The NAPF Longevity Model

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6 February 2015

Unique insights on trends in longevity

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Securing the future of pensions

Agenda

Longevity:

- To the future….
  - Providing information to pension schemes to help them reflect the **diversity** in longevity trends amongst pensioners, using the most **relevant** experience available, that of DB pensioners

- …and beyond
  - Using this information to help pension schemes recognise **uncertainty** and move away from a single common view on how longevity might change in the future

Longevity:
to the future….

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Longevity

Welfare spending

Social care

Healthcare

Population profile

Taxation

Silver surfers

Retirement communities

It's my 'DC' generation

Choices in retirement income

Adequate retirement saving

Grey workforce

Family support

Housing demand

Why research longevity trends?

- Accounting
- Funding updates
- Cashflows (eg for LDI strategies)
- Funding
- Assessing risk-transfer options
- Setting employer-specific contributions
- Trigger points for de-risking
- Revising benefit structures
- Monitoring and managing longevity risk
- Outsourcing bids and cessations
- Assessing member option exercises
- Corporate transactions
- Assessing affordability

Our approach

Population vs pensioners

- **DB pensioners experience different longevity trends from the E&W population**

Grouping pensioners by longevity trend

- Individual pension scheme experience is unique, in part driven by membership profile
- Many factors can be used to place pensioners into longevity trend groups

Determining the best trend groupings

- **Key factors for forming longevity trend groups are pension amount and deprivation**

Using the results in practice

Every pension scheme can now:

- Set longevity trend assumptions based on the most relevant experience
- Reflect the profile of their membership in longevity trend assumptions

Reflecting future uncertainty

- Future longevity trends are uncertain
- We can build on the analysis we have carried out to **illustrate a series of alternative futures**
- Uncertainty is not a represented by a single assumption for the future

Are pensioners scheme members different?

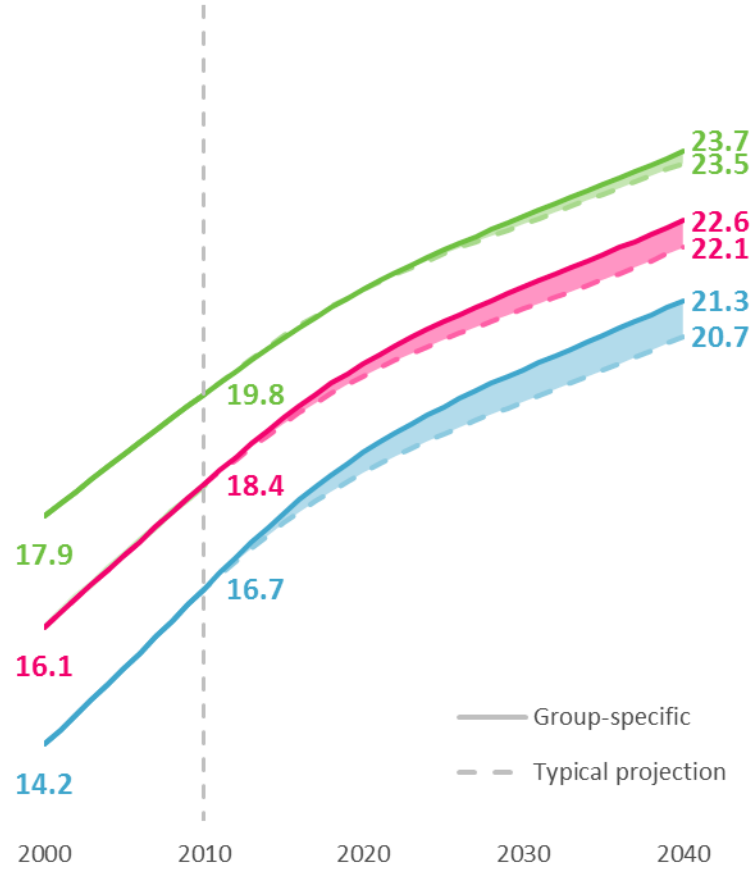
Yes!

Longevity trend groups

Men

Women

Projecting the future based on relevant experience



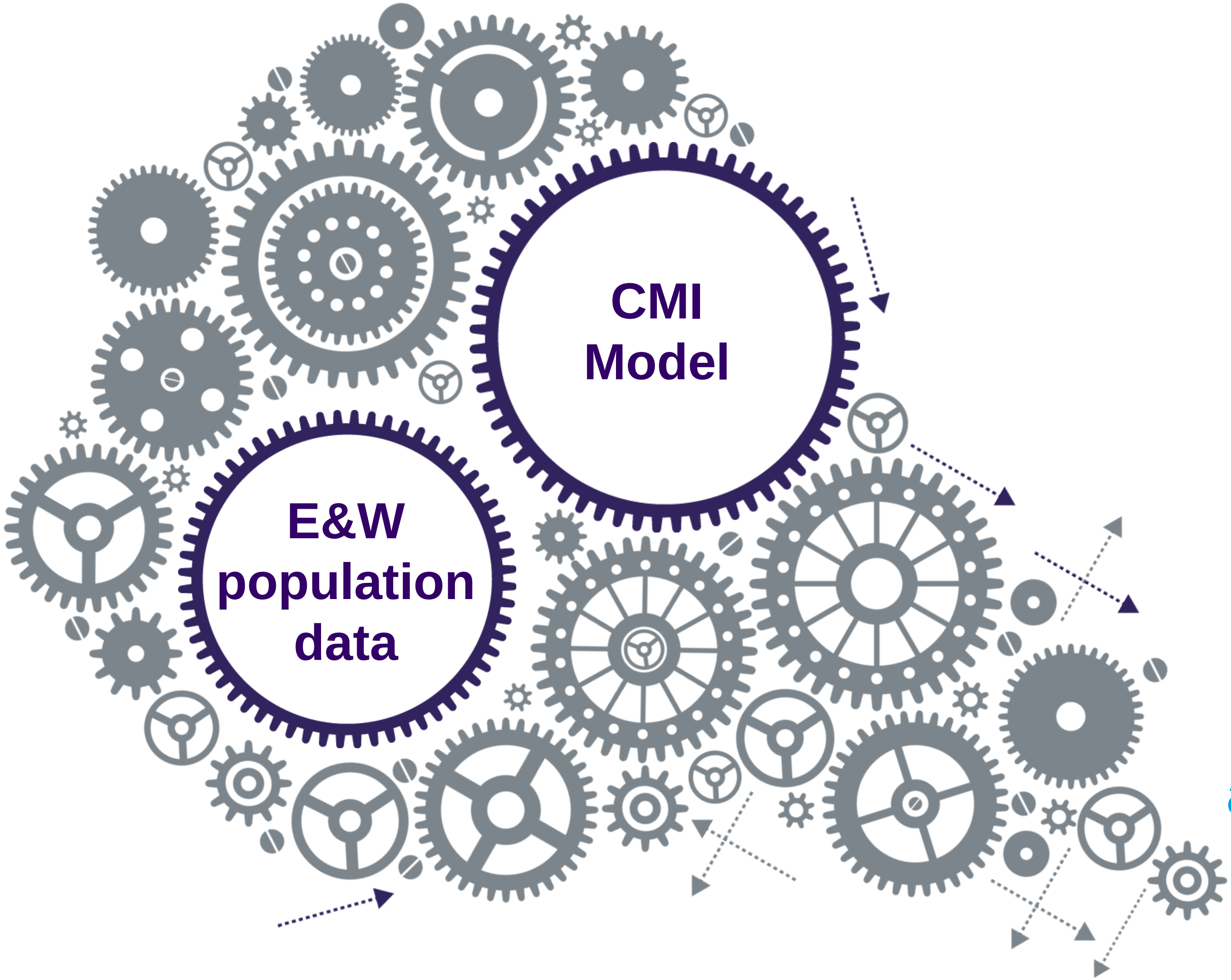
* from age 65

** vs CMI model with CMI starting improvement and 1.5% long-term rate

Range of scenarios

Low trend scenarios		Central(ish) scenarios		High trend scenarios	
Back to the fifties	Challenging Times	Improvement decline	Health Cascade	Cancer revolution	Extended Youth

Reflecting on current practice



Longevity
trend
assumption

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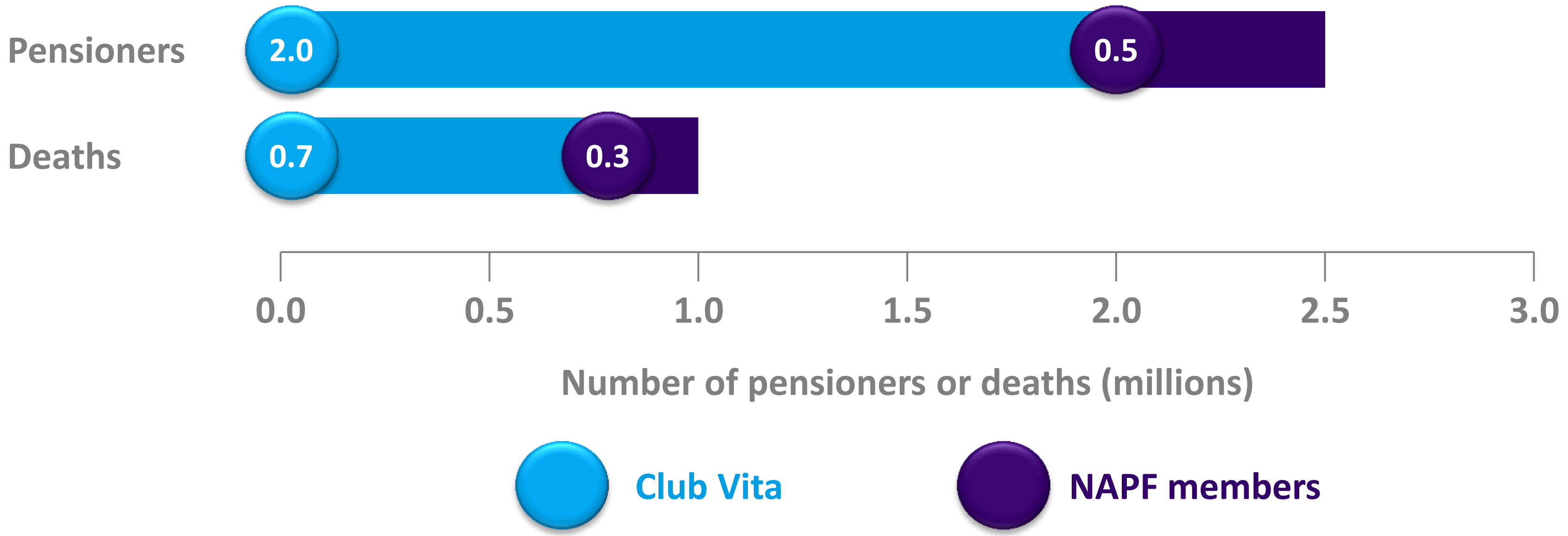
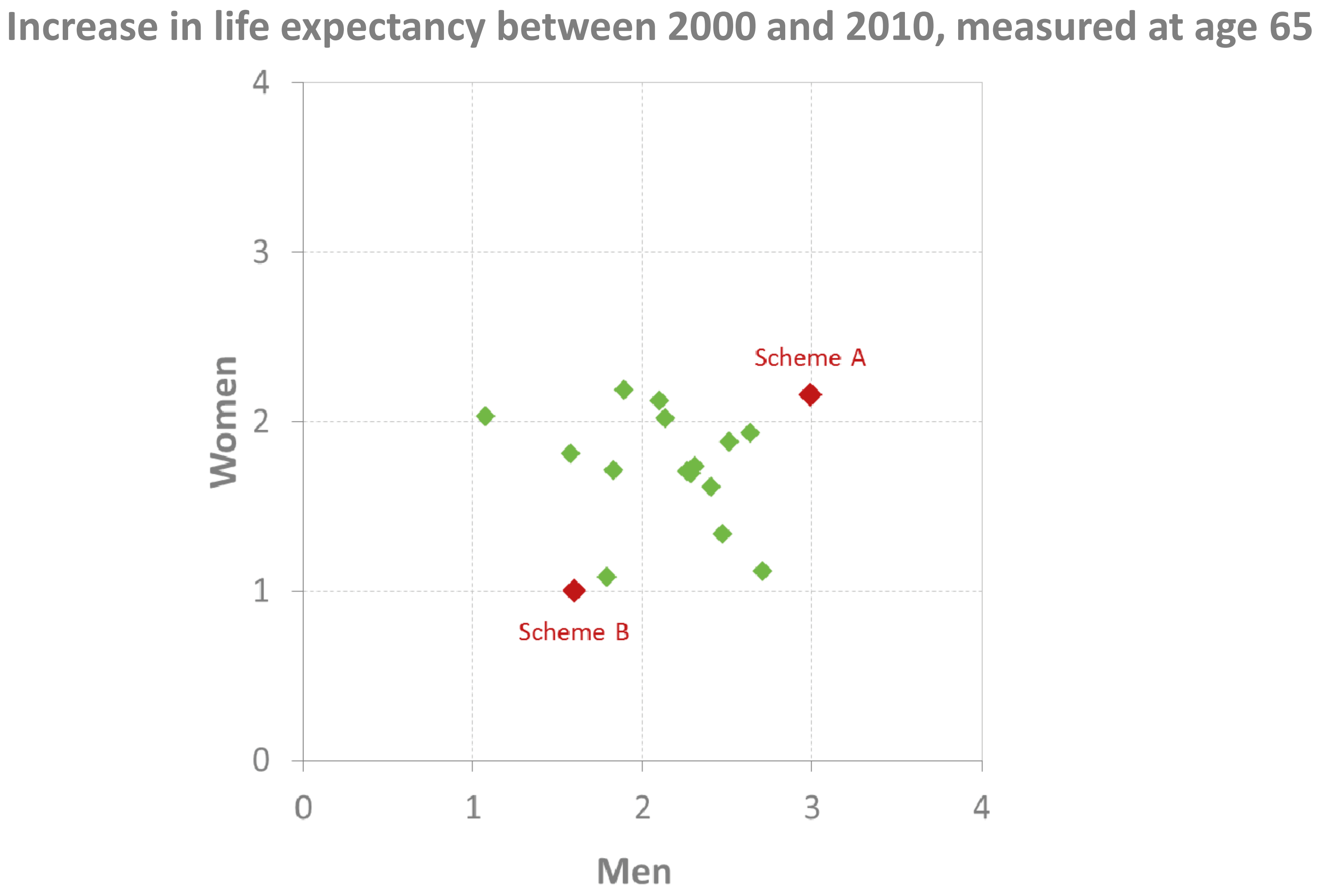
Data

We assembled a large, quality-checked dataset to ensure our results would be credible and reliable



We can recognise the differences between E&W population and DB schemes in longevity assumptions

Individual scheme experience



Grouping pensioners by longevity trend

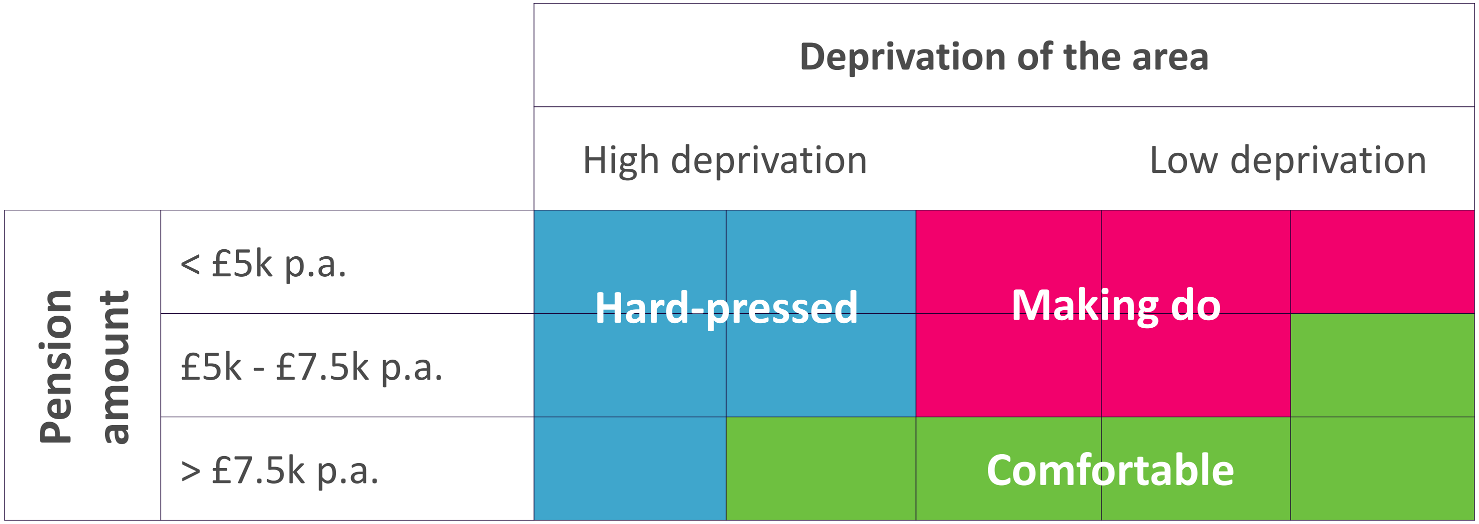
- Public vs Private
- Location
- Pension amount
- Lifestyle measures
- Industry
- Deprivation
- Occupation
- Salary
- Gender

Deprivation is a measure of resource availability of individuals in a certain location

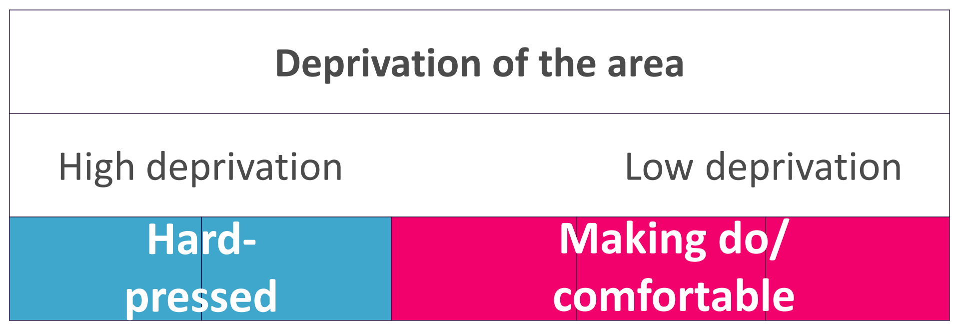
Pension amount is a commonly available, though not perfect, measure of wealth

Longevity trend groups

Men

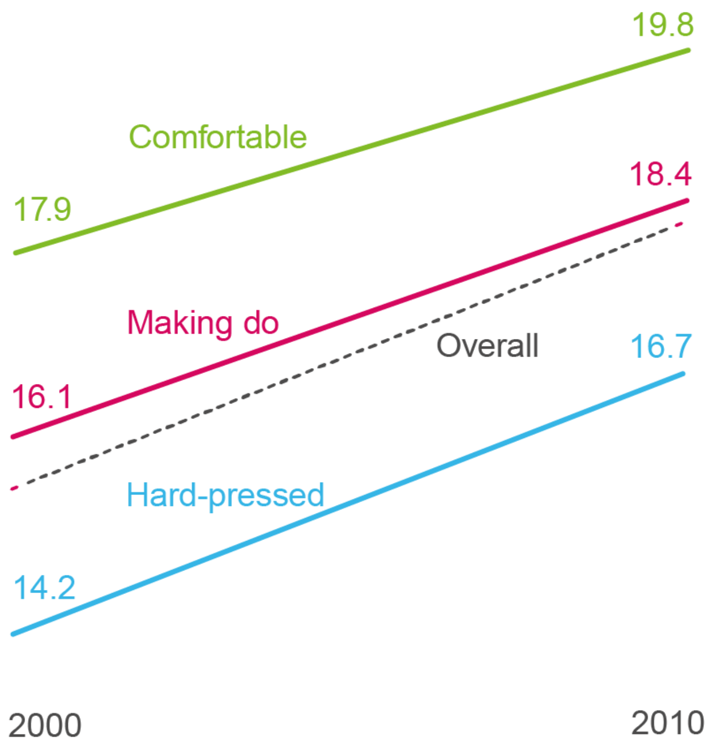


Women

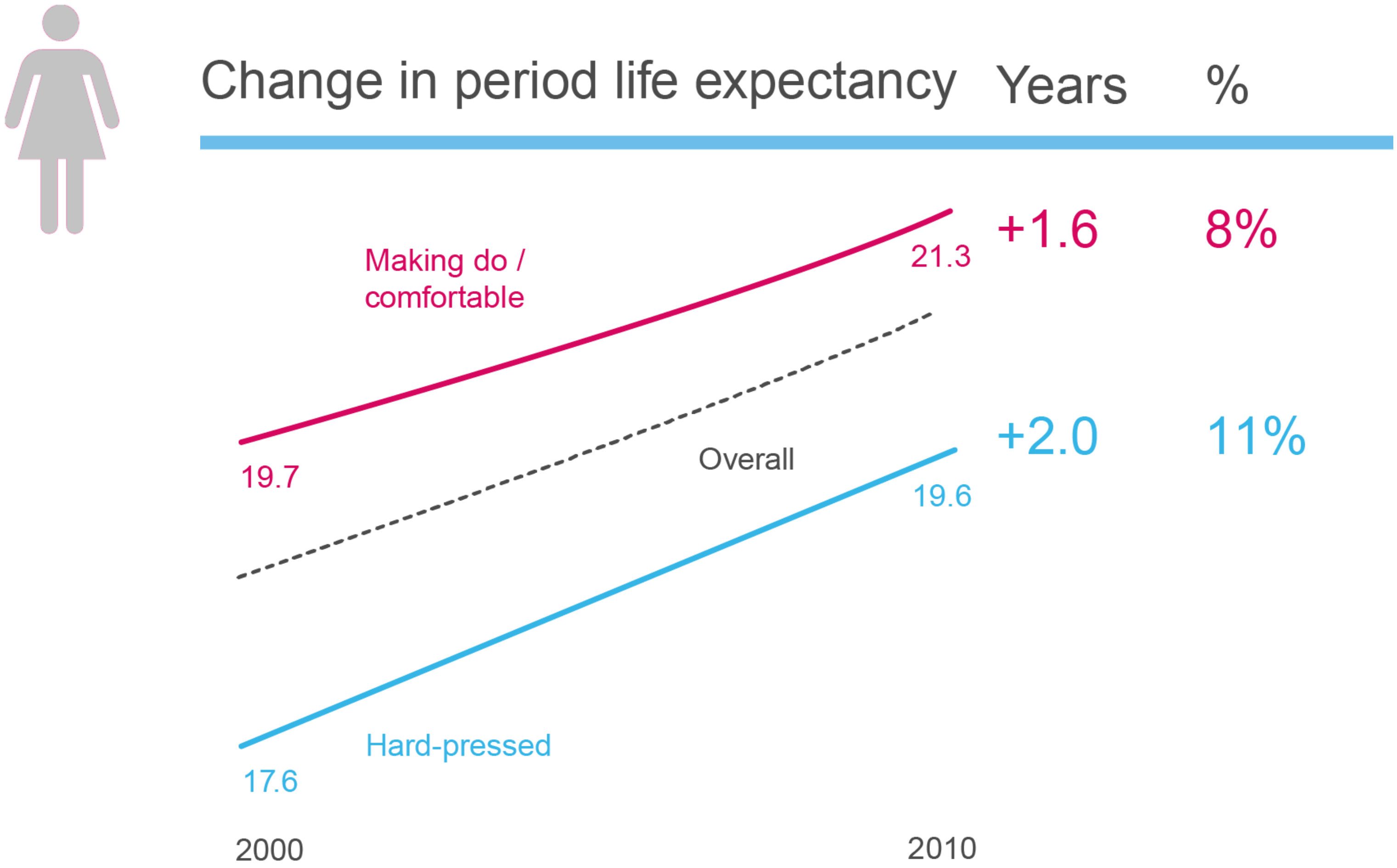


Longevity trend groups - experience

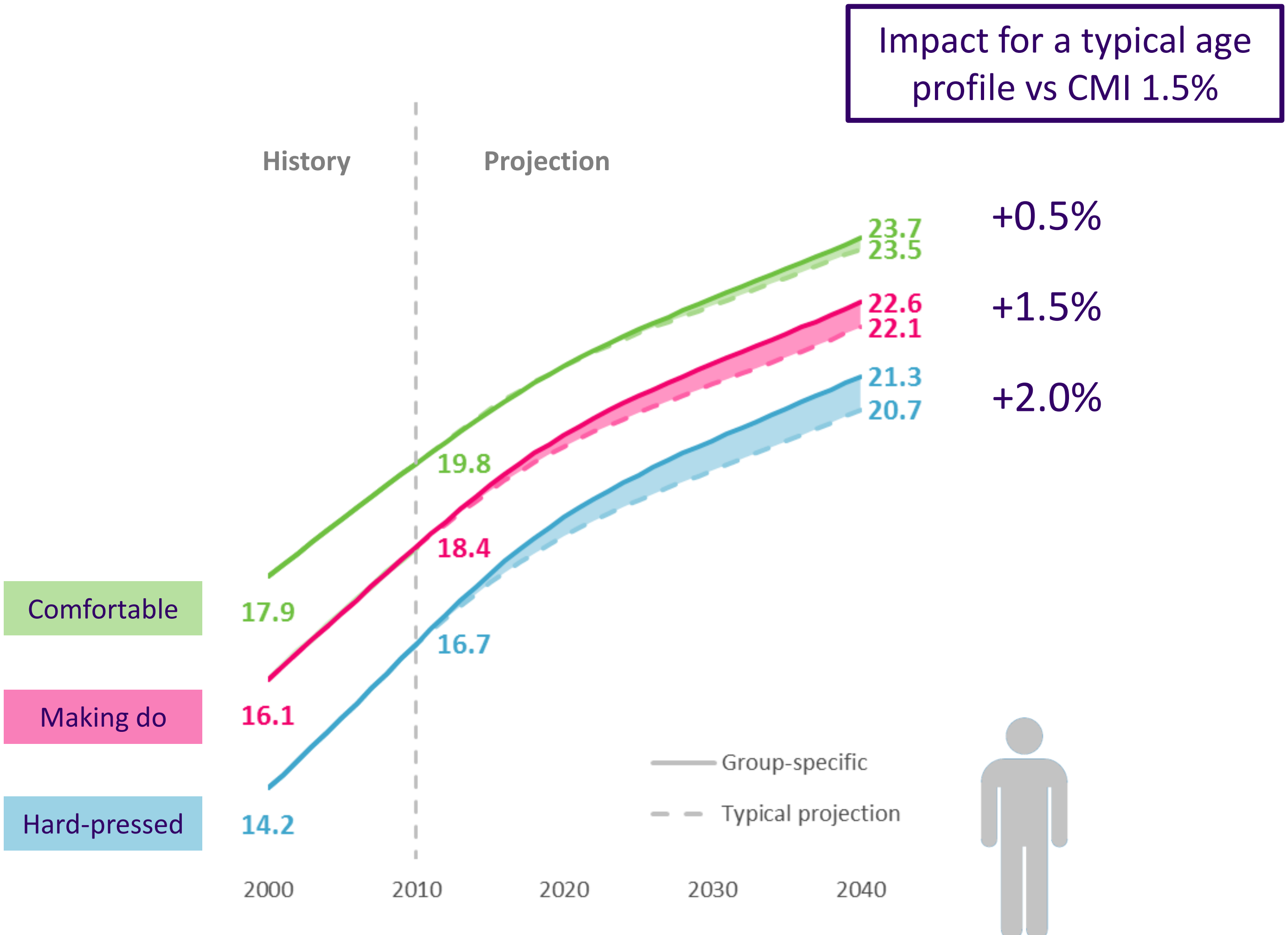
Change in period life expectancy	Years	%
Comfortable	+1.9	+11%
Making do	+2.3	+14%
Hard-pressed	+2.5	+18%



Longevity trend groups - experience

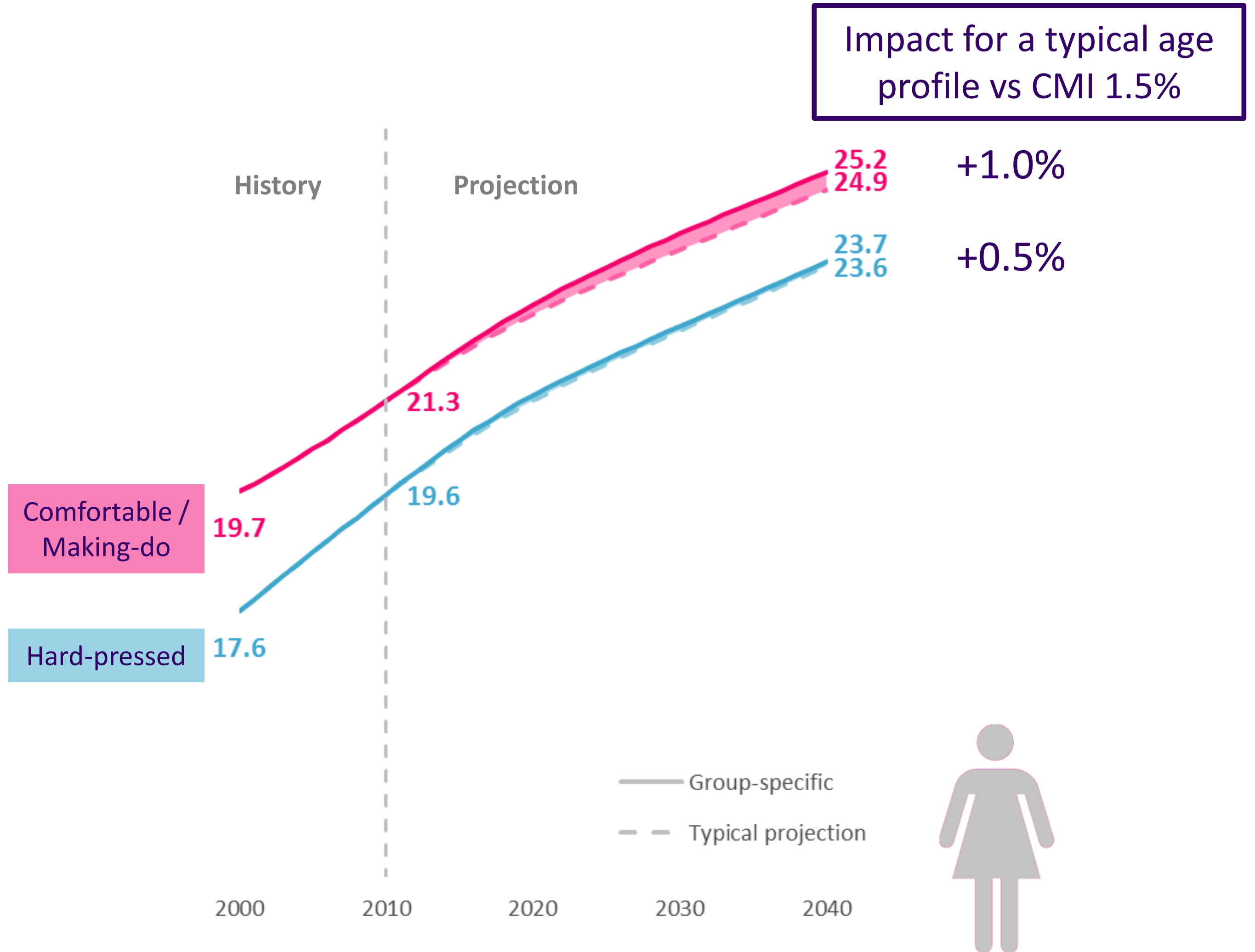


Projecting the future based on relevant experience



Period life expectancy from age 65
Typical projection is CMI model with CMI starting improvement and 1.5% long-term rate

Projecting the future based on relevant experience



Period life expectancy from age 65
Typical projection is CMI model with CMI starting improvement and 1.5% long-term rate

Longevity: to the future…

…and beyond.

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Range of scenarios

Low trend scenarios		Central(ish) scenarios		High trend scenarios	
Back to the fifties	Challenging Times	Improvement decline	Health Cascade	Cancer revolution	Extended Youth

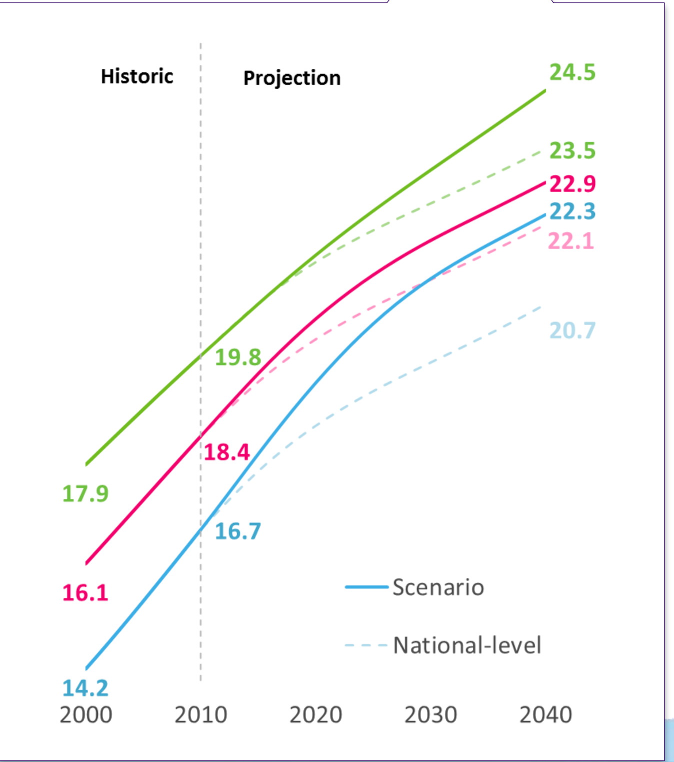
What we do not suggest is that some of these scenarios are better than others, represent or even place outer boundaries on what we might experience in the future. The purpose of sharing these scenarios is purely to support more informed discussions between the key stakeholders in managing pension schemes – trustees, sponsoring companies and their advisors and service providers.

Health cascade

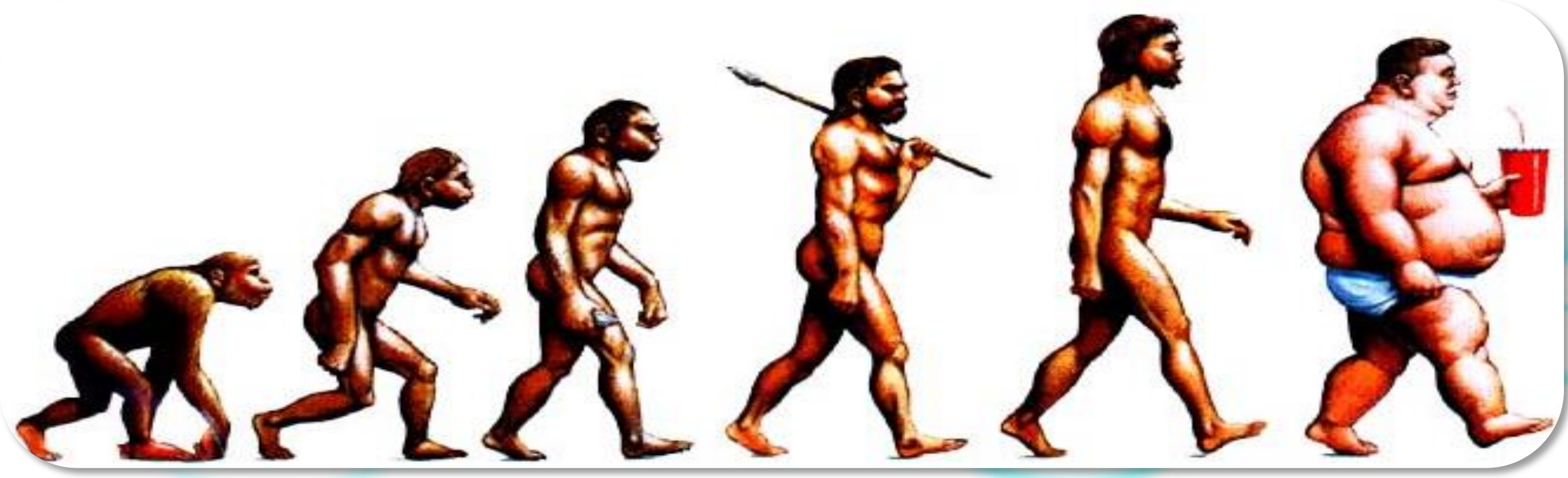
Health cascade

Low trend scenarios | Central(ish) scenarios | High trend scenarios

- Back to the fifties
- Challenging Times
- Improvement decline
- Health Cascade
- Cancer revolution
- Extended Youth



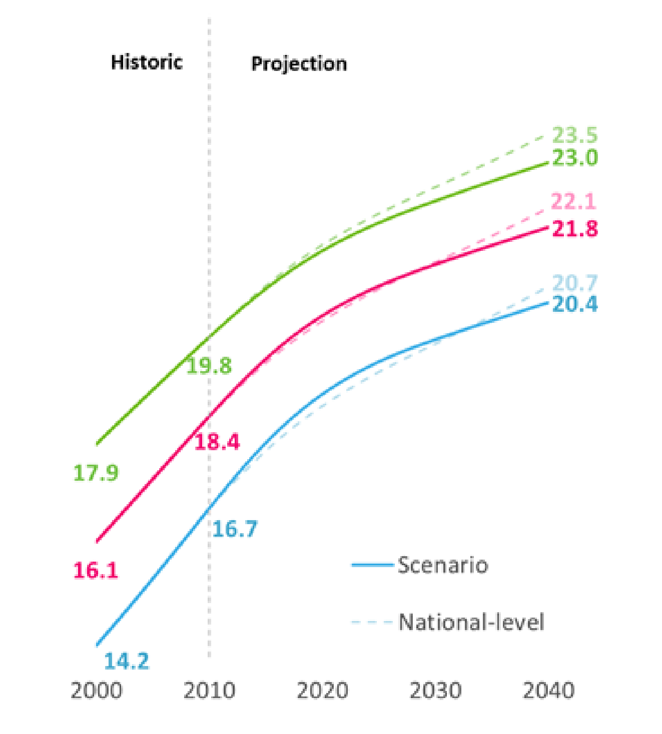
Improvement decline



Improvement decline

Low trend scenarios | Central(ish) scenarios | High trend scenarios

- Back to the fifties
- Challenging Times
- **Improvement decline**
- Health Cascade
- Cancer revolution
- Extended Youth

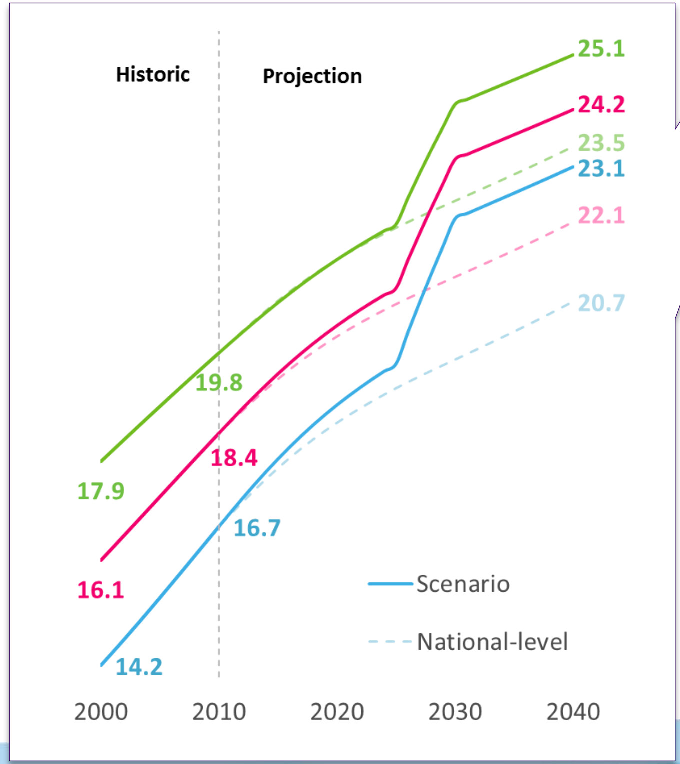


Cancer revolution

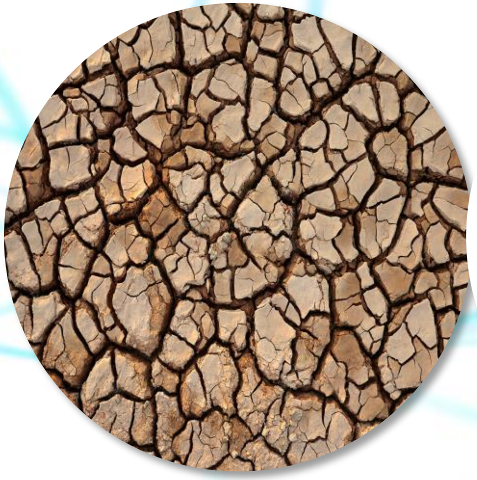
Cancer revolution

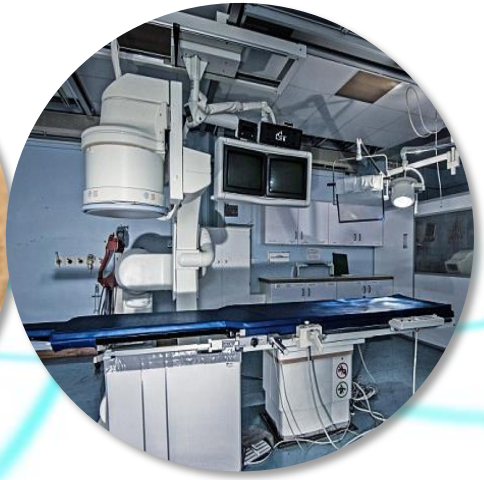
Low trend scenarios | Central(ish) scenarios | High trend scenarios

- Back to the fifties
- Challenging Times
- Improvement decline
- Health Cascade
- **Cancer revolution**
- Extended Youth



Challenging Times





Challenging times

Low trend scenarios | Central(ish) scenarios | High trend scenarios

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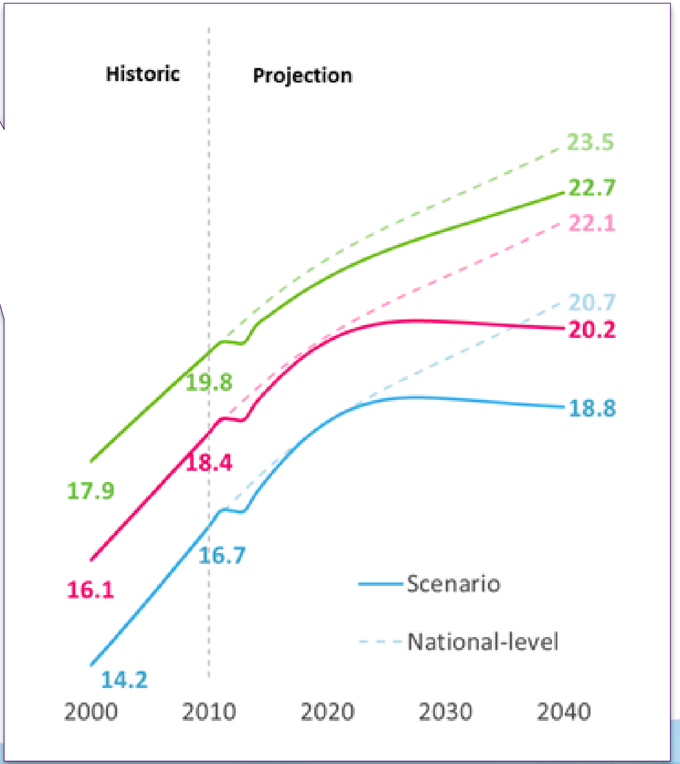

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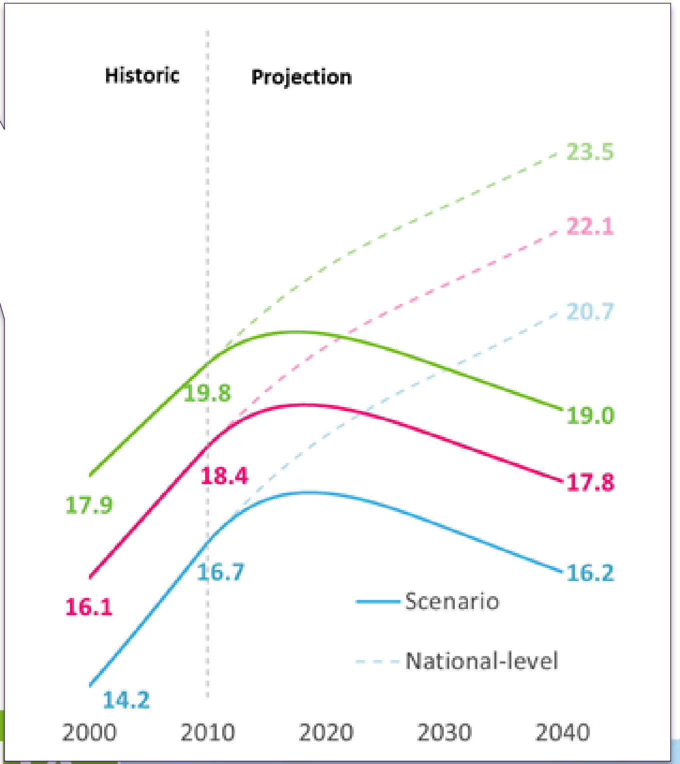
Extended Youth

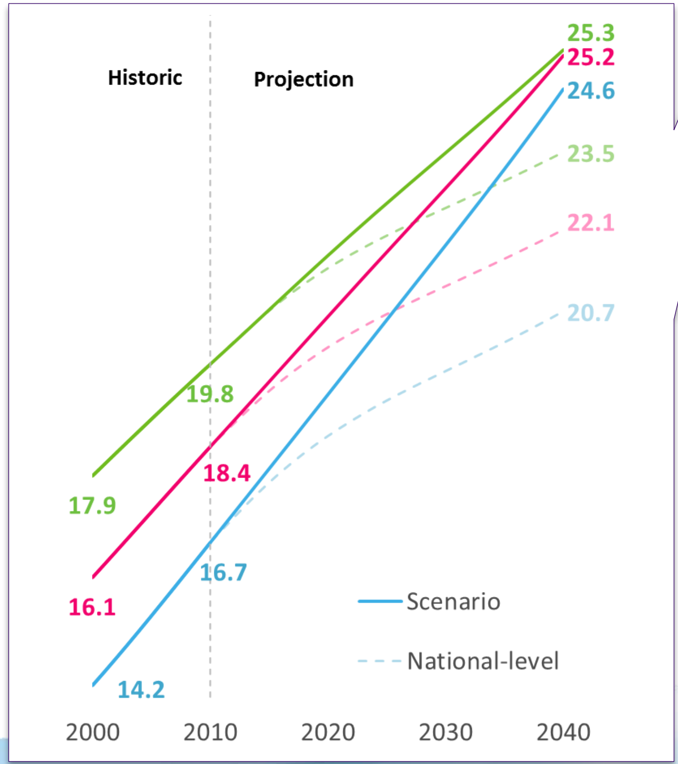
Back to the Fifties

Back to the fifties / extended youth

Low trend scenarios | **Central(ish) scenarios** | **High trend scenarios**

Back to the fifties | **Challenging Times** | **Improvement decline** | **Health Cascade** | **Cancer revolution** | **Extended Youth**





What does this mean for DB schemes?

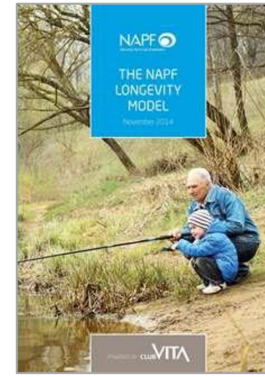
Questions for trustees/pension managers

1. What starting point is being used for the longevity trend assumption?
2. If we were to use the longevity groups set out in the NAPF research report, what would be the impact on scheme liabilities?
3. How would our funding and investment strategies change if longevity trends developed in line with one of the scenarios set out in the NAPF research report (e.g. ‘cancer revolution’) or another plausible scenario?

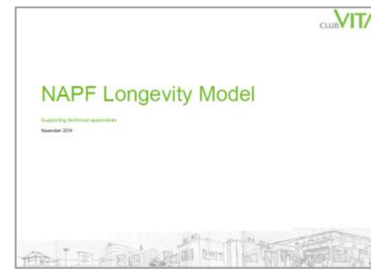
Supporting material

Summary of the research:

http://www.napf.co.uk/longevity-model



Longevity Model:
http://www.napf.co.uk/~/media/Policy/Documents/0414_Longevity_model_Nov14_2.pdf

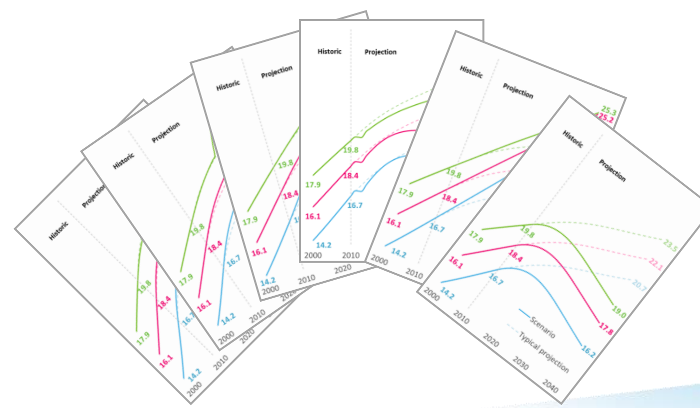


Technical Report:
http://www.clubvita.co.uk/SiteCollectionDocuments/NAPF%20Technical%20Report.pdf

Other information (eg postcode to IMD mapping)

http://www.clubvita.co.uk/home.aspx#longevity

(click "Longevity trends")



Q&A

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