

The evolving concept of health literacy

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Presentation objectives - What we need to know

It can not be said more eloquently..

- “....as we know, there are known knowns; there are things we know we know.
- We also know there are known unknowns; that is to say we know there are some things we do not know.
- But there are also unknown unknowns - the ones we don't know we don't know....”



Presentation objectives

- To answer some questions
 - What is literacy ?
 - What is health literacy
 - What is the state of the science in clinical practice?
 - Why is it a useful concept in public health?
- To initiate discussion on where to from here in research and practice

What is literacy?

- Functional literacy is a measure of basic skills in reading and writing and the capacity to apply these skills in everyday situations

Why do we care?

- Those who are functionally literate are able to participate more fully in society and the economy, and are able to exert a higher degree of control over everyday events

What is literacy?

How do we measure literacy?

- Literacy can be measured in *absolute* terms - distinguishing between those who can read and write basic text (functionally literate) and those who cannot, and
- In *relative* terms by assessing the skill differences between adults who are able to perform relatively challenging literacy tasks and those who are not.

How many people lack functional literacy skills?

- Estimates of the proportion of the population in OECD countries lacking functional literacy skills range from 7% to 47%* (UNDP, 2007)

*<http://hdrstats.undp.org/indicators/30.html>

Relative differences in skills based literacy*

Functional literacy

- basic skills in reading and writing, capacity to apply these skills in everyday situations

Communicative/interactive literacy

- more advanced cognitive and literacy skills, greater ability obtain relevant information, derive meaning, and apply new information to changing circumstances

Critical literacy

- most advanced cognitive and literacy skills, critical analysis of information, ability to use information to respond, adapt and control life events and situations

* See for example: Freebody P, Luke A. 'Literacies' Programs: Debates and Demands in Cultural Context. *Prospect*; 1990; 5(3): 7-16.

Warning!

After more than a century of serious study

- Literacy remains a highly contested (and politicised) concept
- The measurement of literacy remains a highly contested (and politicised) art and science
- We should not be unduly disturbed that the fledgling, derivative concept of *health literacy* is not yet completely tied down in definition and measurement

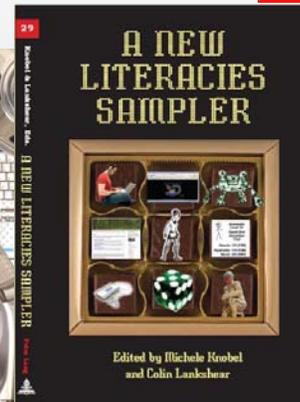
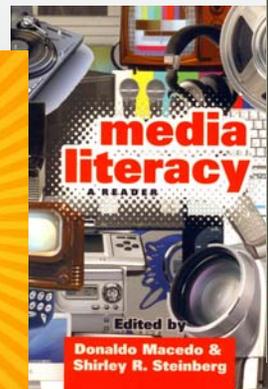
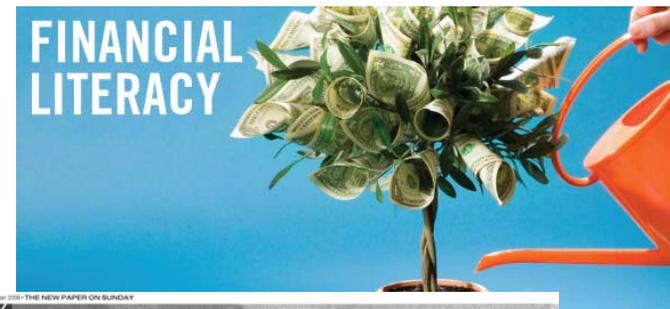
Literacy and Health

- Relationship between low literacy and a range of health related outcomes well established
- Some indirect effects related to employment and lifetime income (both a reflection of and possible determinant of socio-economic status)
- Some direct effects*
 - Engaging in preventive health practices
 - Early detection of disease
 - Access to and use of health care services
 - Medication adherence and chronic disease management

*Dewalt DA et al Literacy and health outcomes: a systematic review of the literature. Journal of General Internal Medicine, 19. 128-39 2004

Literacy is context and content specific

- Increasingly common to talk about literacies for example:
 - financial literacy,
 - Media literacy,
 - IT literacy (new literacy) and,
 - health literacy



What is health literacy?

“content specific literacy in a health context”

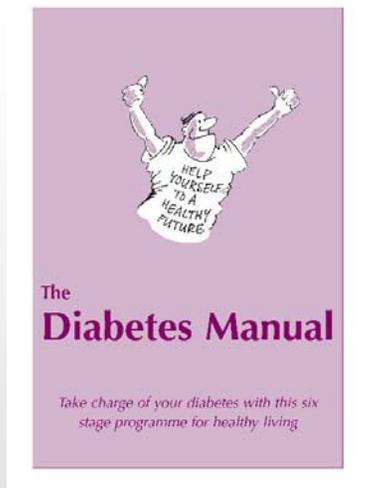
or

“the literacy and cognitive skills that determine a person’s ability to access, understand, and use information for health”

see: Nutbeam D. Health Promotion Glossary (1999) *Health Promotion International*, 13(4): 349-364. 1999
(also - WHO/HPR/HEP/98.1)

Health literacy is also context and content specific - even where a person has advanced literacy skills their ability to obtain, understand and apply health information in a specific health context may be poor:

a person with diabetes who is receiving patient education,



a young person receiving health education on illicit drugs at school.



a pregnant woman attending ante-natal classes



Health literacy can also be considered in *absolute* and *relative* terms

- In *absolute* terms we distinguish between those who have basic skills that enable them to access, understand, and use information for health, and those who do not.
- In *relative* terms we assess the skill differences between those who are able to apply more advanced cognitive and literacy skills to perform relatively challenging tasks in understanding and applying information for health, and those who cannot.

Distinguishing between *absolute* and *relative* health literacy can help us understand the development of two conceptualizations of health literacy

- Absolute measures of health literacy have had most obvious application in **clinical care**.
 - Health literacy may be conceptualized as a “risk” to be assessed and managed through adapted communication and environmental modification
- Relative measures of health literacy have had most obvious application in **public health**.
 - Health literacy may be conceptualized as an “asset” to be developed, as an outcome to health education and communication

*Nutbeam D. 2008. The evolving concept of health literacy. *Social Science and Medicine*. 67. 2072-78

Health literacy in clinical care

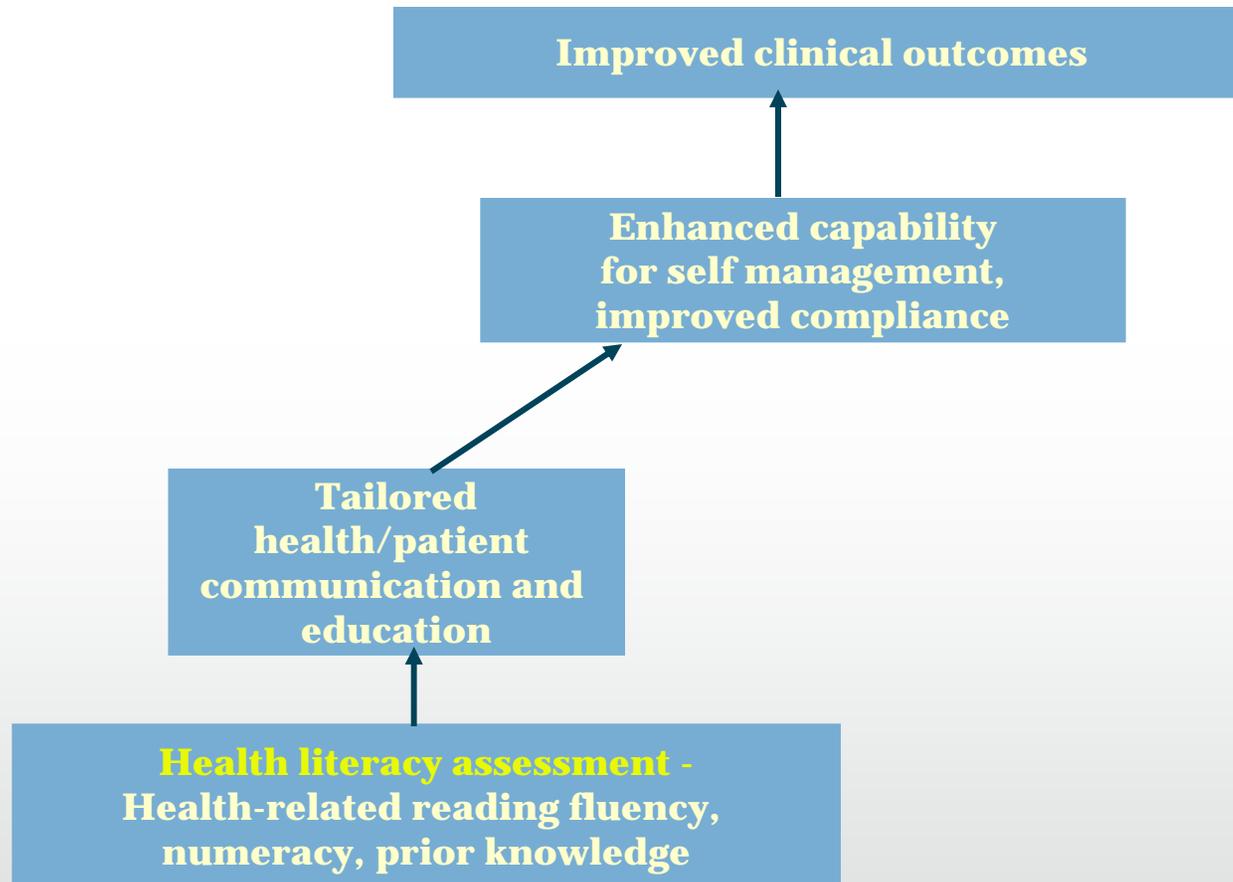
- There are strong practical and ethical reasons to actively involve patients in shared and informed clinical decision-making, and in self management of conditions - especially long term and continuing conditions.
- Past research has indicated that active involvement of patients produces better health outcomes for patients and greater patient satisfaction. This is observable through
 - Improved use of medicines
 - Improved uptake of preventive practices
 - Appropriate use of health services and reduced unplanned hospital admissions
 - Reduced health care costs
- Achieving meaningful patient engagement is fundamentally dependent upon their health literacy - their ability to **access, understand, and use information for health**

Health literacy as a clinical “risk factor”

- Emanating from concerns about the impact of low literacy on patient involvement in shared decision-making, and effective self-care
- Response has taken the form of “risk assessment” that can inform subsequent clinician communication,
- Led to development of quick and simple tools that provide an absolute measure of health related literacy (such as REALM and NVS)* for use in clinical practice

REALM – Rapid Estimate of Adult Literacy in medicine. NVS – Newest Vital Sign

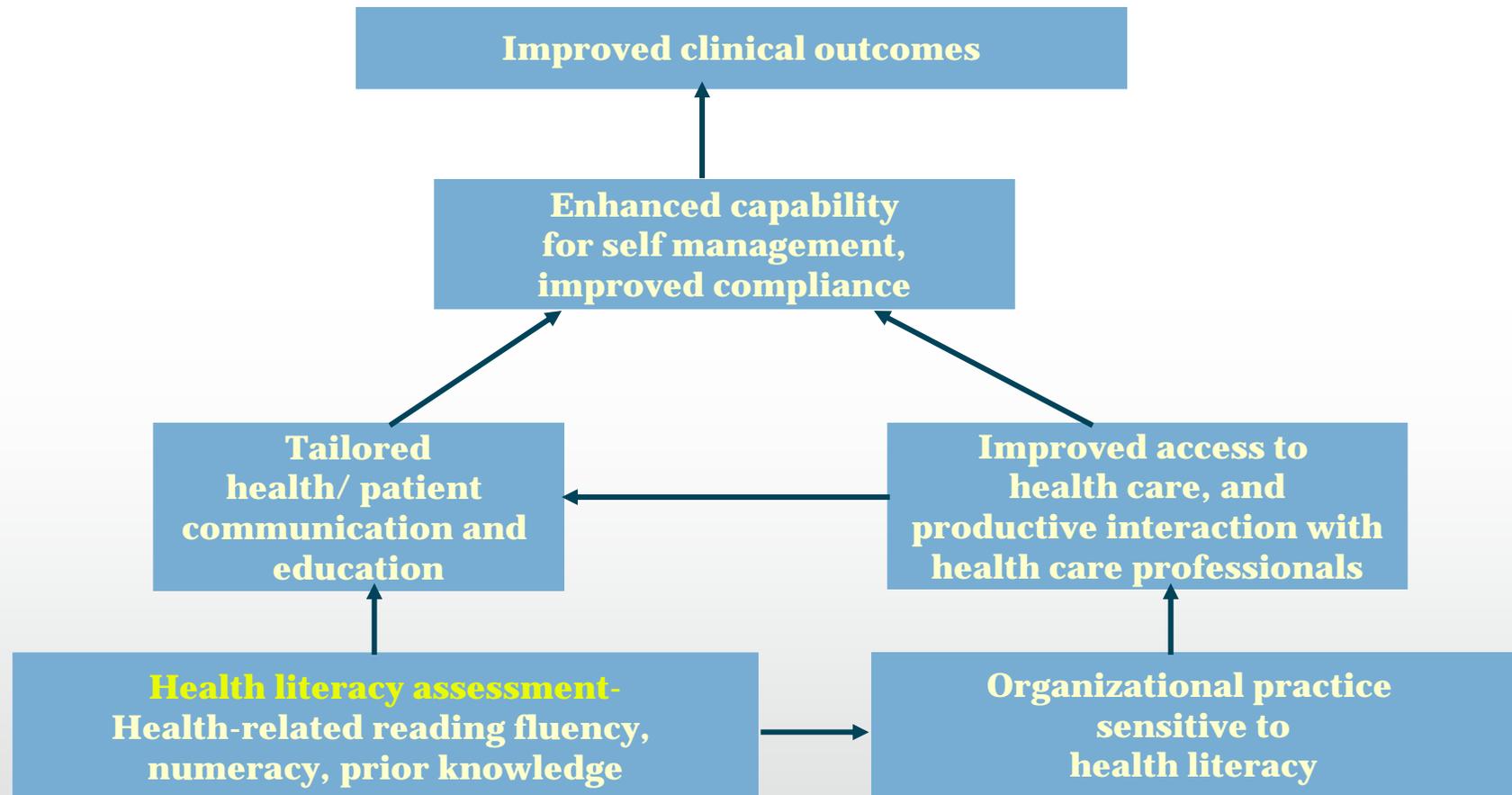
Conceptual model of health literacy as a clinical “risk factor”



Health literacy as a clinical “risk factor”

- Progressive improvement in understanding of health service organisation and environmental factors that exacerbate or minimise impact of low literacy, for example:
 - ease of making appointments
 - functional organisation of clinics
 - use of appropriate communication materials/signage

Conceptual model of health literacy as a clinical “risk factor”



1. Baker D, The Meaning and Measure of Health Literacy. *Jnl of General Internal Medicine* 21.8, 878-883. 2006
2. Paasche-Orlow MK, Wolf MS. The causal pathway linking health literacy to health outcomes. *American Journal of Health Behaviour*; 2007; 31 (Supplement 1): S19-26

Health literacy and clinical care

- Research over past 15 years (mostly in the US) has led to more sophisticated understanding of poor literacy and its association with a range of health practices and outcomes – established case for action
- Demonstrated that rapid assessment of health literacy is feasible in normal clinical practice
- Tested a range of intervention studies specifically designed to address consequences of low literacy provide mostly positive results*, in several cases the strength of the conclusions is limited by poor study design.

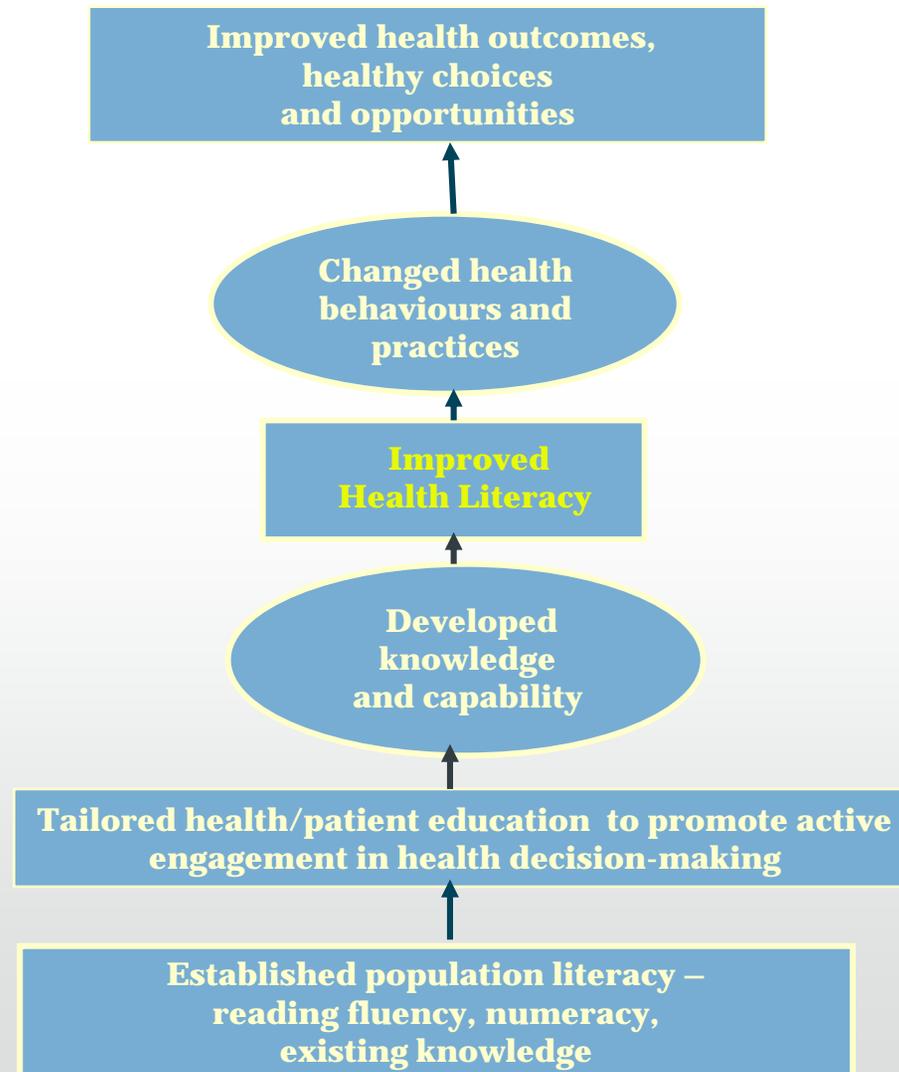
*Pignone, M., DeWalt, D., Sheridan, S., Berkman, N. & Lohr, K.N. (2005). Interventions to improve health outcomes for patients with low literacy. *Journal of General Internal Medicine*, 20, 185-192.

Coulter A, Ellins J. 2007. Effectiveness of strategies for informing, educating and involving patients. *BMJ* 335:24-7

Health literacy in public health

- Origins in contemporary health promotion - a set of capacities that enable individuals to exert greater control over their health and the range of personal, social and environmental determinants of health.
- health literacy is seen as an “asset” to be built, as an *outcome* to health education and communication that supports greater empowerment in health decision-making.
- Measures of health literacy examine *relative differences* in health related cognitive and literacy skills

Developing functional health literacy – a simple linear model



Relative differences in health literacy*

Functional health literacy

- ability to apply basic literacy skills in everyday health decision-making,
- ability to respond successfully to the communication of factual information on health risks, and on how to use the health system;

Supported by health/patient education

- directed towards improved knowledge of health risks and health services, and compliance with prescribed actions (eg clinician advice, traditional health education)



*Nutbeam D. (2001) Health Literacy as a Public Health Goal: A challenge for contemporary health education and communication strategies into the 21st Century. *Health Promotion International*, 15; 259-67

More advanced relative health literacy

Interactive health literacy

- Ability to apply more advanced cognitive and literacy skills to independently obtain relevant health information, derive meaning, and apply information to personal and family health circumstances.

Supported by health/patient education

- Directed towards improving personal capacity to act independently on knowledge, to improving motivation and self confidence to act on advice received (eg school health education).



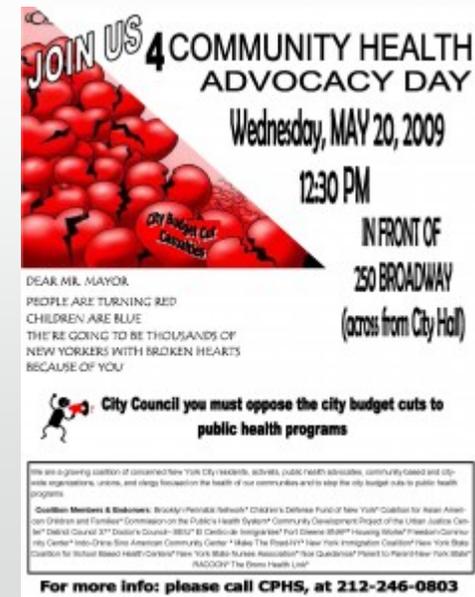
More advanced relative health literacy

Critical health literacy

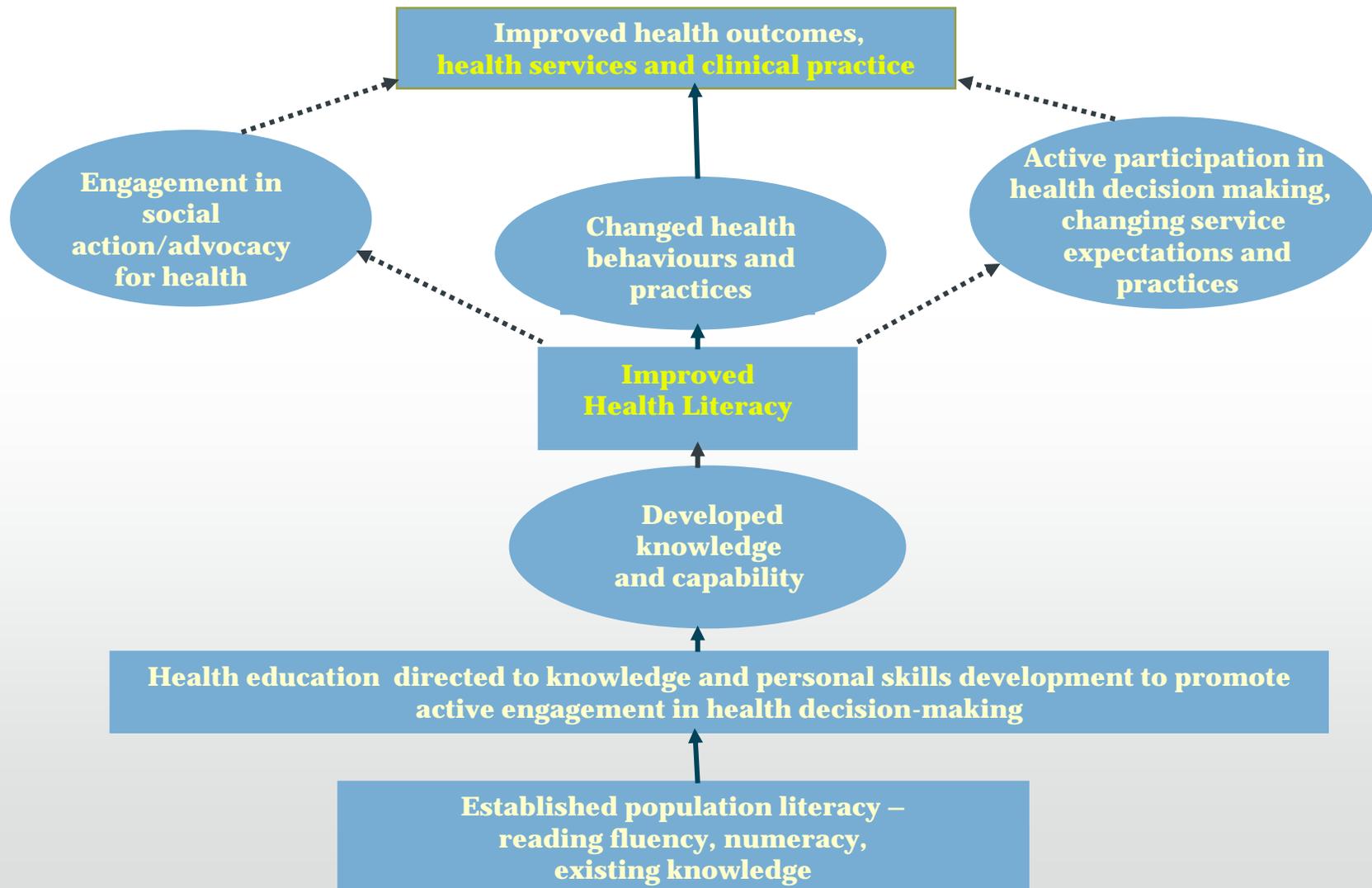
- Ability to apply more advanced cognitive and literacy skills to the critical analysis of health related information,
- Ability to use information to exert greater control over a broad range of health determinants – personal and social.

Supported by health/patient education

- Directed towards provision of information on full range of determinants of health, and assessment of opportunities to achieve change in these determinants (personal and community capacity)



Developing interactive and critical health literacy skills



Is health literacy a risk or an asset?

- It doesn't matter - both conceptualizations are important
- Both are dependent on underlying literacy and numeracy, and are context and setting specific.
- Both will help to minimize the disadvantage suffered by individuals with low literacy

Is health literacy a risk or an asset?

- Recognizing health literacy as a “risk” has the pragmatic advantage of suggesting a relatively simple, clear, goal-directed response in busy clinical practice
- Framing health literacy as an “asset” supports application of the concept in a broad range of settings, and requires a broader repertoire of educational interventions and communication skills
- Both conceptualizations are helping to stimulate a more sophisticated understanding of health communication in both clinical and community settings

Summary remarks

What is the state of science

- Good research in clinical settings linking poor health-related literacy with range of clinical outcomes
- Rapid assessment of health literacy is feasible in normal clinical setting
- Some intervention trials in clinical settings demonstrate potential effectiveness and cost savings
- Undeveloped but promising research outside health care settings (schools, adult education, E-learning)

Summary remarks

Where to from here - in research?

- Continue with basic research to improve underlying conceptual construct
- Continue to **broaden intervention development and evaluation outside of health care setting** and disease groups into schools, adult learning, community development
- Development of measures that incorporate **wider set of skills and capacities** represented by health literacy

Measurement of health literacy

- Different measures required to distinguish between **functional, interactive and critical health literacy**.*
- These measures include assessment of a person's ability to
 - **gain access** to age and context specific information from a variety of different sources;
 - **discriminate** between sources of information
 - **understand and personalise** health information that has been obtained
 - appropriately **apply** relevant health information for personal benefit – context specific self efficacy



*See for example:

Ishikawa et al (2008) Measuring functional, communicative and critical health literacy among diabetic patients. *Diabetes Care*. 31, 874-9

Jordan et al (2010) Critical appraisal of health literacy indices revealed variable underlying constructs, narrow content and psychometric weaknesses. *Journal of Clinical Epidemiology* (in-press, online)

Summary remarks

Where to from here - in clinical policy and practice?

- Continue to **promote understanding** among clinicians of the impact of poor literacy on clinical outcomes
- Progress recognition that
 - self confidence to act on knowledge requires **broader range of educational and communication methods** than commonly used (eg repeat-back)
 - Effective communication can be supported by **service management and organization** that is “literacy sensitive” (eg minimise/simplify form-filling)
- Exploit great potential in **existing educational interventions in health care** such as ante-natal education, patient education for chronic disease management

Summary remarks

Where to from here - in public health policy and practice?

- Health literacy fundamentally dependent upon **levels of basic literacy** in the population – make links between these two social goals,
- School health education provides **important foundations for health literacy**
- **Adult education and skills development programs** can provide ideal partnership for adult health literacy development

The end

Thank you

Skilled for Health (UK)

Welcome to
Skilled for Health



Skilled for health

- Integrates goals of health improvement with improving literacy, language and numeracy (LLN) skills of adults
- Cross government-voluntary sector initiative combines adult LLN learning with people's wish for a better understanding of health

<http://www.dfes.gov.uk/readwriteplus/embeddedlearning/>

The *Skilled for Health* programme integrates the goals of reducing inequalities in health with those of improving the literacy, language and numeracy (usually abbreviated to LLN) skills of adults. The underlying premise is that by addressing both issues simultaneously, the impact on both sets of issues is greater than the impact of addressing them independently.

Skilled for Health is a cross-government-voluntary-sector initiative. Two government departments – the Department of Health (DH) and the Department for Education and Skills (DFES) – are working with the charity ContinYOU, which combines adult LLN learning with people's wish and need for a better understanding of their health. The overall objective is enhanced health literacy. The initiative sits under two key government strategies: *Choosing Health: Making Healthy Choices Easier* (DH) and the *Skills for Life* strategy (DFES). Both strategies have common underpinning goals in terms of improving the life chances of those who are disadvantaged in society. For more information on the *Skills for Life* strategy and *Choosing Health* see Appendices 1 and 2 (pages 376 and 378).

Skilled for Health was launched in January 2003 as a project to test the feasibility of delivering LLN learning in a health-improvement setting. The *Skilled for Health* pilot project ran eight pilot sites that tested out the approach and generated exemplar health-related programmes and materials. The experience of the eight pilot sites has informed the development of the learning materials presented in two *Skilled for Health* files: *Health and well-being* and *Services and self-care*. *Health and well-being* focuses on strategies for attaining good health and keeping healthy; *Services and self-care* focuses on ways to make efficient and effective use of health services and develop skills for self-care.

File contents

- **Skilled for Health: Making the Case** This booklet captures the experience of the eight pilot sites and provides key evidence and arguments for implementing *Skilled for Health*. With this booklet is a CD containing PowerPoint slides that can be used when making a presentation on *Skilled for Health*, and video clips that convey the experiences of some of the people involved with the pilot phase.
- A CD-ROM This is mounted on the inside front cover. It contains:
 - PDF and Word versions of the Teacher notes and Learner resources
 - MP3 audio files that accompany the Learner resources.
- An audio CD, also on the inside front cover, contains the audio resources and is suitable for playing directly through a CD player.
- **Consultation questionnaire** This questionnaire is your opportunity to help shape the future of *Skilled for Health*. Please give us your responses!
- **Introduction to the *Skilled for Health* materials**
- **Teacher notes and Learner resources**