

Prevention or Diversion?

– Achieving change in older people's service use

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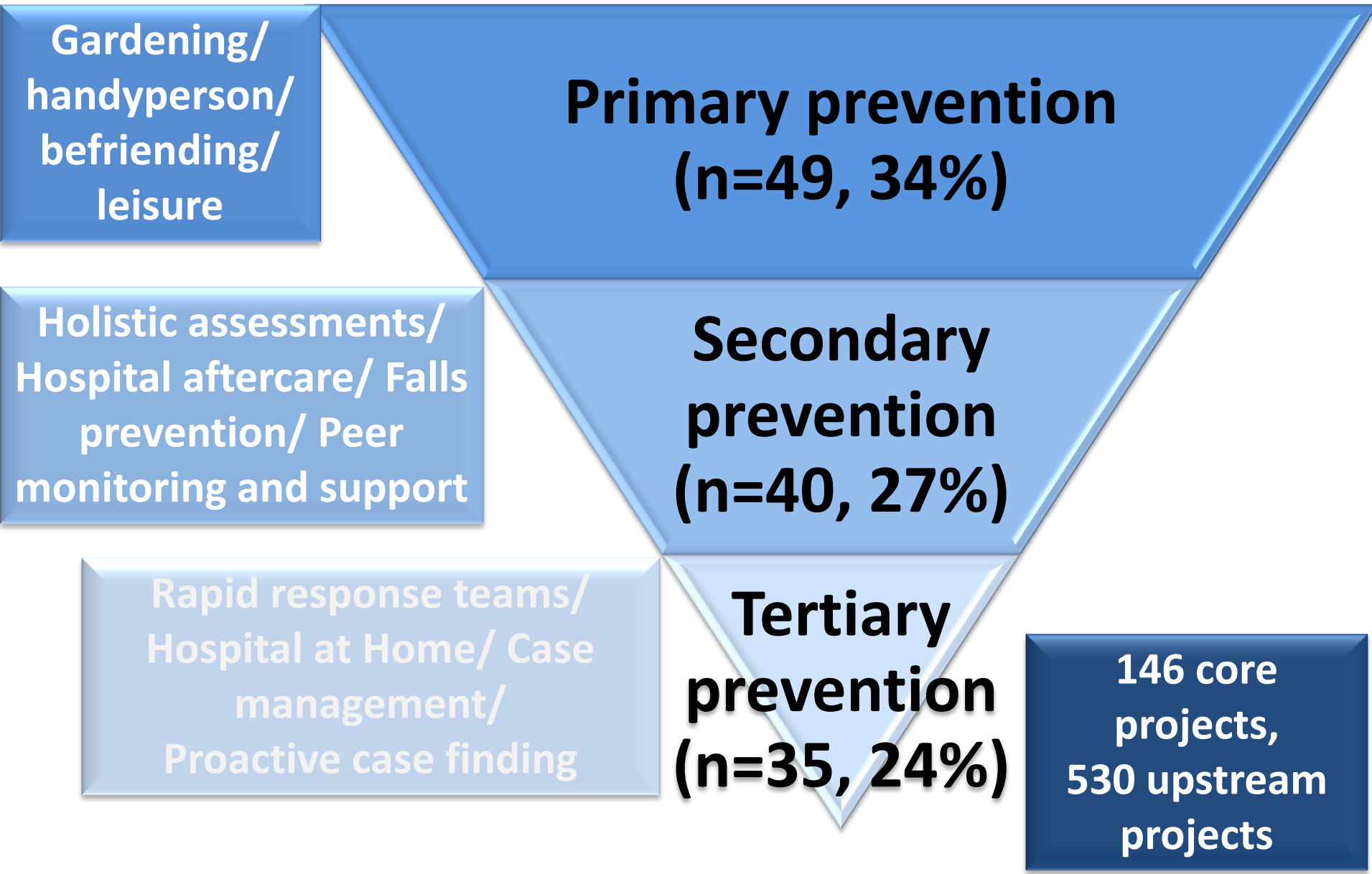
Locating prevention

- Definitional division between health and social care – context is all (Curry 2006, Wistow 2003, Godfrey, 2000)
- Health: Primary, secondary and tertiary prevention (Hollander 2001).
- Social care perceptions of prevention:
 - To prevent or delay ill-health or disability consequent on ageing
 - To promote and/ or improve quality of life
 - To create health and supportive environments (Wistow and Lewis 1997)
- *Our first priority should be to restore an individual's independence and autonomy.* (DH 2010)
- Continuum of preventative services
- Underlying rationale, early and timely services will lead to a reduction in consumption of expensive services in the future.

POPP Programme

- £60 million ring-fenced funding for council-based partnerships to lead locally innovative pilot projects for older people.
- Overall aim was to improve the health, well-being and independence of older people through:
 - Provide person centred and integrated responses for older people
 - Encourage investment in approaches that promote health, well-being and independence for older people and
 - Prevent or delay the need for high intensity or institutionalised care.
- 19 pilot sites funded May 2006 – 2008 (extended to 2009)
- 10 further pilot sites May 2007 – 2009

POPP Interventions



Gardening/
handyperson/
befriending/
leisure

Primary prevention
(n=49, 34%)

Holistic assessments/
Hospital aftercare/
Falls prevention/
Peer monitoring and support

Secondary prevention
(n=40, 27%)

Rapid response teams/
Hospital at Home/
Case management/
Proactive case finding

Tertiary prevention
(n=35, 24%)

146 core projects,
530 upstream projects

Measurement of change

Research Questions (Outcomes)

- Did the POPP interventions improve quality of life?
- Did the POPP programme change or reduce service use?

Measurement

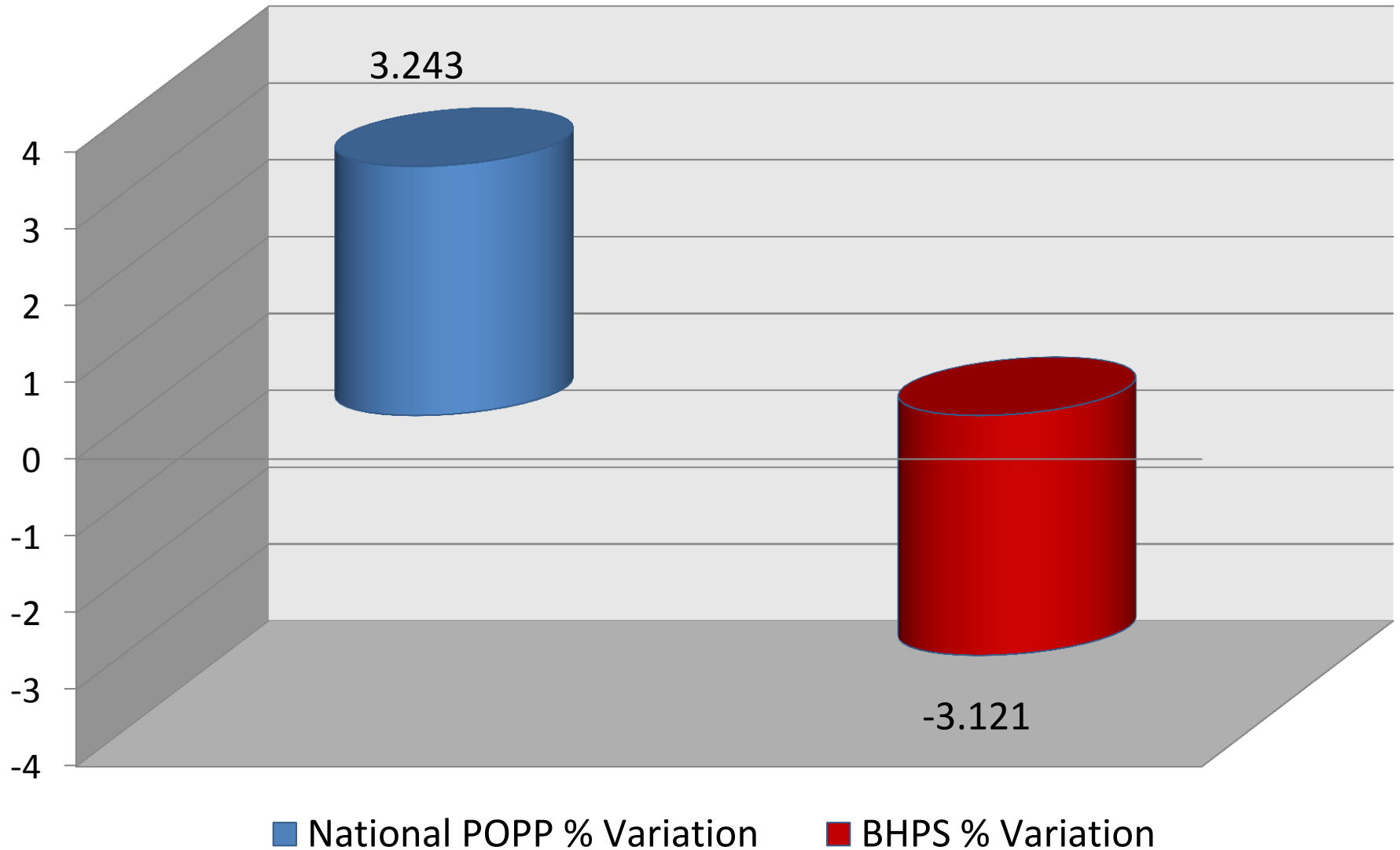
- **Quality of Life:**
 - Self-reported quality of life (Bowling 1995);
 - EQ-5D (Dolan et al 1995);
 - Demographic data
- **Expenditure difference approach: Emergency bed-days (difference-in-difference analysis)**
 - HES data
 - Overall project set-up and roll-out costs
 - Activity data
 - Needs analysis
- **Self-reported service use** (Beecham and Knapp 1992):
 - Secondary care
 - Primary/ community care
 - Social and third sector care

Base-line EQ-5D scores (T_0)

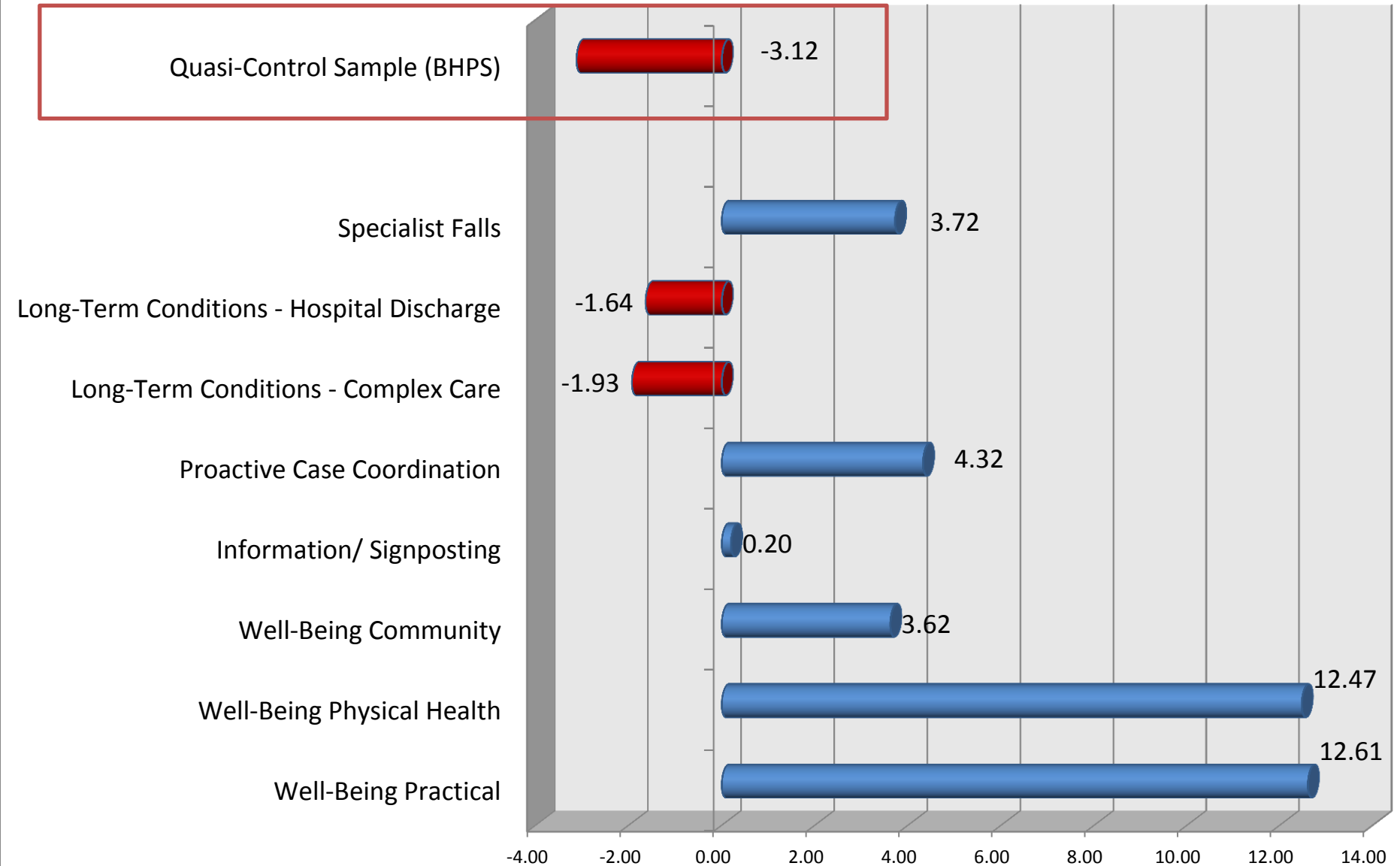
Age range of participant	Overall population	POPP sample
Aged 55 - 64	0.80	0.54
Aged 65 - 74	0.78	0.58
Aged 75+	0.73	0.54

- 62 (of 146) projects, (n=1,529)
- EQ-5D measures five domains: mobility, self-care, usual activities, pain/discomfort, anxiety/ depression.
- Scores range from 0 (death) to 1 (perfect health)
- BHPS used to 'benchmark' outcomes

Standardised percentage changes in EQ-5D (T_0 : T_1)



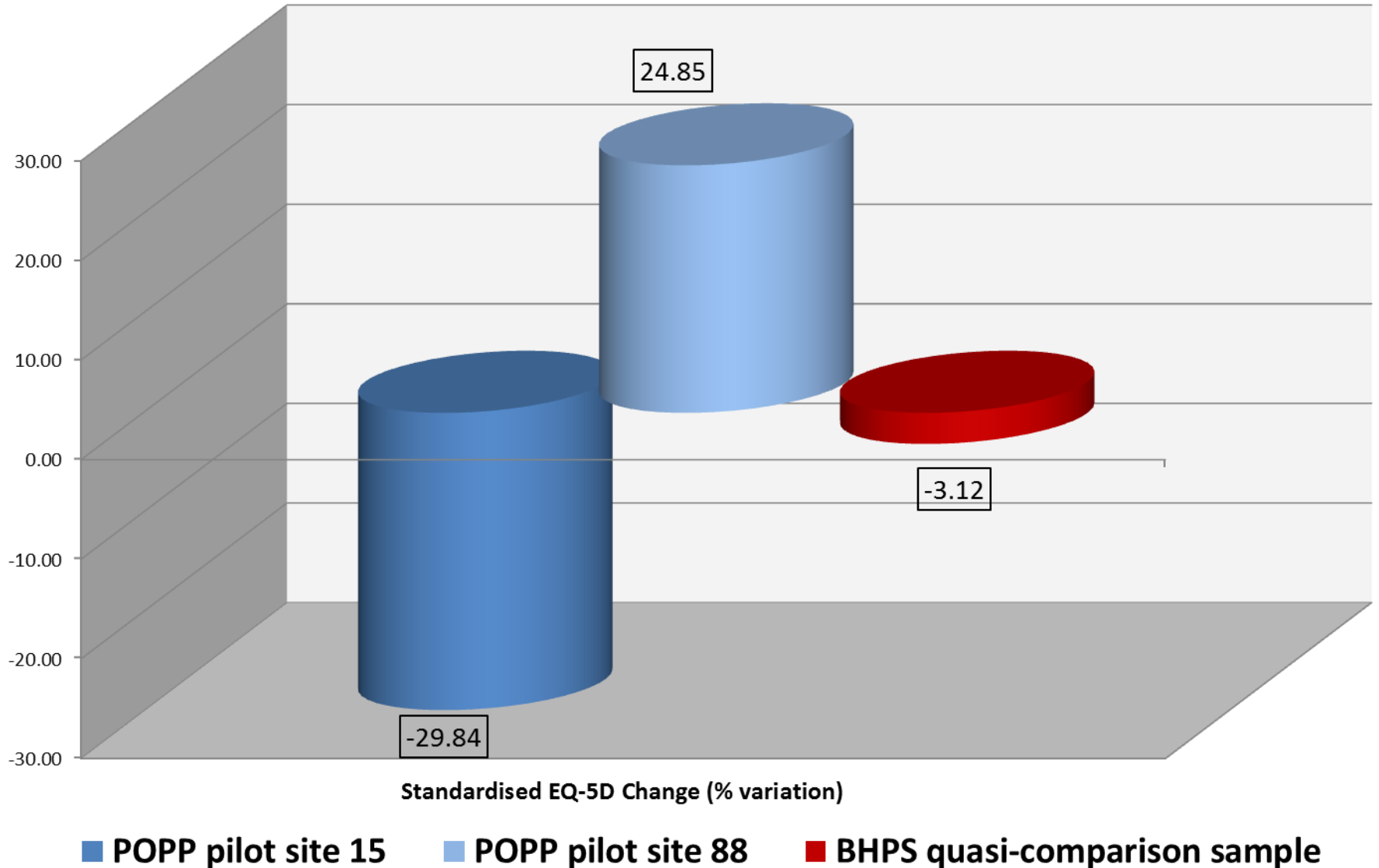
Standardised percentage changes in EQ-5D (T₀: T₁) across service 'groupings'



Impact of project structure and processes – Home from hospital

- **Voluntary organisations facilitated safe and timely discharge** (two projects within the category of ‘Long Term Conditions – Hospital Discharge’).
- **Both concentrated on a practical response:** preparing the house prior to discharge, providing short-term assistance
- **Differences:** within pilot site 88 the voluntary organisation was integrated within a multi-disciplinary team - pilot site 15 operated ‘independently’.

Standardised percentage changes in EQ-5D (T₀: T₁): Home from hospital



Effect of POPP on emergency bed-day use

Effect of...	Management overhead	Effect size	Effect on...	Lower CI	Upper CI
Average POPP project compared to no POPP project (in same POPP PCTs)	30%	-163	Bed-days per month	-211	-115
	20%	-176		-228	-124
	10%	-192		-249	-136
	0%	-212		-274	-149
+£1 spend on POPP project per month in POPP PCT (at POPP time)	30%	-£1.03	Cost per month per PCT of bed-days	-£1.33	-£0.73
	20%	-£1.12		-£1.45	-£0.79
	10%	-£1.22		-£1.58	-£0.86
	0%	-£1.34		-£1.73	-£0.94

Self-reported service use change (mean)

Service	Time 0 (pre-intervention) mean usage	Time 1 (post-intervention) mean usage	Percentage change
POPP projects focused toward secondary prevention (n= 22 projects, 668 users)			
Hospital bed-day**	2.74	1.22	-55%
Accident and emergency**	0.38	0.19	-50%
Physiotherapy**	0.89	0.57	-36%
GP appointments**	1.76	1.50	-15%
POPP projects focused toward tertiary prevention (n=4 projects, 48 users)			
Hospital bed-day*	6.77	0.90	-87%

** p=<0.01 (Marginal Homogeneity Test)

* p=<0.04 (Marginal Homogeneity Test)

Prevention or diversion?

- **Prevented deterioration** in reported health-related quality of life for *some* users (e.g., younger old) in *some* projects (e.g., integrated co-located multi-disciplinary teams, single-line management, 'flag-wavers', appropriate skill levels).
- **Changed *some* service use** – reduction in secondary and primary care.
- **But, short or long-term change?** Did the POPP programme prevent on-going deterioration?
- **Or, service diversion and increased family support?** Some evidence increase in social care and that family support increases following the POPP intervention – mean (hrs, mns, pw) 3.47 at T_0 , to 13.49 at T_1 ($p < 0.03$).