# Twenty-Five Years of Access to Scheduled Services Anything Learned? Anything Change?

UBC Centre for Health Services & Policy Research Conference 2023

Dr Tom Noseworthy
Professor Emeritus University of Calgary



### Disclaimer & Professional Activities

- Professor Emeritus, Community Health Sciences, University of Calgary
- No conflicts of interest
- No prior payment from private sector for research, over this 25 years
- Financial support for access research from four Western Provinces,
   Federal Government and CIHR IHSPR (first grant 1998, 60 pubs.)
- Board Member currently of Canadian Frailty Network & Beacon Community Services (Vancouver Island)
- Recent part-time appointment to University of Calgary as Academic Director, Centre for Health Policy



### Outline

- Anything Learned?
  - Different services different drivers and dynamics
  - Queue Management 101 in a Canadian Context
  - Waiting Time Management Strategies Demand, Supply and Balance
  - Specific and Evidence-based Strategies
- Anything Changed?
  - Measurement and targets
  - Provincial performance
  - COVID impact on scheduled services
- A path forward



## Access Background

- Access to services has been an issue from day 1 in Canadian Medicare
- Beyond a period of watchful waiting, delays to receive service is never good for you health, albeit may not necessarily be bad
- Access to primary care & emergency services influenced by other factors & drivers
- Access to scheduled services is about those things for which people are scheduled and for which they (may) line up to obtain service ... often referred to as Elective services
- Waiting lists and waiting times are rationing of healthcare services
- Every health system in the world rations services but do so differently
- Universal health systems greater challenge with everyone included



## Simply:

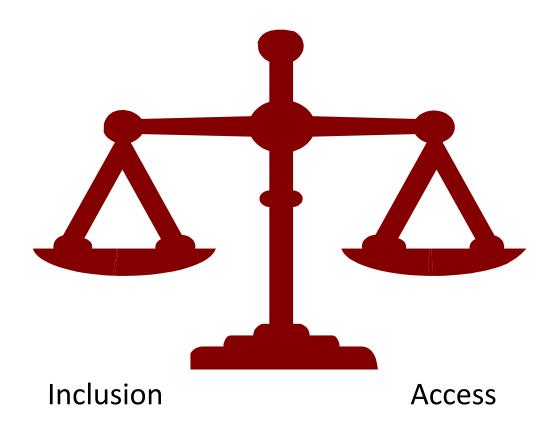
For any given service, when the arrival rate exceeds the service rate a queue forms



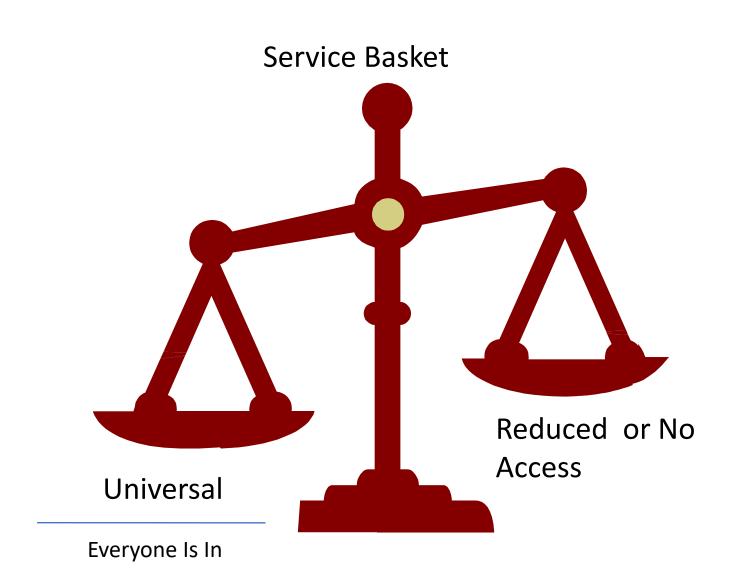
- Demand the arrival rate for the service
- Supply the service rate
- Balance match between both & backlogs
- When arrival rate exceeds service rate a queue forms

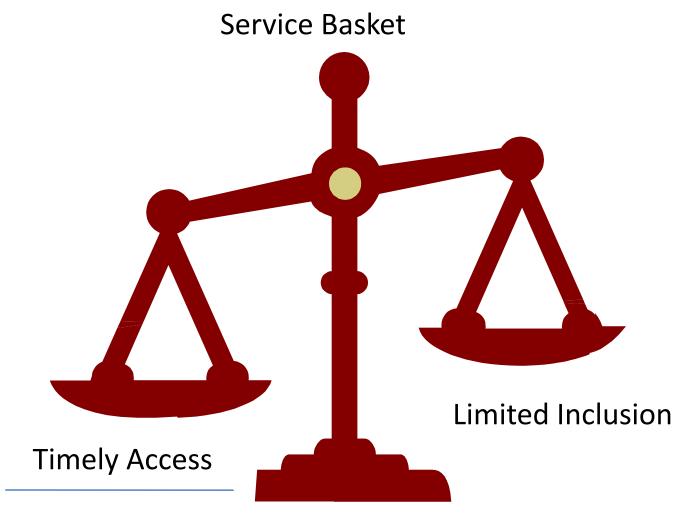


Service Basket Entitlements



The Ideal System in Balance





Rapid Access

# Waiting Time Management Strategies

- Demand lessen arrival rate
- Supply increase service rate
- Match improve the balance between arrival & service rates
- Operations research a branch of Industrial Engineering CORS
- Queue management has a strong theoretical base
- Far more could be learned or applied (S.E.Ms.) from other industries



## Demand Strategies

#### Reduce prevalence

- Tend to be longer-term and public health focus
- May be outside the focus of the health system
  - ACL injuries in young women & knee replacements
  - Better sun protection to reduce cataracts
  - Vascular risk reduction for heart disease and stroke

#### Maximize appropriateness

- Increasing supply risks increasing inappropriate services supply-induced demand
- Appropriateness criteria are few and far between
- RAND/UCLA method commonly used and focuses on net 'clinical' benefit
- For preference-sensitive interventions, patient criteria are centrally important

## Priority-setting for admission to the queue

- Point count scores that reflect relative urgency
- Does not change overall waiting times but improves flow and w/t for most urgent cases



## **Supply Strategies**

- Add more resources without other change
  - Usual political response and system expectation
  - Has a light switch effect but rarely results in long-term improvement in w/t
- Waiting time care guarantees
  - Used in the UK & Scandanavia successfully
  - Politically established and may/may not be influenced by evidence
  - Solid evidence for optimal intervention often lacking & 'preference' sensitive
  - Canada's waiting times 2005 e.g. hip and knee, cataracts
- Single-entry models
  - Cardiovascular surgery has always operated this way
  - Pool arrivals, standardize the criteria for service, pool the service delivery
  - Widespread in other industries single line to multiple service providers
  - Best strategy in the tool kit but is uncommonly used
  - Requires pooling of lists and service delivery
  - Disrupts traditional referral lines
  - Patients may want to choose for themselves offer no preference and provider-preference



## Balancing Supply and Demand

- Eliminate backlogs
  - Always requires an injection of new resources
  - Do the math to fix the problem
  - May not be only the money & be limited by human and material resources
  - Alberta & BC dealt with COVID surgical backlogs using publicly purchased private delivery
- Operations research tools to balance supply with demand
  - Markov modelling still in use
  - Discrete Event Simulation
  - Systems dynamics modelling
- Winging it doesn't get you far



# Macro Policy Options for Waiting Time Management

#### Demand

- Insurability & coverage: Medicare and Medicaid rules United States
   Affordable Care Act
- Priority-setting mechanisms: Financially sustainable thresholds New Zealand
   Point count scores for relative urgency Canada

#### Supply

- Increase resources Capital, financial & human standard approach all governments
- Waiting Time Targets Canada 2005 (H&K, Cataract)
- Waiting Time Care Guarantees UK (Blair Government)

#### Balance

- Resource infusions for backlogs Alberta & BC April 2022
- Enlist private sector resources



## Outline

- Anything Learned?
  - Different services different drivers and dynamics
  - Queue Management 101 in a Canadian Context
  - Waiting Time Management Strategies Demand, Supply and Balance
  - Specific and Evidence-based Strategies
- Anything Changed?
  - Measurement and targets
  - Provincial performance
  - COVID impact on scheduled services
- A path forward



## Commonwealth Fund Annual Survey (2021)

Health Care System Performance Rankings (11)

	AUS	<b>CAN</b>	FRA	GER	NETH	NZ	NOR	SWE	SWIZ	UK	US
Overall	3	<mark>10</mark>	8	5	2	6	1	7	9	4	11
Access	8	9	7	3	1	5	2	6	10	4	11
Care Pro	c 6	<mark>4</mark>	10	9	3	1	8	11	7	5	2
Ad Effici	2	<mark>7</mark>	6	9	8	3	1	5	10	4	11
Equity	1	<mark>10</mark>	7	2	5	9	8	6	3	4	11
Outcome	e 1	<mark>10</mark>	6	7	4	8	2	5	3	9	11

Data: Commonwealth Fund analysis.

Source: Eric C. Schneider et al., Mirror, Mirror 2021 — Reflecting Poorly: Health 1Care in the U.S. Compared to Other High-Income Countries (Commonwealth Fund, Aug. 2021). https://doi.org/10.26099/01DV-H208



## Measurement and Targets

- More attention is being paid to measuring & reporting waiting times
- Length of waiting times is the target not the number on the list
- Comparative performance assessment now possible
- No meaningful work on establishing targets for procedures
- Governments need to establish and enforce maximally acceptable waiting time targets & hold service providers responsible
- Nieve to believe that access problems can be permanently eradicated



#### Provincial Performance

- Canada performs poorly in access not only to scheduled care
- Access is & always has been our Achilles Heel
- Federal Government has next to no influence (NHS & UK)
- Provincial Governments are not working together to resolve this
- Most initiatives are supply side only & involve resource infusions
- Resource infusions alone seldom provide long-term solutions
- WTs have not improved with time
- COVID made all WTs worse, particularly scheduled services
- Opinion: COVID may have improved receptivity to SEMs



#### Path Forward

- Needs to become a sustained Provincial & Federal joint policy priority
- Long waiting times can be fixed and should be
- COVID placed a bright light on this necessity
- Deal with the backlogs first this requires an additional, calculable infusion of resources
- Use Operations Research tools to match supply and demand
- Add calculated resources to re-engineered care to retain balance
- Widespread adoption of single-entry models
- For the most stubborn queues develop appropriateness criteria and consider priority-setting tools



