

CURRENT & FUTURE COST OF FRAILTY TO HEALTH AND CARE

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Workshop overview

- Introduction and overview – economic analysis of frailty data through use of Kent Integrated Dataset (KID)
- Preliminary (incomplete) data
 - Current picture of costs
 - Projections of future costs
- Workshop – what information related to costs of frailty would you find useful?
- Feedback & discussion
- Review and next steps

Frailty costs – background & overview

- 2015 – NICE guidelines
 - Recommended range of interventions aimed at reducing risk and/or delaying onset of disability, dementia and frailty
 - Noted lack of evidence of cost effectiveness – recommended further research

NHS England is undertaking economic evaluation to look at frailty categories and associated healthcare costs.

- Per-patient costs
- Population-level costs
- Intent to capture costs across the system – need integrated dataset
- Cost projections & modelling of potential variations

Kent Integrated Dataset (KID)

- Previous research - focus typically on acute sector activity and costs + (possibly) some primary care data
 - because these were the data generally available to researchers.
- Narrow focus has potential to distort decision-making
 - Conditions where bulk of care provided in acute care setting has potential to appear more important than where care provided in other settings.
- Analysis of productivity impacts related to changes in care may also put undue focus on acute sector costs.

Progress from December 2016

- The Electronic Frailty Index (eFI) has been successfully applied to the Kent population, with guidance from the Leeds University team that developed the index.
- Now covers primary care, much acute sector activity, primary care activity, some community care and mental health activity, and social care.
- Primary care prescribing data – able to link patient level prescribing data to the level of type of medication at patient level – from this, volume and dosage will be estimated.

Plan for analysis

- Activity, cost and demographic data for all those aged ≥ 65 will be extracted from the KID, for a 12-month period starting on 1st April 2016.
- All patients included in the data extracts will be classified as either fit or frail using the electronic frailty index (eFI) developed and validated by Leeds University¹.
- Frail category – further division into the degree of frailty (mild, moderate or severe), as per eFI ('batch coding')

1. Clegg A, Bates C, Young J, Ryan R, Nichols L, Ann Teale E, et al. Development and validation of an electronic frailty index using routine primary care electronic health record data. Age and ageing. 2016;45(3):353-60.

Preliminary Data Analysis

- 2016-17 Data
- Patients age 65+
- Cost data used across entire year
- Frailty category as of March 2017
- eFI used to determine frailty categories ('batch coding')
- Indicative data
- Support from Kent County Council - data extraction

Limitations

- Look back analysis – next analysis will look forward
- No cost data from 1 of 4 acute trusts
- No prescribing costs
- Patients who died in year - costs included for those who died starting in October

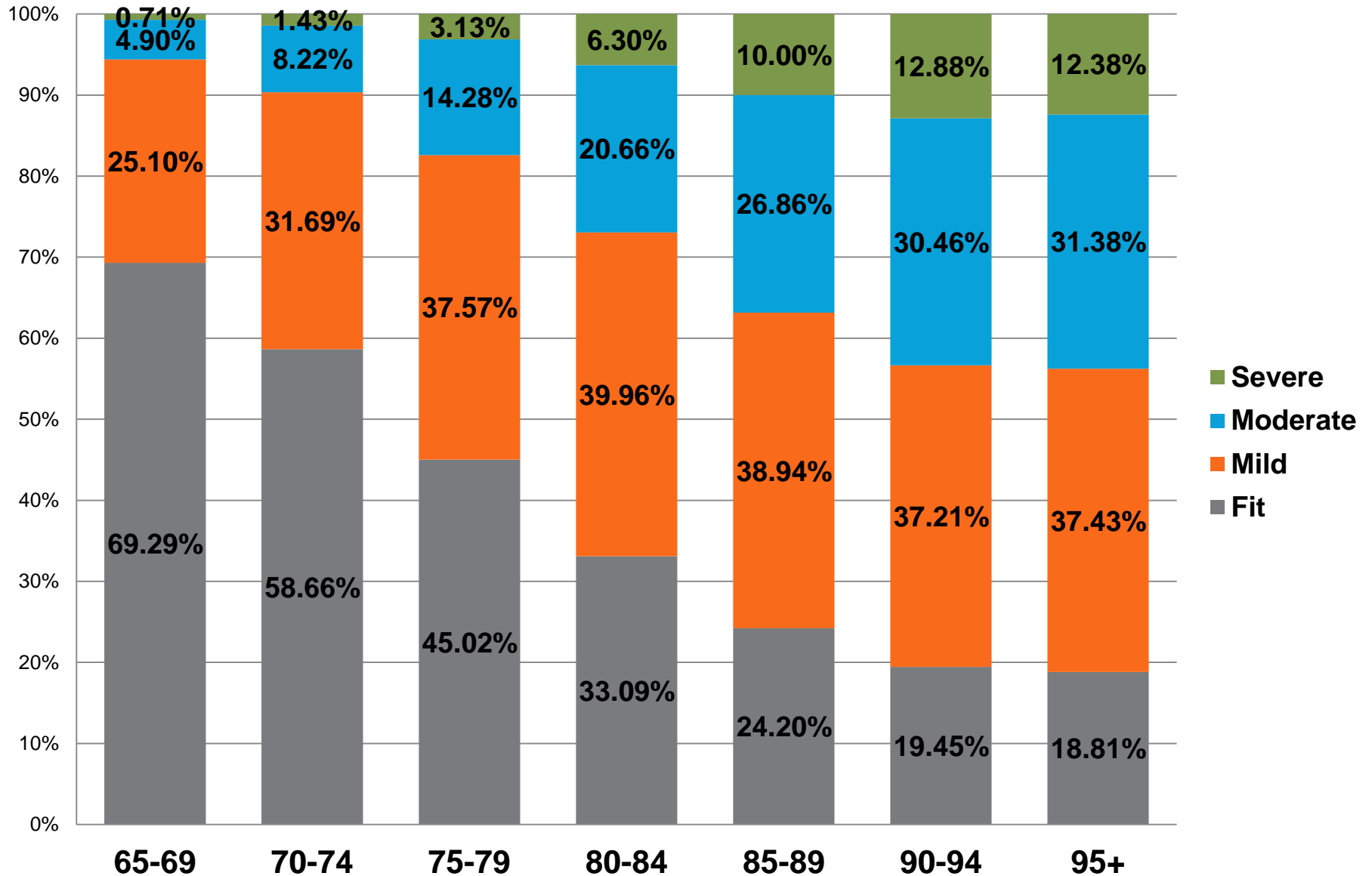
Findings

- 3.6% of population 65+ fall within the Severe Frail category
- Approximately 50% of 65+ are classified by eFI as in the Fit category

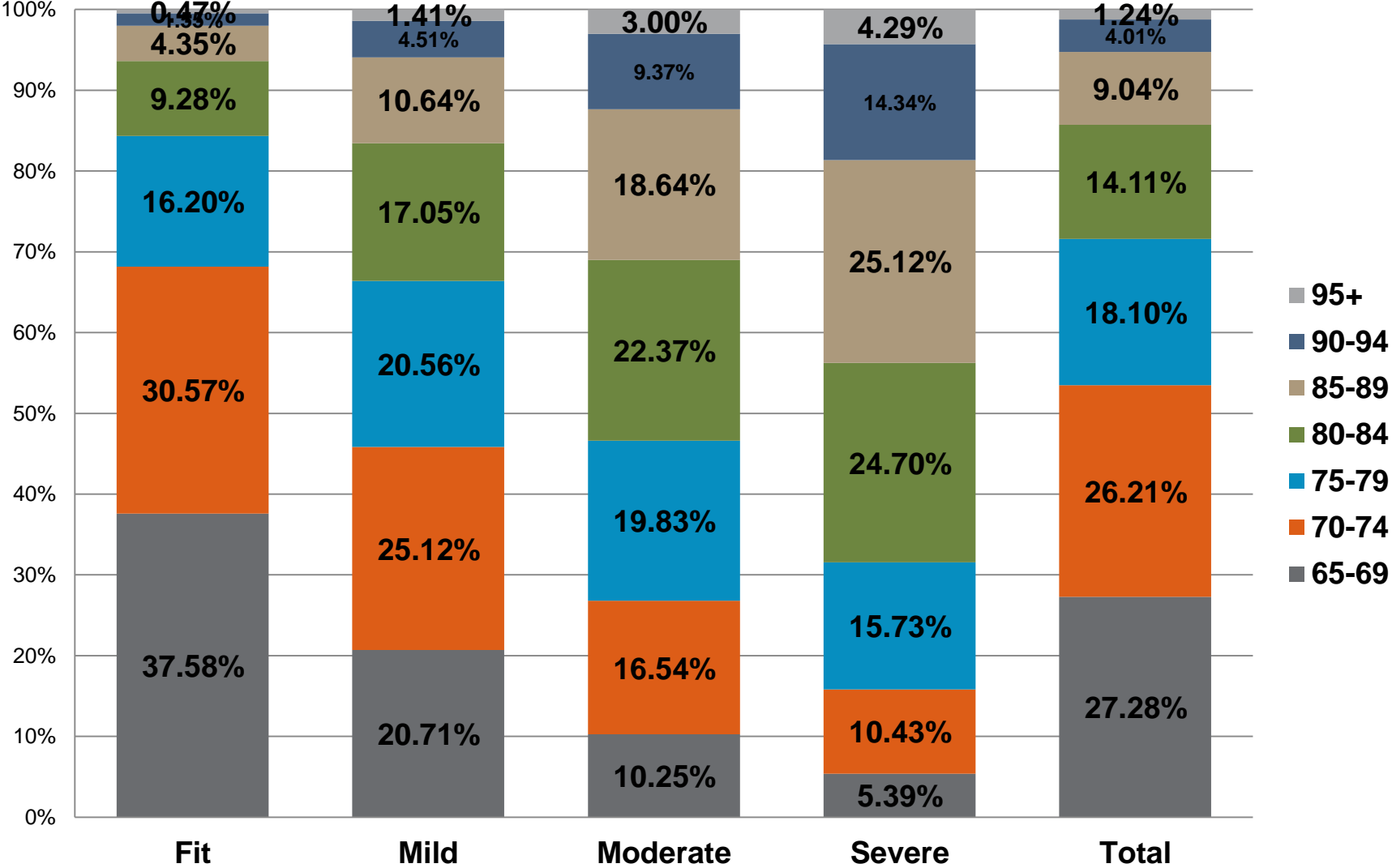
Distribution of Frailty within 65+ population by age bands

	FIT		MILD		MODERATE		SEVERE		TOTAL	
	No	%	No	%	No	%	No	%	No	%
65-69	32866	69.29%	11908	25.10%	2323	4.90%	337	0.71%	47434	100%
70-74	26731	58.66%	14443	31.69%	3746	8.22%	652	1.43%	45572	100%
75-79	14164	45.02%	11822	37.57%	4493	14.28%	984	3.13%	31463	100%
80-84	8118	33.09%	9804	39.96%	5068	20.66%	1545	6.30%	24535	100%
85-89	3804	24.20%	6120	38.94%	4222	26.86%	1571	10.00%	15717	100%
90-94	1355	19.45%	2592	37.21%	2122	30.46%	897	12.88%	6966	100%
95+	407	18.81%	810	37.43%	679	31.38%	268	12.38%	2164	100%
Total	87445	50.30%	57499	33.07%	22653	13.03%	6254	3.60%	173851	100%

Percent Frailty Category Within Each Age Band Patients 65 years and older - KID



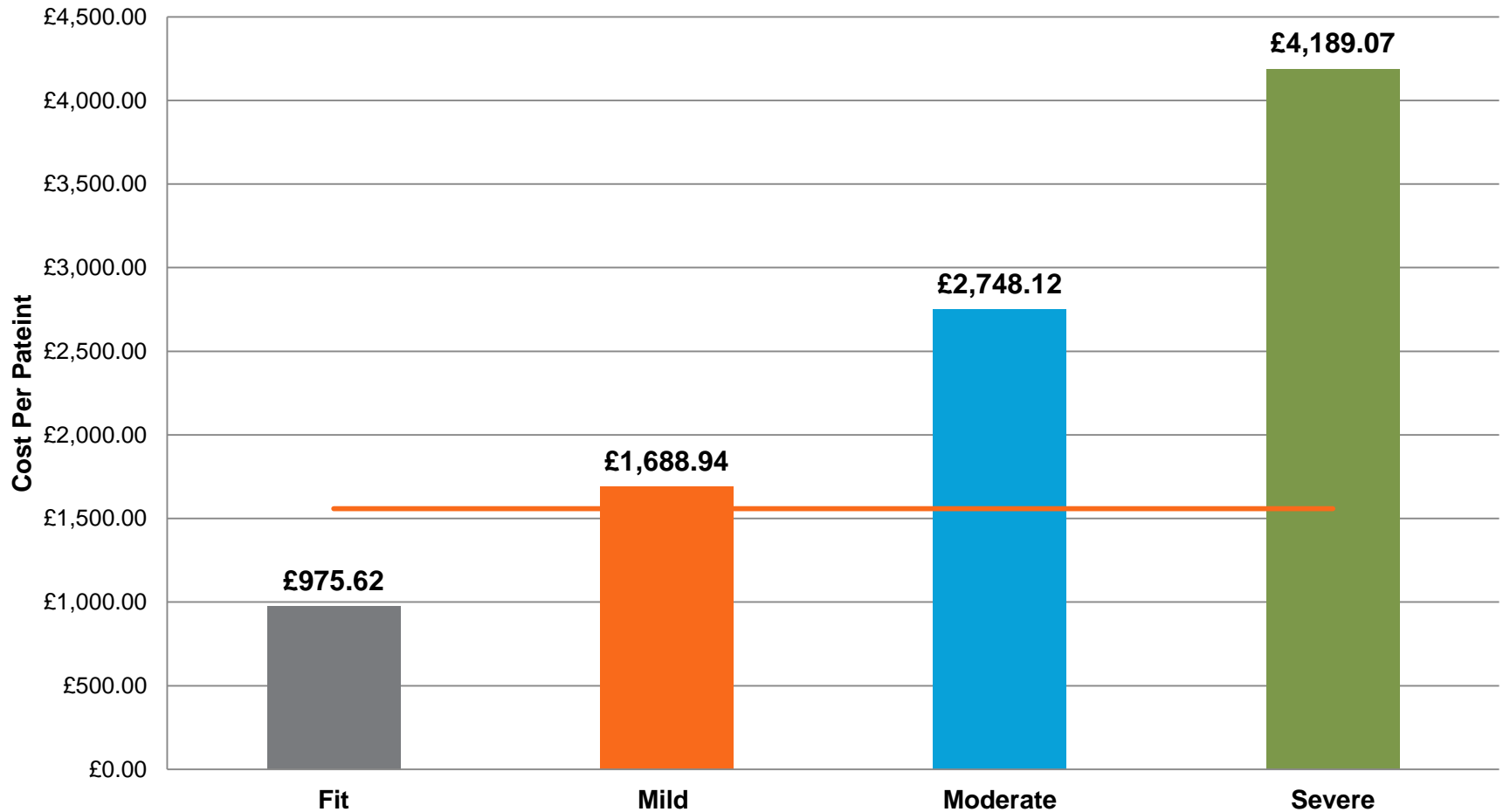
Percent of Age Bands Within Each Frailty Category Patients 65 years and older - KID



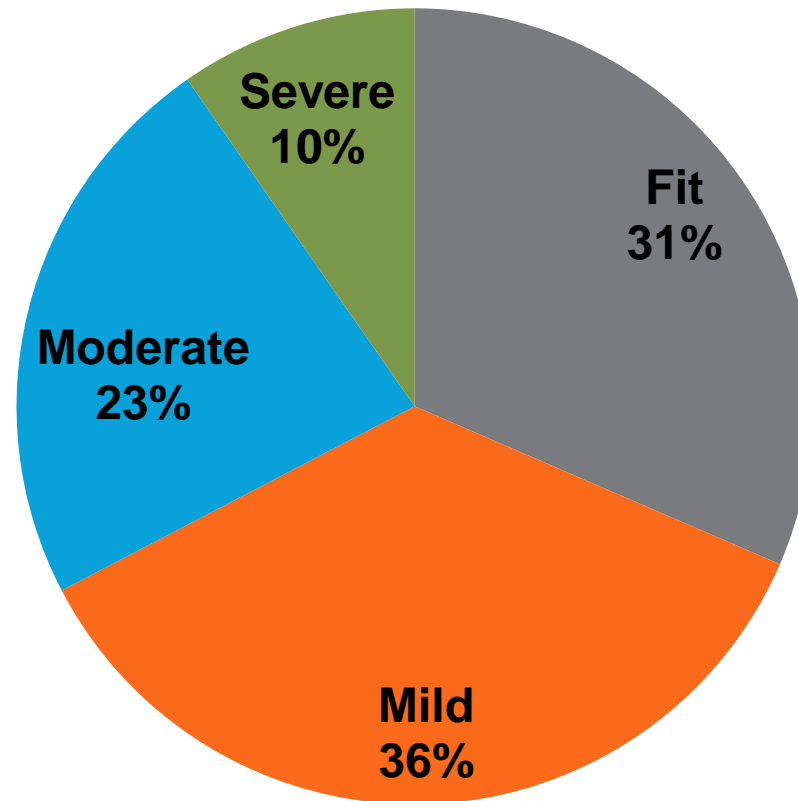
Frailty Costs – the money bit

**NHS Spend as Captured in KID - Average Cost Per Patient
by Frailty Category, Patients 65 years and older**

Source: KID, 2016-17 data

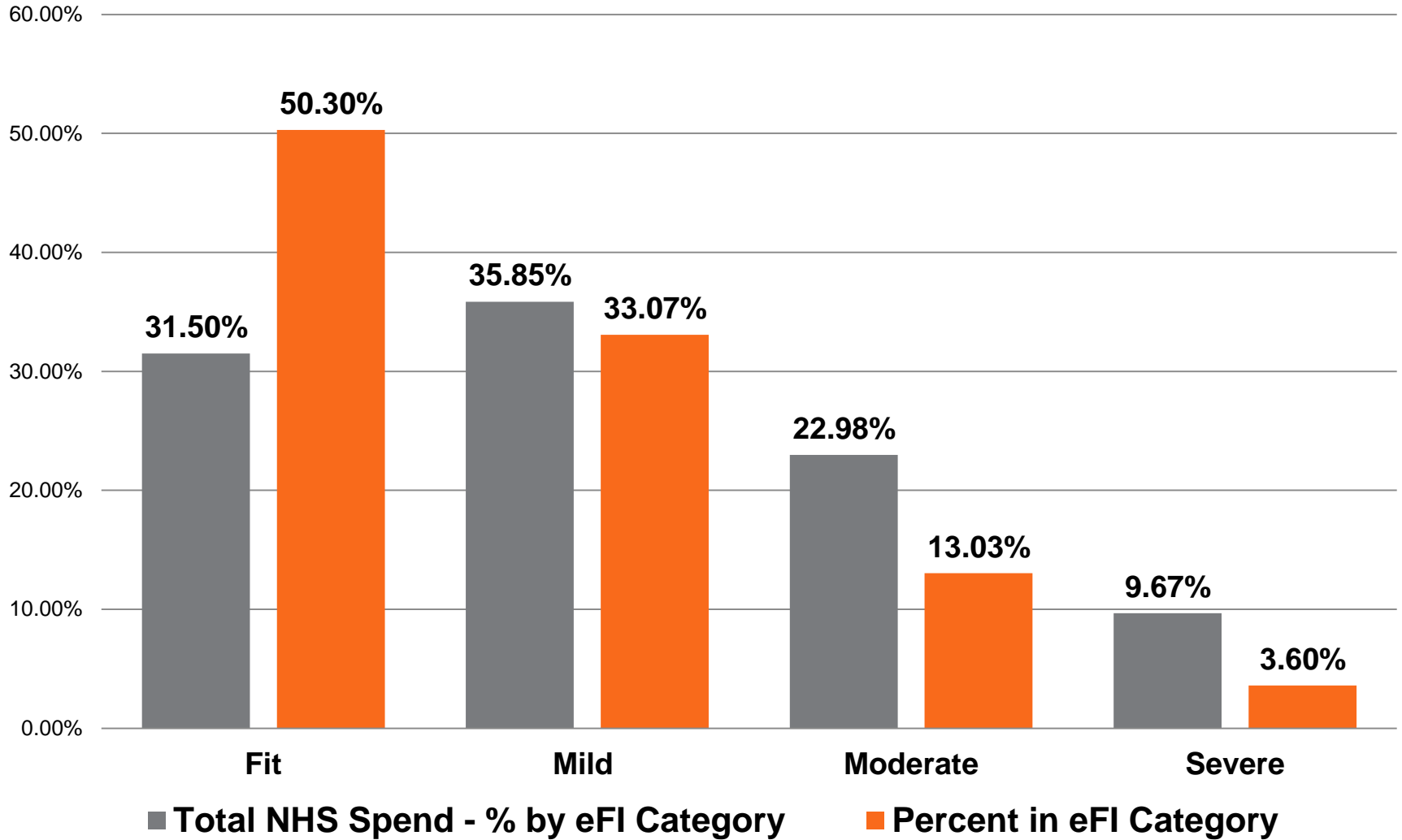


**Total NHS Spend as captured in KID
Percent of total by eFI category**
Source: KID, 2016-17 data, patients 65 years and older



Comparison of % Population and % Total NHS Spend as captured in KID - by eFI Category

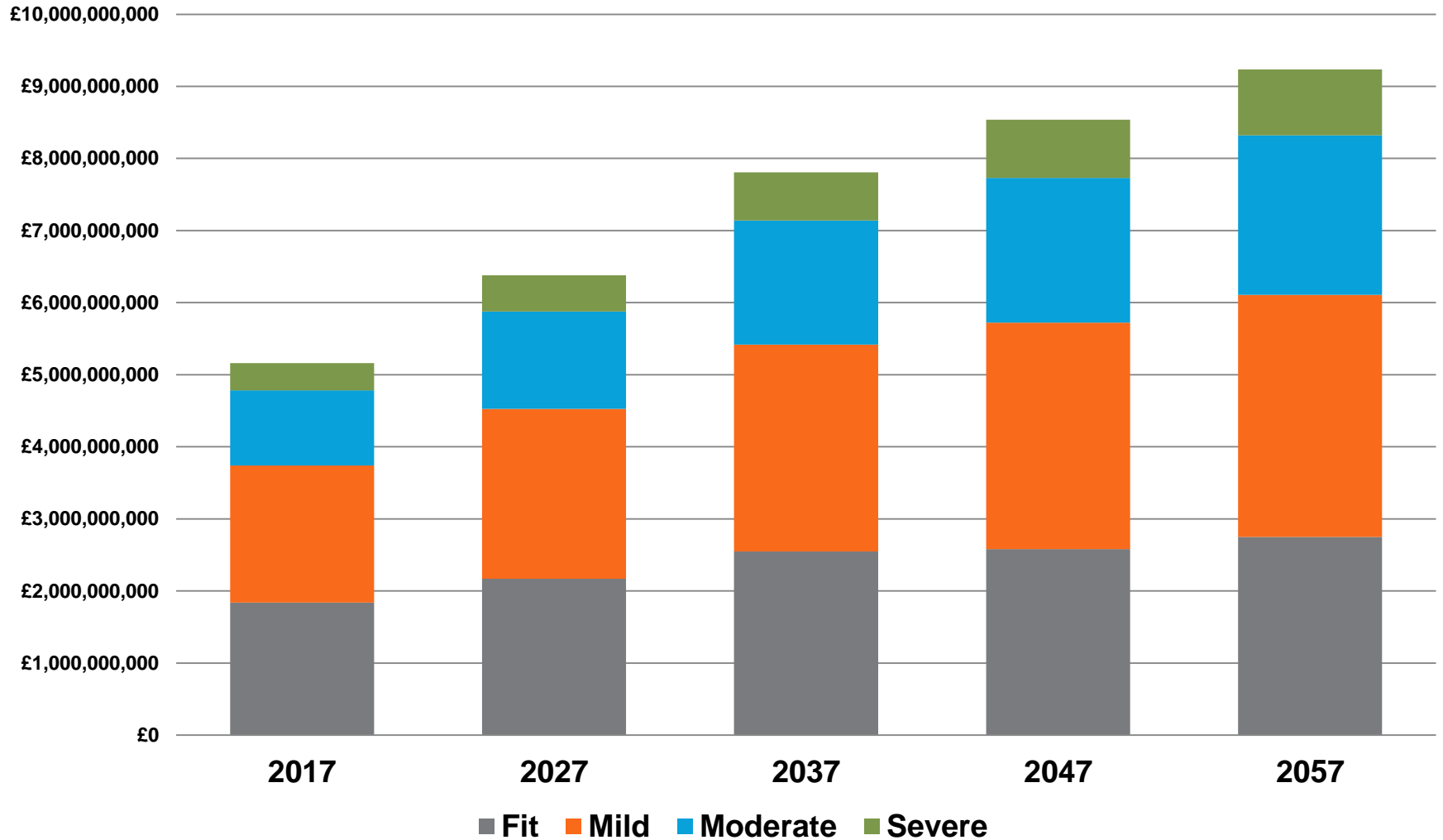
Registered patients 65 years and older – KID, 2016-17 data



Estimated Total National GP Costs per Frailty Category - 2017 through 2057

Source for population estimates: ONS 2014-based National Population Projections, published 29 Oct 2016

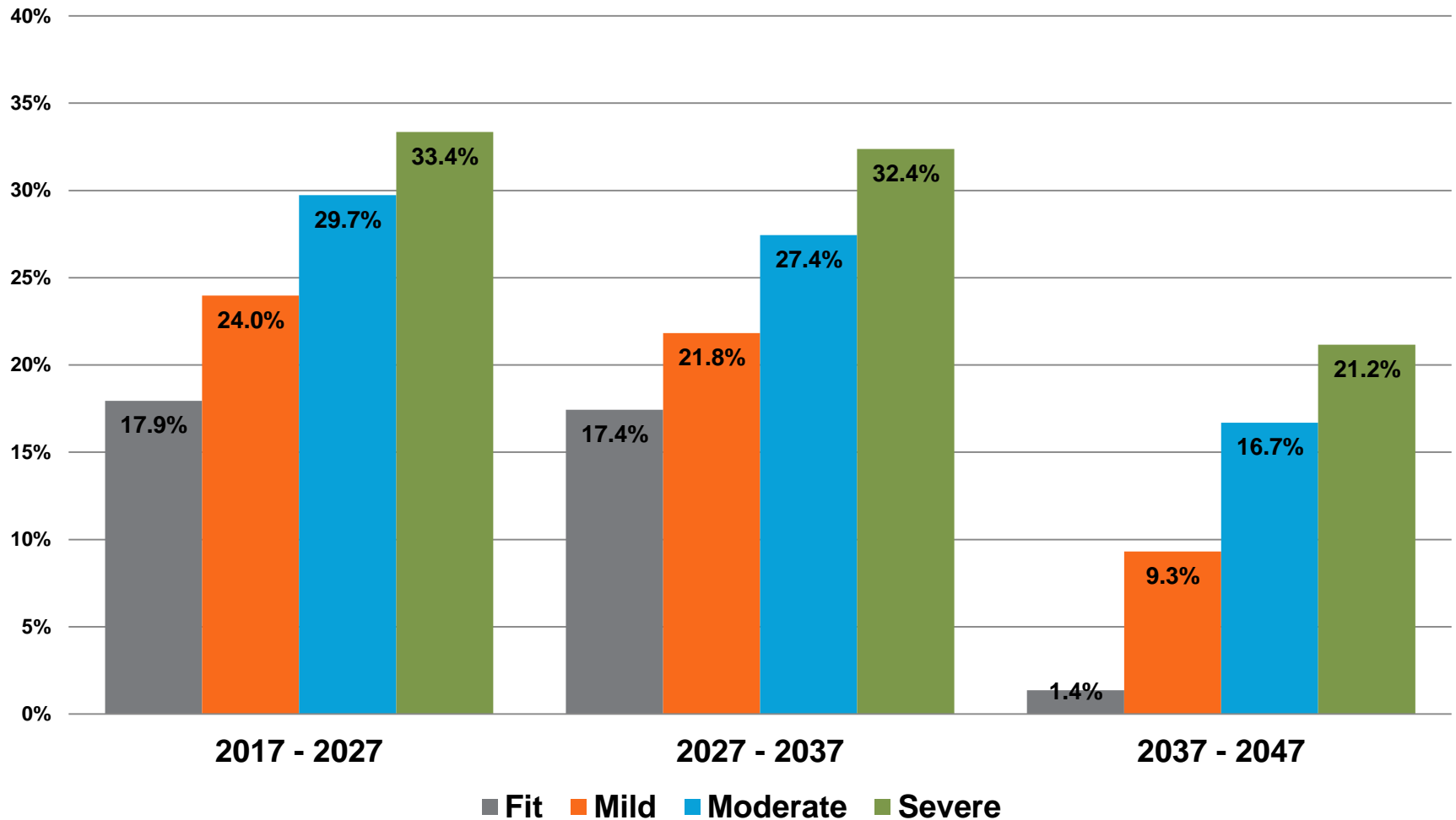
Source for per patient figures used in estimate: Kent Integrated Dataset (KID)



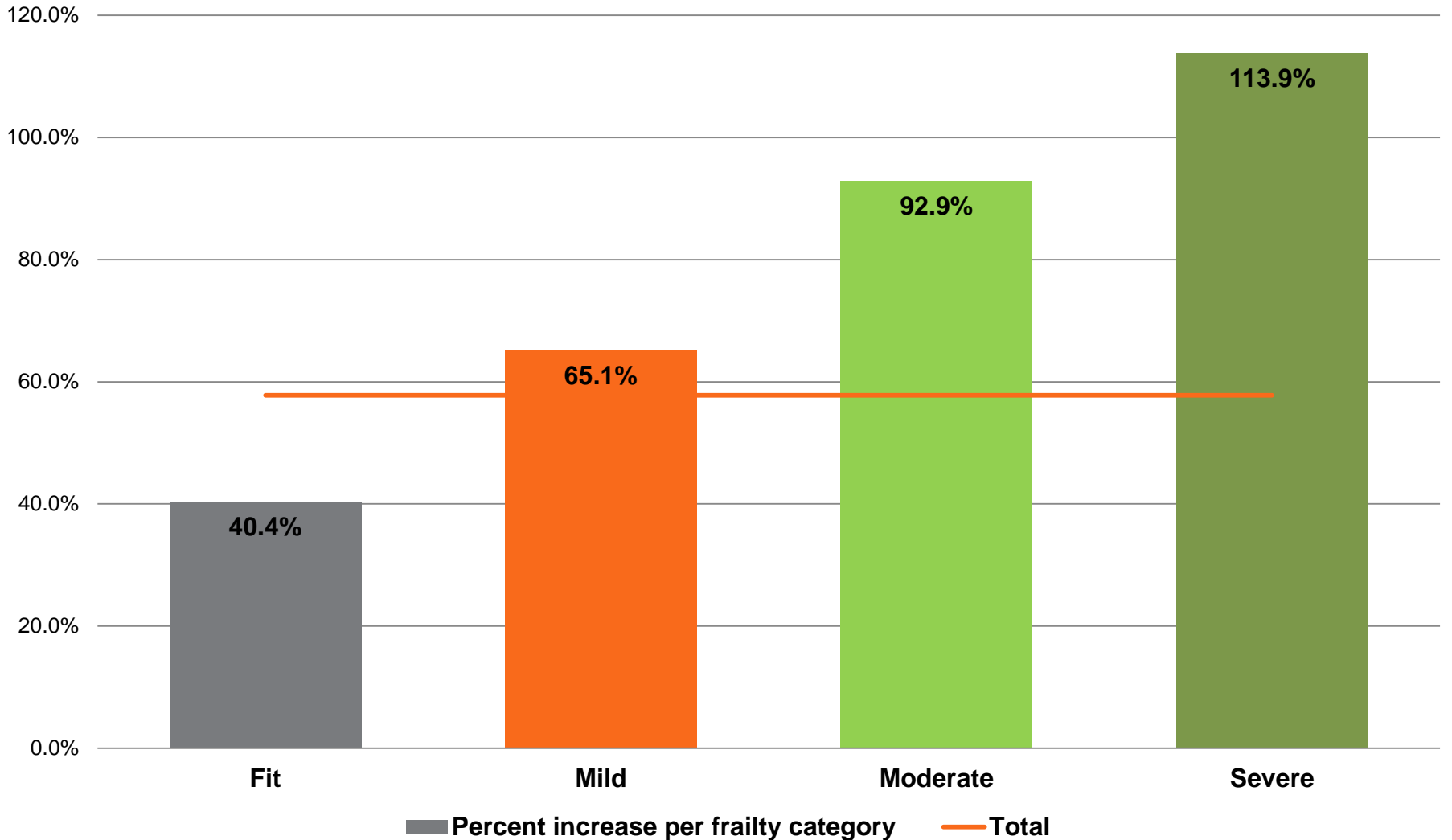
Estimated Percent Increase - 10 Year Increments National GP Costs per Frailty Category - 2027 through 2047

Source for population estimates: ONS 2014-based National Population Projections, published 29 Oct 2016

Source for cost figures used in estimate: Kent



Estimated Percent Increases
National GP Costs per Frailty Category - 2017 to 2047
Source for population estimates: ONS 2014-based National Population Projections, published 29 Oct 2016
Source for costs used in estimate: Kent Integrated Dataset



Workshop Questions

- What information about the costs associated with frailty would you find most useful?
- What questions and/or challenges do you have related to planning for healthcare associated with frailty?

Thank you

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