

Budget Impact Analysis for Implementation Projects

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- Views are mine and do not represent official policy of the Department of Veterans Affairs or QUERI
- Jacob Painter provided an early version of these slides
- Bo Kim and Sara Landes noted insightful ways to make the presentation more useful to implementation scientists
- All errors are my own

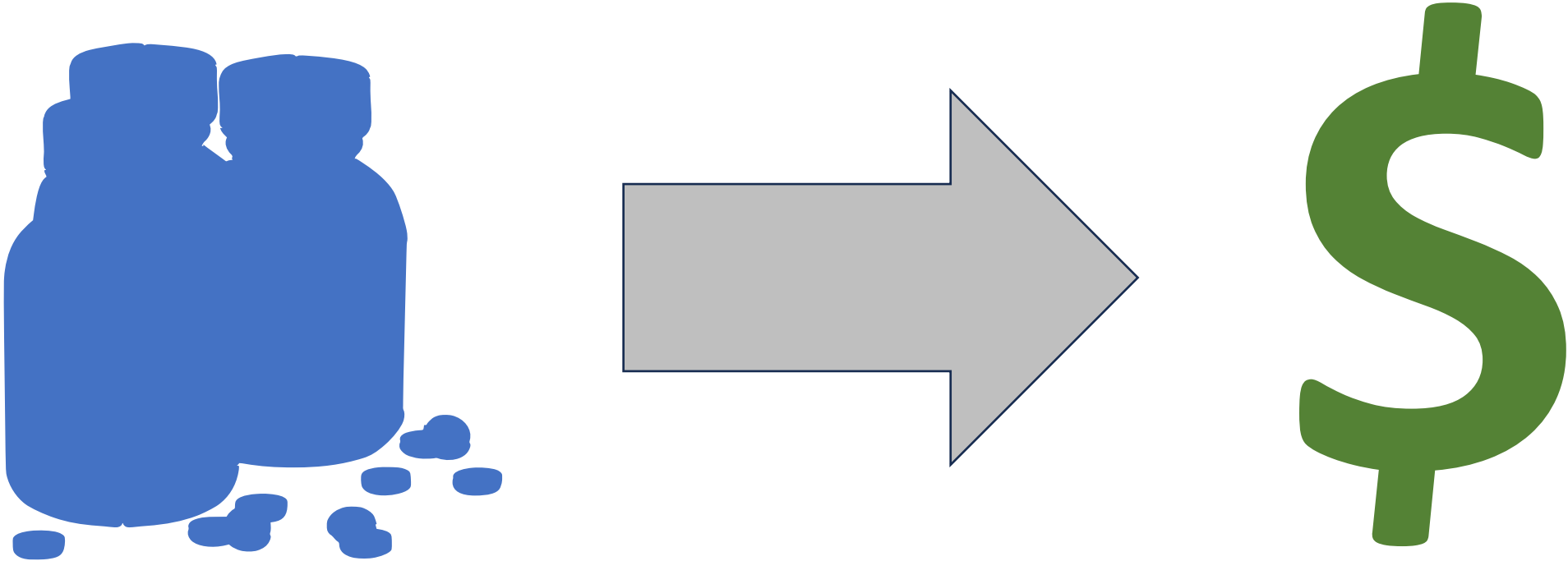
Objectives

- Provide a gentle introduction to budget impact analysis (BIA)
- Describe the role of BIA in decision-making
- Introduce the core components of a BIA
- Teach you
 - Enough economicese to get what you need
 - Skills to approach “Aim 3” data collection so that
 - you get a good analysis,
 - relevant decision-makers get useful information,
 - and your economist is happy

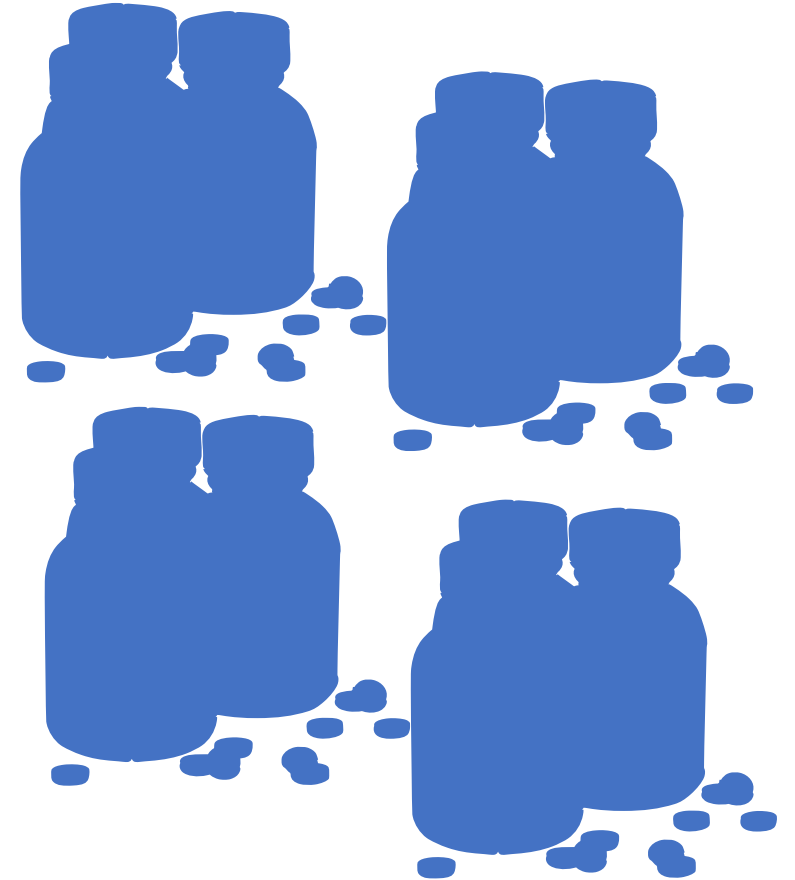
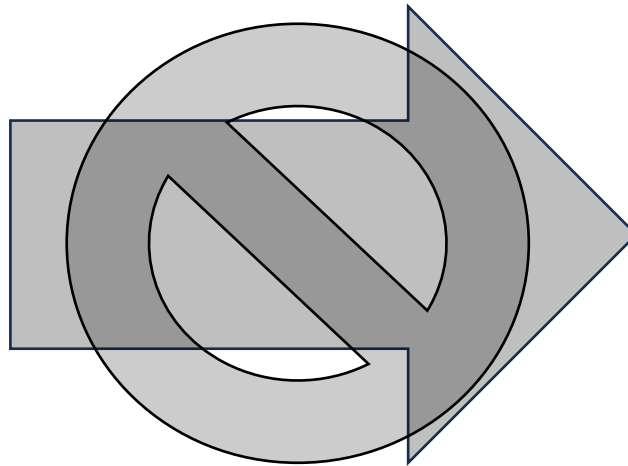
What is budget impact analysis?

- The impact of the budget?
- The impact on the budget?
- "A budget impact analysis (BIA) is an economic assessment that estimates the financial consequences of adopting a new intervention."
 - [- HERC: Budget Impact Analysis \(va.gov\)](#)

The effect of the new intervention on the budget



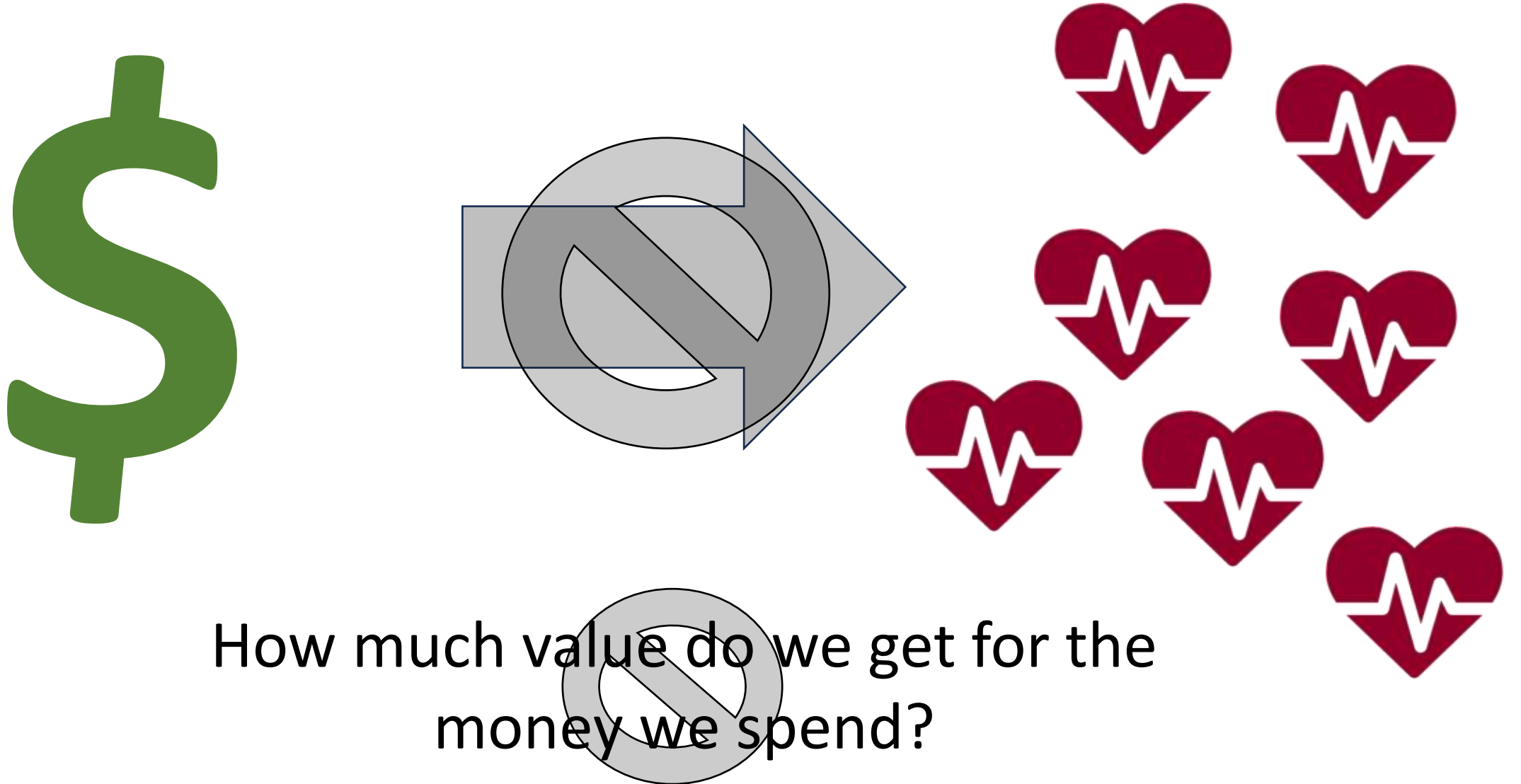
Not the effect of the budget on amount of care that can be provided



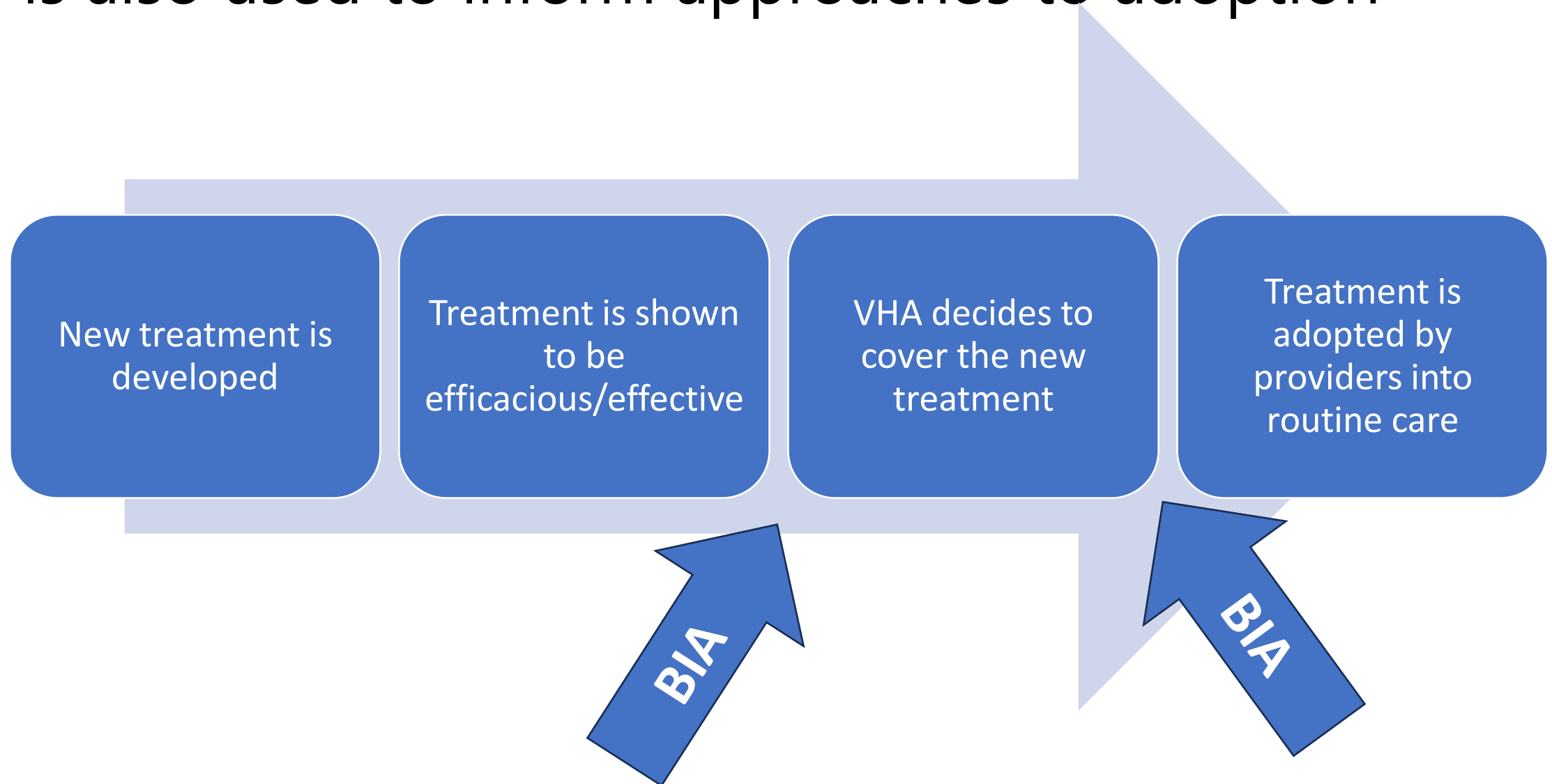
If we spent more, how much more care could we provide?



And **not** the effect of the budget on health



BIA was designed to inform coverage decisions but is also used to inform approaches to adoption



BIA is used to determine if an intervention is affordable

- Use a BIA to inform decisions about whether the organization can afford to
 - Implement an intervention into clinical care
 - Sustain adoption once implemented
- BIAs may also help plan how much funding is needed to comply with mandates
 - When multiple pathways to compliance are available, BIA can help choose the most affordable option
 - Alternately, can choose which patients will have access given limited budgets

There are 6 core building blocks of a BIA

- Perspective – who pays?
- Time horizon – how long do we compute a forecast for?
- Target population – which patients are eligible to get the treatment?
- Treatment mix – how are patients being treated now? how do we expect them to be treated in the future?
- Treatment cost – what are the costs now? how do we expect those costs to change?
- Condition-related costs – what other costs are associated with the patient's disease?

“Classic” BIA focuses on 2 cost buckets

- Treatment & treatment-related costs
 - The new treatment itself
 - Current alternatives to the treatment
 - Medical care for any adverse events
 - Any necessary charges associated with obtaining treatment (e.g., dispensing fees)
 - Training to administer treatment correctly
- Condition-related costs
 - Other costs associated with the disease

Implementation projects pose special challenges

- There is no price for implementation activities
- Implementation extends across budgetary periods, making allocation to "Year 1", "Year 2", etc challenging
- Implementation strategies are highly customized to the setting
- Fidelity to the intervention can affect outcomes
- Implementation often focuses on interventions that fit into a complex "bundle" of care

Economists need implementation teams to help solve the cost data challenge

- Microcosting - each activity gets a cost
 - Need a set of defined activities *before* beginning implementation
 - Log time in Excel, Access, REDCap, or other standardized tool
 - Time is given a value based on the wages of the person completing the activity
 - Amounts are summed up to create a cost
- Macrocosting – cost is based on effort allocation
 - Each person's FTE for implementation is given a value based on the wages
 - Total implementation FTEs are summed

Other things you can do to make data collection & economic analysis easier

- Meet with your economist early!
- For new interventions, set up unique codes to locate records in the clinical data warehouse (CDW) with one or more of these:
 - Clinic stop codes
 - CHAR4 codes
 - Standardized note titles
- Digitize your logbooks
 - Several options exist
 - HERC's list of tools and resources for conducting economic analyses for implementation research
(<https://www.herc.research.va.gov/include/page.asp?id=implementation-tools-resources>)
- Collect data throughout the project and from all sites

To wrap up

- Budget impact analysis:
 - Estimates financial consequences of an intervention
 - Is used to decide whether an intervention is affordable
- If you know your intervention is (cost-)effective, one key question to answer is the affordability of implementing it
- BIA can support implementation by providing this evidence
- You, the implementation researchers, are an important part of making BIA results useful for policy makers

BIA Interactive

Channel your inner economist

“Learning To Internalize The Good”

- New evidence-based manualized self-acceptance intervention
- Clinically efficacious way to improve patients' self-assessed quality of life
- Successful completion significantly associated with lower blood pressure
- Researchers speculate that, long term, a significant number of strokes and heart attacks will be prevented
- Learning To Internalize The Good (LET IT GO)

But there's a catch...

- LET IT GO must be administered with fidelity to achieve health goals
- Behavioral Health QUERI researchers are implementing LET IT GO in 10 pilot sites
- If the implementation is successful, VACO will provide funding to any VAMC that wants to adopt LET IT GO locally
- To implement LET IT GO, 3 implementation strategies are used:
 - Develop educational materials (pre-implementation)
 - Conduct educational outreach visits (4 total)
 - Audit and provide feedback (1 year)

Which best describes what we need to analyze?

A.

Budget impact of implementation

- We want to know the budget impact of our strategies to implement LET IT GO
- Implementation strategies are the “treatment” applied to health care settings

B.

Budget impact of the treatment

- We want to know the budget impact of LET IT GO
- Implementation is just one component of larger cost changes for a treatment offered to patients

Ask your economist for the budget impact of the implementation – VACO needs to know how much it will cost to pay for implementation.

What is the budget impact of providing implementation support for a new VAMC?

- Why did we pick this question?
 - VACO leadership needs to know how much it will cost to provide funds for implementation at non-pilot VAMCs
- What are the key features about this implementation project?
 - VACO will pay for future implementations
 - We have 10 sites in our sample
 - We 3 implementation strategies

Who is the payer?

A. QUERI

B. VACO is the payer because they will be funding future implementations

- The BIA will be done from VACO's perspective

C. Each VAMC

Needed or Not Needed for BIA?

Component	Needed	Not Needed
Salaries of implementation staff	✓	
Time spent developing new training materials		x
Number of handouts given out during trainings	✓	
Printing costs	✓	
Time spent delivering educational meetings	✓	
Who attended each meeting	✓	
Time spent developing audit and feedback system		x
Time providing feedback	✓	
Diffusion of LET IT GO into clinical care		x
Number of Veterans successfully treated		x
Blood pressure		x
Heart attack hospitalizations		x

But there's a catch...

- LET IT GO must be administered with fidelity to achieve health goals
- Behavioral Health QUERI researchers are implementing LET IT GO in 10 pilot sites
- If the implementation is successful, VHA will endorse LET IT GO for enterprise-wide adoption, but local facilities will have to decide if they can afford it
- To implement LET IT GO, 3 implementation strategies are used:
 - Develop educational materials
 - Create a learning collaborative (virtual community of practice)
 - Conduct educational meetings (show trainings at grand rounds)

Which best describes what we need to analyze?

A.

Budget impact of implementation

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- We want to know the budget impact of LET IT GO
- Implementation is just one component of larger cost changes for a treatment offered to patients

Ask your economist for the budget impact of LET IT GO – a VAMC needs to know how much it will cost to pay for implement and sustain the new treatment

Who is the payer?

A. QUERI

B. VACO

C. Each VAMC is the payer because the adoption and sustainment decision will be made locally

What is the budget impact of implementing and sustaining LET IT GO?

- Why did we pick this question?
 - A VAMC budget administrator needs to know how much it will cost to implement LET IT GO and continue to offer the treatment once adopted
- What are the key features about this implementation project?
 - VAMCs are responsible for the cost of LET IT GO
 - We have 10 sites in our sample
 - We 3 implementation strategies

Needed or Not Needed for BIA?

Component	Needed	Not Needed
Salaries of national implementation staff		x
Salaries of site-level implementation staff	?	
Time spent developing new training materials		x
Time spent delivering educational meetings		x
Who attended each meeting		x
Time spent developing community of practice		x
Provider time engaging with community of practice	?	
Diffusion of LET IT GO into clinical care	✓	
Number of Veterans successfully treated		x
Blood pressure		x
Heart attack hospitalizations		x

Selected resources and references

- <https://www.herc.research.va.gov/include/page.asp?id=budget-impact-analysis>
- <https://www.herc.research.va.gov/include/page.asp?id=implementation-tools-resources>
- Cost-Analyses of FUNCTION QUERI Programs: STEP-KOA and STRIDE
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