



Institute  
and Faculty  
of Actuaries

# IFoA Life Conference

Social Care Working Party: modelling update

# Content



Intro to the working party and scope of research



History and current state of the adult social care funding



Designing a New Social Care Product Linked to Pensions



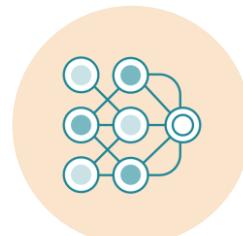
The working party engagements



ILC Dinner: Towards a new vision for social care



Social Care Survey:  
Attitude towards social care in the UK 2025



Cost of care at different stages of progressing to needing care, using global and UK data

# Social Care Working Party

## Introduction



### Scope of working party

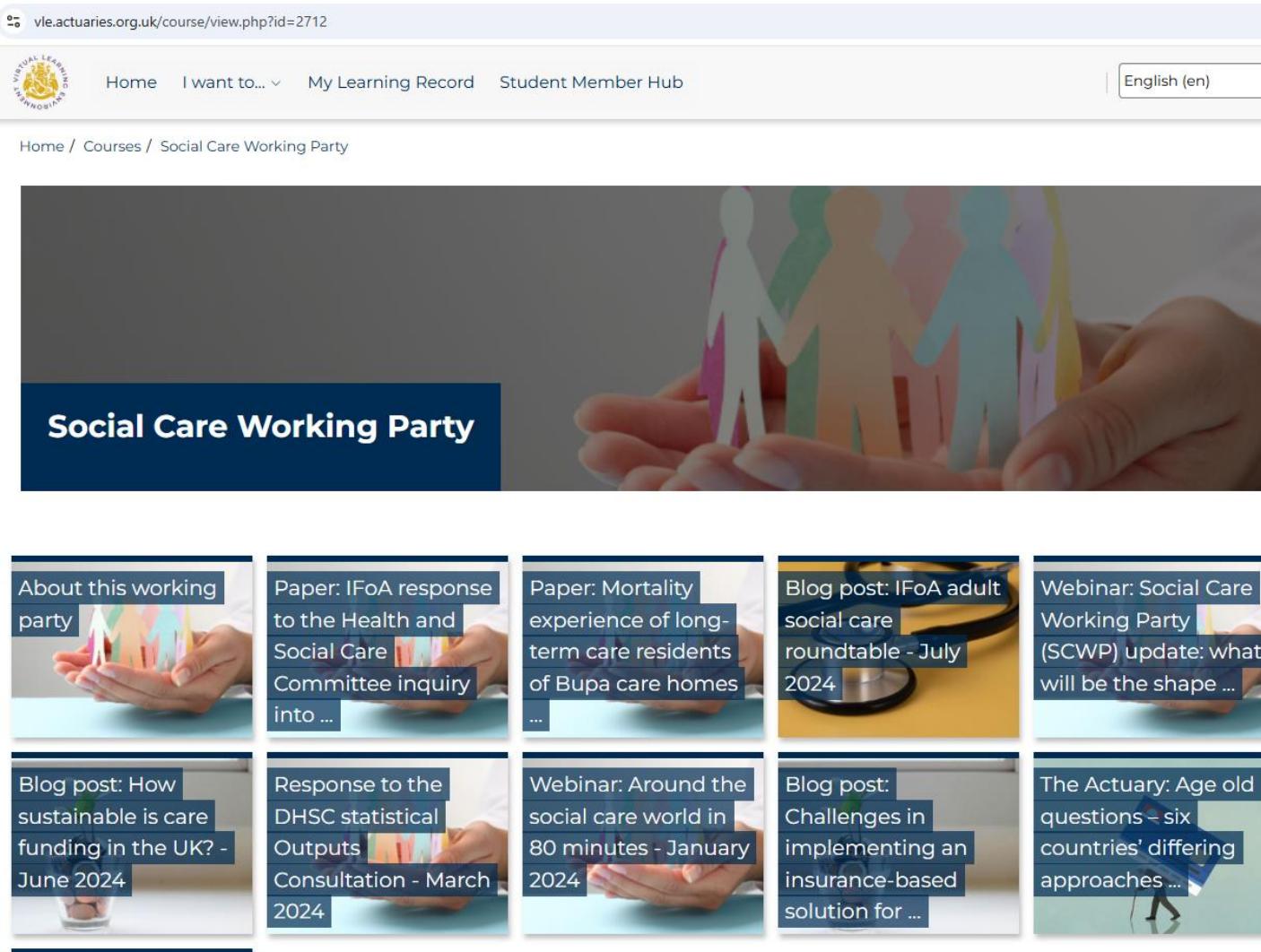
Engagement with different stakeholder to ensure that the Actuaries are part of the conversation in developing a solution

Data availability and feasibility of using the data to design products that could meet long-term care needs

### 7 members

# Social Care Working Party News

## IFoA VLE and IFoA Communities



[vle.actuaries.org.uk/course/view.php?id=2712](https://vle.actuaries.org.uk/course/view.php?id=2712)

Home I want to... My Learning Record Student Member Hub English (en)

Home / Courses / Social Care Working Party

**Social Care Working Party**

About this working party

Paper: IFoA response to the Health and Social Care Committee inquiry into ...

Paper: Mortality experience of long-term care residents of Bupa care homes ...

Blog post: IFoA adult social care roundtable - July 2024

Webinar: Social Care Working Party (SCWP) update: what will be the shape ...

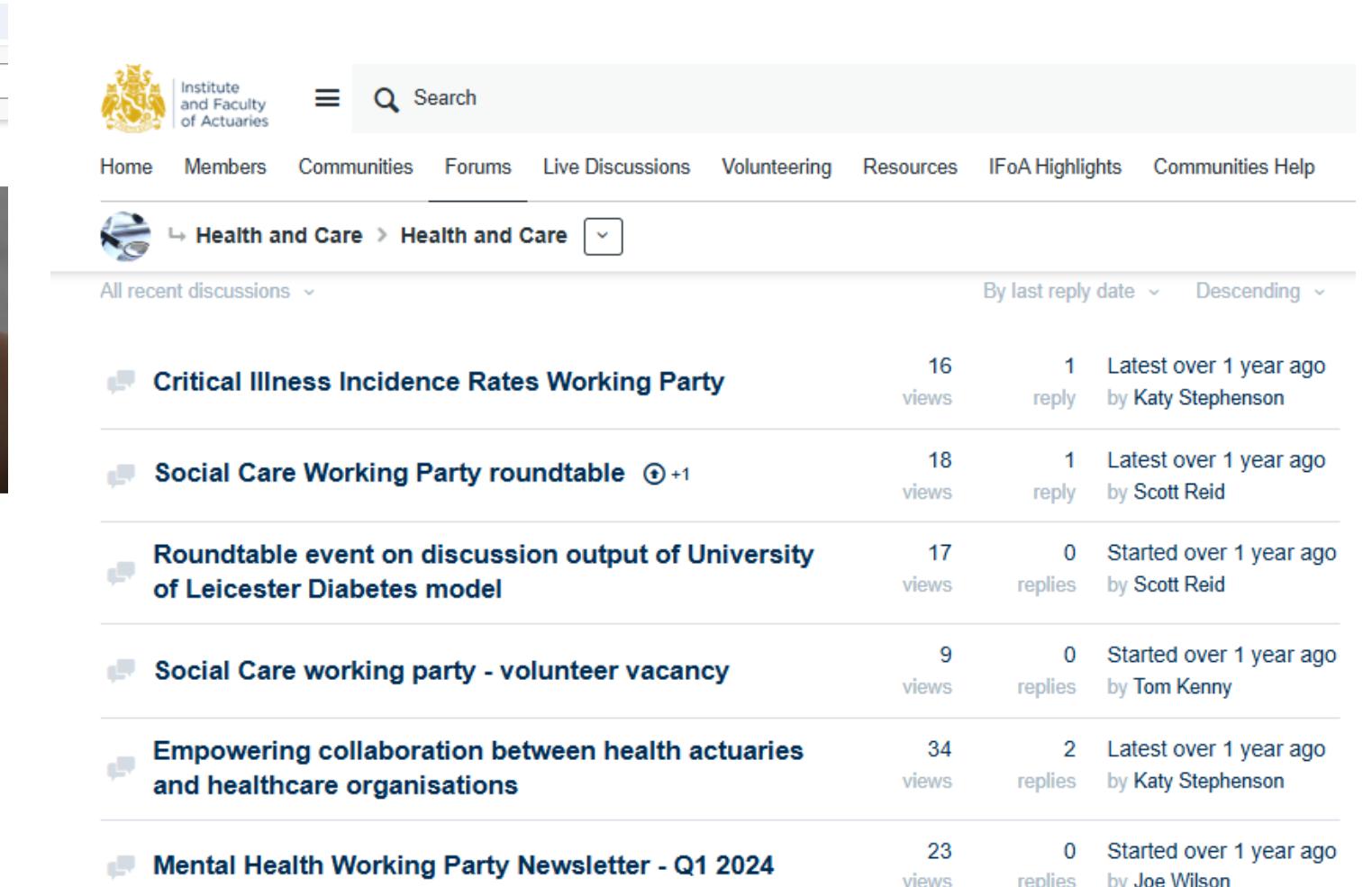
Blog post: How sustainable is care funding in the UK? - June 2024

Response to the DHSC statistical Outputs ...

Webinar: Around the social care world in 80 minutes - January 2024

Blog post: Challenges in implementing an insurance-based solution for ...

The Actuary: Age old questions – six countries' differing approaches ...



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Health and Care > Health and Care

All recent discussions By last reply date Descending

Discussion Title	Views	Replies	Latest Reply Date
Critical Illness Incidence Rates Working Party	16	1	Latest over 1 year ago by Katy Stephenson
Social Care Working Party roundtable <small>+1</small>	18	1	Latest over 1 year ago by Scott Reid
Roundtable event on discussion output of University of Leicester Diabetes model	17	0	Started over 1 year ago by Scott Reid
Social Care working party - volunteer vacancy	9	0	Started over 1 year ago by Tom Kenny
Empowering collaboration between health actuaries and healthcare organisations	34	2	Latest over 1 year ago by Katy Stephenson
Mental Health Working Party Newsletter - Q1 2024	23	0	Started over 1 year ago by Joe Wilson

History and current state

# Adult Social Care landscape

# Interactive question

Instructions

Go to

[www.menti.com](https://www.menti.com)

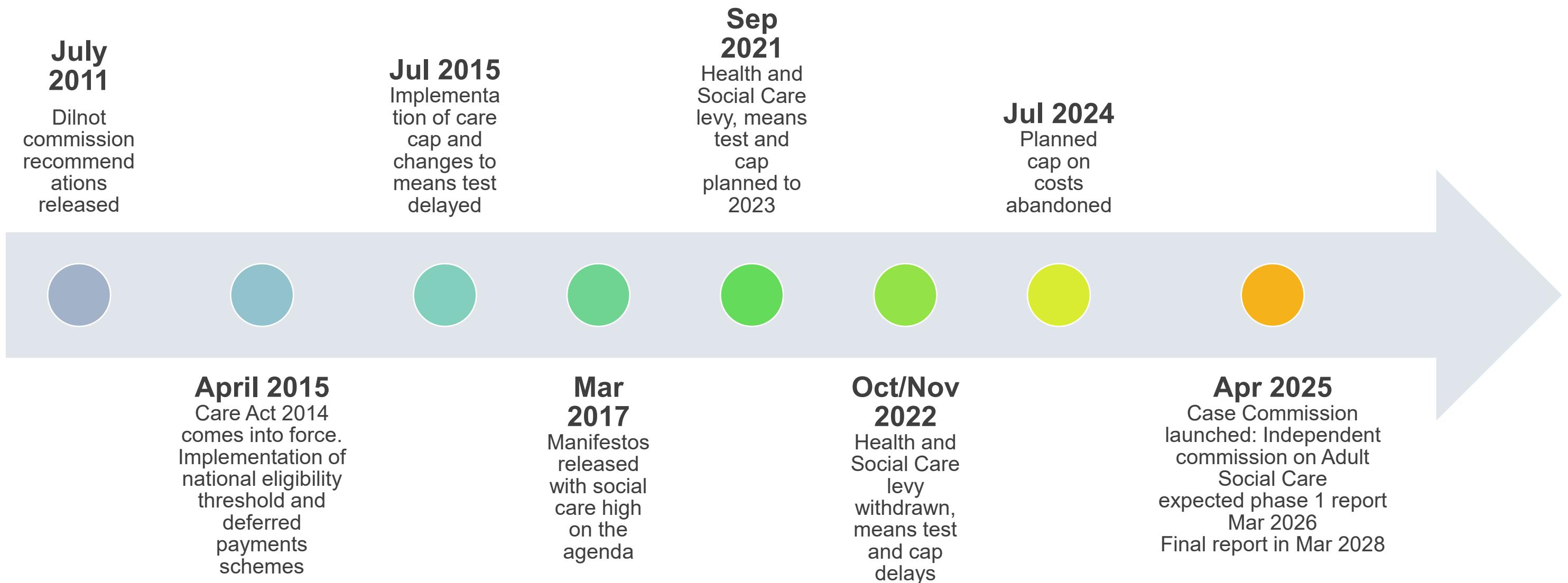
Enter the code

2713 2208



# The political timeline (so far)

## Recent history of the debate on Adult Social Care Funding



Paper by Vince Bodnar and Gregory Moore

# Designing a New Social Care Product Linked to Pensions

# Research design

## Objectives, approach and design

### Objectives

- Design and test the consumer appeal of a social care insurance product linked to a defined contribution pension
- 💡 • Provide contributory learnings and other useful insights from consumer interactions.

### Approach

- Initially informed by the authors' experience with consumer attitudes towards social care and retirement planning
- Use in-depth qualitative consumer input to shape the design
- Stay open-minded and nimble, let consumer input drive design thinking
- Design a product informed by this input
- Test the appeal of such a product with consumers, also using an in-depth qualitative approach.

### Ethnographic method explained

- Rooted in anthropology
- Dives deep into a social group to understand behaviors, beliefs, ways of life
- Focuses on immersion in everyday realities, not survey data.

### Application of the method

- Conduct in-depth phone interviews with empathetic listening, reactive questions on concerns, motivations
- Derive strong themes related to planning for social care and retirement and to product appeal
- Product appeal and actionability discussions included usage of a mock website, positioned as live. The interviewer was described as a neutral contractor hired to hear consumer feedback.

### Study scope

- 50+ in-depth interviews of 40 consumers, plus employers
- Individuals aged 30 to 60 with incomes of £60k-£120k.

💡 Contributory learnings are marked with a lightbulb symbol throughout.

# Key insights

## Shaping product design

Insight	Description	Resulting product features
Retirement assurance prioritisation	 People worry about both retirement income and social care (funding and finding) but prioritize the former	<ul style="list-style-type: none"><li>“Retirement Income Fund” as core feature</li><li>“Social Care Fund” as secondary</li><li>Social care coordination services</li></ul>
Preference for certainty	 Preference for locking in guaranteed income pre-retirement over investment risk and growing a pot	<ul style="list-style-type: none"><li>Each contribution locks in a known layer of guaranteed monthly income at retirement, closely resembling a US deferred income annuity</li></ul>
Difficulty starting	<ul style="list-style-type: none"><li>People don’t know how or where to start planning for retirement, delaying action</li></ul>	<ul style="list-style-type: none"><li>Easy-to-use, education-based enrolment platform</li><li>Interactive displays of contributions and resulting benefits</li><li>Ongoing engagement to encourage increasing contributions</li></ul>
Flexibility	<ul style="list-style-type: none"><li>People want contribution and withdrawal flexibility</li></ul>	<ul style="list-style-type: none"><li>Flexible contribution frequency and amounts, including lump sums</li><li>Withdrawals allowed (with market value adjustment)</li></ul>
Accessibility	<ul style="list-style-type: none"><li>Insurance terminology is confusing, creating an access barrier</li><li>Low usage of financial advisors</li></ul>	<ul style="list-style-type: none"><li>Avoid insurance terminology</li><li>Workplace-based enrolment as alternative, broad distribution</li><li>Potential for employer contributions</li></ul>

# Primary feature: locking in layers of guaranteed income

## Illustration

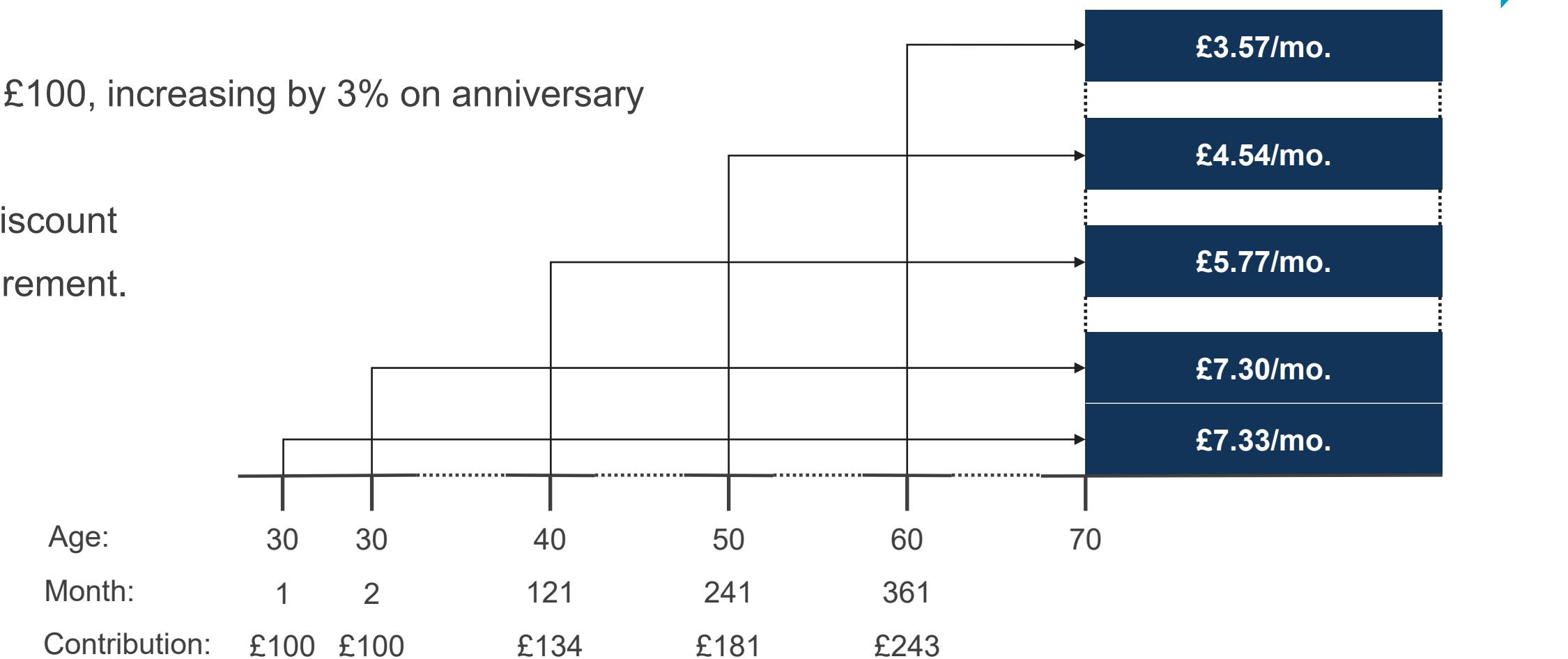
- Each contribution creates a layer of guaranteed retirement income, priced and locked in at the time of contribution
- Example: £100 at 30 might lock in £7.33/month guaranteed income at 70

### Assumptions

- Monthly contributions, initially at £100, increasing by 3% on anniversary
- 5.5% interest discount
- No pre-retirement survivorship discount
- CMI S4 Series Mortality post retirement.

Guaranteed monthly lifetime income

Total:<sup>1</sup> £2,234/mo.



<sup>1</sup>Total shown at the top of the bar is the sum of all layers purchased before age 70, which is annuitised at age 70

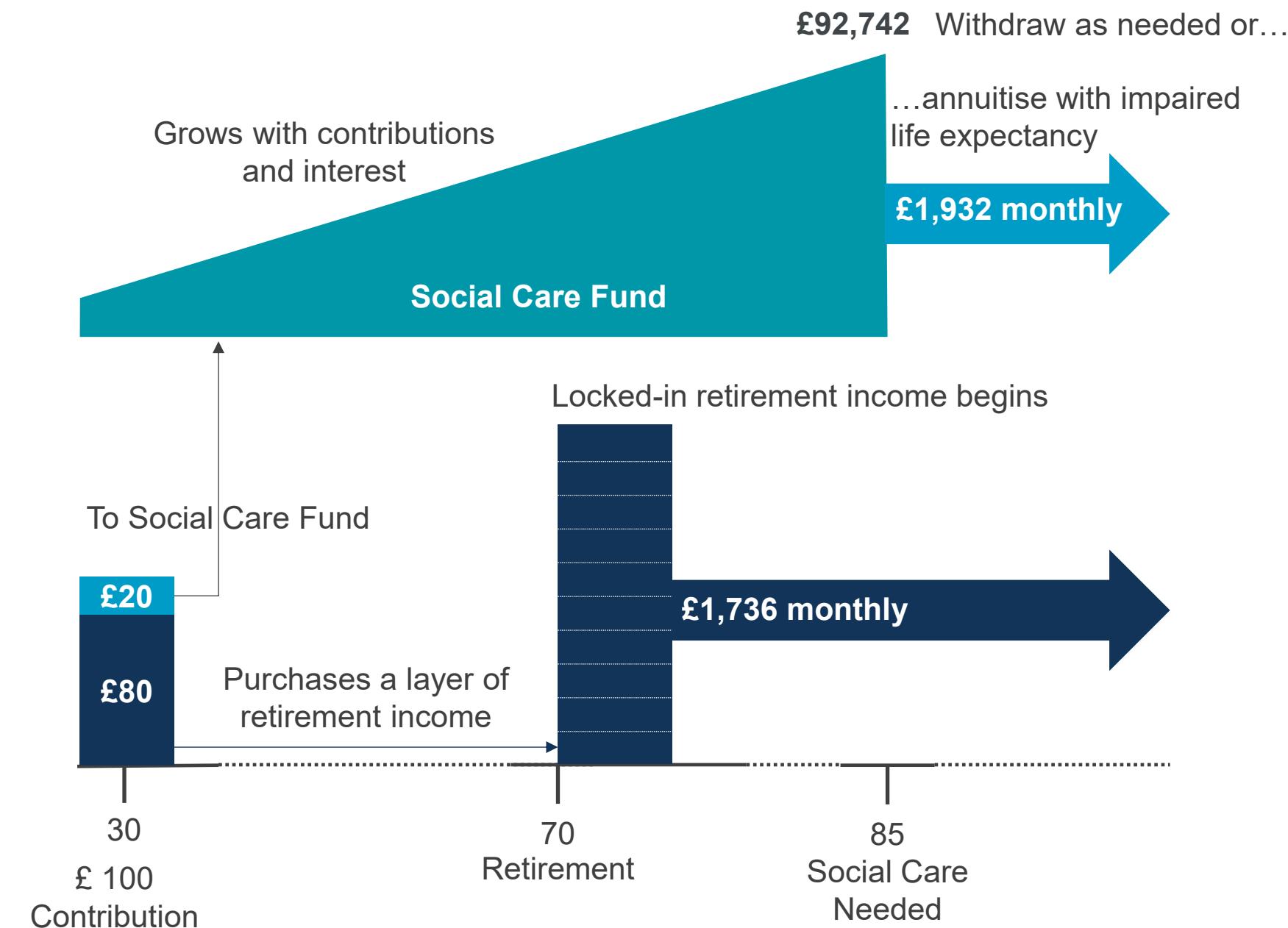
# Secondary feature: Social care funding

## Illustration

- An elected portion of each contribution payment (e.g., 20%) goes towards a Social Care Fund
  - Remainder purchases a layer of guaranteed monthly retirement income (per prior page)
- The Social Care Fund grows with each contribution and interest (e.g., 5.5%), before and after retirement
- Can be used to fund social care when needed (e.g., age 85) either by periodic withdrawals or annuitised based on impaired life expectancy
- Customers elect contribution allocation informed by local social care costs and estimates of resulting fund.

### Example

Local care cost	Fund needed at 85	Annuitized income
£2,000/month	£92,742	£1,932



# Closing remarks

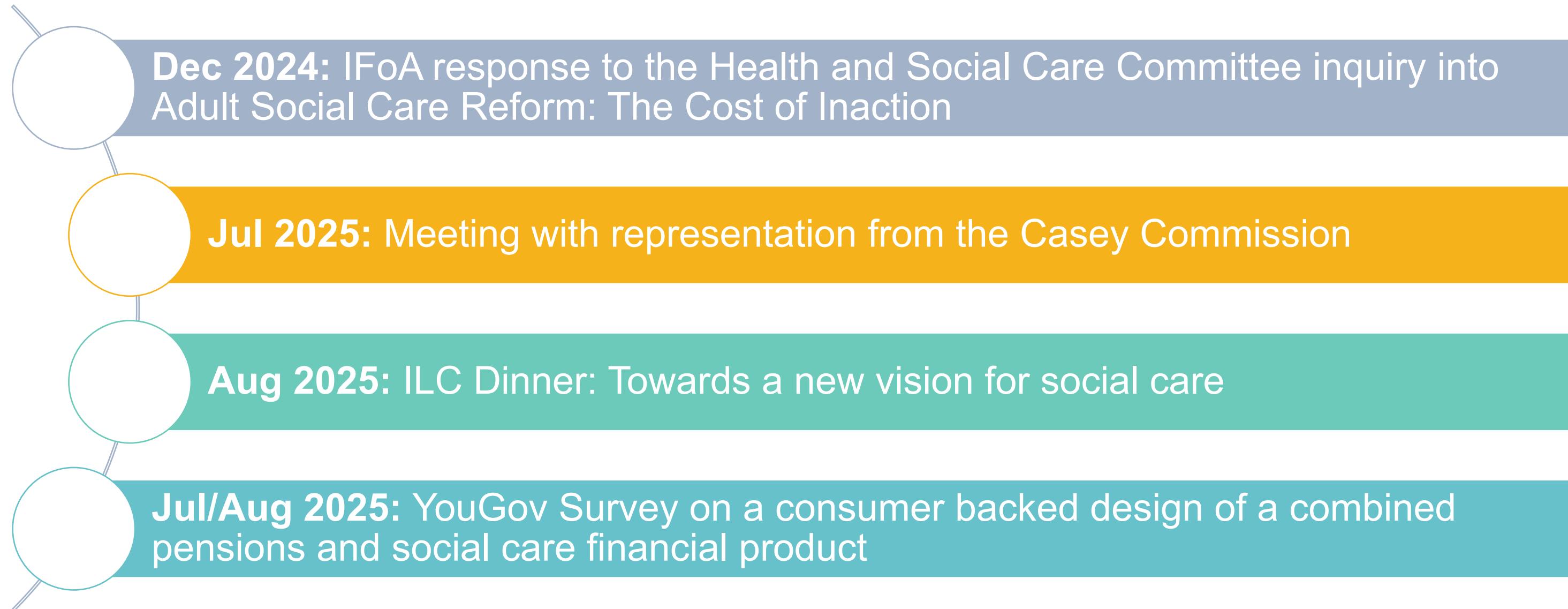
- 💡 • The road to working-age consumers contributing to social care funding runs through retirement income assurance
- 💡 • To consumers, retirement income assurance means locking it in during working years
- 💡 • Many consumers are willing to receive this assurance and remove investment risk/gains
- 💡 • The product has strong consumer appeal (57% willingness to enroll)
  - The product addresses dual anxieties by prioritizing retirement income and integrating social care funding
  - Self-service enrolment, contribution flexibility, liquidity and ongoing engagement makes it “easy to start” and later build on.

Representing the Actuarial Profession in the public discourse

# The working party engagement

# SCWP – engagement with stakeholders

Update since 2024 life conference

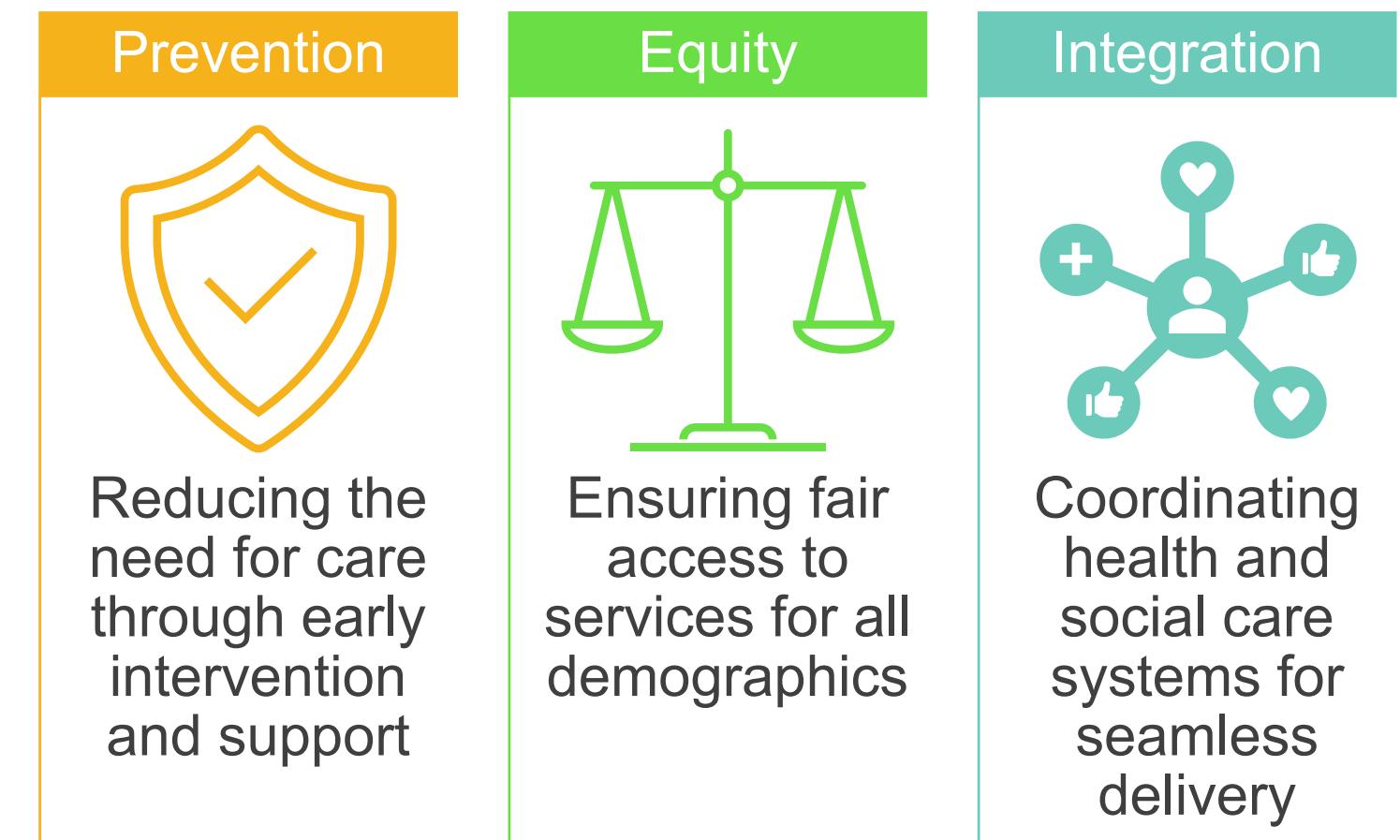


# International Longevity Centre (ilc) – Discussion paper

## Towards a new vision for social care: policy solutions for an ageing population

### Rethinking UK Social Care – Vision and Challenges

- Ageing population demands urgent social care reform.
- Pressures on unpaid carers, fragmented support, and avoidable NHS costs.
- By 2034/35, an additional **£9.1 billion per year** is needed to meet basic care demand.



Source: <https://ilcuk.org.uk/wp-content/uploads/2025/09/ILC-Towards-a-new-vision-for-social-care.pdf>

# International Longevity Centre (ilc) – Discussion paper

## Towards a new vision for social care: policy solutions for an ageing population

### Policy Proposals for Sustainable Social Care

- Needs-based national planning: Central data systems and minimum standards to address disparities.
- New funding mechanisms: Explore long-term care insurance and better financial support for carers.
- Integrate workforce and carer roles, prioritise prevention and digital integration.



Source: <https://ilcuk.org.uk/wp-content/uploads/2025/09/ILC-Towards-a-new-vision-for-social-care.pdf>

# You Gov survey

## Who Cares? Exploring Attitudes Toward Social Care in the UK: 2025 Survey



### Retirement Outlook

- 3 in 5 are pessimistic about achieving their desired lifestyle
- 71% have limited or no investment knowledge
- 3 in 5 from pre-retirement age use workplace pension
- 1 in 2 want guaranteed income
- 3 in 10 not considered planning for retirement yet



### Care planning

- 3 in 4 not taken steps to prepare for long-term care needs
- 76% are open to downsizing their home for care planning
- 2 in 5 provide or expect to provide informal (unpaid) care
- 1 in 4 carers dedicate over 40hrs weekly
- 30% worry about affordability of long-term care



### Care funding

- 3 in 5 believe social care is mostly funded by individuals
- 1 in 2 predict the cost of residential care at £50k
- 2 in 5 predict the cost of residential care at £50k

#### Expected funding sources:

- 39% Personal savings/ investments
- 31% Local authorities
- 25% the NHS



### Helping options

- 1 in 2 trust the government for reliable information
- 1 in 5 are satisfied with retirement planning tools

**Preference on type of support to prepare for social care**

- 38% government initiatives or support
- 24% more affordable long-term care insurance or savings
- 25% jargon free resources



# You Gov survey

## Cross-cutting policy recommendations

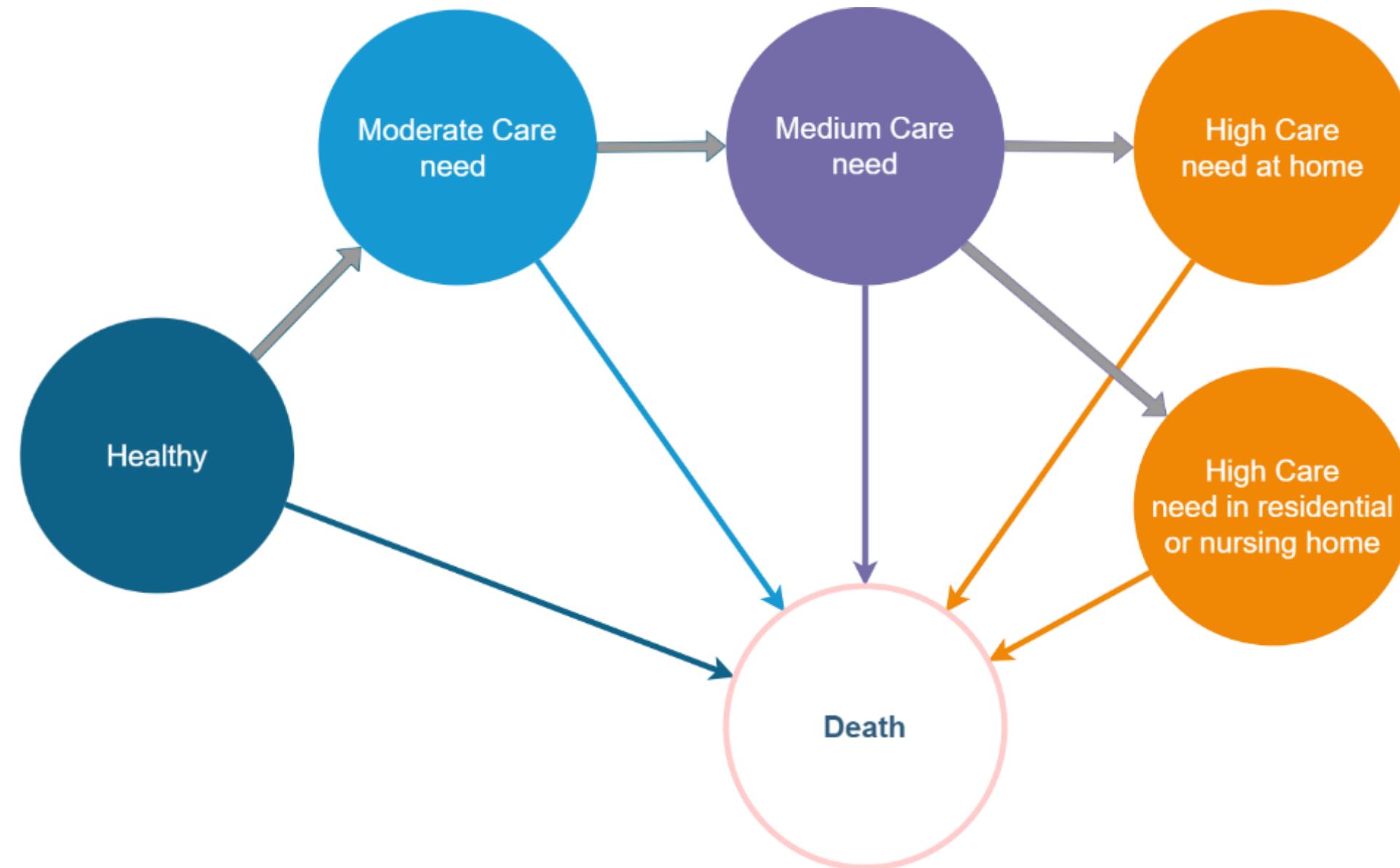


Insurance Product Design

# Using actuarial approach to model future cost of long-term care

# Multistate model

When should insurance claim be triggered



# Cost of care – model - assumptions

- Society of Actuaries (2000-2011 Long-Term Care Experience Study) data set used to set claim inception and termination rates
- Claim distribution by care setting based on DHSC data for England
  - Nursing 10%, Residential 20% and At home 70%
- Annual claim inception rates by age and care setting (using distribution above)

Age	Nursing	Residential	At home
65	0.01%	0.02%	0.08%
70	0.07%	0.14%	0.47%
75	0.17%	0.34%	1.20%
80	0.32%	0.64%	2.23%
85	0.55%	1.10%	3.84%
90	0.94%	1.88%	6.59%
95	1.21%	2.43%	8.49%



# Cost of care - model - assumptions

- Nursing home claim termination rates

		Claim duration (months)									
Age	Policy Duration (years)	1	12	24	36	48	60	72	84	96	
65	1	13.5%	2.1%	1.7%	2.0%	2.2%	2.7%	2.7%	2.7%	2.7%	
75	11	16.6%	2.6%	2.1%	2.4%	2.7%	3.3%	3.3%	3.3%	3.3%	
85	21	12.4%	3.8%	3.4%	4.0%	4.5%	5.4%	5.4%	5.4%	5.4%	

		Claim duration (months)									
Age	Policy Duration (years)	1	12	24	36	48	60	72	84	96	
65	1	4.5%	1.1%	1.3%	1.6%	1.7%	2.1%	2.1%	2.1%	2.1%	
75	11	5.8%	1.5%	1.6%	2.0%	2.3%	2.7%	2.7%	2.7%	2.7%	
85	21	4.6%	2.3%	2.9%	3.5%	3.9%	4.7%	4.7%	4.7%	4.7%	

- Care at home termination rates

		Claim duration (months)									
Age	Policy Duration (years)	1	12	24	36	48	60	72	84	96	
65	1	12.8%	2.0%	1.6%	1.8%	1.9%	2.1%	2.0%	1.8%	1.7%	
75	11	14.2%	2.2%	1.8%	1.9%	2.0%	2.3%	2.2%	2.0%	1.9%	
85	21	9.6%	2.9%	2.6%	2.9%	3.0%	3.4%	3.2%	3.0%	2.8%	

# Cost of care - model - assumptions

## Model Assumptions

Mortality rates based on CMI185 Series 4 tables

Weekly cost of care

- Nursing = £948.59
- Residential = £825.94
- At home (assumes 4 hours of care per day) = £560

Care fee inflation 3.0%

Discount rate 6.0%

Profit and expense loading 10%

# Cost of care - model

Projection	Calendar	Age	Active life Incidence Rates				Active Lives												Disabled Lives											
			Mortality	(Monthly)			BOM				New			EOM				BOM Lives				New Incidence				Deaths				
				Rate	1	2	3	Lives	Deaths	Incidents	Recoveries	Lives	NH	ALF	HHC	Total	NH	ALF	HHC	Total	NH	ALF	HHC	Total	NH	ALF	HHC	Total		
Year	Month	Year	(Monthly)	NH	ALF	HHC																								
1	1	65	0.0323%	0.0009%	0.0018%	0.0065%		1.000000	0.000323	0.000092	0.000000	0.999585	0.000000	0.000000	0.000000	0.000009	0.000018	0.000065	0.000092	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	
1	2	65	0.0323%	0.0009%	0.0018%	0.0065%		0.999585	0.000323	0.000092	0.000006	0.999176	0.000009	0.000018	0.000065	0.000092	0.000009	0.000018	0.000065	0.000092	0.000001	0.000000	0.000003	0.000004	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
1	3	65	0.0323%	0.0009%	0.0018%	0.0065%		0.999176	0.000323	0.000092	0.000012	0.998773	0.000017	0.000036	0.000121	0.000174	0.000009	0.000018	0.000065	0.000092	0.000001	0.000001	0.000006	0.000007	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
1	4	65	0.0323%	0.0009%	0.0018%	0.0065%		0.998773	0.000323	0.000092	0.000015	0.998372	0.000024	0.000053	0.000170	0.000247	0.000009	0.000018	0.000065	0.000092	0.000001	0.000001	0.000008	0.000011	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
1	5	65	0.0323%	0.0009%	0.0018%	0.0065%		0.998372	0.000322	0.000092	0.000016	0.997974	0.000030	0.000069	0.000215	0.000314	0.000009	0.000018	0.000065	0.000092	0.000002	0.000001	0.000010	0.000013	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
1	6	65	0.0323%	0.0009%	0.0018%	0.0065%		0.997974	0.000322	0.000092	0.000018	0.997577	0.000036	0.000085	0.000256	0.000377	0.000009	0.000018	0.000065	0.000092	0.000002	0.000002	0.000012	0.000015	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
1	7	65	0.0323%	0.0009%	0.0018%	0.0065%		0.997577	0.000322	0.000092	0.000018	0.997181	0.000041	0.000100	0.000295	0.000437	0.000009	0.000018	0.000065	0.000092	0.000002	0.000002	0.000013	0.000017	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
1	8	65	0.0323%	0.0009%	0.0018%	0.0065%		0.997181	0.000322	0.000092	0.000019	0.996786	0.000047	0.000116	0.000332	0.000494	0.000009	0.000018	0.000065	0.000092	0.000002	0.000002	0.000014	0.000018	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
1	9	65	0.0323%	0.0009%	0.0018%	0.0065%		0.996786	0.000322	0.000092	0.000019	0.996391	0.000051	0.000130	0.000367	0.000549	0.000009	0.000018	0.000064	0.000092	0.000002	0.000002	0.000015	0.000019	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
1	10	65	0.0323%	0.0009%	0.0018%	0.0065%		0.996391	0.000322	0.000092	0.000020	0.995997	0.000056	0.000145	0.000402	0.000603	0.000009	0.000018	0.000064	0.000092	0.000002	0.000002	0.000015	0.000020	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
1	11	65	0.0323%	0.0009%	0.0018%	0.0065%		0.995997	0.000322	0.000092	0.000020	0.995603	0.000061	0.000159	0.000435	0.000655	0.000009	0.000018	0.000064	0.000092	0.000003	0.000003	0.000016	0.000021	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
1	12	65	0.0323%	0.0009%	0.0018%	0.0065%		0.995603	0.000322	0.000092	0.000020	0.995210	0.000065	0.000173	0.000467	0.000706	0.000009	0.000018	0.000064	0.000092	0.000003	0.000003	0.000016	0.000022	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000



# Cost of care - model - output

- Probability of needing care in later life at age 65 = 51%
- Expected cost of care = £19,752
- Likely monthly premium (paid over 15 years) to cover cost of care = £193
- Based on BUPA study, the expected cost of care in a nursing home at the point of entering a home would be £95k for a male and £118k for a female.
- The actual cost will vary significantly based on the health of the individual entering the home.
- There is a significant variation in time spent in a care home as shown on the following slide.



# Mortality experience of long-term care residents

- Joint work between the Mortality Research Steering Committee of the Institute & Faculty of Actuaries & Bupa
- Authors: Dr Mary Hall FIA, FSAI, Mr Andrew Barry FIA
- This paper presents analysis the duration of care and the mortality of residents of Bupa care homes in Britain during the period 2016-2019.
- The paper provides insight into:
  - the duration or length of stay by types of care and gender;
  - mortality experience of Bupa residents.
- How can this research support modelling of the cost of care?

Table 3. Proportion of deaths over the period 2016-2019 by year post admission to Bupa LTC facility for males and females respectively.

	Year 1	Year 2	Year 3	Year 4	Year 5+
<b>Males</b>	59%	17%	9%	7%	8%
<b>Females</b>	47%	18%	12%	8%	16%

