



MAFEIP

Wrap up of the day

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1 Addressing information needs on different levels of the EIP on AHA

2 Potential tool improvements / further developments

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4 What's missing – future research to provide health economic support to Active & Healthy Ageing

1

Addressing information needs on different levels of the EIP on AHA



Impact on Partnership-level

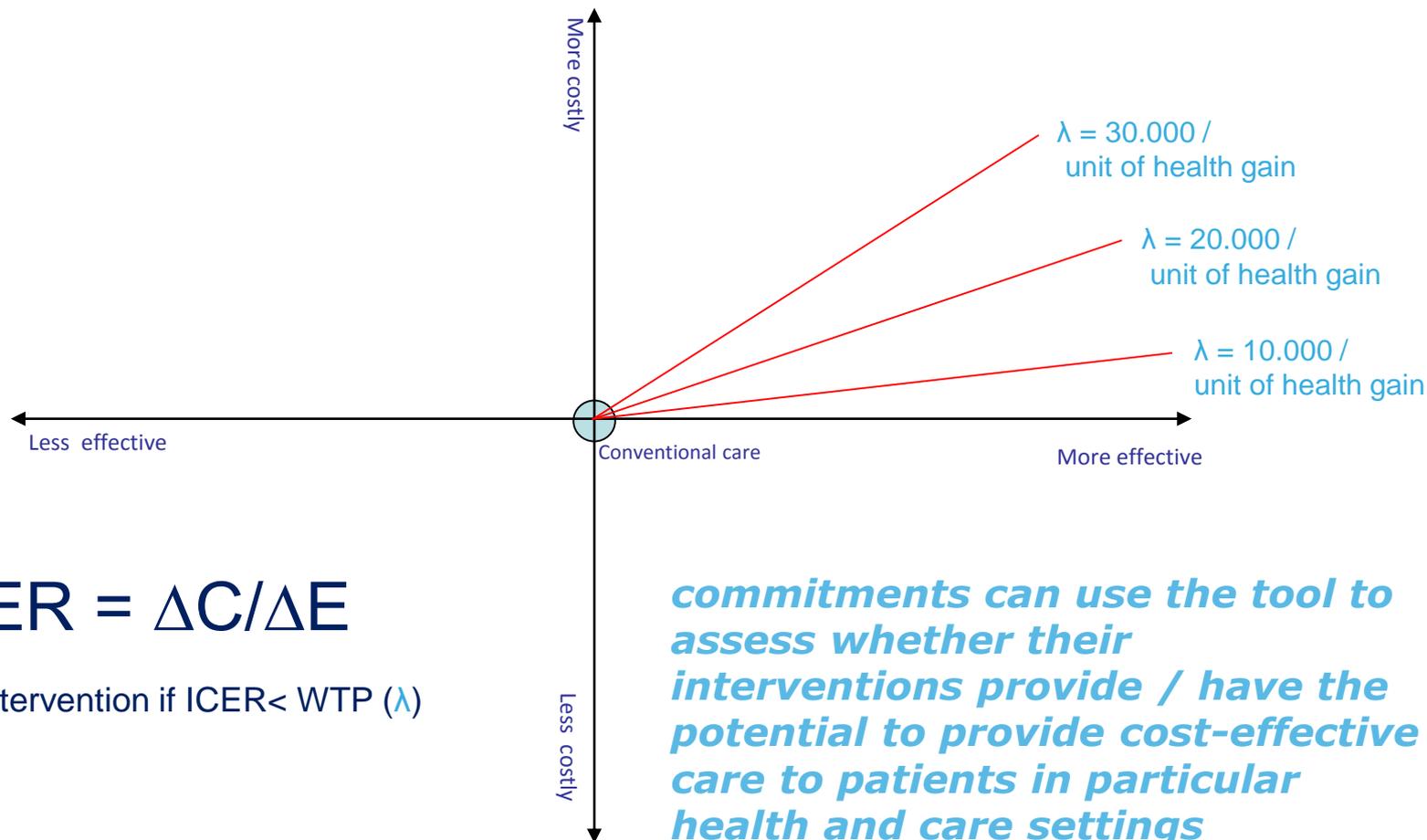
The EC does not intent to compare or rank EIP on AHA commitments

However, the MAFEIP-tool provides a comparative assessment of individual interventions against suitable (context specific) standard care scenarios

On Partnership level, we may assess the cumulative impact of the activities carried out by stakeholders in terms of aggregated population level impact on:

- a) Health (QALYs) and
- b) Health and care expenditure

Impact on Intervention-level





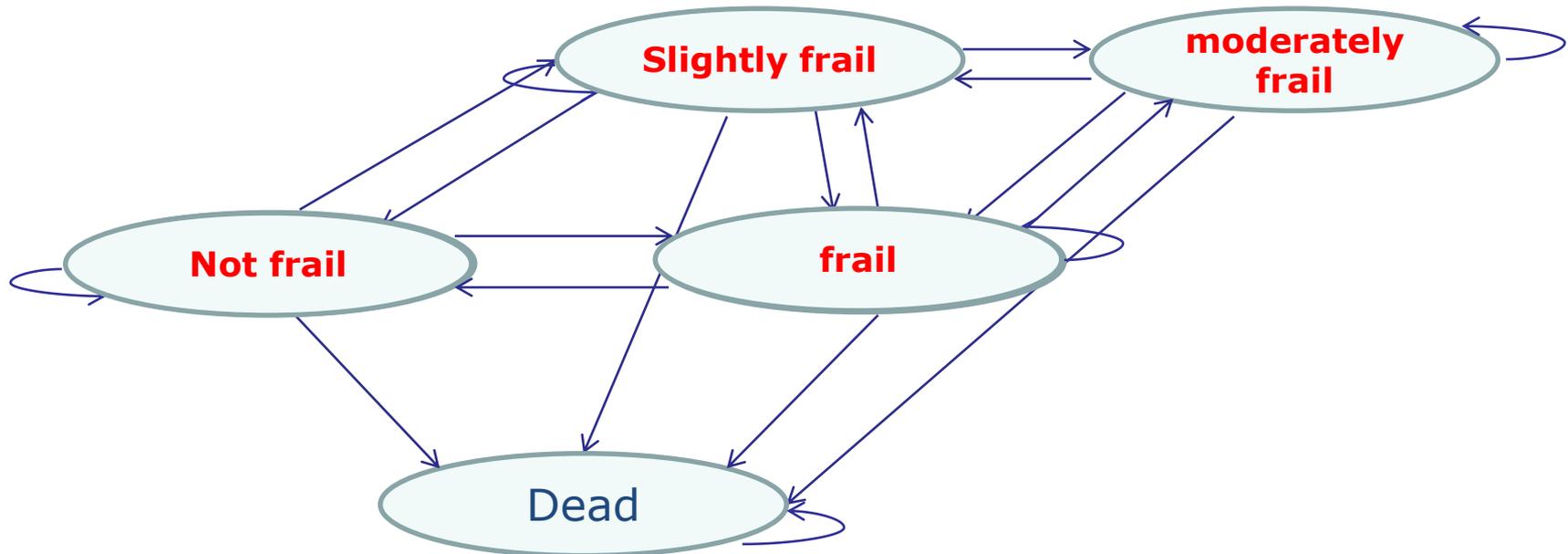
- The MAFEIP-tool can be applied to assess technologies even at an early stage of development
- It does so by using methods conventionally used for informing 'decisions to buy' (demand-side) into the development process of a new technology ('decision to invest')
- Hence, with MAFEIP we can take on an 'investors perspective', which is particularly interesting for the EIP on AHA (and other policy initiatives) as
 - The Partnership aims at identifying and scaling up innovations to improve active and healthy ageing
 - It is still a 'young' policy initiative, where many interventions are also at an early stage of development and
 - The information available about respective technologies is typically scarce and scattered
- In this context, early HTA through MAFEIP can be a useful tool for assessing the potential of a new technology, which in turn, may provide valuable information for
 - The developer of a technology to decide upon further investment and
 - The EIP on AHA (and other initiatives for that matter), to provide the right support for respective innovations so that they can progress faster to the next stage of development

2

Potential tool improvements / further developments

Improving tool-flexibility through:

a) Optional additional health states





Improving tool-flexibility through:

b) More nuanced data inputs, e.g. for transition probabilities

| | Control group | Intervention group |
|-------------|-----------------------------------|--------------------------------------|
| Incidence ⓘ | <input type="text" value="30"/> % | <input type="text" value="25.41"/> % |
| Recovery ⓘ | <input type="text" value="70"/> % | <input type="text" value="74.59"/> % |

Currently, the input sheet allows specifying probabilities which are not time /age dependant and remain constant throughout the entire model lifetime (apart from background mortality data).

| Age | Time (t) (Cycle Nr) | Control Group | | Intervention Group | |
|-----|------------------------|-----------------|---------------------|--------------------|---------------------|
| | | Baseline health | Deteriorated health | Baseline health | Deteriorated health |
| 60 | 1 | ... | ... | ... | ... |
| 61 | 2 | ... | ... | ... | ... |
| 62 | 3 | ... | ... | ... | ... |
| 63 | 4 | ... | ... | ... | ... |
| 64 | 5 | ... | ... | ... | ... |
| 65 | 6 | ... | ... | ... | ... |
| 66 | 7 | ... | ... | ... | ... |
| 67 | 8 | ... | ... | ... | ... |
| 68 | 9 | ... | ... | ... | ... |
| 69 | 10 | ... | ... | ... | ... |
| 70 | 11 | ... | ... | ... | ... |
| 71 | 12 | ... | ... | ... | ... |

It may be more realistic to assume that probabilities depend on age and may vary over a models lifetime.

One future development of the tool should therefore look into improving flexibility to populate the model with more nuanced data, especially for transition probabilities (including excess mortality to adjust background data)

Improving tool-flexibility through:

c) More analytic options, e.g. for subgroup analysis

— Target population —

In this section you can indicate the minimum and maximum age and country of your target population. This will be used to select (age and sex dependent) baseline mortalities from the database, as well as the distribution of age and gender in the selected country.

| | |
|-------------|--|
| Minimum age | <input type="text" value="65"/> |
| Maximum age | <input type="text" value="84"/> |
| Country | <input type="text" value="United Kingdom"/> ▾ |
| Gender | <input checked="" type="radio"/> Male <input type="radio"/> Female |

e.g. BMI

Smoking

Diabetes

Etc....

Can be partly solved through additional model states and / or running the model multiple times with different subgroups

3

Suggested MAFEIP dissemination strategy within EIP on AHA



The MAFEIP-tool is intended for users with limited background in health economic evaluation

....however.....

....even though we aimed at simplifying methods as much as possible without sacrificing on the validity of the approach...

...it remains a complex task to populate the tool with data and interpret results correctly!



Therefore....

...we suggest an approach with **regular seminars and workshops with hands-on exercises** to support EIP on AHA stakeholders with making the best use of the tool and its results

...a potential MAFEIP continuation should therefore look into the **development of appropriate user-support** for stakeholders with different levels of experience.

The **EIP on AHA** with its six thematic Action Groups **provides an excellent platform** to carry out such workshops and seminars, and the **MAFEIP Team** has vast experience in **facilitating economic evaluation methods** to various audiences.

4

What's missing – future research to provide health economic support to Active & Healthy Ageing



A 'generic measure of ageing related well-being'

Within MAFEIP, outcome is strictly defined in terms of health (quantity & quality)

However, active ageing is a *multidimensional concept*, and this limits the applicability of the tool to *health-related policies and interventions*.

Significant work has been carried out to measure the untapped potential of older people for active and healthy ageing across countries

We need to build up from these experiences and further improve outcome measurement, exploit synergies between tools, and ultimately aim for a measure of outcome that can be used to evaluate and compare different active ageing policies and interventions.

| Active Ageing Index | | | | |
|---|-----------------------|------------------------------------|--|---|
| The Active Ageing Index (AAI) is a tool to measure the untapped potential of older people for active and healthy ageing across countries. It measures the level to which older people live independent lives, participate in paid employment and social activities as well as their capacity to actively age. | | | | |
| DOMAINS | | | | |
| | Employment | Participation in Society | Independent, Healthy and Secure Living | Capacity and Enabling Environment for Active Ageing |
| INDICATORS | Employment Rate 55-59 | Voluntary activities | Physical exercise | Remaining life expectancy at age 55 |
| | Employment Rate 60-64 | Care to children and grandchildren | Access to health services | Share of healthy life expectancy at age 55 |
| | Employment Rate 65-69 | Care to older adults | Independent living | Mental well-being |
| | Employment Rate 70-74 | Political participation | Financial security (three indicators) | Use of ICT |
| | | | Physical safety | Social connectedness |
| | | Lifelong learning | Educational attainment | |



A framework for the *'economic evaluation of Active Ageing policies'*

MAFEIP builds up strictly from economic evaluation in health

However, for the same reason we need to improve outcome measurement, we also need to adapt methods for the economic evaluation of active ageing policies.

This involves several aspects, for instance:

- **The fact that active ageing policies typically impact on several policy areas**
- **Many outcomes are intangible and we need to find ways of measuring them (previous point)**
- **Assessing the cost of active ageing policies can be way more complicated as impact on several budgets (positively and negatively) is possible.**
- **Trade-offs between different active ageing outcomes need to be accounted for and also**
- **The preferences of different stakeholders with respect to active ageing outcomes**

Some relevant literature (all open access)

- BOEHLER C, DE GRAAF G, STEUTEN L, YANG Y, ABADIE F (2015) **Development of a web-based tool for the assessment of health and economic outcomes of the European Innovation Partnership on Active and Healthy Ageing (EIP on AHA)**. *BMC Medical Informatics and Decision Making* 15(Suppl 3):S4
- BOEHLER C, ABADIE F (2015) Monitoring and Assessment Framework for the European Innovation Partnership on Active and Healthy Ageing (MAFEIP) - **Conceptual description of the Monitoring and Assessment Framework for the EIP on AHA**. European Commission, DG Joint Research Centre, Institute for Prospective Technological Studies (EUR 27412); DOI: 10.2791/290381
- BOEHLER C, ABADIE F, SABES FIGUERA R (2014) Monitoring and Assessment Framework for the European Innovation Partnership on Active and Healthy Ageing (MAFEIP) - **Second report on outcome indicators**. European Commission, DG Joint Research Centre, Institute for Prospective Technological Studies (EUR 27034); DOI: 10.2791/171684
- ABADIE F, BOEHLER C, LLUCH M, SABES FIGUERA R (2014) Monitoring and Assessment Framework for the European Innovation Partnership on Active and Healthy Ageing (MAFEIP) - **First report on outcome indicators**. European Commission, DG Joint Research Centre, Institute for Prospective Technological Studies (EUR 26826); DOI: 10.2791/12311
- ABADIE F, BOEHLER C, LLUCH M, SABES FIGUERA R, ZAMORA TALAYA MB(2014) Monitoring and Assessment Framework for the European Innovation Partnership on Active and Healthy Ageing (MAFEIP). **Second update of the process indicators**. European Commission, DG Joint Research Centre, Institute for Prospective Technological Studies (EUR 26827); DOI: 10.2791/12501

More information on MAFEIP:

<http://is.jrc.ec.europa.eu/pages/TFS/MAFEIP.html>