


Mission
Statement

## CAPCSD <br> 

ABOUT CSDCAS MEMBERSHIP PROFESSIONALDEVELOPMENT MEMBERLOGINS

## Strategic Plan

CAPCSD always looks to the future for ways to support member program administrators, faculty, and clinic directors. In February 2019, the CAPCSD Board of Directors approved a three-year strategic plan for 2018-2021. We invite you to review the STRATEGIC PLAN and see where CAPCSD is headed in the near future.


The Council of Academic Programs in Communication Sciences and Disorders (CAPCSD)

## Objectives

- Explain cost-effective analysis and why it's useful
- Describe what you need for cost-effectiveness analysis.
- Describe what you need to use cost-effectiveness analysis.



## BEFORE BUYING SOMETHING, IT MAKES SENSETO KNOW

- What you will pay
- And
- What you will get



## 



## Smart shopping 101

$\square$ What you get
-Quantity,
-Quality,
-Cost


Should this be paid for?


## What is it?

Defining what you get and what it costs



## LIGHTLY CARBONATED, LOW C Mlope

How good is the new thing?

# MANGUE ORANGE SA 591 mL 



FAIT DE : EAU GAZÉIFIÉE, FRUCTOSE CRISTALLIN, CONCENTRÉ DE JUS DE POIRE ET CITRON, ARÔMES NATURELS, ACIDE CITRIQUE, B-CAROTENE (COLORER), BENZOATE DE POTASSIUM (POUR CONSERVER LA FRAİCHEUR), SUCRALOSE ( 25 mg par portion de 591 mL ), ACID ASCORBIQUE.

## Example from your life: coffee \# variation



## Is the new thing worth it?





## Can "economists" help?



## "I want to learn about Economics!" <br> -no one




## Economics? Really?

## OUR LADY OF THE ASSUMPIION <br> 



 You Made Yesterday Didn't Come True Today.

## WHAT IS ECONOMIC EVALUATION?

- "Methods such as 'what we did last time,' 'gut feelings,' and even 'educated guesses' are not always better than organized consideration of the factors involved in a decision to commit resources to one use instead of another."

Drummond MF, O'Brien BJ, Torrance GW, Stoddart GL. Methods for the economic evaluation of health care programmes. 2nd ed. Oxford:
Oxford University Press; 1997.

## WHAT MAKES IT "ECONOMIC EVALUATION"?

- organized consideration of the factors involved in a decision to commit resource to one use instead of another."

Economic (1 use)
Evaluation (organized)

## ECONOMICS = SCARCITY AND TRADEOFFS



## EVALUATION: DECISIONS, DATA, RESULTS

organized consideration of the factors involved in a decision
to commit resources to one use instead of another."


## COST-EFFECTIVENESS: PUTTING WHICH EGGS INYOUR BASKET?



## Main issue

Are we paying for:
Efficiency (cost and health outcome)

## OR

Value (cost, health outcome and "other stuff")


## CERTIFIED HUMANE RAISED \& HANDLED


What does it mean?
Do you value it enough to pay more for it?

## Vegetarian meat...

It's good for the planet...


# Raised without antibio ics or added hormones.* Fed a vegetarian diet. <br> Please refrigerate chicken if it's not being eaten immediately. Microwave-saf 

## CEA $\neq$ Menu without prices nor prices with no menu



## WHY DO ECONOMIC EVALUATION?

■ "That's nice, but how much does it cost?

- "Why should we pay more for this?"
- "Are there better ways to spend our resources?"


## GO FOR WHICH DOT?



Patient outcome

IF RESOURCES WERE SCARCE:
GO FOR WHICH DOT?


## Not worth it

## (not cost-effective)

## How do you know when is something cost-effective?

After you estimate the extra cost and extra effect, then what?

## Decision-making illustrated


© Jeffrey Hoch, PhD

## 3 ways to become cost-effective: Be more effective



## 3 ways to become cost-effective: Be less costly



## 3 ways to become cost-effective: Be willing to pay more



## Exam time



## WHEN SOMEONE

Doesnt want you to win

## Economic evidence = Smart Shopping Is this a good deal?



## Halibut is cost-effective?

## Beer Battered Fish \& Chips

Higher "quality"
Higher "cost"
 Haddock $\$ 18$

Okanagan 1516 lager 6attered fish with fresh cut fries, coleslaw and lemon.

## Why this matters...

- "Efficiency" is a part of quality care
- Because if you "waste resources" ...
- you can't provide as much care as if you don't waste resources.
- "waste not, want not."


## Why you need cost-effectiveness analysis

- If you want to advocate for what you do, you need to say more than,
- It could work, or
- It does work
- You need to be able show it is a good use of resources
- It is good "value for money"

Why bother with "economic evidence?"


## It helps punctuate the value proposition

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## Two concepts of value

- Value Concept \#1: Important to think about
- IS $\qquad$ important?
- Value Concept \#2: Worthwhile to do
- What should we do?


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How do we make the case in healthcare?

## Two concepts of value

- Value Concept \#1: Important to think about
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- What should we do?

Important because:

1) Lots of people have it (big N)
2) Bad to have (bad outcomes)
3) Costly (High C)

## Special Preview - White Paper on the State of Aphasia

## Did you know?

New data now includes aphasia prevalence estimates across stroke, traumatic brain injury, and brain tumor. The estimated U.S. prevalence of aphasia for these etiologies ranges from about 2.5 million to 4 million people.

In early Fall of 2017, Aphasia Access will release a research study sure to impact aphasia care moving forward. Conducted over the course of the last year, and overseen by Nina Simmons-Mackie, Ph.D. this report is a look into the state of aphasia in North America.

This resource goes beyond awareness and other top line metrics to dive into the real challenges on the front lines of aphasia care. It will be in demand for anyone looking to set research and service priorities, not to mention gra funders, policymakers, and tt Important because:

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## Special Preview - White Paper on the State of Aphasia

## Did you know?

The incidence of major depression
increased from 11\%
at three months to $33 \%$ at twelve months in a study of people with aphasia

In early Fall of 2017, Aphasia Access will release a research study sure to impact aphasia care moving forward. Conducted over the course of the last year, and overseen by Nina Simmons-Mackie, Ph.D. this report is a look into the state of aphasia in North America.

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## Not just in the US, eh

## 196

ORIGINAL ARTICLE

## Incidence and Profile of Inpatient Stroke-Induced Aphasia in Ontario, Canada

Laura Dickey, BA, Aura Kagan, PhD, M. Patrice Lindsay, PhD, Jiming Fang, PhD, Alexandra Rowland, MSc, Sandra Black, MD, FRCP(C)

ABSTRACT. Dickey L, Kagan A, Lindsay MP, Fang J, Rowland A, Black S. Incidence and profile of inpatient stroke-induced aphasia in Ontario, Canada. Arch Phys Med Rehabil 2010;91:196-202.

Objectives: To determine the incidence rate of inpatient stroke-induced aphasia in Ontario, Canada, and to examine the demographic and clinical characteristics for stroke patients with and without aphasia.
Design: Age- and sex-specific incidence rates for aphasia in Ontario were calculated using the Ontario Stroke Audit. In addition, data collected from the Registry of the Canadian Stroke Network (RCSN) were used to determine the demographic and clinical characteristics for stroke patients with and
ence of aphasia was found to be an independent predictor of longer hospital stays, increased use of rehabilitation services, and higher rates of thrombolytic therapy.

Conclusions: A significant number of people with stroke experience aphasia, with advancing age associated with a higher risk. The profile and patterns for stroke patients with aphasia differed significantly from those who did not experience aphasia as a residual disability after stroke, particularly in relation to service usage. Given the personal and system cost associated with aphasia, best practices in the area of stroke should include recommendations on how to best serve this population throughout the clinical pathway.

Key Words: Aphasia; Health services; Incidence; Rehabil-

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## Two concepts of value

- Value Concept \#1: Important to think about
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- What should we do?
"Most of the problems in life are because of two reasons: we act without thinking or we keep thinking without acting."
~Unknown


## Example

LIKELY, IMPORTANT


SHOULD I BUY THIS?


The healthcare payer's problem....
-You have \$x million and you want to get as much health (e.g., quality adjusted life years) for your population as possible.

## Sometimes "efficient" makes sense



## Sometimes "efficient" doesn't make sense to us



## WHY YOU SHOULD CARE?

| Costs challenge | Paying for Value <br> (not volume) is <br> a popular <br> 'solution' | Cost- <br> effectiveness <br> analysis is a way <br> to look atValue. |
| :--- | :--- | :--- |
| patients and <br> payers |  |  |



## WHAT IS VALUE?

"In most industries, "value" as defined by consumers is associated with in four attributes:
Accessibility: "can I get what I need or want from you?"
process
outcome
cos $\dagger$

Service: "is dealing with you a pleasant experience?"
Effectiveness: "is what you're providing going to satisfy my need or want?"
Costs: "what's the cost to me and my family and is it worth it?"

## Objectives

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## TO USE CEA, YOU MUST HAVE ...

## 4 Quadrants

## 3 Findings

2 Items of interest

I Thing



## COUNT DOWN TO USE

## 4 Quadrants


$\square$
CEA tells you a tradeoff located in one of 4 areas

## 4 potential outcomes


"More or less" means $\geq 2$ options.

Which outcome (what to use as effect)? Over what time horizon?

## "More or less" means $\geq 2$ options.

- Are they relevant/correct?
"more than" or "less than" $\rightarrow$ | option is compared to a $2^{\text {nd }}$ option.

Does the "usual care" in the analysis match your context / reality?
"More or less" means $\geq 2$ options.

- Are they relevant/correct?


## Whose cost?

- Decision maker's perspective included?

The decision maker cares about the decision maker's costs (i.e., not paying = not a cost)

What are you trying to accomplish with this policy or program?
$2 \times 2$ TABLE $=$ 4 QUESTIONS

## Which outcome (what to use as effect)?

- Is one that matters included?

What amount of "success" does the new option offer?


Over what time horizon?

- Over policy/clinically relevant time period!


## $2 \times 2$ TABLE $=$ 4 QUESTIONS

"More or less" means $\geq 2$ options.

- Are they relevant/correct?


## Whose cost?

- Decision maker's perspective included?


## Which outcome (what to use as effect)?

- Is one that matters included?

Over what time horizon?

- Over policy/clinically relevant time period!


## 4 potential outcomes


"More or less" means $\geq 2$ options. - Are they relevant/correct?

## Whose cost?

- Decision maker's perspective included?

Which outcome (what to use as effect)?

- Is one that matters included?

Over what time horizon?

- Over policy/clinically relevant time period!

Right Effect?

## COUNT DOWN TO USE

3 Findings



## 4 potential outcomes



## 4 potential outcomes



## 4 potential outcomes



## 4 potential outcomes

| 2 dimensions <br> x <br> 2 directions | Less effective | More effective |
| :---: | :---: | :---: |
| Costs more |  | It Depends |
| Costs less | It Depends |  |

## 9 potential outcomes



## 3 potential findings

|  | Less effective | Similar Effect | More effective |
| :---: | :---: | :---: | :---: |
| Costs more |  |  |  |
| Similar Costs |  |  |  |
| Costs less |  |  |  |

## COUNT DOWN TO USE

2 Items of interest


## 2 items of interest: 1) Estimate




[^0]
## 2 items of interest: 2) Uncertainty



## 2 ITEMS OF INTEREST: l) ESTIMATE \& 2) UNCERTAINTY

# USING 2 ITEMS OF INTEREST: I) ESTIMATE \& 2) UNCERTAINTY 

## ESTIMATE

- How much extra cost?
- How much extra effect?
- How much extra cost per extra effect?
- How much more extra benefit than extra cost?


## UNCERTAINTY

- What other values are possible?
- What is the $95 \% \mathrm{Cl}$ ?
$\$ 75,000$ extra cost and 6 more months of life
$\$ 75,000 / 0.5$ years $=\$ 150,000$ per year of life


## From Effectiveness to Cost-Effectiveness Analysis (CEA)

## From Effectiveness to Cost-Effectiveness Analysis (CEA)



## COST-EFFECTIVENESS PLANE



## COST-EFFECTIVENESS PLANE



## COST-EFFECTIVENESS PLANE



## COST-EFFECTIVENESS PLANE



## WHAT IS THE DECISION MAKER WILLING TO PAY (WTP)?



[^1]
## COUNT DOWN TO USE

## I Thing

Quadrilaterals; Perimeter

E. I have 4 riaht anoles

4 Quadrants, 3 Findings, 2 Items of interest, 1 Thing

## IN THEORY: SPEND <br> EFFICIENTLY!



There is something odd about the choreography of the CEA...


Cause of Death:
"Patient laid down the boogie and played that funky music til he died."


## WHAT IS BEING CONSIDERED?

"Given the available evidence on comparative effectiveness and incremental cost-effectiveness, and considering other benefits, disadvàntages, and contextual ${ }^{\circledR}$ considerations, what is the long-term value for money of treatment with acupuncture and usual care versus usual care alone for patients with chronic low back pain?

```
Low: 1 votes 
```




Figure 1. Value votes by incremental cost-effectiveness ratio, aggregated (top) and by individual assessment (bottom)*

 $\triangle$ apalutamide for prostate cancer)
$=\$ 88 \mathrm{k}$ and $100 \%$ voted $i$ thigh value

[^2]IN PRACTICE, OTHER THINGS MATTER

Everything happens for a reason, but sometimes things happen because you're stupid and make bad decisions.

```
your cards
```



WHEN IS TRANSPARENCY NOT A GOOD THING?

## Objectives

x Explain cost-effective analysis and why it's useful
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## Case study: Estimate and uncertainty

## NIHR <br> National Institute <br> for Health Research

Health Technology Assessment
Volume 24 • Issue 19 • April 2020
ISSN 1366-5278

Computerised speech and language therapy or attention control added to usual care for people with long-term post-stroke aphasia: the Big CACTUS three-arm RCT

Appendix 18 Within-trial analysis: base-case cost-effectiveness planes and cost-effectiveness acceptability curve


## AS HEALTHCARE BECOMES MORE EXPENSIVE...

There will be more focus on "value" (i.e., cost and effectiveness of new treatments). Cost-effectiveness analysis (CEA) is a tool used throughout the world to help inform policy. The questions you ask when "smart shopping" are the same ones to answer with CEA

## CALL TO ACTION

- Do more to show
- the value (the CE) of what you do;
- Do more to show
- that investing in what you do is a "good buy".
- (helps people in a meaningful / valuable way for the money spent).


## Acknowledgements

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- Ned Campbell, Director of Meetings and Continuing Education
- And to the organizers


## Contact information

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[^0]:    2 Items of interest, 1 Thing

[^1]:    4 Quadrants, 3 Findings, 2 Items of interest, 1 Thing

[^2]:    4 Quadrants, 3 Findings, 2 Items of interest, 1 Thing

