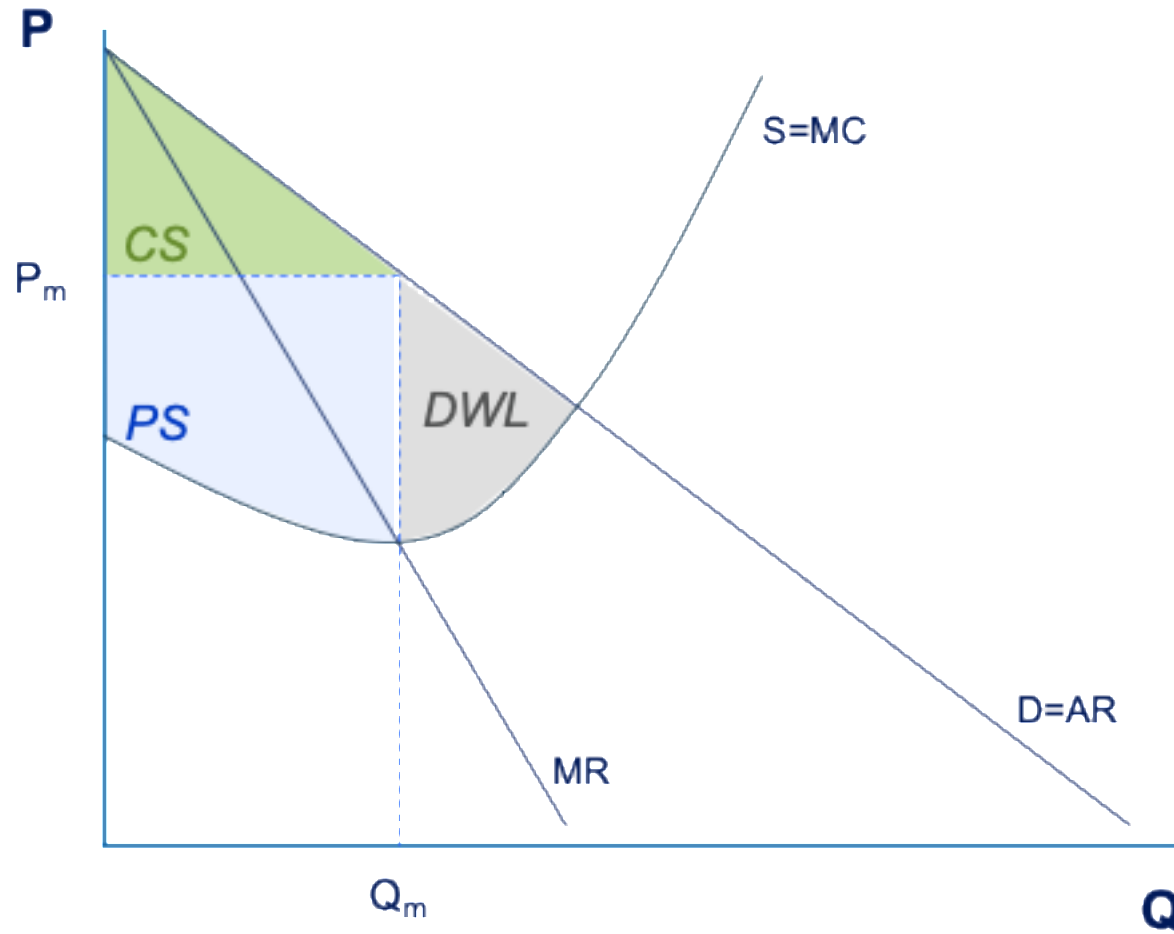
Room 201BC

Tuesday, May 19, 4:45 PM - 5:45 PM

Overview

- Panelists (~10 minutes each)
 - Bob Nordyke, PhD, BlueRidge Life Sciences, Los Angeles CA
 - Brief introduction and moderation
 - Anirban Basu, PhD, University of Washington, Seattle WA
 - Survey economic frameworks that aim to determine optimal producer surplus and their use as assessment tools
 - R. Brett McQueen, PhD, University of Colorado Anschutz, Aurora CO
 - Argue that access and innovation are better addressed through public policy proposals such as extensions to exclusivity periods or patent buyouts
 - Julie Patterson, PharmD PhD, National Pharmaceutical Council, Washington DC
 - Argue that converting theory into practice suggests tools not rules, while calling for evidence-based value debates from both sellers and buyers
- Discussion (20 minutes)

Econ 101 Refresh: What is dynamic efficiency and producer surplus?



In simple static analyses

- Consumer Surplus = CS
- Producer Surplus = PS
- Total Surplus = CS+PS
- PS commonly reported as a % of TS, max 100%

Static theory surplus calcs relevant to pharma

$$CS = \sum (\text{Benefits} - \text{Price paid for benefit})$$

$$PS = \sum (\text{Manufacturer net revenue} - \text{Cost}^1)$$

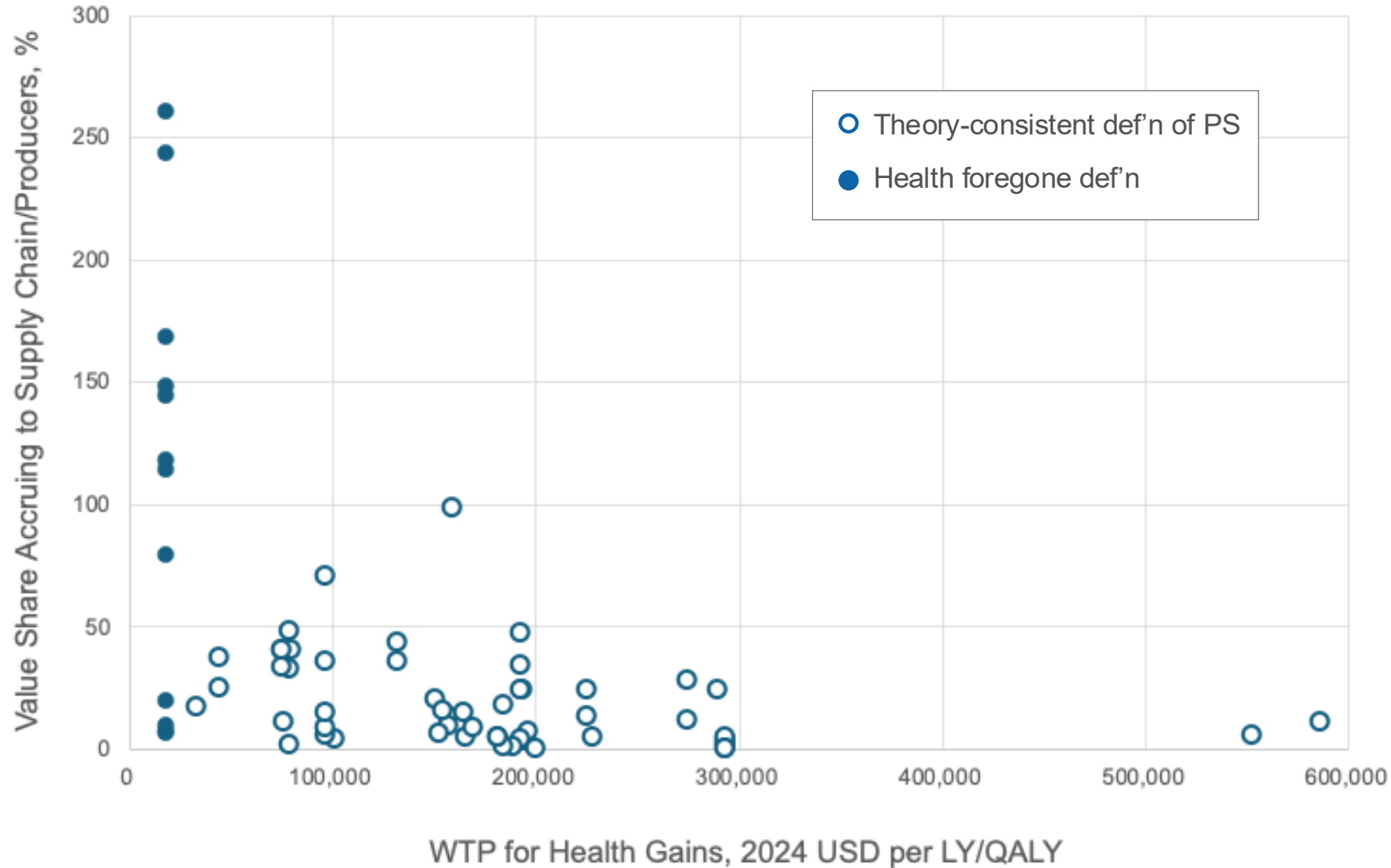
Allocative and Productive efficiencies → current time period;

Dynamic efficiency → multiple time periods

How does this play out over time as new products are introduced in R&D intensive industries?

- $\text{Products}_{t+1} = f(\text{PS}_t)$
- $\text{CS}_{t+1} = g(\text{Products}_{t+1})$
- $\text{Products}_{t+2} = f(\text{PS}_{t+1})$
- $\text{CS}_{t+2} = g(\text{Products}_{t+2})$
- And so on...

Empirically, what is the share of total surplus that accrues to manufacturers?



Pre-LOE Period Only	Estimate, %
All estimates	43.9
Theory-consistent definition	14.7

Overture: Drug prices are powerful and sometimes blunt tools

- Drug prices are currently used to achieve three goals
 - Make drugs affordable
 - Ensure that patients can get access
 - Manufacturers see enough financial returns for continued R&D
- These goals and use of price as a tool vary across countries and markets
- Other policy tools are also used to (re)balance access, affordability, and innovation

- Can we use price in new ways to balance access and innovation over long periods of time? How?

Contact info

- Anirban Basu, PhD, University of Washington, Seattle WA
 - basua@uw.edu
- R. Brett McQueen, PhD, University of Colorado Anschutz, Aurora CO
 - robert.mcqueen@cuanschutz.edu
- Julie Patterson, PharmD PhD, National Pharmaceutical Council, Washington DC
 - jpatterson@npcnow.org
- Bob Nordyke, PhD, BlueRidge Life Sciences, Los Angeles CA
 - bnordyke@blueridgelifesciences.com