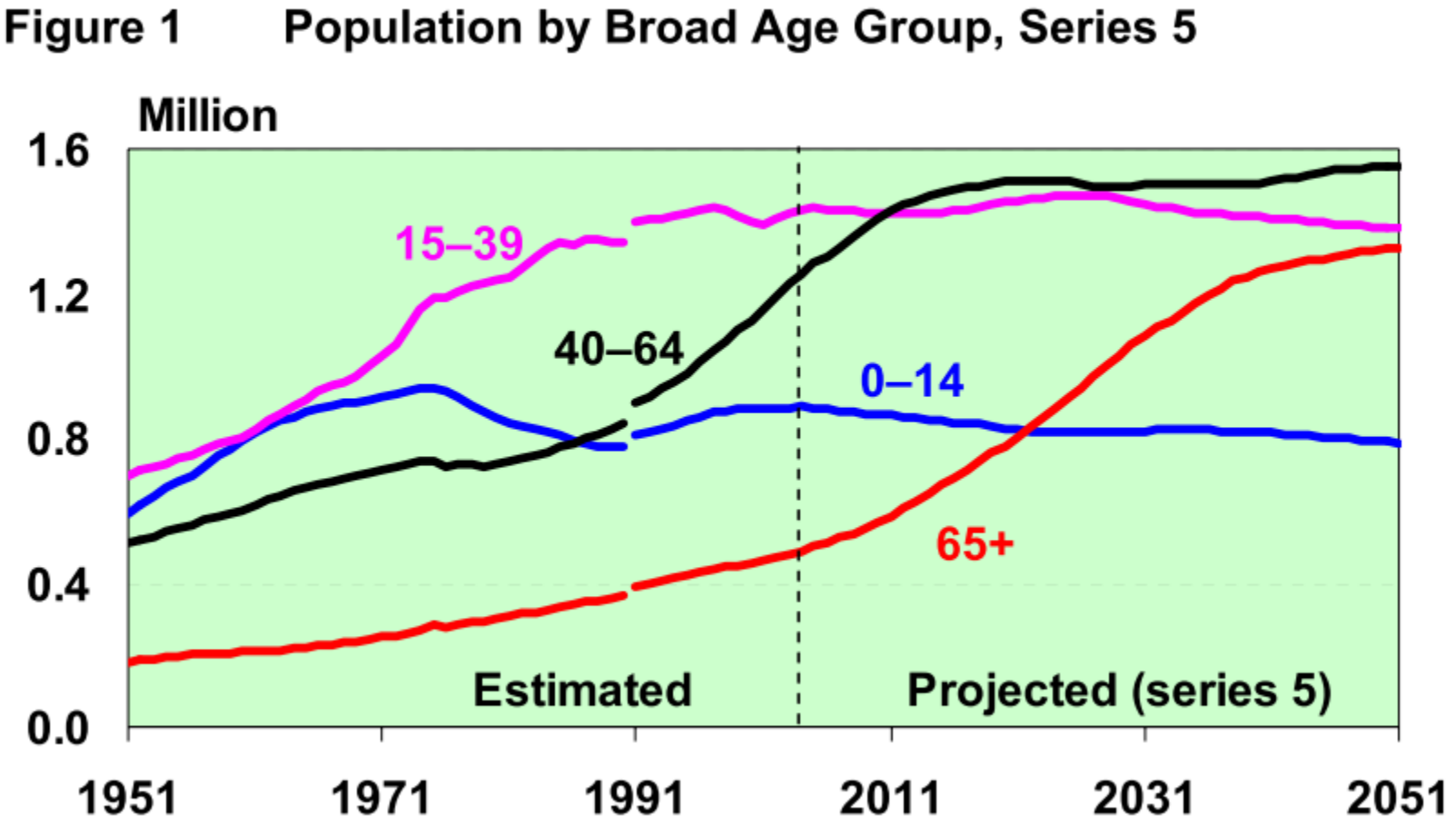
Rehabilitation in NZ and QE Health

Rehabilitation

- Rehabilitation is a treatment or treatments designed to facilitate the process of recovery from injury, illness, or disease to as normal a condition as possible

- The main types are physical, psychological, occupational. These can be combined in a multidisciplinary approach for moderate to severely affected people

NZ Population change



The big picture

- Standard and Poor's warns aging population will increase pension and healthcare costs to 20.9% of GDP by 2050 from 14.4% now
- Health Workforce NZ states that there will be a 100% increase in aged care needs by 2026 but only a 30% increase in resources
- The current healthcare model for aged care is unsustainable. Each Rest Home admission costs $40,000 per annum
- Need for elderly people to remain independent
  - Rehabilitation fosters independence

Changing needs for rehabilitation

- There is currently no comprehensive rehabilitation system in New Zealand.
- Provision of, and access to services is fragmented and varies greatly between regions.
- The main funders of rehabilitation- the Ministry of Health, Accident Compensation Corporation and District Health Boards, all purchase different components of rehabilitation leading to the provision of varied and often inequitable services and therefore different outcomes for clients.
- The current rehabilitation workforce faces issues of recruitment and retention at all levels; from the unregulated workforce of caregivers, through allied health professionals to rehabilitation medicine specialists.
- Training in rehabilitation is limited and uptake is not currently adequate to meet the needs of a comprehensive system.

Health Workforce NZ – Rehabilitation Forecast Dec 2011

Why the poor state?

- Rehabilitation and aged care are not Public Funding Priorities
- 2012/13 DHB Health Targets
  - Shorter stays in emergency departments
  - Improved access to elective surgery
  - Shorter waits for cancer treatment
  - Increased immunisation
  - Better help for smokers to quit
  - More heart and diabetes checks

REHABILITATION

WHAT IS IT AND DOES IT WORK?

Rehabilitation

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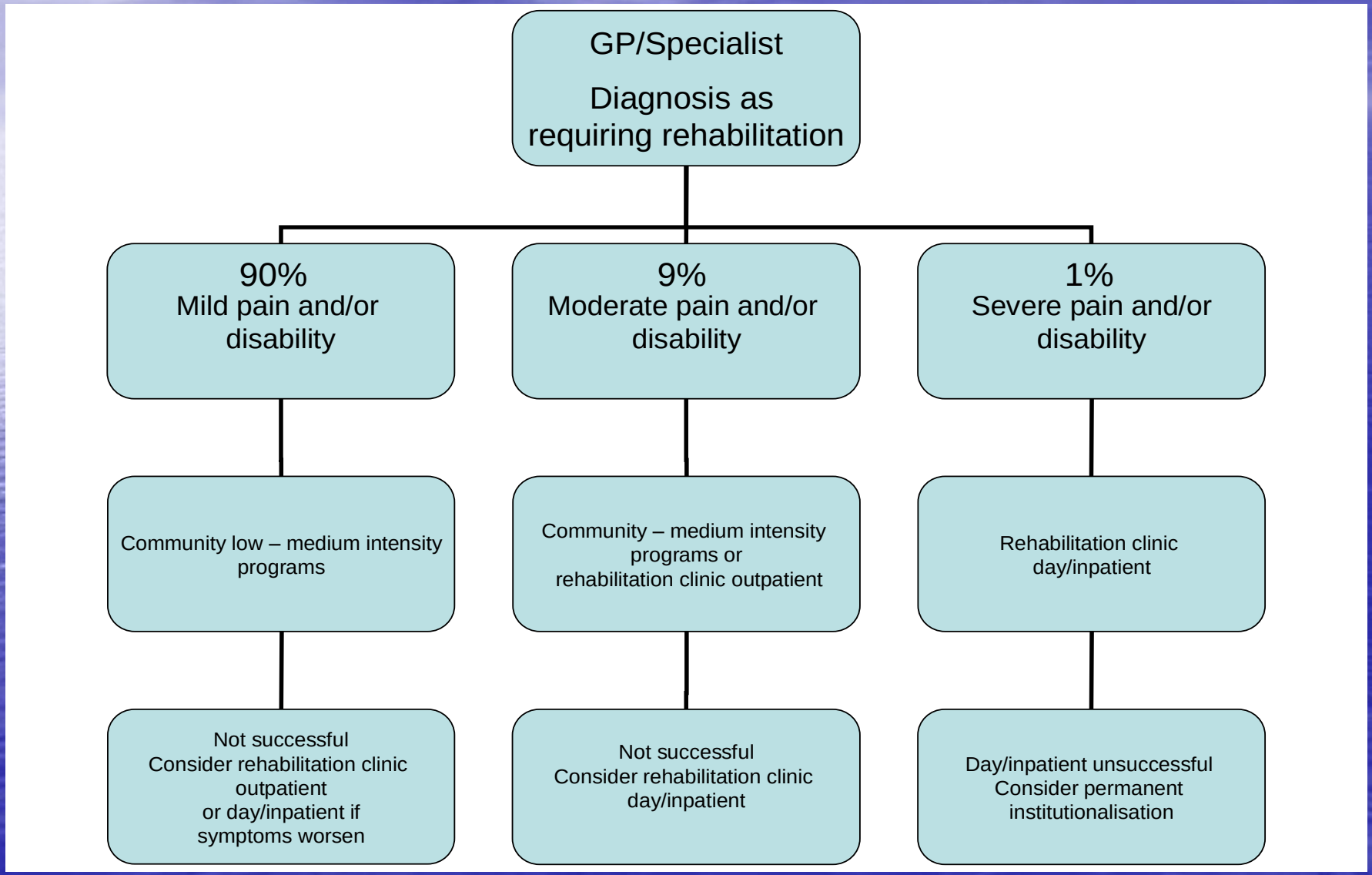
- The main types are physical, psychological, occupational. These can be combined in a multidisciplinary approach for moderate to severely affected people

Rehabilitation – treatment pathways



Supporting Evidence (Very intensive Rehabilitation)

Musculoskeletal - Back pain

- Guzman et al (BMJ 2002),
- Fairbanks et al (BMJ 2005),
- Rivero-Arias et al (BMJ 2005)
- http://www.nice.org.uk/CG88.
- (Chou et al. Spine 2009).

Musculoskeletal – rheumatoid arthritis

- (Hammond 2004).
- (Vlieland, J Rheum 1997).
- (Lambert, BMJ 1998).
- (Spiegel, Arthritis Rheum 1986; Anderson, J Rheum 1988; Helewa, Arthritis Rheum 1989).

Musculoskeletal – ankylosing spondylitis

- Masiero et al (J.Rheum 2011)

Neurological

- Frazzita et al (Neurorehabil Neural Repair 2012**)** Parkinsons disease.
- Trend et al (Clin Rehabil. 2002) Parkinsons disease.
- Cabrera Gomez (Int J MS Care. 2010) multiple sclerosis patients
- Piira et al (J Neurol Neurosurg Psychiatry 2010) Huntingdons' disease. Zinza et al. (J Neurol Neurosurg Psychiatry 2010) Huntingdon's disease.

Outcomes

- Audit of QE Health patient records for 10 years between January 2001 to December 2010
- Several health outcomes measures consistently collected over this time period
  - Please see appendix for detail on the measures used
- All patients included (no a priori exclusions from analysis)

10 year audit (Approx 7 PPS patients per annum)

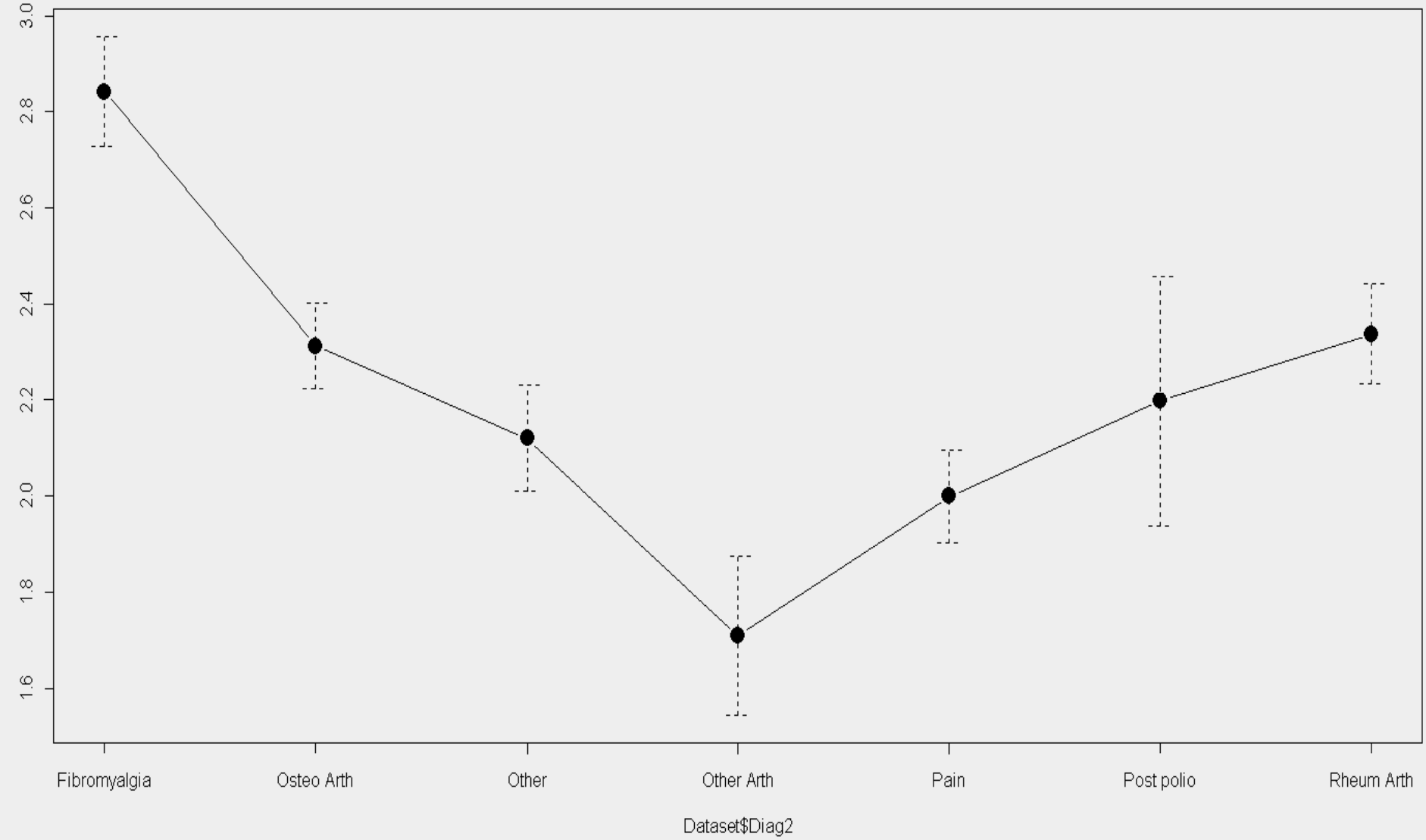
Table 1) Demographics of QE Health treated population

Time period 01/01/2001 - 17/12/2010

		National			National
Number of patients		2624	Diagnosis	Pain	25%
Number of rehabilitation visits		3214		Osteoarthritis	21%
				Rheumatoid Arthritis	15%
Age	Mean	59		Fibromyalgia	13%
	Median	60		Post Polio Syndrome	2%
	Mode	74		Other	23%
Sex	M	28%	Data Availability	Visits with pre and post outcomes data	89.7%
	F	72%			
Ethnicity	Pakeha	83%	Number of visits	1 visit	84%
	Maori	12%		2 visits	11%
	Islander	1%		3 visits	3%
	Asian	1%		4 visits	1%
	Other	3%		5 visits or more	0%
Funding	Lakes	16%	Occupation	Retired	38%
	BOP	22%		Working	26%
	Waikato	13%		Beneficiary	11%
	Midland	17%		Housewife/Home person	10%
	Other DHB NZ	18%		Other/NA	14%
	ACC	12%			
	Private and Other	2%			

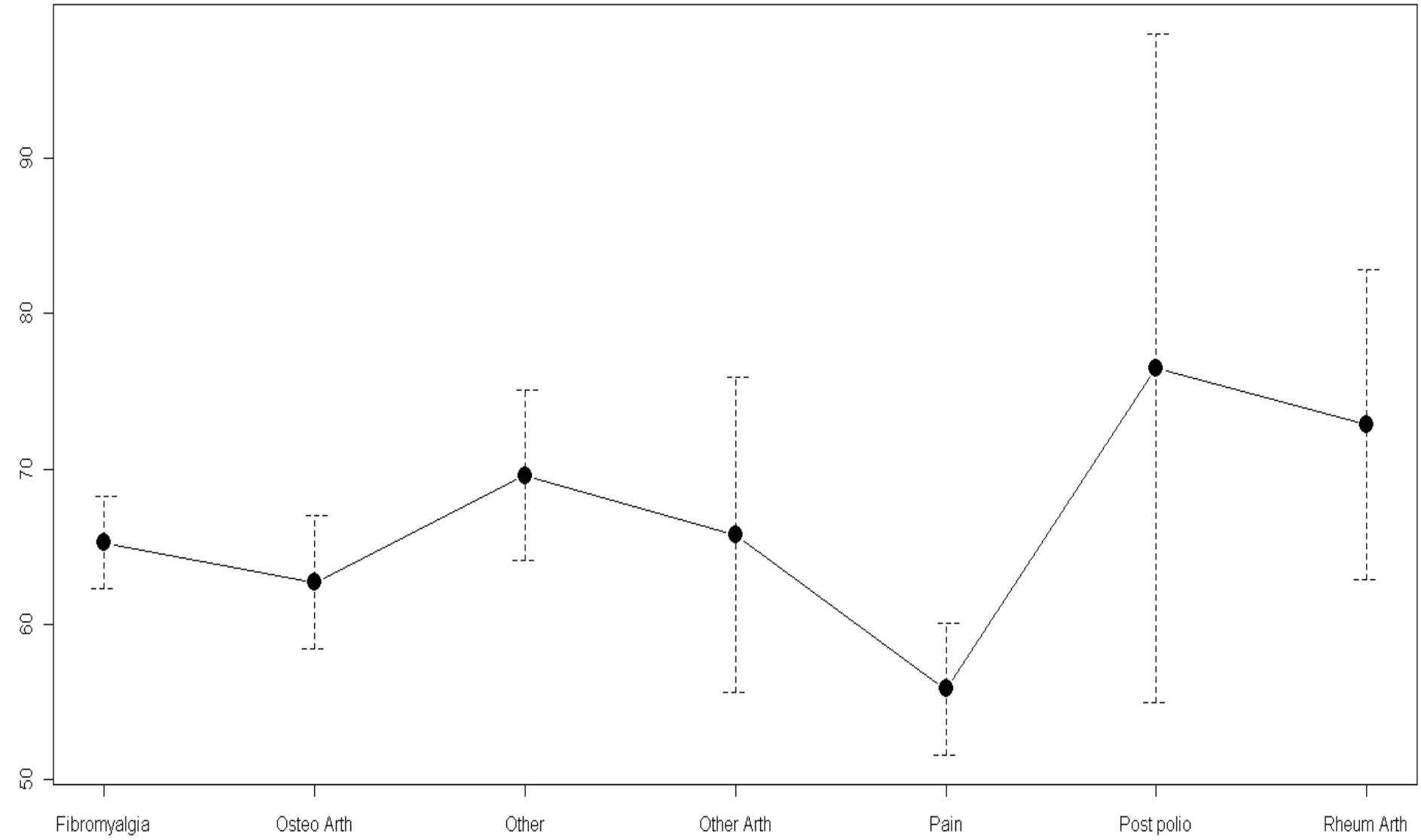
Global Health

Change in Wellness score (0=no change) between admission and discharge at QE Health
A score between 0 (as good as dead) and 10 (full health)
(Changes above 1.0 are clinically significant)



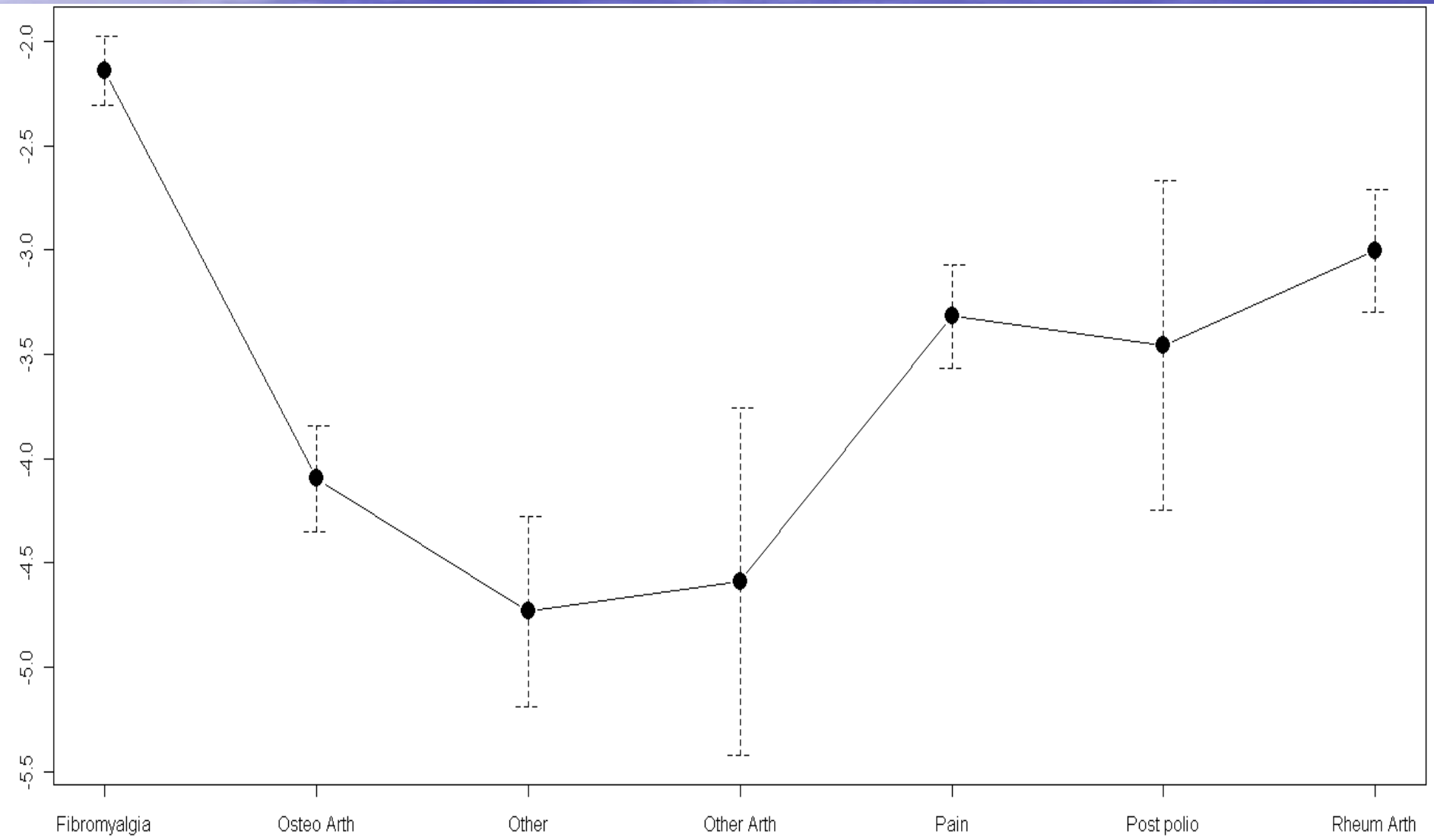
6 minute walk test

Change in 6 minute walk test (0=no change) between admission and discharge at QE Health
How many metres can you walk in 6 minutes?
(Changes above 44m are clinically significant)



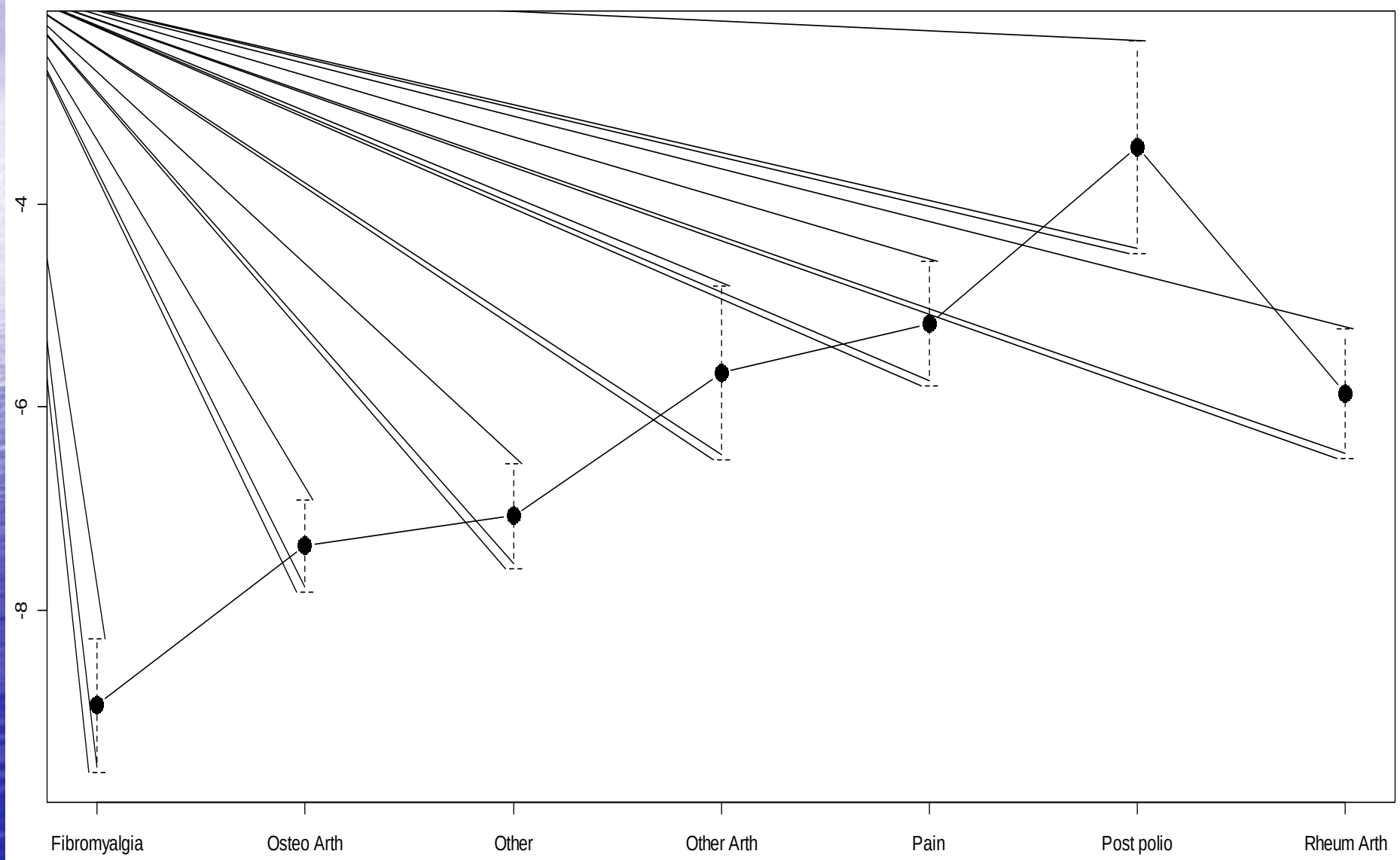
Getup and Go test

Change in GetGo test (0=no change) between admission and discharge at QE Health
Timing patients from waking to full activity. It is measured in minutes
(Changes above 1.0 are clinically significant)



Pain

Change in McGill Pain Score (0=no change) between admission and discharge at QE Health
Negative scores signifying reduced pain are better
(Negative changes greater than -4.0 are clinically significant)

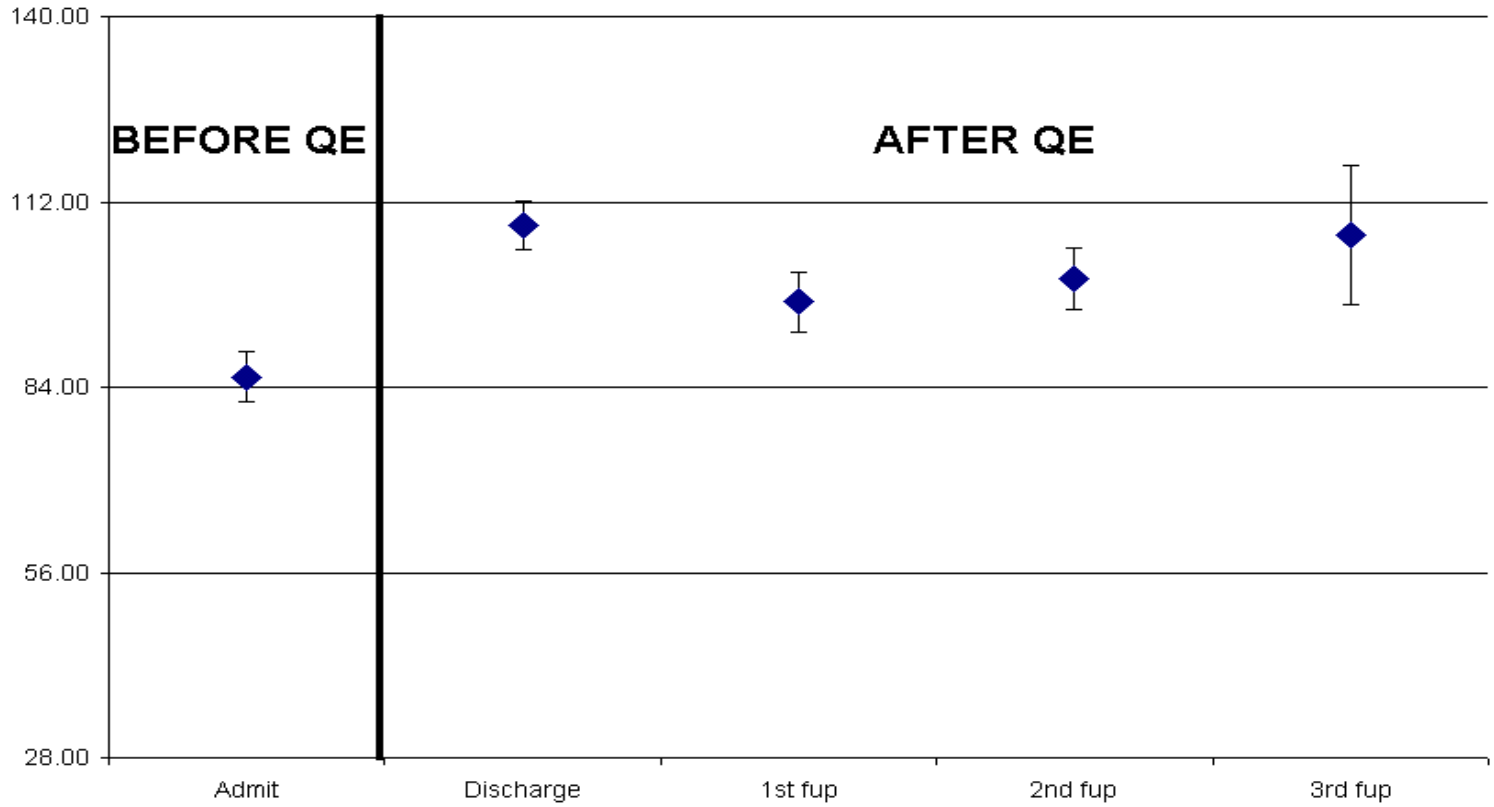


How long does the treatment effect last?

- Currently under study
- Only 16% of patients return for a second visit
- Evidence from pain patients show treatment outcomes still strong at 12 months

QE Health rehabilitation – analysis to 12 months in persistent pain patients

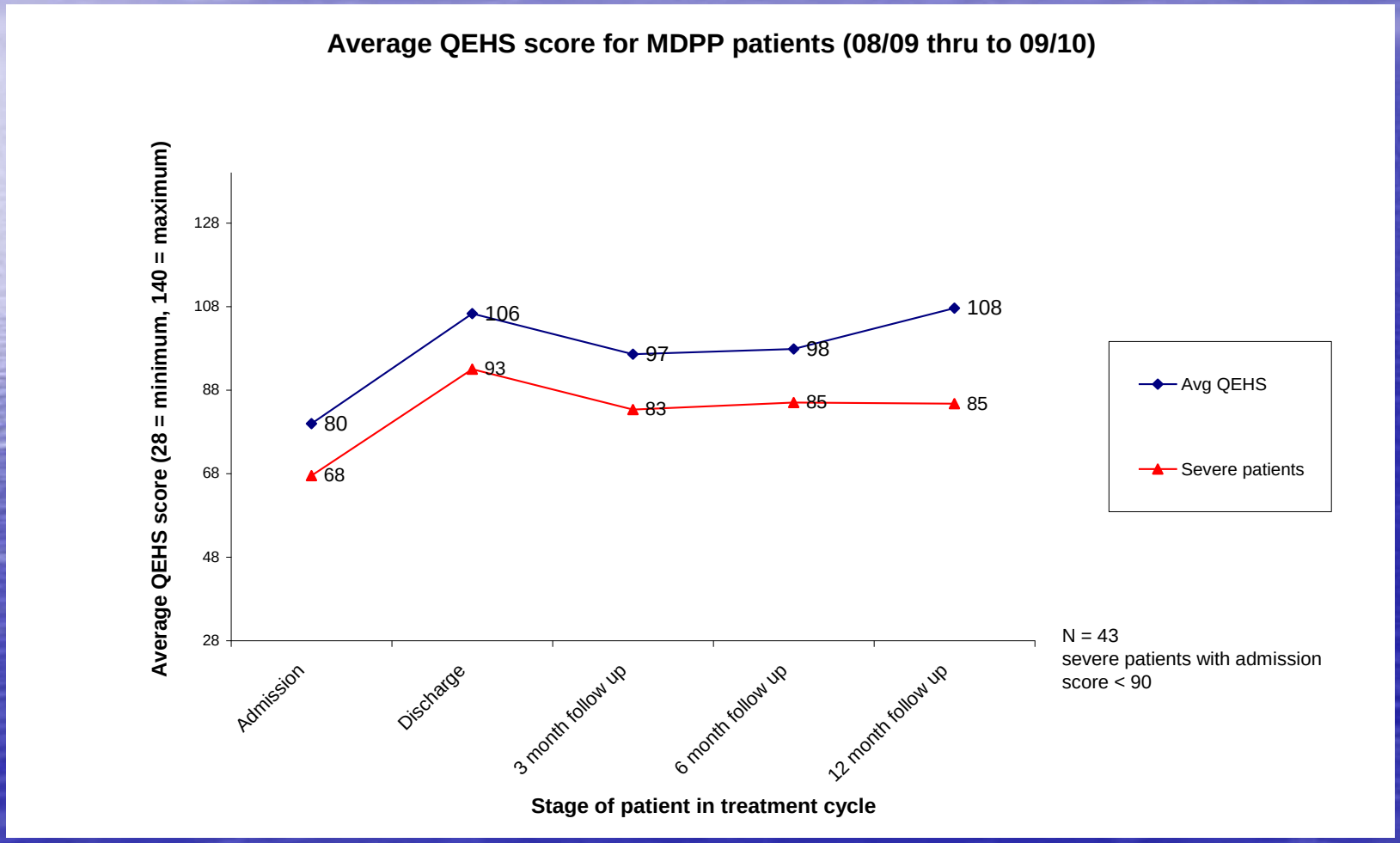
Quality of life in ACC MDPPP patients at different stages of QE Health Therapy - combined results of 2 audits in 2009 and 2011



	Admit	Discharge	1st fup	2nd fup	3rd fup
Number of patients	140	135	108	73	17
Avg QEHS	85.51	108.43	96.95	100.38	106.88
95% Confidence Interval	3.78	3.62	4.52	4.74	10.51

Long term benefits across severity

Different patient types benefit: ACC funded pain patients experience similar gains to DHB funded rheumatology patients



N = 41: Data for September review 2010. Severe patients have QEHQ < 90 at admission

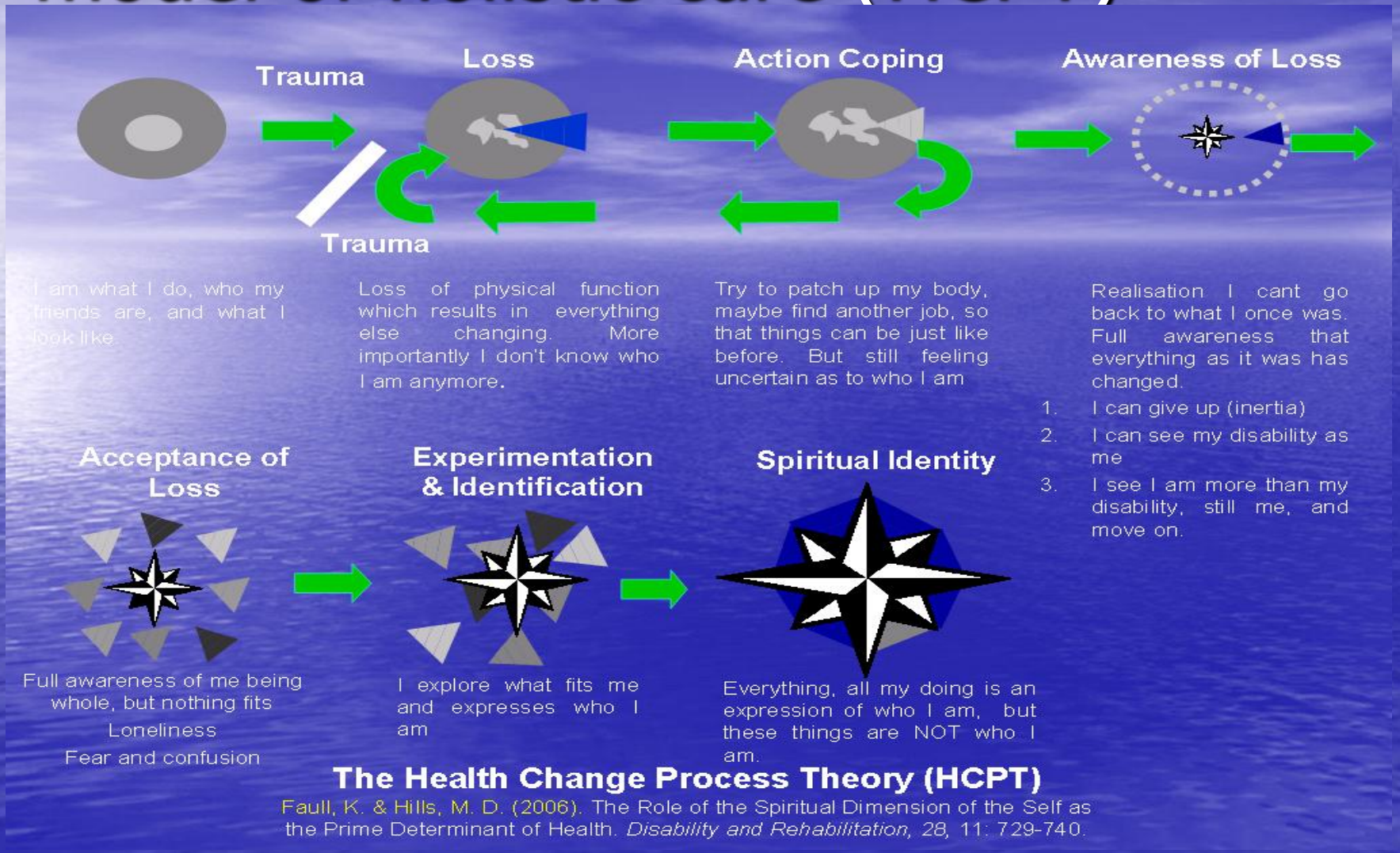
QE – as a microcosm of larger issues

- DHB focus on elective surgery and non rehabilitation services
  - Publicly funded services declining
- Private demand increasing

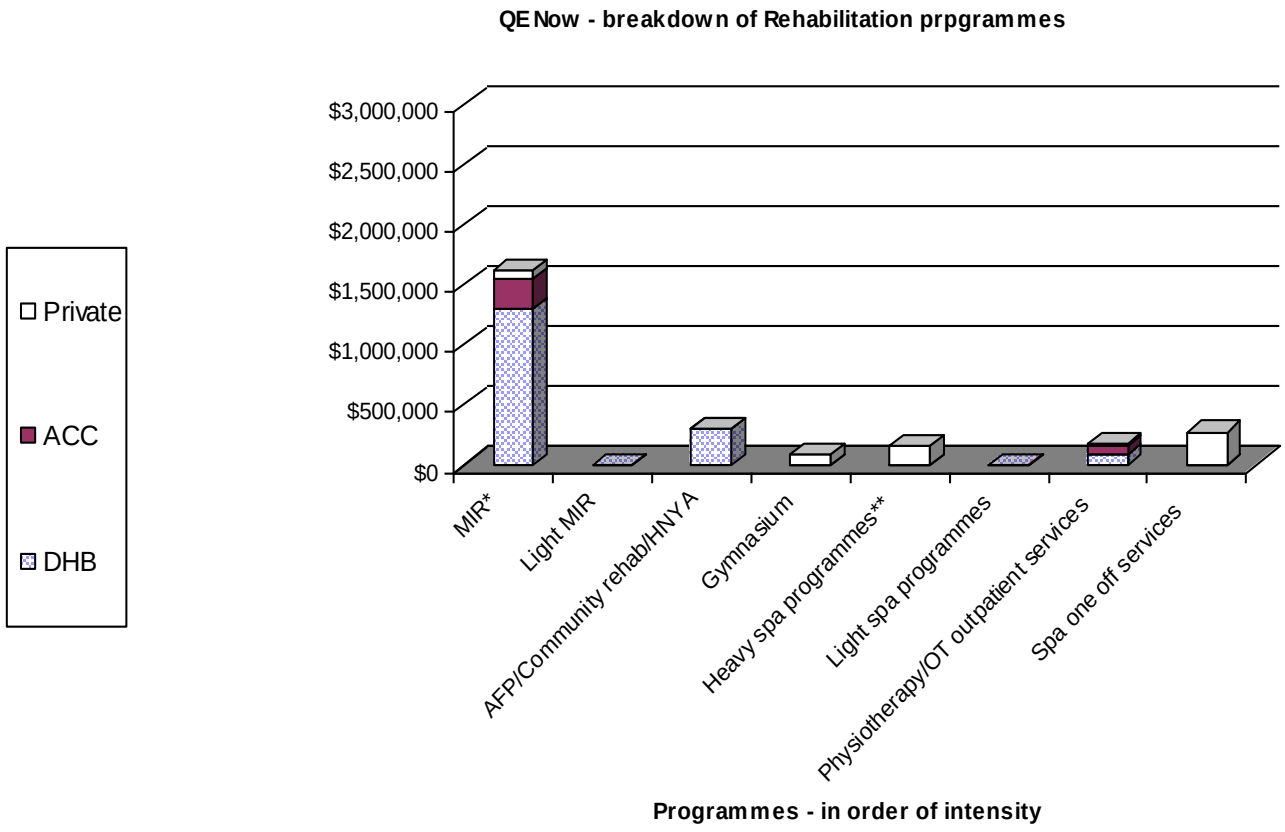
What is QE Health today?

60 staff employed

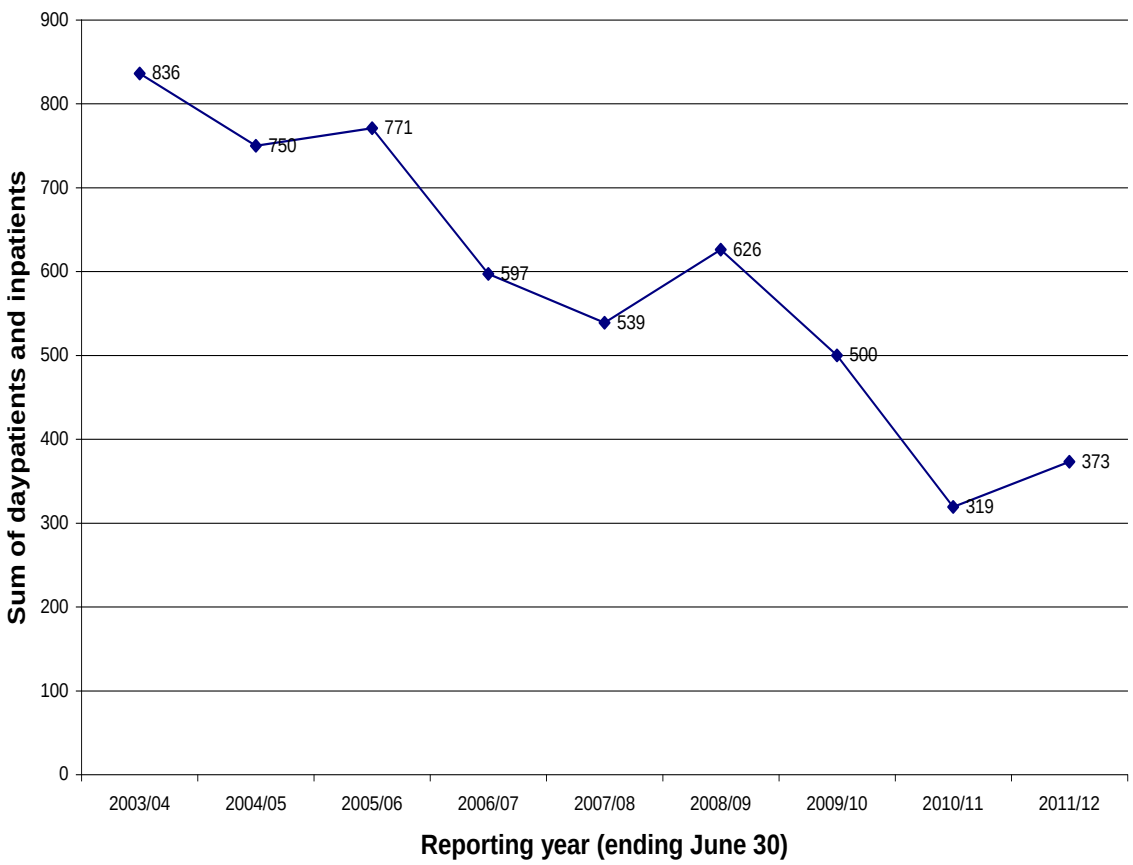
QE Health has its own recognised model of holistic care (HCPT)



QE: Historical rehabilitation service patterns



QE as a microcosm of the larger picture: MIR rehabilitation in decline

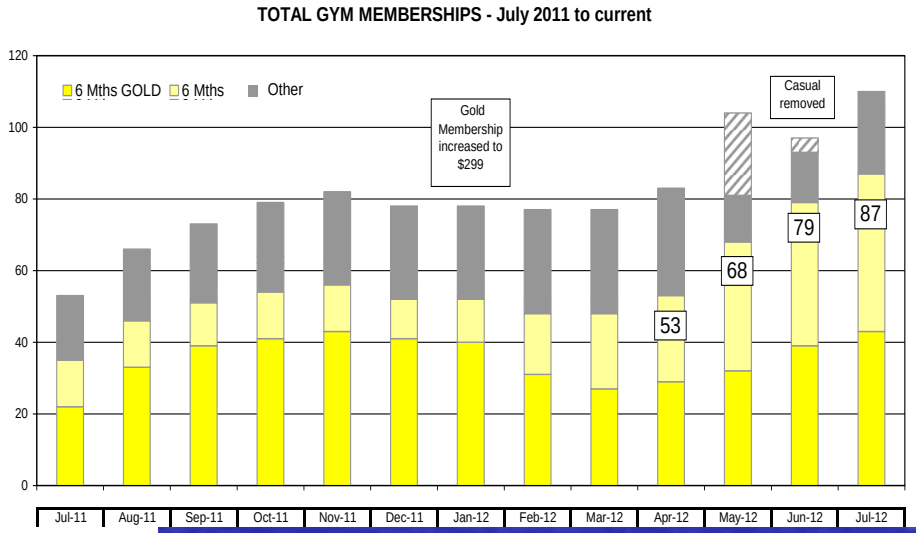


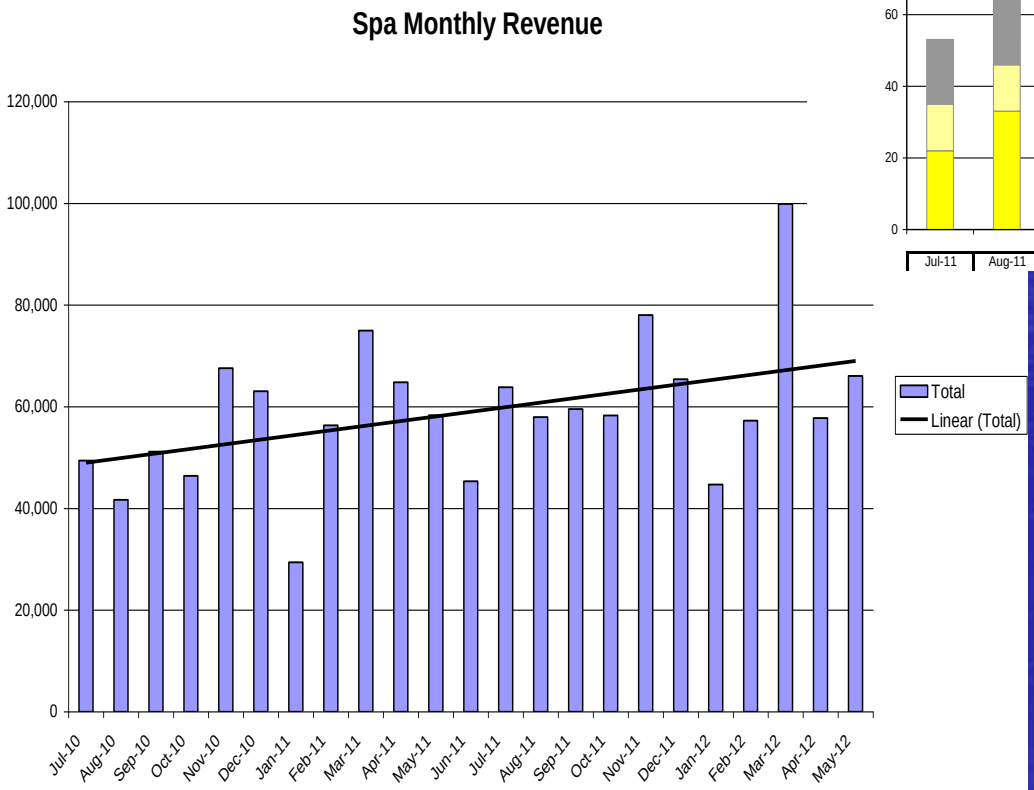
Why the change?

- Rheumatology has specialised on inflammatory conditions
  - Osteoarthritic conditions no longer catered for
  - Very large patient group left out
    - In 2010 **15.2 per cent** of New Zealanders aged 15 and over were living with at least one type of arthritis which is equivalent to 660,000 people. By 2020 the prevalence of arthritis is expected to reach 16.9 per cent.
    - RA is the second most common form of arthritis in New Zealand, affecting **3.5 per cent** of the population. In 2008 this was equivalent to more than 149,000 people.
- Pain specialists are beginning to meet the unmet need.
  - But very slowly as it is not on DHB priority list

Source: Fit for Work: Musculoskeletal disorders and the NZ labour market. University of Lancaster 2012

Diverse fortunes – smaller sub business growing





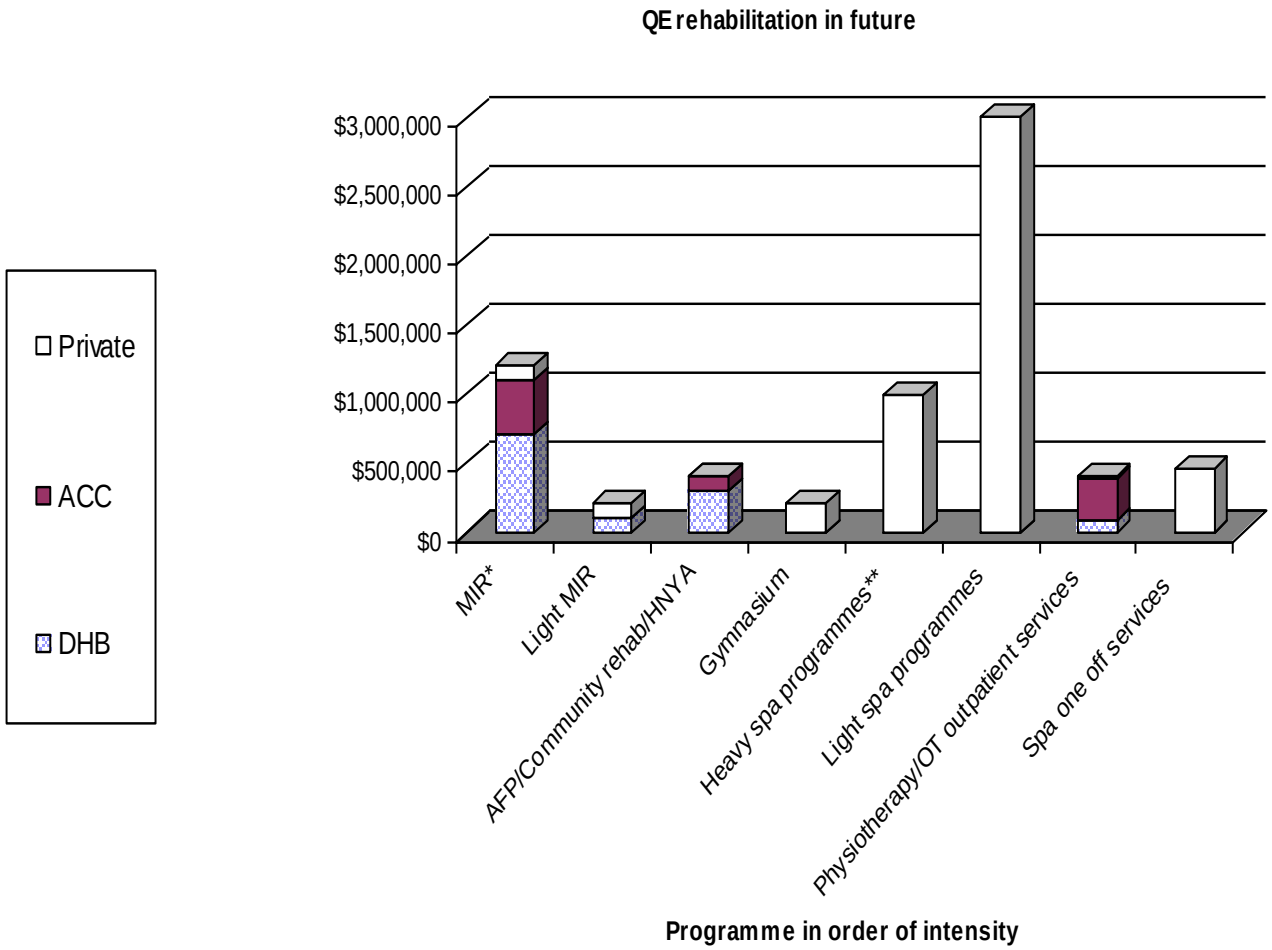
French Spa curistes – private health maintenance

- 2012/13 – 40% growth in numbers
- Average treatment length 1 week
- Daily spa therapies + physio, gym or rheumatology if required
- $1,000 per head average spend on QE therapies alone

The way forward

- No fast change expected on public funding approach
  - Crisis is required prior to this
- Rehabilitation must survive and grow in a private market setting
  - Medical spa services
  - Dementia rehabilitation

A wider range of rehabilitation programs – target for 2018



Crisis brewing? What if the focus on surgery changes?

- "Antimicrobial resistance poses a catastrophic threat.
- If we don't act now, any one of us could go into hospital in 20 years for minor surgery and die because of an ordinary infection that can't be treated by antibiotics.
- And routine operations like hip replacements or organ transplants could be deadly because of the risk of infection".

Prof Dame Sally Davies; England's Chief Medical Officer; Annual Report 2011