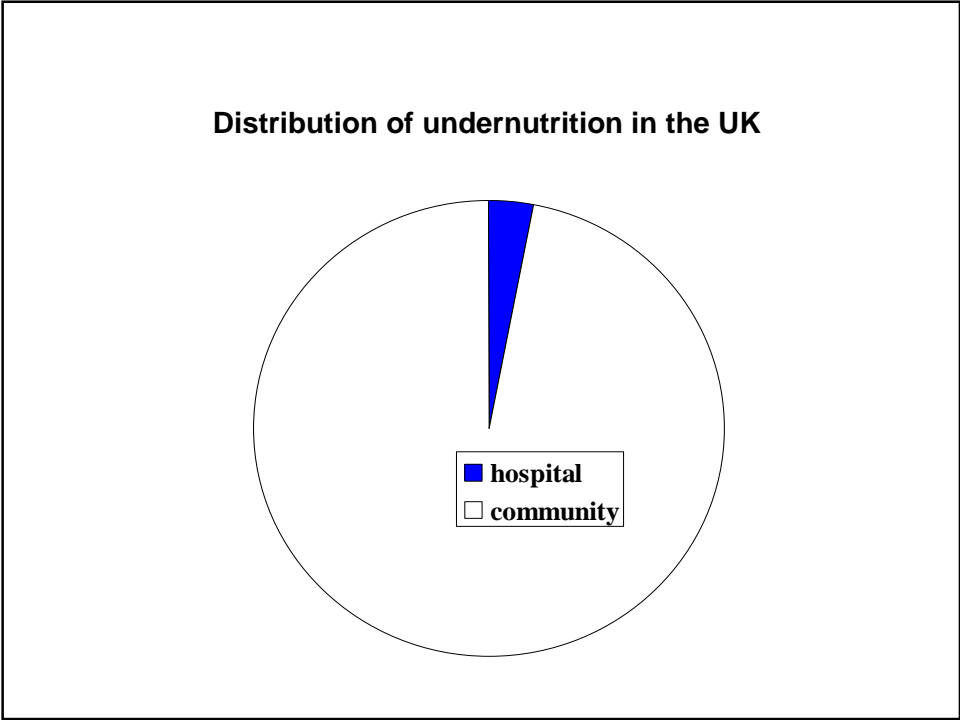
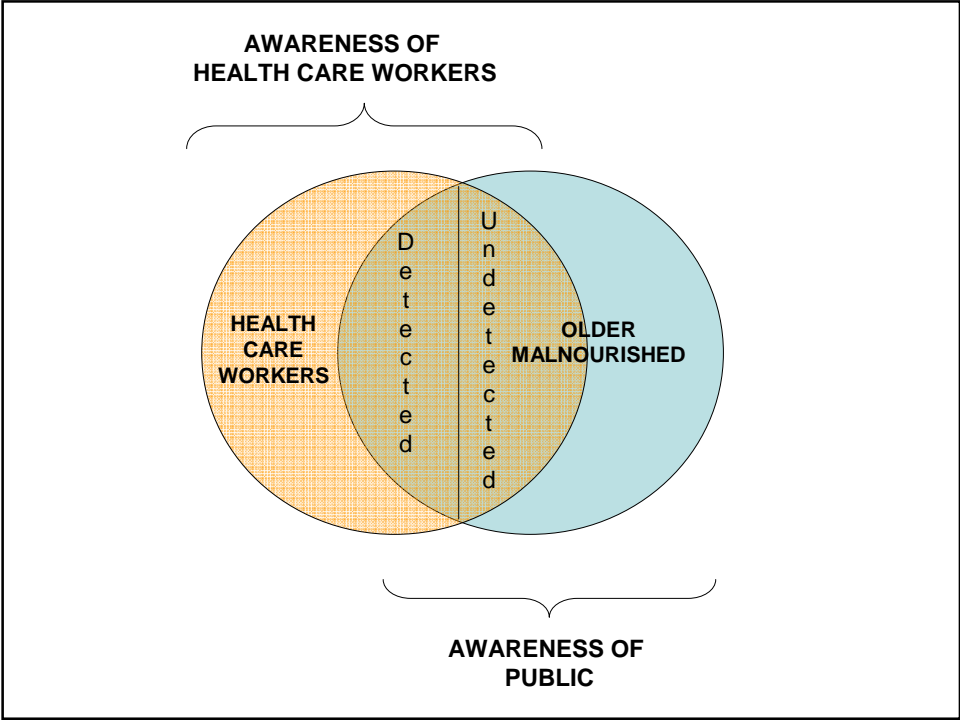


MALNUTRITION IN OLDER PEOPLE

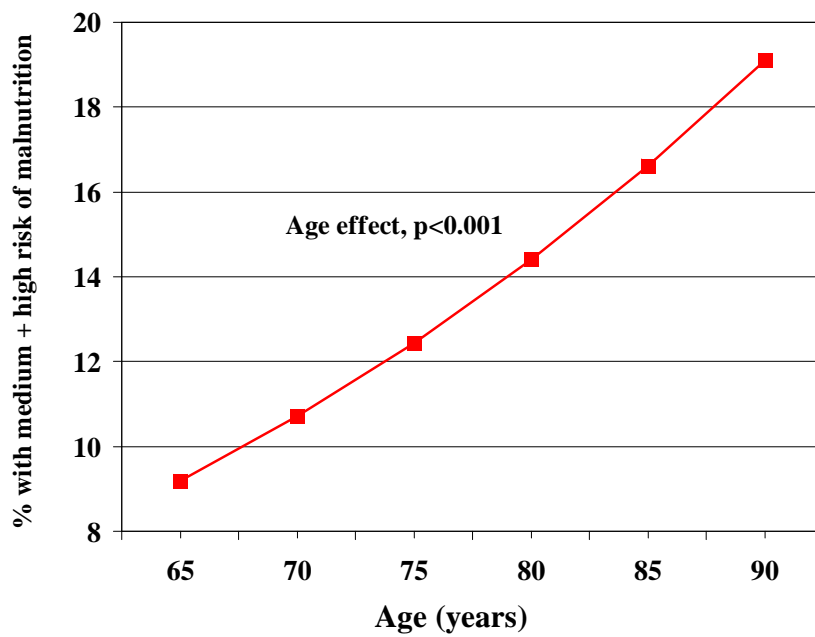
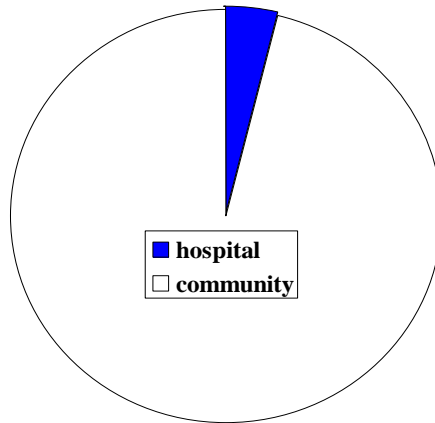
Introduction
Marinos Elia

NICE guidelines

- Typically for specific diseases e.g. specific drugs for specific diseases (malnutrition broad range of conditions)
- Clinical perspective rather than public health perspective (obesity guidelines expected in 2007 – first time NICE methodology applied to public health evidence)
- NHS perspective (NICE is a special Health Authority) – guidance primarily for health care workers – generally less attention to those that do not access the health service (NB inequalities) and the public

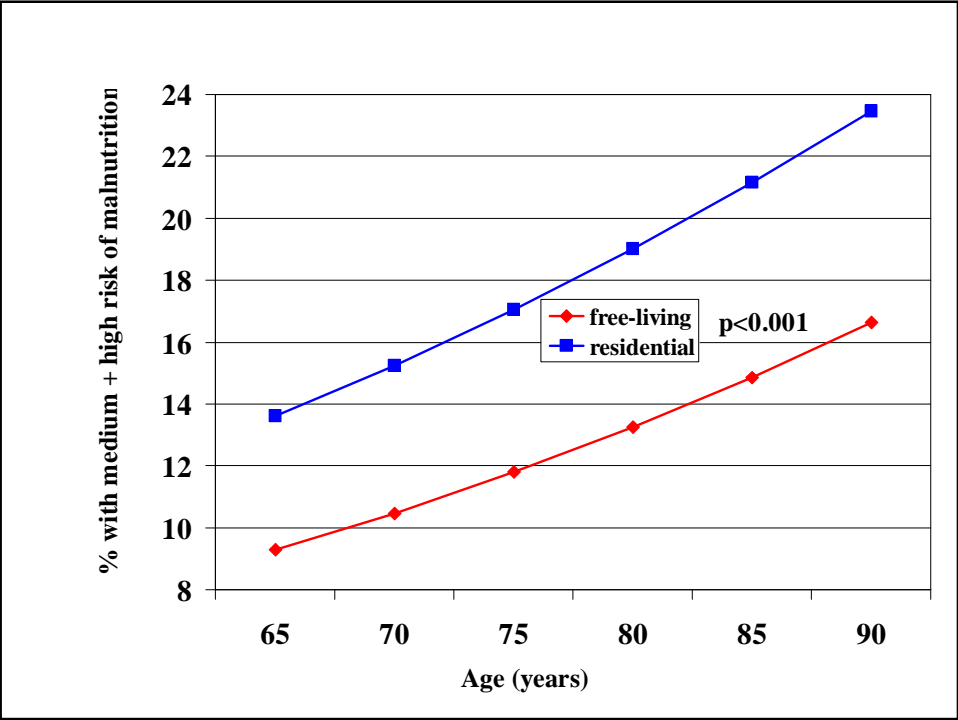


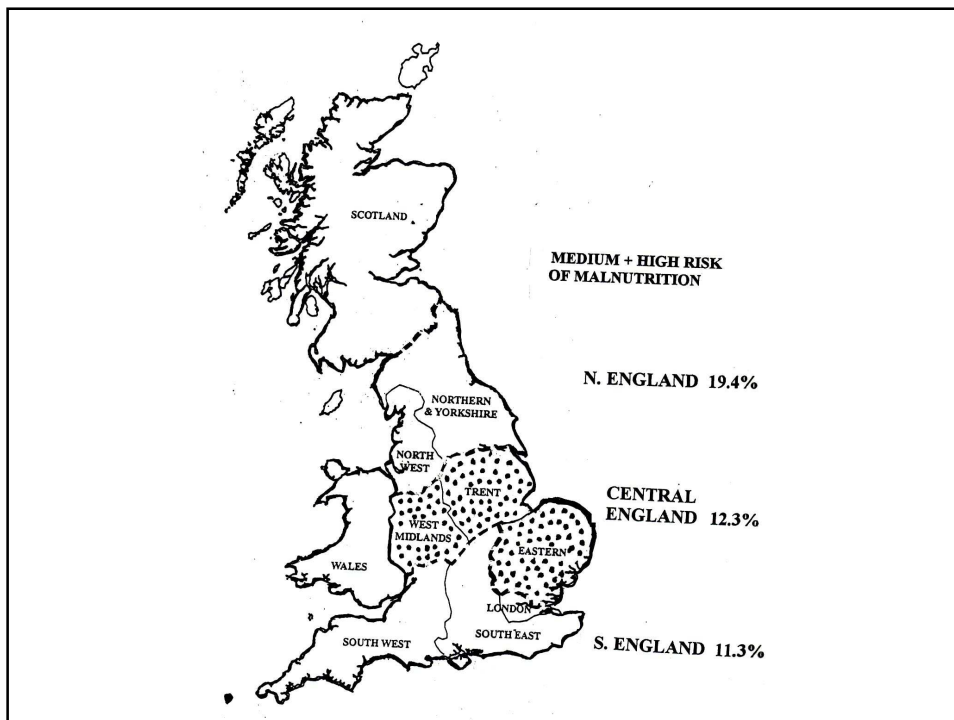
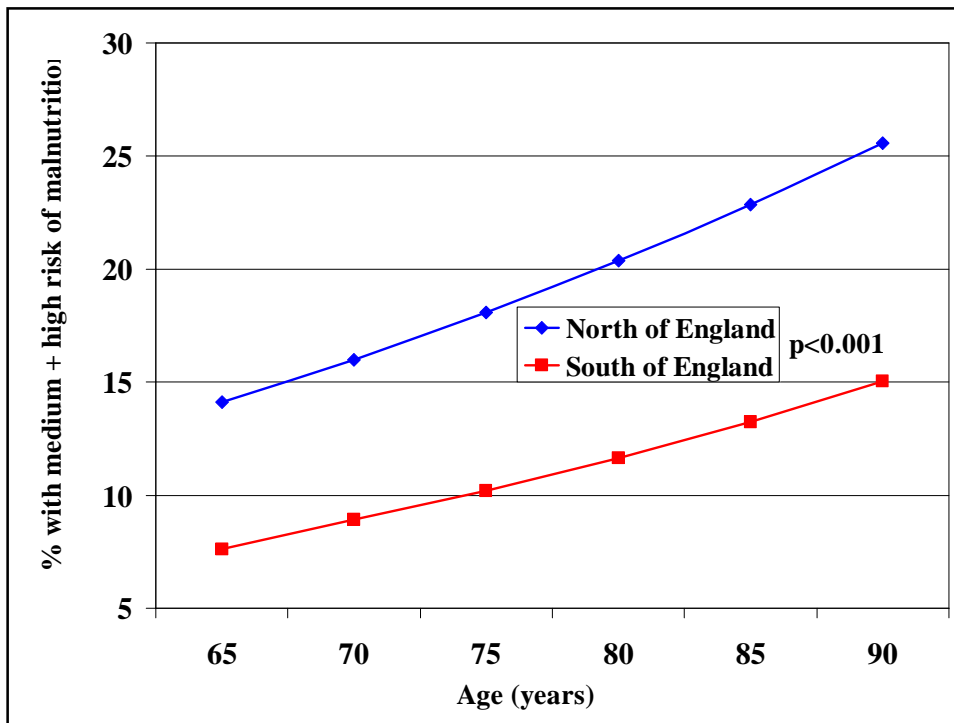
Proportion of illness spent in hospital
(from onset to complete recovery)



Risk of malnutrition (%)				
	Low	Medium	High	Medium + High
Domicile: Free-living	87.6	6.9	5.5	12.4
Institution	79.5	9.4	11.1	20.5
Long-standing illness: No	91.8	4.2	4.0	8.2
Yes	83.8	8.6	7.6	16.2
Overall	86.2	7.3	6.5	13.8

Elia & Stratton 2005

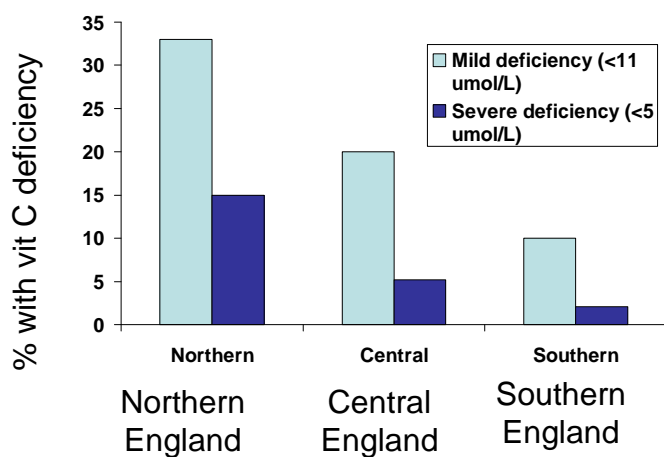




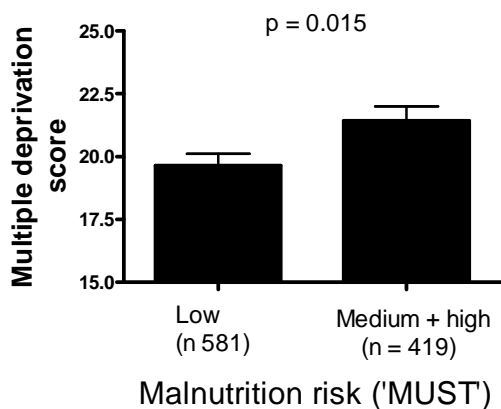
MEDIUM +HIGH RISK OF MALNUTRITION	
NORTH ENGLAND	19.4%
CENTRAL ENGLAND	12.3%
SOUTH ENGLAND	11.3%
North v rest of England	p<0.001
Central v rest of England	NS
South v rest of England	p<0.022
P (trend)	p<0.003

medium + high risk of malnutrition	
65 y	9.2%
85 y	16.6%
85 y + residential	21.2%
85 y + residential + long standing illness	24.4%
85 y + residential + long standing illness + N. Engl	32.2%

Prevalence of vitamin C deficiency (≥ 65 y old) Elia & Stratton 2005



Same geographical area (controlling for age and sex)



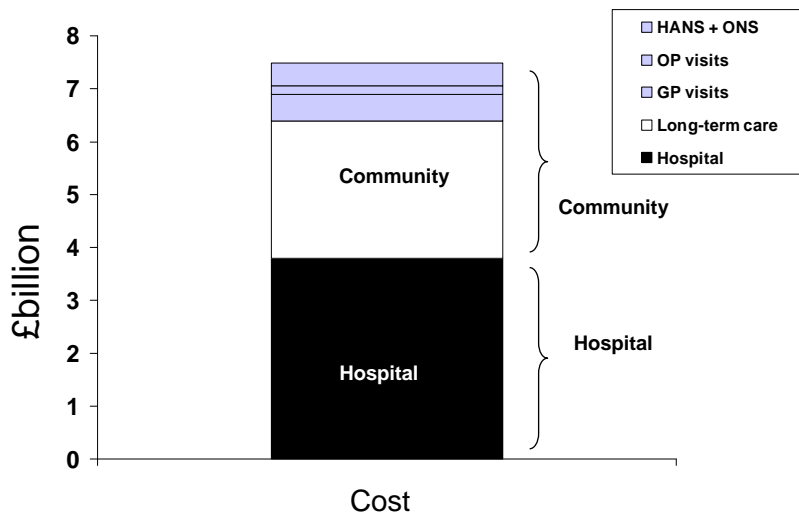
Stratton & Elia 2005

Utilisation of health care resources by malnutrition risk category

	Malnutrition risk group			p<
	Low	Medium	High	
Hospital inpatients (12 mo) (%)	19	24	55	0.001
Hospital stays (12 mo) (n*)	1.02	1.39	1.47	0.04
GP visit (3 mo) (%)	57	72	84	0.001
GP visit (3 mo) (n*)	1.55	1.78	2.34	0.001
Regular clinic visit (%)	22	21	24	0.88

*geometric mean
(Stratton et al 2001)

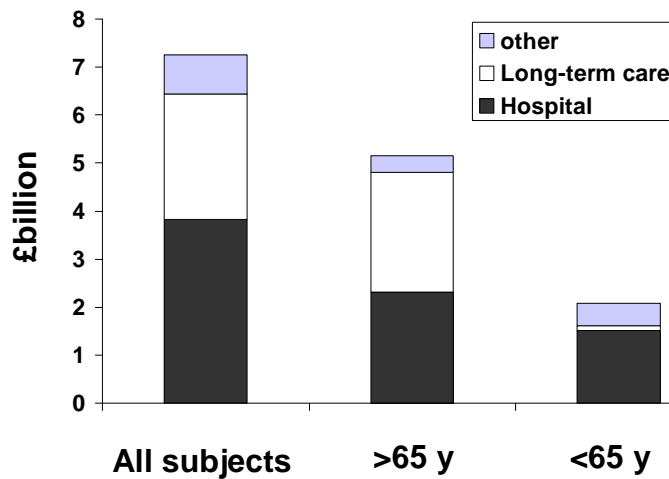
Annual cost and incremental cost of medium + high risk of malnutrition ('MUST') & associated disease in the UK



BAPEN Health
Econ. Group 2005

Annual cost of disease-related malnutrition in the UK*

Elia et al (BAPEN Health Economic Group 2005)



Malnutrition is undetected and untreated

Hospitals inpatients

≥60% unrecognised (McWhirter & Pennington 1994)

70% unrecognised (Kelly et al, 2000)

62% unrecognised (Mowe et al 1991)

Hospital outpatients

45-100% of patients unrecognised (Miller et al 1990);

57% in older outpatients (Wilson et al 2004)

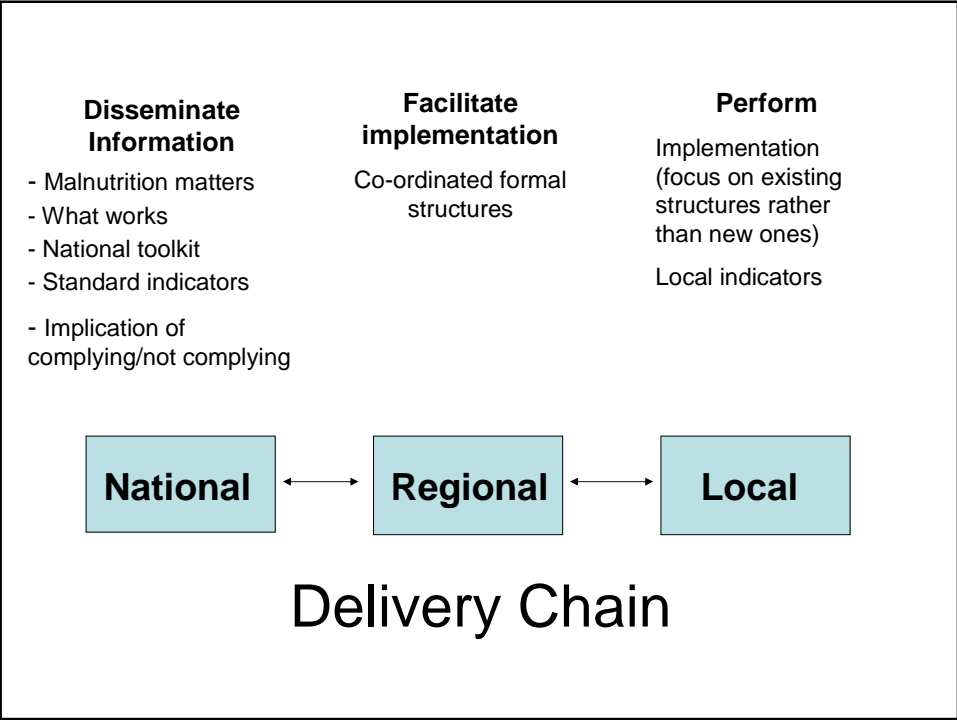
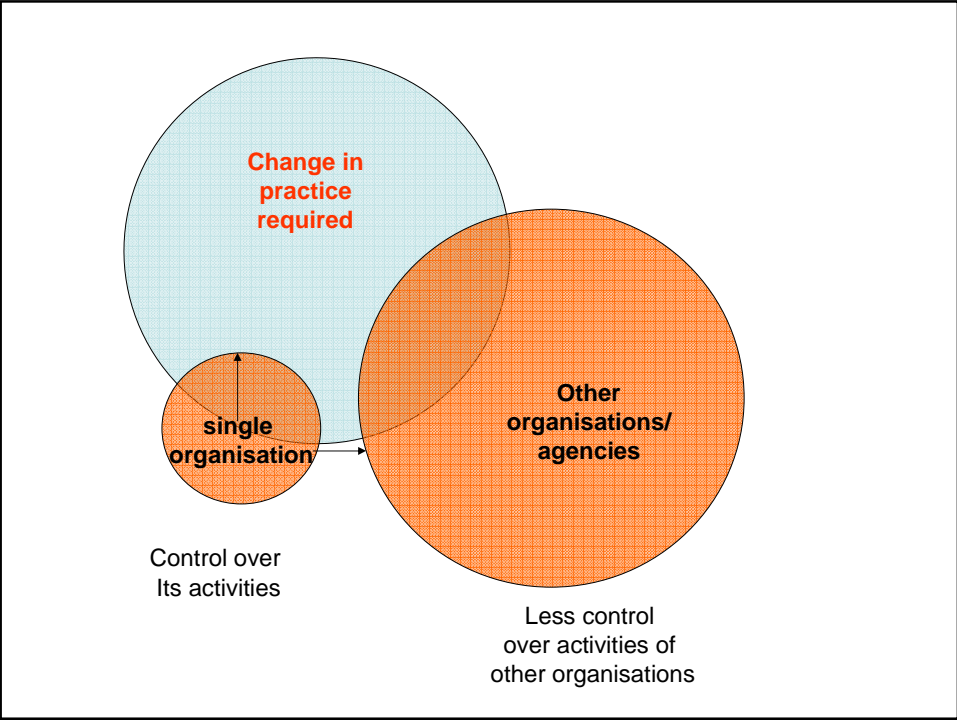
Nursing homes

Almost 100% of patients unrecognised (26 US nursing homes) (Abbasi & Rudman 1990);

Long-term care

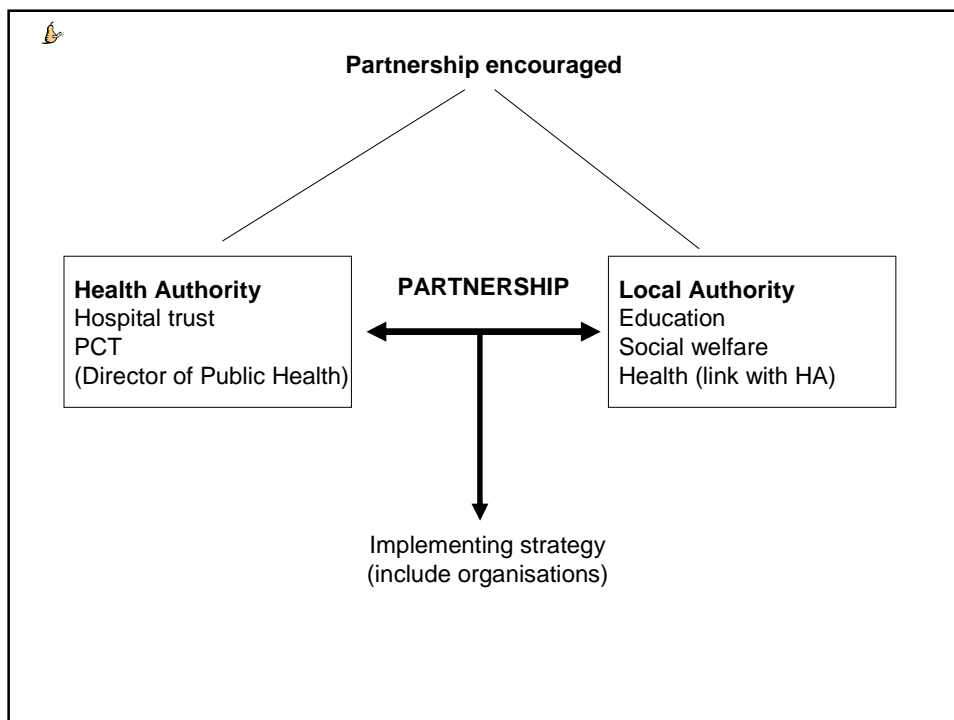
50% unrecognised as underweight (CRAG, 2000)

Community e.g. 15-50% of children with failure to thrive are unrecognised (Wright et al 1998; Bachelor 1990)



Delivery chain

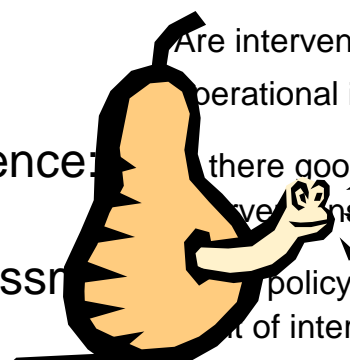
- Clear direction
- Clear responsibilities
- Greater efficiency
 - Avoid duplication
 - Sharing expertise/training material
 - Use of same consistent indicators
 - Multidisciplinary
 - Funding and capacity building more co-ordinated



When is a policy ready for implementation?

- Plan:** Are interventions, outcomes and operational infrastructure clearly defined?
- Evidence:** Is there good evidence that the interventions work?
- Assessment:** Does policy include surveillance and audit of interventions?
- Resources:** Are adequate resources available for implementing programme?

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- 

Vitamin deficiencies in older individuals (≥ 65 years; NDNS 1998)

	Free living %	Institutions* %
Thiamine	9	14
B ₁₂	6	9
Vitamin C	14	40
severe	5	16
Folate	20	35
severe	8	16

* Registered residential homes (57%), nursing homes (30%); dual registration homes (9%) and other facilities (4%)

DELIVERY CHAIN

- Sophisticated outcome-focused services, better tailored to the diverse and local needs of the public can rarely be achieved by one organisation alone
- Instead they require close partnership working together between different organisations at national, regional and local levels.
- These relationships ultimately linking the responsible ministers to the frontline health worker have become known as the delivery chain, echoing the business concept which refers to the network of systems, processes and organisations through which strategic objectives can be achieved.

PSA 2006

DELIVERY CHAIN

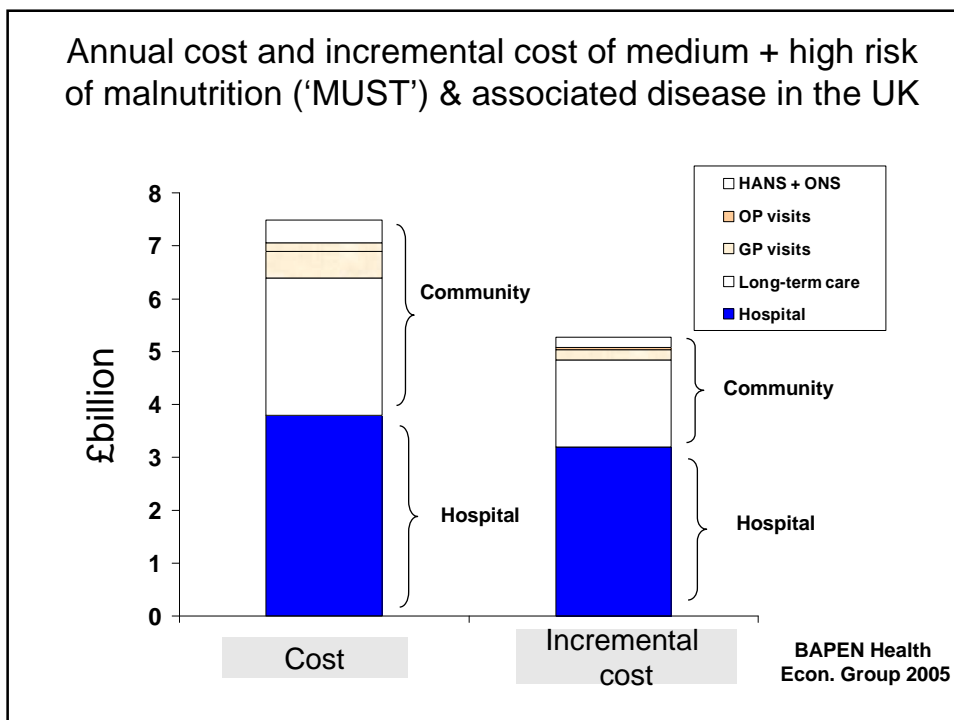
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PSA 2006

Delivery chain

- Clear direction
- Clear responsibilities
- Greater efficiency
 - Avoid duplication
 - Sharing expertise/training material
 - Use of same consistent indicators
 - Multidisciplinary
 - Funding and capacity building more co-ordinated

Barriers	Breaking down barriers
<ul style="list-style-type: none"> Perceived to be unimportant (lack of evidence) 	<p>Highlight importance to patients and Trusts</p>
<ul style="list-style-type: none"> Inadequate skills/infrastructure 	<p>Training and education Establish infrastructure</p>
<ul style="list-style-type: none"> No ring fenced money/resources 	<p>Reallocation (? new) funds/resources</p>





Tackling Health Inequalities

Consultation on a plan for delivery

Inequalities in life expectancy at birth (by Local Authority area) – female, 1997–99

