NEW DEVELOPMENTS IN THE THEORY AND APPLICATION OF BEHAVIOURAL MEDICINE 2012

TOOLS FOR EVALUATING THE COST EFFECTIVENESS OF SUPPORT FOR BEHAVIOUR CHANGE

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THE TOOLKIT

VfM tools are one element in a toolkit alongside:

- Qualitative reviews – behavioural economics
- Longitudinal Studies - persistence and health recovery
- Measures of Health and Social Impacts
- National Research and Evaluation Programmes
- Dialogue between Stakeholders

They answer the question - "What is changing behaviour worth in health and social cost terms "– with the answer -"If you accept these estimates and assumptions then the answer is between x and y"

If you don't accept these estimates and assumptions then you can change them

CURRENT VFM TOOLS

VfM tools include:

- The Portsmouth Ready Reckoner for HT services
- Cancer Research UK CAR Evaluation
- nsmc / NICE tools for:
  - Smoking cessation
  - Alcohol harm reduction
  - Weight, diet and activity management
  - Breast feeding continuation
  - Response to bowel cancer surveys

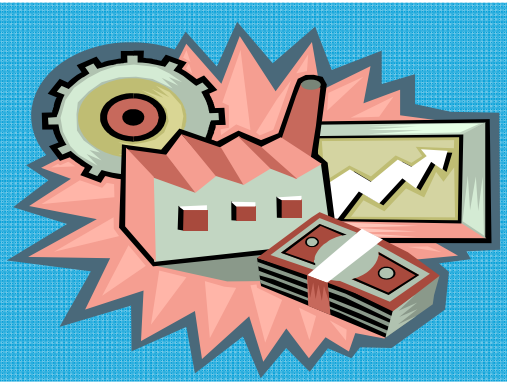
Free tools available at breakout session also at http://thensmc.com/resources/vfm
Sign up for specialist training

VFM TOOLS: COMMISSIONED BY DH

Developed over one year at a cost of £150,000 by:

- Expert Advisory Panel chaired by Fiona Adshead : Mike Kelly, Julian LeGrand, Richard Little, Ian Basnett, Robert Anderson.
- Delphi study of 50 experts – questionnaire + follow up interviews
- Health impact assessment with WHO Burden of Disease team
- NHS Costing input from NICE team
- Consultation with expert groups in each field
- Piloting and refinement with local user groups

All NSMC Tools are available free at
http://thensmc.com/resources/vfm



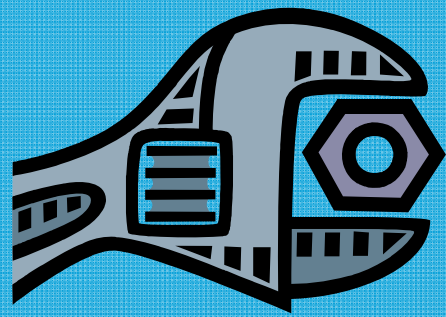
THE VFM TOOLS USE

Best available evidence on:

- Costs, target clients and immediate outcomes – your input
- Impact on long term behaviour – from studies of persistence of behaviour change and health recovery rate by age.
- Consequences for health - from WHO National Burden of Disease Tool – applied to England 2004
- Costs to NHS as supplied by NICE team – from various studies
- Other social impacts - impact on LA services, household expenditure, employer costs – various studies as of 2011

You need to read user guides to understand the evidence

All tools can be improved as new evidence emerges
They are adjustable spanners!



HOW THE TOOLS WORK

All inputs and estimates can be varied by users:

- Input s
  - Capital and revenue cost to all stakeholders
  - Characteristics of client group
  - Intermediate outcomes i.e. short term behaviour change
- Estimates
  - Persistence of change and health recovery rate by age
  - Impact on long term health outcomes and costs to NHS/LAs
  - Cost impacts on government, families, employers + inflation and STPR
- Output
  - Current value of costs per QALY, before and after NHS and LA impacts
  - Costs and benefits to Government, families and employers
  - Social Return on Investment (with and without weighting for social disadvantage)
  - Other intermediate measures (Life Years added, Deaths avoided, Odds ratio, NNT)

Tools can be varied to account for :

- Different estimates of cost impacts etc
- Greater persistence due to social capital
- Wider impact due to social multiplier

WHAT THE TOOLS HELP YOU ASSESS

- Long term health outcomes discounted at the Social Time Preference Rate (that can be varied)
- Future NHS and LA service cost savings
- Family costs e.g. cost of consumption and care
- Government costs e.g. Tax and Duty, Disability Benefits and Pension + Criminal Justice System
- Employers e.g. cost of absence and productivity

Behavioural economics tells us

- Public choice is often irrational
- Even when fully informed , so
- Health policy must rebalance the market

WHAT WE TAKE INTO ACCOUNT

- Most people who change their behaviour will not persist in change, it depends upon self-efficacy and social support.
  - Expected persistence based on evidence for 1 year and longer term can be varied to reflect self efficacy and social support.
- In most cases people do not recover their full health at once
  - Levels of health assumed recovery change with age based on evidence, this can be improved as research improves.
- Long- term health outcomes are discounted to current impact
  - Social time preference rate and inflation rates can be varied

We did not forget about inflation

VALUING IMPACT ON DISADVANTAGE

You can include a weighting for disadvantage i.e.

- Clients from disadvantaged areas (high IMD wards)
- Other measures of disadvantage

You can

- Use Health England Formula (based on a survey of 99 DPH)
  - C= cost per QALY, R = Reach D = Disadvantage %
  - Utility = $e^{(-0.0000586x\ C\ +\ 0.0435987\ x\ R\ +\ 0.119895x\ D)}$
- Or add your own weight for disadvantage

But DH does not agree with this approach

The formula is based on a utility curve for public health policy experts

HOW TO IMPROVE VfM

Improve efficiency:

- Reduce costs
- Increase throughput
- Improve behaviour change outcome s
- Follow up to increase persistence

Increase focus on:

- Disadvantaged groups (see weighting for disadvantage)
- Smoking → Diet and activity → Alcohol → Other
- Younger clients (increases persistence and recovery rate)
- Support groups/ social capital (increases persistence)

Improving persistence of change by follow up and social groups is the best way to improve cost effectiveness.

POTENTIAL VfM IMPROVEMENTS

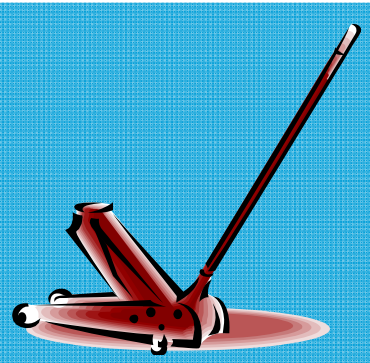
Improve efficiency: typical results

- Reduce costs , 20% ↑ = 45% VfM gain
- Increase throughput 20% ↑ = 40% VfM gain
- Improve outcomes 20% ↑ = 40% VfM gain

Increase focus on:

- Disadvantaged 20% ↑ = 5% weighted social return
- Specific areas of support make little difference
- Younger clients = VfM +50-60%
- Support Groups = VfM + 40-50%

You can use the tool to explore these impacts



USING THE VfM TOOLS

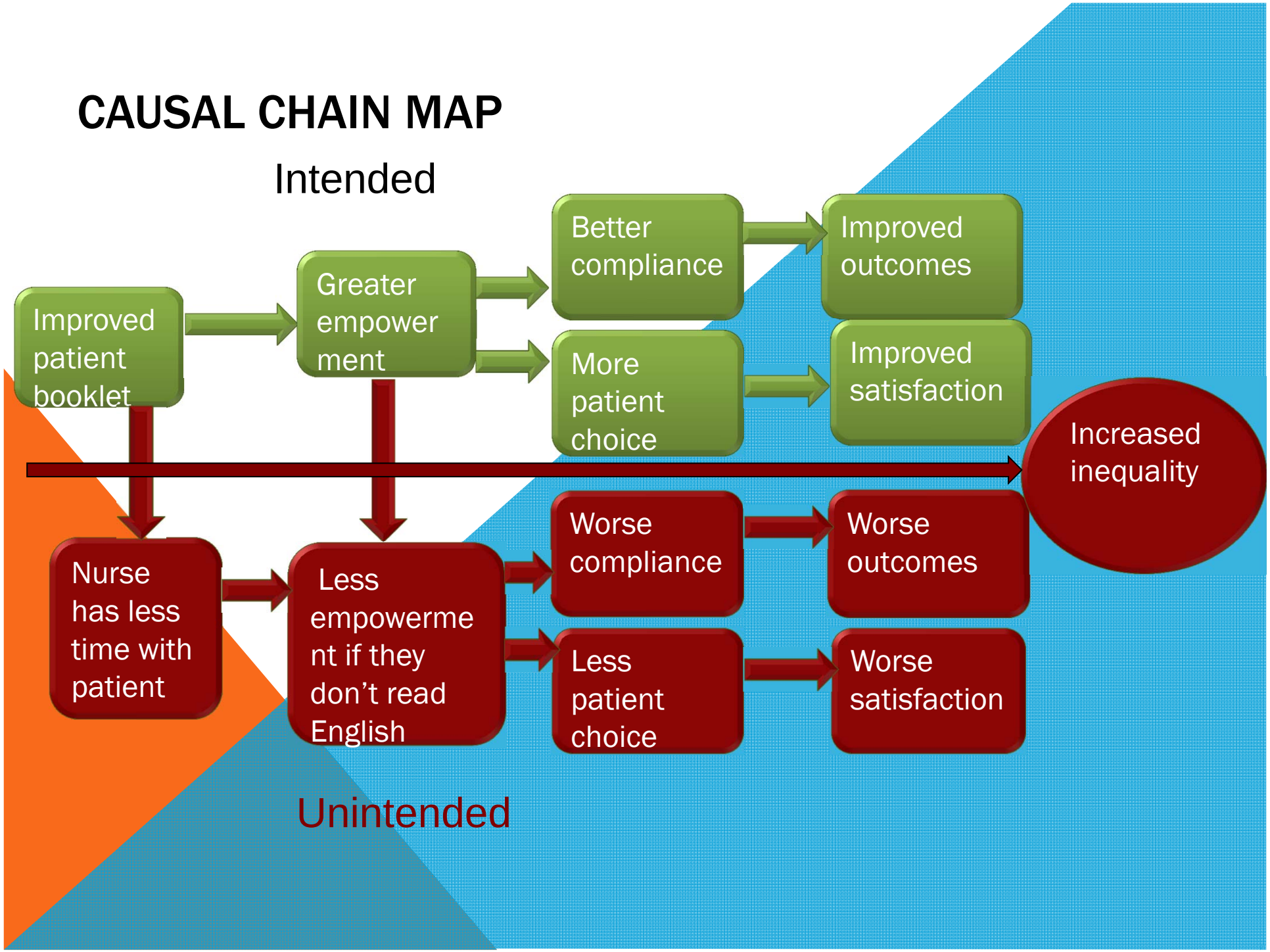
Always start with the clients and other stakeholders:

- Talk to them, understand their perspectives
- Their objectives and how they can be measured
- Understand the process of change and its costs and
- Intended and unintended consequence of change
- Only use the tools when you understand the process

Remember garbage in= garbage out

A SOCIAL IMPACT MATRIX

Objectives › Stakeholders v	Improved Health and Wellbeing	Reduced inequality	Improved social capital	Reduce long term costs
1. Local Authorities	Improved wellbeing QALY gain	Disadvantaged and Hard to reach % IMD	Membership of community groups	Reduced social care and other service costs
2. NHS	Improved health status QALY gain	Reduce health inequality % IMD	Better use of NHS services more participation	Reduced NHS costs from associated conditions
3. Other Government	As above	As above	Improved employment	Tax, benefit, excise and VAT impacts
4. Clients	Improved personal health status	Access for disadvantaged and hard to reach	More opportunities to participate and community support	Employment income Less expenditure on addictive products and informal care
5. Community	Better access to health and care	Wider participation	Increased volunteering	Opportunities for cost sharing
6. Employers	Reduced sickness and absenteeism	Less long term sickness	Improved staff relations	Less costs of replacing staff better productivity


CAUSAL CHAIN MAP
Intended
Improved patient booklet
Greater empower ment
Better compliance
More patient choice
Improved outcomes
Improved satisfaction
Increased inequality
Nurse has less time with patient
Less empowerme nt if they don't read English
Worse compliance
Less patient choice
Worse outcomes
Worse satisfaction
Unintended

REMEMBER

Tools produce a defensible answer to the question

- How much is change worth in health and social terms?

Based on best available evidence at the time

- They need to be used, discussed and updated
- Public Health England - should be doing this

They give a broad estimate of probable long term outcomes

- Best expressed as a range of possible values
- You can't predict exactly where and when savings will arise but probably when clients are 70-80

They are only part of your toolkit

To become an evaluation expert
Contact NSMC and get on a course

CAREFUL!

Be open and honest:

- Discuss assumptions between Commissioners and Providers
  - Try out options and improvements
  - Look at the range of results not just a single outcome
- Don't force super results,
  - A VfM of £5,000 per QALY is good
  - A VfM of up to £10,000 per QALY is acceptable
  - A VfM of – anything = a net saving and is exceptional
- Don't use this tool in isolation remember the other tools
  - Describe the service and its outcomes then show the value

You can always ask me at g_c-lister@msn.com

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