Translating evidence into real-life settings:

A preventative service for people at risk of developing type 2 diabetes

19th June 2012

Anna Betzlbacher

NIHR CLAHRC for Greater Manchester

Overview

- The CLAHRC for Greater Manchester
- Our approach to implementation of evidence-based care /knowledge transfer and the role of Knowledge Transfer Associates (KTAs)
  - Theoretical background
  - Remit and role description
- Example: Preventing type 2 diabetes

Collaboration for Leadership in Applied Health Research and Care

- Greater Manchester
- Birmingham and the Black Country
- Cambridge
- Leeds, York and Bradford
- Leicester, Northamptonshire and Rutland
- NW London
- Nottinghamshire, Derbyshire and Lincolnshire
- South Yorkshire
- Peninsula

Collaboration between a university and its local NHS trusts that will…

↓

Conduct high quality health services research

↓

Ensure knowledge gained from the research is translated into improved health care in the NHS

↓

Build NHS capacity to plan and implement evidence-based improvements

patient and public involvement

NIHR CLAHRC for Greater Manchester

Research themes:

People with long-term conditions

Practitioners

Systems

Previous research relevant to people with:

Heart disease

Diabetes

Kidney disease

Stroke

Implementing for people with:

Heart disease

Diabetes

Kidney disease

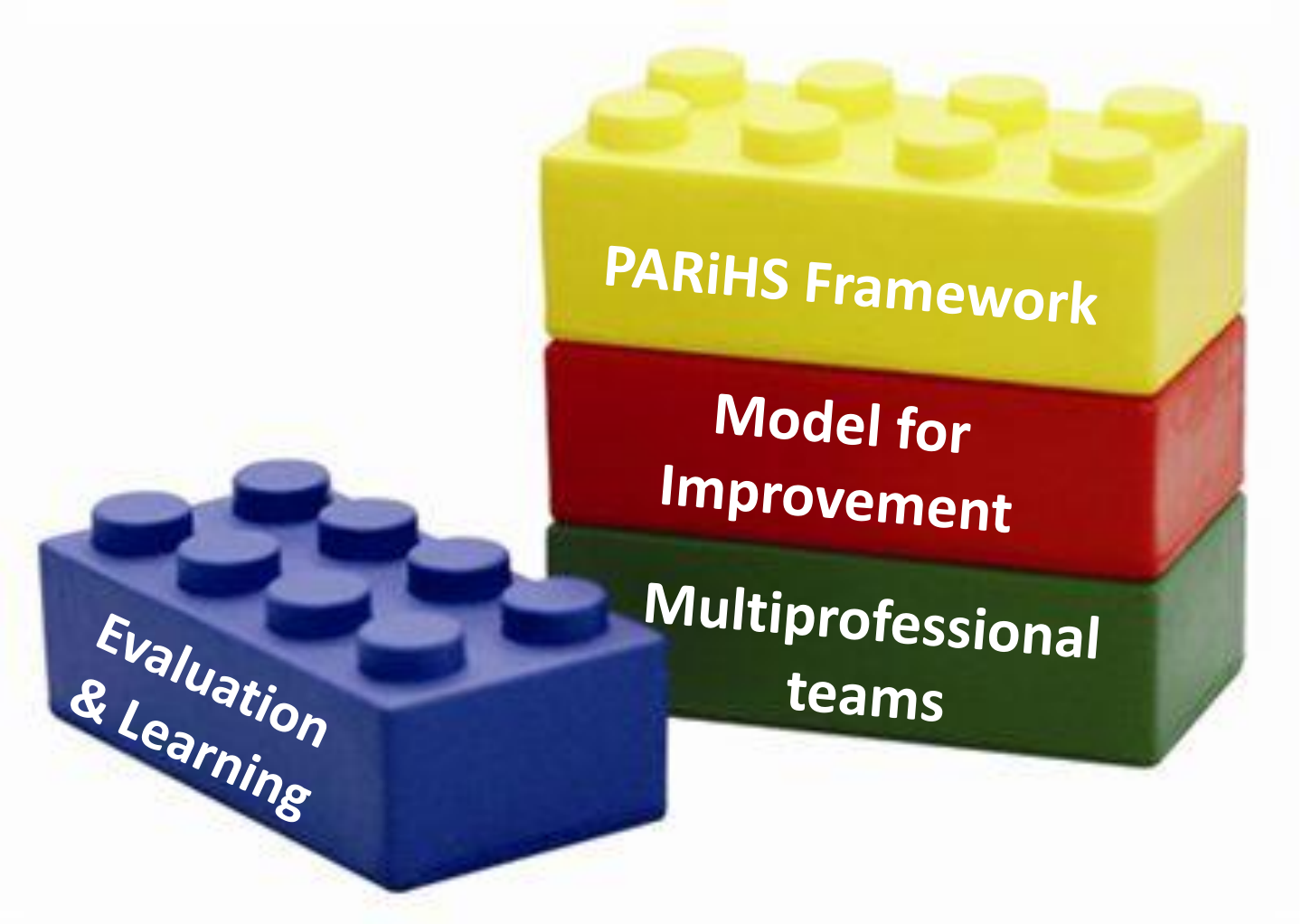
Stroke

Implementing these and other evidence-based improvements in healthcare

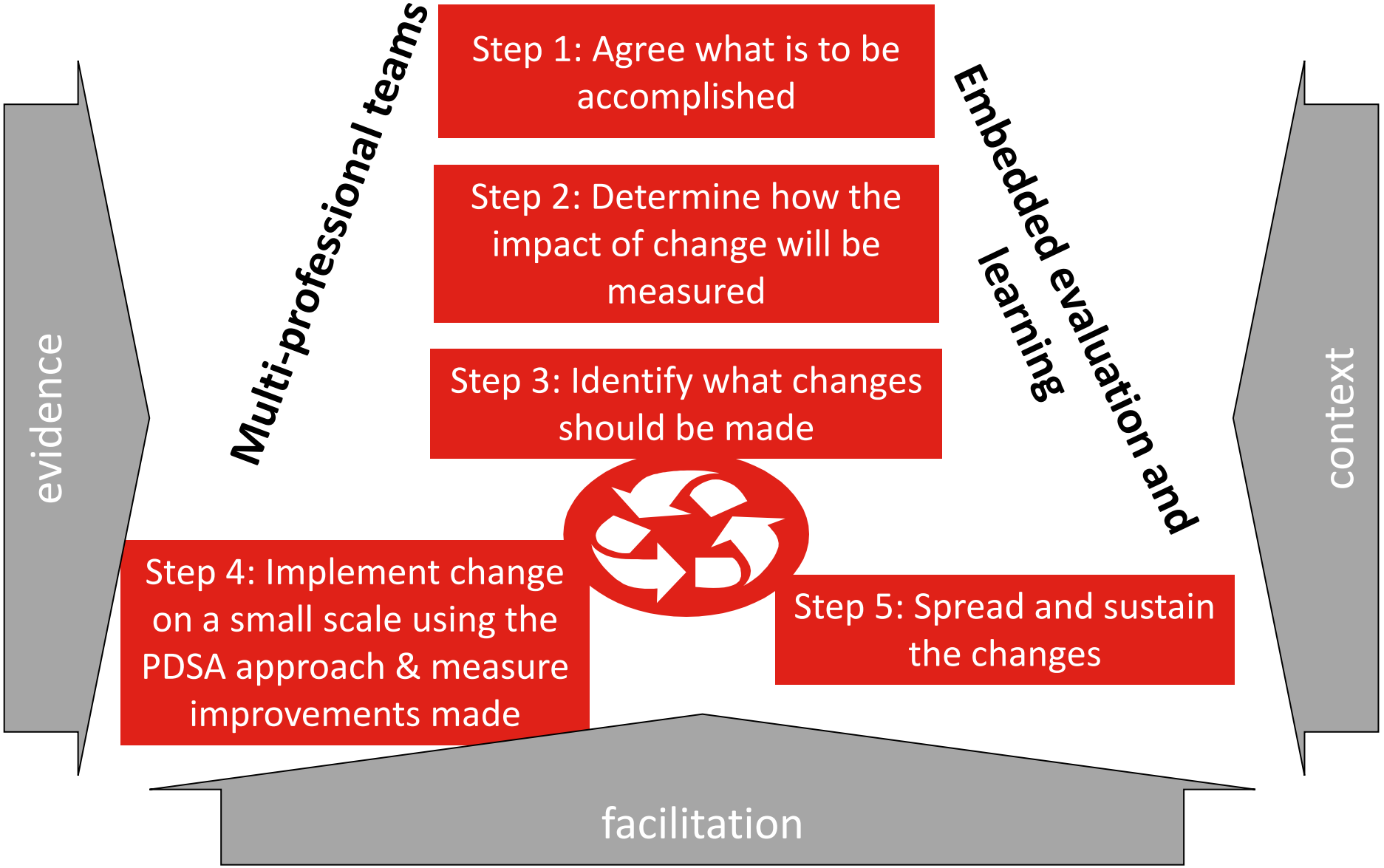
Developing and evaluating improved ways for the NHS to support people in managing their vascular disease

Building NHS capacity to plan and implement evidence-based improvements for people with vascular disease

4 building blocks



GM approach to implementation



Implementation of evidence-based care: Our approach

1. Evidence is broader than research
2. Good research is not enough to guarantee its uptake in practice
3. Rational/linear models are inadequate in planning and undertaking implementation
4. Acknowledgements of and responsiveness to the context of implementation
5. The need for tailored, multi-faceted approaches to implementation
6. Importance of forming networks and building good relationships
7. Individuals in designated roles to lead and facilitate the implementation process
8. Integrated approach to the production and use of evidence about implementation

The role of Knowledge Transfer Associates (KTAs)

Theoretical background:

We draw on the empirical and theoretical work on organizational change, especially as applied to health care organizations.

- Concept of knowledge brokerage
- Concept of boundary spanners
- Importance of clinical opinion leaders in the context of health care

The role of Knowledge Transfer Associates (KTAs)

- Novel role
- Variety of professional backgrounds and career stages
- Not clinical experts
- Multidisciplinary team setting and complementary knowledge and skill sets
- Support and input from a clinical and academic perspective
- Acting as main facilitators supporting health care professionals (different professions and organisations) in implementing evidence-based practice; & utilizing change management knowledge in supporting improvement processes

The role of Knowledge Transfer Associates (KTAs)

Role components:

- Working with a wide range of stakeholders, different organisations, professions, attitudes and beliefs, agendas, and political contexts
  - Need to tailor approach and solutions to each of the individual backgrounds and contexts
  - Importance of assessing contexts and stakeholders
  - Need to develop networks and rapport quickly -> links with (clinical) opinion leaders
  - Bridging gaps: linking people/professions/contexts, ideas/knowledge
- Identifying, appraising, summarising and translating research and evidence of best practice

The role of Knowledge Transfer Associates (KTAs)

Role components:

- Planning and evaluating implementation projects with wider team
- Not opinion leaders themselves, but offering continuous facilitation support to others
  - Assessing skills and strengths
  - Offering knowledge and capacity building
- Advisory role

Example: Preventing type 2 diabetes in Bolton

The problem:

- Growing burden of type 2 diabetes for patients and the NHS alike
- Rising numbers due to unhealthy/sedentary lifestyle choices

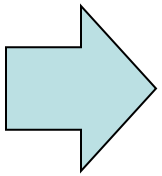
The evidence:

Strong evidence through international and long-term randomised controlled trials that type 2 diabetes can be delayed or even prevented through intensive lifestyle change interventions offered to people with Impaired Glucose Tolerance (IGT)

?

However:
Lacking translational studies based in the UK outlining best evidence for offering diabetes prevention services. What would be the best solution for Bolton?

Example: Preventing type 2 diabetes in Bolton



The project:

- Working with NHS Bolton, providers, GP practices, and patients to find a sustainable way of offering diabetes prevention for people at risk of developing type 2 diabetes
- Tailoring the service/interventions to the local context
- Planning and evaluating project
- Offering ongoing improvement activities

Example: Preventing type 2 diabetes

Role of KTA:

- Identifying, assessing and summarising evidence
- Analysis of different health economies and contextual differences
- Building relationships and interfacing with a wide range of stakeholders
- Advising and negotiating with PCTs, GPs and providers the scope and design of the improvement projects/interventions
- Continuous facilitation and project management support
- Ongoing evaluation and improvement support

Example: Preventing type 2 diabetes in Bolton

The solution:

Working with the existing Health Trainer service to develop a diabetes prevention service.

Example: Preventing type 2 diabetes in Bolton

The advantages of the existing Health Trainer service:

- Health Trainers are based within GP surgeries, with good coverage across the borough
- Service solely focused on lifestyle change/health promotion (CVD risk prevention)
- Skilled in supporting behaviour change and offering personalised motivational support

Project outcomes

Mean weight loss	**2.8kg / 2.9%**
	(n=127)
Mean waist circumference reduction	**2.9cm / 2.6%**
	(n=104)
Mean reduction in diabetes risk score	**1.0 points**
	(n=134)
Reduction in mean 2 hour glucose levels following Oral Glucose Tolerance Test (OGTT)	**0.7 mmol/l**
	(n=83)
% reverting to normoglycaemia following OGTT (based on 2h OGTT)	**47 (n=83)**

Project outcomes

- Embedded a sustainable and accepted service offering specific support to people at risk of developing type 2 diabetes

Since service was piloted in August 2009, over **1000** people with IGT attended at least an initial appointment with a Health Trainer.

- Project results are comparable to published diabetes prevention studies
- Project helped to embed the Health Trainer service within primary care and proved its additionality.

References

Theoretical basis for the KTA role:

Dobbins et al (2009) A randomised controlled trial evaluating the impact of knowledge translation and exchange strategies. *Implementation Science*. 4:61.

Dopson & Fitzgerald (2005) *Knowledge to Action? Evidence-based health care in context*: Oxford University Press.

Ferlie et al (2005). The Non Spread of Innovations: the mediating role of professionals. *Academy of Management Journal.* 48(1): pp.117-134.

Ferlie et al (2009) Renewing Policy to Support Evidence Based Health Care. *Public Administration.* 87(4): 837-852.

Fernandez & Gould (1994) A dilemma of state power: brokerage and influence in the national health policy domain. *American Journal of Sociology,* 99: 1454-1455.

Flodgren et al (2007) Local opinion leaders: effects on professional practice and health care outcomes. Cochrane Database of Systematic Reviews, Issues1 Ast. No.: CD000125. DOI: 10.1002/14651858.CD000125.pub3.

Glasby et al (2007) Making evidence fit for purpose in decision making: a case study of the hospital discharge of older people. *Evidence and Policy. 3(3): 425-437.*

Kitson et al (1998) Enabling the implementation of evidence based practice: a conceptual framework. *Quality in Health Care*. 7(3): 149-159.

Locock et al (2001) Understanding the role of opinion leaders in improving clinical effectiveness. *Social Science and Medicine*. 53(6): 745-757.

References

Diabetes prevention studies:

Diabetes Prevention Program Research Group (2009) 10-year follow-up of diabetes incidence and weight loss in the Diabetes Prevention Program Outcomes Study. *The Lancet.* 374: 1677-1686.

Eriksson & Lindgarde (1991) Prevention of type 2 diabetes mellitus (non-insulin dependent) by diet and physical exercise. The 6-year Malmo feasibility study. *Diabetologia*. 34: 891-898.

Ramachandran & Snehalatha (2006) The Indian Diabetes Prevention Programme shows that lifestyle modification and metformin prevent type 2 diabetes in Asian Indian subjects with impaired glucose tolerance (iDIPP-1). *Diabetologia.* 29: 289-297.

Tuomilehto et al (2001) Prevention of type 2 diabetes mellitus by changes in lifestyle among subjects with impaired glucose tolerance. *N Engl J Med.* 344: 1343-1350.

Health Trainer model

Attree et al (2011) NHS Health Trainers: a review of emerging evaluation evidence. *Critical Public Health.* 22: 25-38.

Department of Health (2004) Choosing health: Making healthier choices easier. London

Gardner et al (in press) Behaviour change among overweight and socially disadvantaged adults. A longitudinal study of the NHS Health Trainer service. *Psychology and Health.*