



Healthcare and Active Ageing

# Patient Choice in Cataract Care

Expert Panel chaired by Heinz K. Becker MEP (EPP, Austria)  
and Stephen Hughes MEP (S&D, UK)



## Forewords

### Heinz K. Becker

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### Stephen Hughes

*Mr Hughes is a Member of the European Parliament since 1984 for the Group of the Progressive Alliance of Socialists and Democrats. He has a long standing history in the UK Labour Party and has extensive experience working for and with labour unions. Mr Hughes has been a highly active Member with regards to social affairs, such as by being the Chairman of the Committee on Employment and Social Affairs (1994-1997 & 1997-1999). Finally, he has been the main advocate for improving health and safety at work.*

### Dr. Renate Heinisch

*Dr. Heinisch is a Member of the European Economic and Social Committee (EESC) and a former Member of the European Parliament (1994-1999). She is a Member of the German Christian Democratic Union (CDU) in Baden-Württemberg. Dr. Heinisch is highly involved in ageing policy, having written the opinion on the impact of population ageing on health and welfare systems (2010) and several other opinions.*



## Contributors

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*Prof. Banks is the President of the European Men's Health Forum and President of the Men's Health Forum for England and Wales. Additionally, he is the Chair of the stakeholder group known as the European Forum Against Blindness. He is a family doctor and represents General Practitioners for the British Medical Association. Professor Banks has long been involved in men's health and vision health and with the European Men's Health Forum published several reports on these topics.*

### Prof. Roberto Bellucci

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### Foreword MEP Heinz K. Becker

The European Union and its Member States have prioritised policies addressing the ageing society over the past years. Current national government and EU policies suggest that Europe will increasingly depend on the health and independence of the ageing persons.

Furthermore, Europe is dependent on innovation. Innovation is particularly important when dealing with healthcare and creating new treatments. For the elderly population, medical innovation is even more crucial, given that new inventions will extend life and essentially independent life. The medical technology sector is a major growth and innovation factor of the European economy, being responsible for a large number of independent and healthy living solutions.

Since 1982 the European Parliament has set up an "Intergroup on Ageing and Intergenerational Solidarity", of which I am a Member and Vice-Chair since December 2011. The group has as objective to bring together different Members of the European Parliament to discuss and develop policy with regards to ageing and solidarity across generations. The intergroup of the European Parliament schedules discussions with the Council of Ministers as well as the European Commission together with important stakeholders to raise awareness of these topics and to discuss policies. Together with several colleagues we have been highly proactive in the last years that ageing is becoming an increasingly important subject. The European year of 2012 on Active and Health Ageing and Solidarity between Generations because a strong impulse for increasing awareness in the last years.

Healthcare is a particularly important pillar in securing active and health ageing at older age. When the older generation gets sick it will become more fragile and therefore will lose important connections to society. For the elderly generation it is of high importance that they have the possibility to make informed choices with regards to their treatment.

In this sense, medical innovation is also of major importance to create new effective for e.g. independent living and mobility. Logically, medical innovation can only be progressed, when innovative products can be used on the market. Patients need to be in contact with innovative products, choosing the best possible treatment for their specific condition and personal life. Such innovation is best used when bringing a real benefit to patients and their daily quality of life.

Governments, public policy and private stakeholders are all key factors in providing solutions to the challenge of Europe's ageing society. This Recommendations Paper strongly refers to the findings of the European Parliament work in the area of active and healthy ageing in the past years. It should therefore be seen as a strong contribution to the future of policy making this area. The European Parliament is and will be a consequent power to enhance the best possible healthcare and to promote active and healthy ageing offensively.

Heinz K. Becker MEP



### Foreword MEP Stephen Hughes

Europe is facing great challenges with regards to employment and social security. This creates great problems with regards to the job security and the sustainability of our workforce. The economic crisis and the demographic change are the major factors for this difficult situation. With the increase of elderly workers, policies are changing that demand further active ageing at work, enabling the '50+ generation' to stay active, independent and healthy. During my mandate as a Member of the European Parliament, as a coordinator of the Socialist Group and as chairman of the Employment and Social Affairs Committee in the European Parliament from 1994 until 1999, I have been actively engaged in shaping the European social and employment policy. As such I have seen the problems with demographic change and the impact it has had on employment policy throughout the years.

A pre-condition of Europe's citizens to be most efficient at work is to create the best possible working environments and ensure to keep the 'generation 50+' active and in the best possible state of health. Beyond the employment angle, the duty of the European Union institutions and national governments will be to ensure the highest possible independence in life. Good vision is crucial for both work performance as well as a safe and independent life in age. This Recommendation Paper is suggesting measures which could impact this as they make sure that employees and ageing persons have the necessary vision checks, which could lead to people staying at work longer. Additionally, these Recommendations contribute to reducing accidents at work with the promotion of early diagnosis and better checks.

Whilst serving as a Member of the European Parliament, one of my main objectives was to improve health and safety at work. With regular checks, early diagnosis and an approach based on prevention, the health and safety at work, working conditions and consequently efficiency can be improved tremendously. The reduction and prevention of accidents at work related to improved eye care, such as falls prevention are highly important factors. In addition, falls prevention is even more important for the older people in our society, given that this can prevent other accidents and can contribute to keeping them active for a longer period of time, which increases their productivity and active and independent living.

These Recommendations would therefore combine aspects of greater independence in age, healthy ageing, improved work conditions and efficiency as well as the strengthening of patients' rights for choice for best available healthcare. The recommendations could therefore have a great impact for policy makers working in these social and health policy areas.

MEP Stephen Hughes



*European Economic and Social Committee*

### Foreword Dr. Renate Heinisch

The challenges Europe will have to undergo because of the demographic change have been under discussion for a number of years now in several European Union institutions, such as the European Commission, the European Parliament and the European Economic and Social Committee. Key topics that have been discussed are solidarity between generations, older workers, healthcare, care of the elderly and long-term care, violence against older people, lifelong learning, the needs of older people and the effects of the ageing population on health and social systems.

The European Year of 2012 on Active and Healthy Ageing and Solidarity across Generations has greatly contributed to raising awareness of these key topics. I have strived to get ageing firmly on the European agenda by advocating for the year 2012 to be the Year of Active and Healthy Ageing. In 2010, I had been appointed Rapporteur for the Opinion of the European Economic and Social Committee on the Impact of Population Ageing on Health and Welfare Systems. This Opinion was requested to the EESC by the then vice-President of the Commission, Ms Margot Wallström.

In this Opinion, which was subsequently adopted by the EESC, I have highlighted the importance to focus on age-related diseases and to provide healthcare specifically to the needs of ageing persons. Among these recommendations is a prioritised list of disease areas where conditions that specifically affect ageing persons or to which elderly persons are particularly exposed to, such as: chronic illnesses (diabetes, rheumatism and heart disorders), degenerative illnesses of the nervous system (dementia and Alzheimer's), the musculoskeletal system, cancer and the eyes (Cataract).

It is crucial that patients, and particularly elderly patients, enjoy their rights to receive the care that they need. Ageing should not only be active, but also healthy, dignified and enjoyable. In this list, health plays a crucial role in achieving active ageing, because without it, no activity is possible.

The recommendations in this Opinion should be seen with a number of other now accepted healthcare concepts, such as informed patient choice, in combination of appropriate information to patients provided by doctors and pharmacists. This concept of patient choice is now legally embedded in the in 2011 adopted EU Directive on Patient Rights in Cross-border Healthcare.

Since the adoption of the EESC report on Ageing and Health and the Cross-border Healthcare Directive, Member States take first legislative action to ensure that elderly persons can opt for the healthcare that they need.

This Recommendations Paper focuses therefore on one of the recognised age-related diseases, namely Cataract, and takes this disease and its treatment options as a case study for improving healthcare for the elderly.

Dr. Renate Heinisch

## FACTBOX

## Cataract

- A Cataract is clouding of the lens of the eye (the Crystalline lens), which impedes the passage of light.
- Cataracts are the main cause of impaired vision in the world. They affect men and women equally.
- Age related Cataract is responsible for 48% of world blindness, which represents about 18 million people.
- A Cataract needs to be removed when vision loss interferes with everyday activities, such as working driving, reading, or watching television.
- With the traditional monofocal lens treatment, the patients have very limited functional vision after the surgery as their farsightedness or nearsightedness is not treated. Therefore, the patients need to invest in purchasing glasses out of their own pocket to complete the procedure.
- Patients need to invest private money to purchase glasses after a traditional Cataract treatment. With innovative lenses the need for glasses after the Cataract surgery can be prevented.

## Patients

- People with Down's Syndrome are more prone to get Cataract, as well as people with diabetes.
- Patients with diabetes mellitus are 2–5 times more likely to develop Cataracts than their non-diabetic counterparts.
- The most common symptoms of a Cataract include frequent prescription changes in eyeglasses or contact lenses, as those become less effective.

## Fall Accidents

- 30% of people over 65 fall each year. In the age of 80 this number rises to 50%.

## Patients

- A 2006 Norwegian survey of people aged over 67 found that nearly one-quarter had experienced a fall in the preceding six months. Of those, more than one-half reported that their most recent fall had led to an injury and roughly 15% said it had resulted in a fracture.
- In one UK research study, around 30% of people aged 65 and over had Cataracts in one or both eyes that impaired their vision.
- In the United States, by age 80, more than half of all Americans either have a Cataract or have had Cataract surgery.
- In the US, according to the Centres for Disease Control and Prevention (CDC), falls are the leading cause of injury-associated deaths among the over-65s, and are the leading cause of non-fatal injuries and hospital admissions for trauma in that group. The CDC adds that the fear of falling can in itself place great restrictions on mobility and increase social isolation, leading to further negative outcomes.
- A UK study demonstrated a significant reduction in the risk of falls after Cataract surgery in the elderly population. The study shows that Cataract surgery is an effective intervention to reduce the risk of falls in elderly patients with Cataract related visual impairment.

## I. Executive Summary

The European Union and its Member States share common challenges and opportunities during the current times of economic crisis. Across all Member States and EU institutions the ageing of the population and the financial challenges have been set as overall priorities affecting all societal sectors. Particular attention has been paid to the notion of active and healthy ageing and this is now understood as being one of the main factors to contain the economic burden of ageing related diseases on healthcare budgets.

To address healthy ageing appropriately, policy makers have prioritised prevention measures as well as age-related diseases. Among these diseases, Cataract, which is the clouding of the lens of the eye (the Crystalline lens), is the major cause of vision impairment for senior citizens, with at least one in two being affected.

Cataract is a disease which can be treated with a **sophisticated micro-surgery procedure, requiring specialised medical expertise**, by replacing the lens of the eye. Generally, the surgery will only be performed once on each eye, unless there are complications. The surgeries performed to treat Cataract can be performed in hospitals and clinics. **Different levels of surgery exist ranging from the traditional treatment that would require wearing corrective glasses following the surgery the use of innovative implantable technology allowing patients to have improved eyesight and allowing them to have such good vision that the wearing of glasses will not be necessary even if they were long or short sighted before the operation.**

With the ageing population one can also expect an increase in the amount of Cataract surgeries performed. Taking into account that the people living with these implants are also living longer, it is of vital importance that they get the most appropriate treatment and best possible choice. Because of the unique nature of Cataract treatment and its impact on an ageing society, this Recommendations Paper explains how existing policies and policy concepts should be applied and implemented to give patient the informed choice that they are entitled to.

This Recommendations Paper discusses how creating greater flexibility within healthcare systems can help to achieve important objectives in the special case of Cataract treatment:

- To ensure patients enjoy their right to receive full information of their treatment options
- To ensure patient can chose the best option for them enabling them to keep or re-establish excellent eye sight, important both for an independent life as well as for an active work life
- To ensure patient can receive the best possible treatment fitting the individual needs of the patient

These Recommendations will address the request of policies being developed, that respond to major policy challenges of today:

1. Uniting different political priorities in the EU and at national level in the case of Cataract to include (active) ageing, greater healthcare choice by patients, manageable healthcare budgets and the priority of improved vision and use of innovative technology.
2. A trend for patient choice can already be seen today in a number of European countries, also for Cataract treatment options.
3. Enabling people to continue to work later in life.
4. Opting for an improved Cataract technology, for better health outcomes, while not having any impact on the public healthcare budget or the private costs that may be necessary in case of a cost-sharing contribution by the patient. Therefore, patients should not lose funding for the standard Cataract procedure when opting for a more innovative and advanced treatment.

## II. Europe's major challenges for health policies



“The rise of life expectancy is good news for individuals,  
provided that their quality of life is good too.”

*Economist Intelligence Unit, 2009*



The **greatest societal challenge is the demographic crisis** caused by increased life expectancy and lower birth rate throughout EU Member States. The European Year for Active Ageing and Solidarity between Generations (2012) and various policies around this topic such as social inclusion, extending pension age, and recently the dominant factor of ‘healthy ageing’ demonstrate the **political push to find responses to this situation. One solution often heard is to focus more on prevention and early diagnosis of diseases, particularly when it comes down to age-related diseases and those diseases hindering employment.**

The currently most discussed item in the European Union is the **return to financial stability** and the agreement for growth, always linked with the innovation objectives that dominate the Lisbon Agenda. The second challenge is linked to this, given that the financial constraints have also affected the healthcare sector for some years. **Discussions focus on how to keep a sector blessed with innovation and increasingly better health outcomes, affordable, and to change the paradigm from the view of cost to investment in healthcare outcomes.**

A third aspect is the **increasing societal change of self-initiative and responsibility** as well as the EU’s citizen striving towards greater **independence and free choices.**

This Recommendations Paper outlines how these three policy drivers interact, and have, over time blended into integrated policy approaches. **The elements ‘healthy ageing’, ‘financial constraints versus use of innovative solutions’ and ‘independent living’ are no longer concepts that can be kept separate.** Policy makers have demonstrated over the past years and most recently that these elements are bound together and need integrated approaches. The elements above have therefore led to a shift from traditional approaches to real political innovation.

These Recommendations will focus on how these innovative and integrated political solutions will and should apply to the worldwide leading cause for surgical intervention, Cataract treatment, being an area that, like no other, clearly binds the discussed elements of healthy ageing, independent living based on choice and use of innovation under financial constraints.

## 1. European Society is ageing while seeking to increase its healthy lifespan

Percentage of the population above 65 years in the WHO European Region\*



\*Except Andorra, Monaco and San Marino.

With ageing society having become an EU priority since the mid 2000s, the topic has focused increasingly on ‘healthy ageing and independent living’ in the past two years. The political conclusion is clearly that tackling the demographic change can only be achieved with elderly remaining independent and, foremost, healthy.

Various reports, such as the Commission Demography Reports<sup>2</sup>, suggest that younger family members will be less likely to support the elderly population (as it had been in the past) and that there will be less young people taking care of them. These reports also show that this is most likely an irreversible trend.

Policy makers have rightly concluded that the **need for independent living of the elderly can only be achieved by keeping the elderly healthy and use technologies that also enhance their independence**. For this reason the European Commission decided to establish policies for the European Union on Ageing and Health and interlinking these policies, such as by establishing the European Innovation Partnership on Active and Healthy Ageing. Given the complexity of this multi-sectoral topic and to avoid silo-based approaches by singular Directorate Generals, the Commission requested an Opinion as a basis for a new policy from the European Economic and Social Committee (EESC). **In this report, the EESC created a shortlist of the priority age-related diseases and as such created the term age-related diseases.**

“Supporting active and healthy ageing is important both to improve the quality of life of elderly citizens and help them contribute to society as they grow older; and to reduce unsustainable pressure on health systems.”

*European Commission Communication on the European Innovation Partnership on Active and Healthy Ageing*

As the EESC report points out that **“demographic change requires healthcare and welfare systems, healthcare services and other related services be developed as regards their organisation and capacity, 1) to meet the needs of older people, 2) to ensure that all those in need of care receive those services that are necessary to uphold their autonomy and dignity, and 3) to ensure that all sections of the population, regardless of age, gender, financial situation or place of residence, have equal access to high-quality health services”**.

The European Commission has emphasised the need for a common approach to active ageing by creating the European Year for Active Ageing and Solidarity between Generations (2012). The European Parliament’s report on the Active Ageing year 2012<sup>3</sup> states that there are great opportunities for successful ageing policies, particularly with regards to employment policy. It states in addition that **“efforts should be made to consolidate the European**

Year's results in the framework of specific policies and programmes across the relevant policy areas, thus providing a drive for permanent practices”.

The year 2012 has seen numerous events, meetings, reports and initiatives to help national Member States cope with the demographic changes Europe is facing. An example is the **AGE Platform Europe, which has been set up to help foster an age-friendly environment, with a particular focus on prevention and early detection of diseases and fragility.** In this context, AGE suspected that it would be beneficial to raise more awareness of Cataract with people around from around 50+ and to stimulate regular testing<sup>4</sup>. AGE has an additional role in bringing together stakeholders and helping organisations in carrying out their age-focused recommendations and policies. The AGE Platform Europe stated that, differently from having a specific priority list for diseases, there would be a possibility to divide the early prevention diseases and early diagnosis diseases, such as Cataract.

“Increasing life expectancy in Europe is a tremendous achievement, and we need to match adding years to life with improving the quality of life. Policy-makers all over the WHO European Region can support this development by investing in a broad range of policies that promote healthy and active ageing.”

*Zsuzsanna Jakab, World Health Organisation, Regional Director for Europe*

Similar to AGE, regular testing has also been emphasised by the European Men’s Health Forum<sup>5</sup>. The European Men’s Health Forum noticed that people often do not understand or disregard their symptoms, especially concerning vision problems. As such, this again highlights the need for more regular testing.

**Occupational health and the necessity of vision for occupational health are often overlooked.** Obviously, there are certain professions which depend more on good vision than others, but vision is of key importance to the majority of professions. The European Men’s Health Forum furthermore stresses the importance of men’s health, given that in large parts of Europe the man is still the main breadwinner and therefore needs to retain his job to provide for the entire family. **Given that the retirement age is rising, this also creates a need for people to stay active in their jobs longer, which makes eye health and even more vital issue in the years to come.**

#### Recommendation 1

- ➔ Ageing associated diseases, such as cataract, should be recognised and considered as a group of conditions with similar challenges when it comes to policy formulation and provision of eye care. This would be a key approach in tackling the health challenges posed by demographic change.

#### Recommendation 2

- ➔ Regular testing for eye health is to be encouraged, particularly for those diseases that can be early diagnosed or prevented. Regular testing can improve the ability to work for the older citizens and can contribute to active ageing.

## 2. European citizens are striving for more independence and choice

A number of factors have led to citizens and patients in Europe striving for greater independence, independent living and choices in healthcare. **The demographic changes and the increasing amount of elderly citizens versus younger generations have led to policies that foster independent living and shaping policies that enable citizens to lead more independent lives when they become older.** This need for independent living has therefore become a key factor in many EU policies.

**This development comes hand in hand with greater patient empowerment.** Patients are more knowledgeable about their conditions through a greater access to information as well as the increased level of activities and influence of patient organisations.

Greater patient information and choices has become an EU concept in the early 2000s. The adoption of the Clinical Trials Directive in 2002 has introduced **the 'informed consent' principle** to replace the mere 'consent' principle, allowing not only the patient to be informed, but to have options and choices beyond the information. The currently discussed proposal for legislation on Information to Patients is due to create increased options for informed choices of patients for therapy. Since the mid 2000s, EU institutions were unable to adopt the legislation due to disagreement on the extent of which patients should be able to seek information. The currently ongoing third attempt for a greater liberalisation and greater patient rights' to access information is considered the final chance for European Parliament and Health Ministers. The system is expected to undergo a paradigm shift. **As Members of the European Parliament announced, the traditional top-down approach (doctor to patient) is considered outdated. Allowing the patient to express his informed choices should be part of the new system.**

However, currently patients can often feel scared when having to discuss their symptoms with their doctors. This fear plays an even more important role when the patient is scared to lose his or her job over a condition (which is often a fear concerning eyesight problems). **Patients should not be afraid to visit the doctor and they should also be encouraged to ask questions about their vision.**

**Today, patients are insufficiently informed about their possible treatment options<sup>6</sup>.** The amount of information received depends from country to country and could also depend on the relationship the patient has with his or her doctor<sup>7</sup>. **Patients need to be better informed about treatment options in order for them to actually make an informed choice about their treatment.** In the case of Cataract, patients are often not aware that there is an advanced treatment that would allow them full functional vision without needing glasses.

On the other hand, **not only patients, but also physicians are not always fully informed about other treatment options**, which adds another layer of ambiguity for the patient. According to several surgeons, the approach taken by most hospitals does not allow much opportunity to discuss treatment options with patients, i.e. given the manner in which the consultations are held or the amount of treatments available in the hospital. Additionally, in some cases the physicians are informed of the different treatment options, but are not allowed to discuss them. The systems in the different Members States are not helping physicians to be able to discuss treatment options with their patients either. Therefore, the healthcare systems need to become more open towards informing patients and informed patient choice. In the case of Cataract treatment options, some physicians are not allowed to discuss the advanced treatment options with their patients, given that it is not covered by the national insurance and could be seen as promoting private practices.

One consideration to make is that the patients should continue to trust their physician when they are proposing a treatment. Informed patients should get the opportunity to ask about different treatment options, but the patient's choice should be based on the options given by the doctor. As stated by Professor Roberto Bellucci, "As there are rights for the patient, there should also be rights for the doctor to refuse to perform a certain treatment if it is not the best one for the patient in the eyes of the doctor".

**The EU Cross-border Healthcare Directive, adopted in 2011, has responded to the issue of information and choice with a groundbreaking legally binding article that will allow patients to take choices of available therapies to be administered to them.** The primary goal of the Directive is to create a clearer situation about reimbursement for cross-border treatment accordingly to cases brought forward to the European Court of Justice. In addition the Directive is a piece of legislation which incorporates the coordination of social security systems in Europe. As such, the Directive focuses on the reimbursement patients are allowed to receive when having a treatment in another Member State. The Directive focuses on structural items such as deliveries and services and does not refer to specific medical interventions or costs.

### EU Directive vs. EU Regulation

An EU Regulation is a legislation which is directly binding in the EU Member States. The Regulation needs to be implemented as a whole across the EU. Regulations therefore streamline policy across the Member States, making sure that a piece of legislation is the same in every country. This Regulation will be placed 'on top' of the national legislation and works as an overarching piece of legislation.

An EU Directive on the other hand leaves a bit more flexibility to the Member States on how this piece of legislation will be implemented. Directives work towards harmonising policy across the EU in a slower pace than Regulations as they leave room for interpretation at national level. An EU Directive sets goals that to be implemented within the national laws. The Member State can choose in which national legislation they will introduce the different concepts and goals of the Directive.

The Cross-border Healthcare Directive demonstrates that there is an irreversible trend towards greater choice for patients, more flexible healthcare delivery and enabling citizens, especially the elderly, to live more independent lives. The topics of independent living and patient choice are also recognised as global issues with a great impact on the lives of the elderly population worldwide. Indeed, greater choice, independent living and more flexible healthcare delivery are the declared objectives of EU governments. The question is therefore not whether patient-choice-based policies come into practice, but rather how such policies are best implemented.

The Cross-border Healthcare Directive needs to be implemented by Member States by 25 October 2013. However, it is expected that Member States will have difficulties implementing this Directive as it is often not clear how certain goals should be interpreted.

### Recommendation 3

→ Given that the Cross-border Healthcare Directive demands patients to take informed choices about their treatment options, Member States should be encouraged to implement this to the best possible satisfaction of the patient. Patients need to be given the appropriate information on treatment options available, and in a manner appropriate for elderly people.

### Recommendation 4

→ Member States should provide for mechanisms creating more information for healthcare professionals about different treatment options.

### 3. Policy makers are seeking better health outcomes with innovation in a cost-containment environment

A third major political driver in healthcare is the **use of innovation in health while keeping financial sustainability**. Policy makers are attempting to identify solutions that respect both a financially contained situation while at the same time keeping the EU's economy innovative and competitive. The main focus lies on prevention and finding creative solutions to tackling the rising costs in healthcare, such as E-Health solutions.

Europe is still home to the majority of today's medical innovation, which puts Europe ahead compared to the United States or Japan. It has become clear that with many of the EU's goals, in keeping people healthy and keeping the elderly with greatest possible independence, innovative medical technology and therapy need to remain accessible.

The **EU Health Ministers have adopted a Conclusion on innovation in the medical devices sector** in June 2011<sup>8</sup>. In these Conclusions as a first item, **Ministers note that the major long-term societal changes facing Europe, such as an ageing population, call for innovative healthcare systems**. In this respect, the EU Council notes that **innovation should be increasingly patient and user-centred and demand-driven**, for example through increased involvement of patients and innovation in order to improve individual health and quality of life.

For certain choice-based medical solutions, **EU Member States have created 'cost-sharing' or 'co-payment' solutions**. A European Parliament study of 1998 as well as a European Commission funded study from 2007 outline that cost-sharing is common practice across EU Member States, with different focus and extent of use, but generally existent as a principle. One example often used in this case is dental care, where cost-sharing is a common practice in Europe.

In the case study of Cataract, cost-sharing is a practice which would give benefits to some of the patients, particularly those who have additional troubles with their eyes, such as being farsighted or nearsighted or having astigmatism (resulting in trouble of focussing). **For Cataract, treatment options are very different, ranging from traditional monofocal lenses to innovative advanced technology lenses**. The monofocal lenses are the standard lenses, which are just to replace the clouding of the lens. After this treatment the patient will still need to wear glasses to complete the treatment to allow full functioning vision. The advance technology lenses can also provide full functional vision, thereby making glasses unnecessary. This 'once-in-a-lifetime-only' possibility to choose a treatment will have a lifelong implication on the patient's vision capacity and dependency from glasses. **Cost-sharing in the case study of Cataract would allow patients to choose an innovative lens and procedure and hence the patients would not need to wear glasses anymore. The patient could pay for the additional costs on top of the standard reimbursement. Making sure that the patient gets the standard reimbursement is essential for the patients and physicians to at least get a proper choice of treatment.**

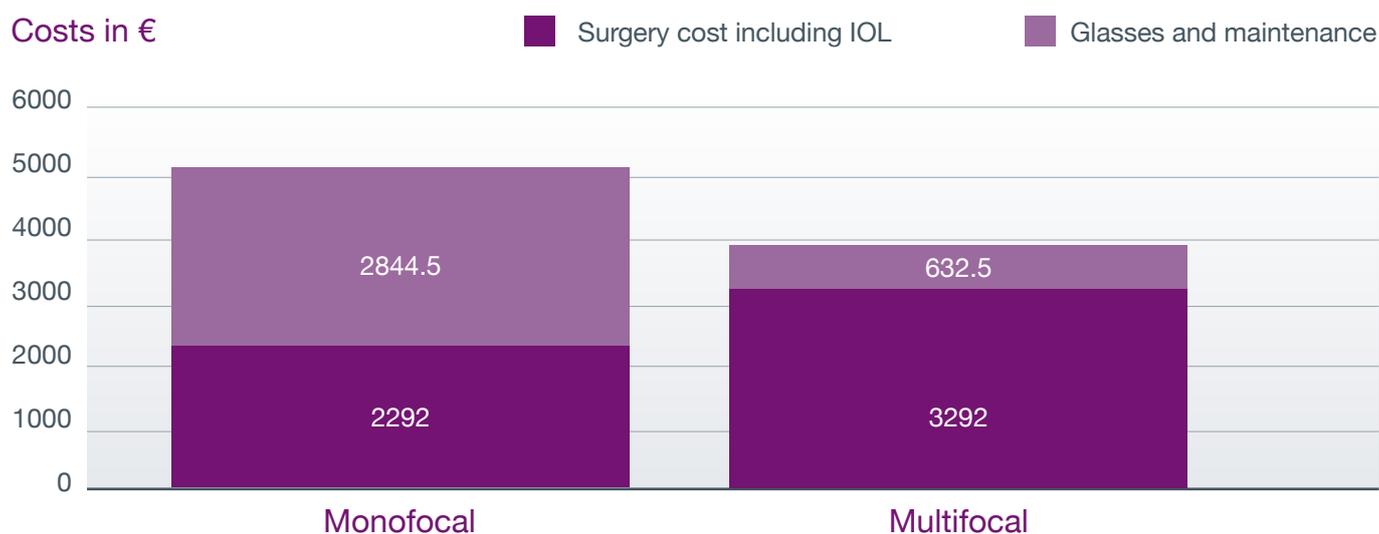
#### Why focusing specifically on Cataract treatment for cost-sharing?

In this paper, cost-sharing is only being looked at for the specific case of Cataract and innovative Cataract treatment. **Why Cataract is only being focused on when looking at cost-sharing for advanced Cataract treatment, is because the patients are already sharing the costs for glasses after the standard Cataract treatment**. Following standard treatment, investment in glasses is still necessary. Glasses are being paid for out of the own pocket of the patient, sometimes with partial reimbursement.

The advanced lenses would allow the patients full functional vision immediately after the surgery, without an additional need for glasses. Therefore, a one time cost-sharing for advanced technology lenses or a continuous cost-sharing for glasses are for the patient similar investment.

This approach for Cataract would allow patients to opt for a more innovative treatment and would allow for improved health and greater quality of life following treatment while contributing financially to the cost of the treatment beyond the part being reimbursed for a traditional treatment in that indication.

The following graph gives an overview of the average costs of the standard Cataract treatment with lifelong need for glasses versus the advanced technology treatment without the need for extra glasses<sup>9</sup>. This of course depends on the age of the patient when being treated for Cataract, the years the patient still has, as well as how often new glasses are needed.



Antoine Lafuma and Gilles Berdeaux .  
Modelling lifetime cost consequences of ReSTOR® in cataract surgery in four European countries.; BMC Ophthalmology 2008; 15; 8:12

**In this spirit, the German government introduced in 2009 in its Coalition Agreement a commitment to enlarge individual choice of patients by introducing co-payment for choice-based medical treatments.** This coalition agreement developed into legislation has been implemented as of the fall of 2012. **As a consequence, German citizens will never lose the reimbursement for the standard treatment, when they would opt for an innovative technology treatment.** The patient then only needs to pay the difference, namely the additional costs between the standard and innovative treatment. Other Member States, such as France, such developments are in motion, demonstrating the dynamics of these envisaged decisions. These developments are in line with the findings of the EESC report as well as the ‘Patient Choice’ Article of the Cross-border Healthcare Directive, all of which indicating a new approach for patient choice for Cataract patients

As has already been outlined in this paper, the economic limitations, particularly for hospitals, can also restrict the amount of innovative treatments being provided. Therefore, this can further limit the amount of information patients receive about their different treatment options.

Recommendation 5

- ➔ Uniting different political priorities in the EU and at national level to include active ageing, patient informed choice, manageable healthcare budgets and the use of innovative technology should be promoted for the case of Cataract care.

Recommendation 6

- ➔ Patients should not lose funding for the standard Cataract procedure when opting for a more innovative and advanced treatment.

### III. Recommendations

#### Objectives:

- Ensure that patients enjoy their right to receive full information of their treatment options.
- Ensure that patients can choose the best option for them, enabling them to keep or re-establish excellent eye sight, important both for an independent life as well as for an active work life.
- Ensure that patients can receive the best possible treatment fitting the individual needs of the patient.

#### Recommendation 1

- Ageing associated diseases, such as cataract, should be recognised and considered as a group of conditions with similar challenges when it comes to policy formulation and provision of eye care. This would be a key approach in tackling the health challenges posed by demographic change.

#### Recommendation 2

- Regular testing for eye health is to be encouraged, particularly for those diseases that can be early diagnosed or prevented. Regular testing can improve the ability to work for the older citizens and can contribute to active ageing.

#### Recommendation 3

- Given that the Cross-border Healthcare Directive demands patients to take informed choices about their treatment options, Member States should be encouraged to implement this to the best possible satisfaction of the patient. Patients need to be given the appropriate information on treatment options available, and in a manner appropriate for elderly people.

#### Recommendation 4

- Member States should provide for mechanisms creating more information for healthcare professionals about different treatment options.

#### Recommendation 5

- The EU and Member States should unite different political priorities in the EU and at national level to include active ageing, patient informed choice, manageable healthcare budgets and the use of innovative technology for Cataract care.

#### Recommendation 6

- Patients should not lose funding for the standard Cataract procedure when opting for a more innovative and advanced treatment.

### Innovative Cataract Surgery is cost-neutral for both patients and healthcare systems

Cataract surgery has as its only objective to restore the eyesight of the patient. Traditional surgery and technology are fully reimbursed or funded, but come with the need for glasses to allow full functioning vision after the surgery. The reimbursement or funding is limited to the traditional treatment.

Whereas the traditional treatment for Cataract is reimbursed, the patients nevertheless need to pay for their own glasses following the operation to achieve the full functioning vision. These glasses will need to be renewed depending on the development of the eye sight of the patient and hence **patients will most likely have to invest in new glasses numerous times.**

With the use of an innovative treatment, the patient would not require glasses. The patient could share the cost of treatment with the public healthcare system by paying for the difference between the level of reimbursement for the traditional treatment and the additional cost of the innovative treatment. The patient would then no longer need to wear or invest in glasses.

The use of innovative treatment would therefore most likely be cost-neutral for both the healthcare system and the patient. In fact, considering that patients are most likely to require new glasses every few years, the one-off payment for a more innovative medical option and choice could result in a long-term saving by the patient.

For healthcare systems long-term cost savings could also be achieved by patients having optimal eyesight and therefore will avoid accidents and falls, as proven statistics suggest.

### Trend to Patient Shared Healthcare underway

The innovative treatment for Cataract will also lead to keeping people healthy and active at work, an important objective in today's economic- and demographic crisis struck Europe.

For the case of Cataract, creating greater flexibility for healthcare systems for patients to take choices based on their individual medical and working life's needs is therefore crucial. Patient choice and the introduction of innovative medical technology can be cost-neutral for the case of Cataract. The EU and national governments are now turning to more flexible healthcare systems, which is a necessary development whereby governments and healthcare systems should incorporate such policies.

Cost sharing and co-payment is a politically sensitive topic in some Member States. The provision of equal healthcare is often considered a basic right for patients. Member States often find it difficult to switch to a system that would favour some patients over others. For Cataract, a system of greater flexibility does not contradict the provision of good healthcare to all patients. For Cataract treatment, the choice aspect is not linked to the provision of better healthcare for greater personal investment but a choice on where the patient is willing to invest – optimum eyesight through surgery or investment in glasses.

Cost sharing is already a common practice in a number of Member States for several health sectors, e.g. dental care, hearing aids and eye care, but also for a number of medical treatments, for example in-vitro fertilisation or diabetes care. Germany, the Czech Republic and the Netherlands have introduced measures, legislation and pilot projects that allow for patient shared billing based on choice and medical need. Advanced Cataract treatment would fit even better for cost-sharing, given that the patient already shares costs for the glasses.

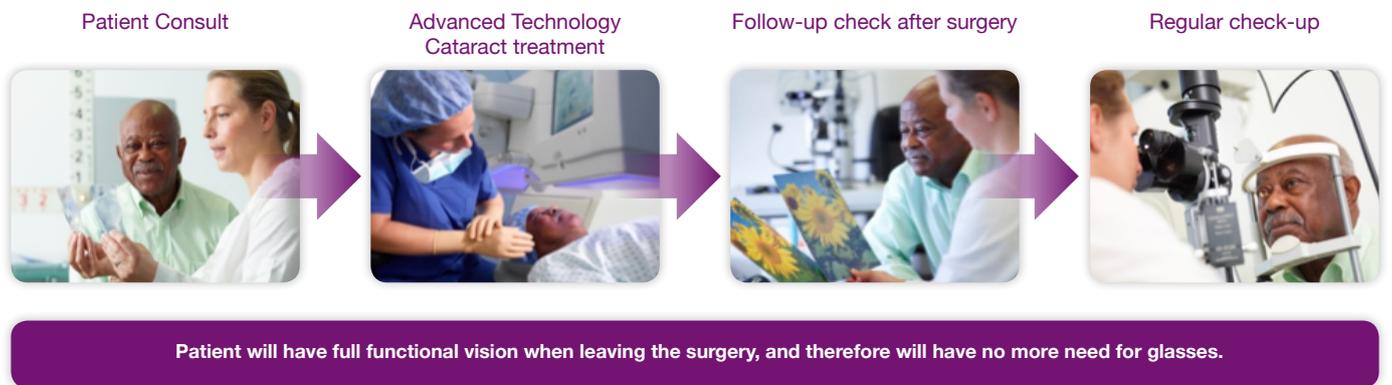
Concluding, like no other medical indication, Cataract represents the elements of ageing, patient choice, innovation leading to greater independence and new flexible healthcare options following cost containment:

- ➔ It represents one of the identified age-related priority diseases
- ➔ **Innovative Cataract treatment is cost neutral for both patients and healthcare systems**
- ➔ **The working life societal benefit is significant**
- ➔ Innovative technologies enabling patients to lead greater independent lives, safer and extended working lives
- ➔ Options for cost-sharing/ co-payment by patients based on the patient choice for a more innovative therapy and hence combine innovation and cost-containment, **cost-neutrality and economic benefit for societies**

### Route for the patient: Standard Cataract treatment



### Route for the patient: Advanced Technology Lens Treatment



## IV. Ageing, Patient Choice and Healthcare Systems: The Case of Cataract

### 1. Cataract and Ageing

Given that the European Economic and Social Committee (EESC) has in its opinion from July 2010 prioritized the most important health threats to the elderly population and with it recognised Cataract as one of the priority diseases and a major health risk, this should **encourage European policy makers both at European and national level to address respective challenges to the healthcare professions, diagnostics, treatments and healthcare provision itself appropriately and sustainably.**

With regards to the high number of Cataract surgeries performed every year and the high number of patients waiting to receive treatment in many Member States, this requests concrete action on among others the following applicable recommendations from the EESC report:

- Opening of national health and social care systems to model tests with subsequent evaluation in order to enable systems to evolve.
- Making systems for additional payments and complementary insurance more flexible in the case of Cataract.

### 2. Cataract and Patient Choice

**Cataract is an outstanding example of how innovative technologies that lead to greater independence, if patients are given the choice to opt for a more innovative technology.** Healthcare decision makers should open this option to patients, without any impact on their healthcare costs, by enabling a patient shared billing that would reimburse the innovative therapies to the standard of the traditional treatment and giving the patients the freedom to pay for the difference that the new technology will cost.

Recent discussions at the level of the European Parliament suggest that policy makers want to press forward for greater information and choices for patients when considering therapies including medical technologies on the basis of safety and quality and health outcomes. Following the patient choice Articles from the 'Cross-Border Healthcare Directive' which introduce this basic right to patients, Members of the European Parliament have once again clearly marked their commitment for patients by giving the patients a choice for their therapies and medical technologies used.

### 3. Cataract and Healthcare Funding

Cataract treatment is a procedure which is frequently performed in Europe and therefore has quite a significant impact on healthcare budgets. While the majority of patients will receive a traditional Cataract treatment, for some it would be better treated to receive a more advanced treatment, **fitting their individual needs for a continued active working life and giving them additional benefits such as not needing reading glasses.**

Evidently, changes in the treatment schemes of Cataract might be seen associated with the threat of additional costs to society. While this consideration does not reflect the additional benefits to society that the use of innovative technology can bring, several Member States have already put specific legislation to Cataract treatment in place.

Patient-shared billing is already a more common practice in dental treatment or other recent introductions of patient shared billing based, on the Cross-border Healthcare Directive which foresees that patient and health insurance split the costs of treatment, differentiating between what is medically necessary and additional benefits and services the patient opts for.

Through this, legislators have made sure, that patients do not ever lose their basic right for the reimbursement of treatment of their Cataract, by making a choice for a not reimbursed lens.

## V. A guide to implementing EU legislation on patient information and patient choice

### 1. Patients do not yet receive information about all treatment options

In recent years, both the European Commission and the European Parliament have recognised the necessity and need for patients to be well-informed about their treatment and treatment options. Patient information has become increasingly important because of societal developments, such as the ease of access to information through means such as the Internet and other new ways of communication<sup>10</sup>.

In the case of Cataract, information to patients is crucial as the procedure can only be done once, which is why the patient needs to be informed well of all the available treatments.

A European wide survey on patient involvement published in May 2012<sup>11</sup> led to several important conclusions:

- Patient involvement is not well understood by either patients or healthcare professionals.
- It's felt that not enough time would be given to doctors to spend with patients.
- Still many patients are uncomfortable asking for feedback or a different treatment.
- Giving patients a choice was indicated as an important factor for patients to get better involved.

This survey unsurprisingly indicates that more needs to be done to involve patients and to **drive this towards an integrated and normal part of any consultation.**

In the case of Cataract information to patients is a crucial need as the procedure can only be done once, which is why the patient needs to be informed well of all the available treatments. It is important to emphasize the necessity for a **good distinction between information to patients and marketing of a product.** Particularly in healthcare it is of great (ethical) importance that the doctor is providing correct and impartial information and it is not the intention of this document to undermine these efforts.

In practice, this will require healthcare systems to allocate appropriate resources to this process, rather than further rationalising the treatment schemes. As most Cataract surgeries are reimbursed through the DRG-System, patient information processes need to be included in the DRG definition as well as in the medical guidelines. DRG stands for Diagnosis Related Groups, which identifies the different products and services a patient receives, such as the surgeon's time, the nurses and other healthcare personnel, the products used (bed, food, etc) as well as the medicinal products and possible medical device used. On the basis of this DRG, the cost of the full treatment and reimbursement is decided.

Specific efforts need also to be done with regards to the information given to the elderly population on ageing-related diseases and new and innovative treatment options.

Finally, sharing information is essential to develop health literacy which will in turn help not only elderly population but all age group making the most adapted choice to their situation and condition. As stated before, improving information to patients has been recognised as an important step in improving healthcare across Europe by several stakeholders.

### 2. Implementing Patient Choice is now a legal requirement not a choice

Once the patient is informed about his treatment options, he can now make an informed choice for treatment. Patients would benefit from the possibility to be active in the decision making process of the treatment they see as most adapted to their needs, with the help of their practitioners in order to make the most educated choice, moving away from what is currently understood as informed consent.

The European Union is currently undertaking numerous high-level efforts to bring this to the attention of Member States. Patient Choice has recently been directly reflected in legislation such as the Cross-border Healthcare Directive 2011/24<sup>12</sup> which sets out that patient should be provided treatment options even if these would not be available in their home country. The need to enhance and help patients in making an educated and informed choice is reflected in Article 4 (b) of the Directive:

“The Member State of treatment shall ensure that healthcare providers provide relevant information to help individual patients to make an informed choice, including on treatment option, on the availability, quality and safety of the healthcare they provide in the Member State of treatment and that they also provide clear invoices and clear information on prices, as well as on their authorization or registration status, their insurance cover or other means of personal or collective protection with regard to professional liability. [...]”

The Directive extends the choices of treatments available to patients and has been drafted with the intention of putting pressure on Member States to provide the best available treatment choices for patients in Europe. The Directive is not clear about which procedures can be performed with and without a prior authorisation, which still needs to be decided with the Member States. In the Directive it is stated that for procedures requiring overnight stay as well as for highly specialised procedures there is a need for prior authorisation. How this will be implemented in practice is however not known currently.

Therefore Member States will need to implement these provisions on Patient Choice by 25 October 2013 and ensure that it is applied in practice then.

In the case of Cataract, it is particularly important to ensure the ability for patient to be able to choose from a range of treatments the most adapted option for his situation, as patients should not be discriminated based on their choice.

### 3. Cross-border Healthcare

The implementation of the Directive is scheduled for 25 October 2013 and will most likely pose several challenges as its content is very broad and its implications could be multiple. The Cross-border Healthcare Directive was drafted with the intention of putting additional pressure on Member States to deliver the best health care possible. This legislation is particularly relevant for surgeries such as Cataract. Cataract procedures can be performed approximately half an hour and do not require post-surgery stay in hospitals, as such it is a procedure which can be performed abroad without too much trouble.

The Directive 2011/24 on the application of patients' rights in cross-border healthcare is an ambitious piece of legislation which allows for patients to be treated abroad and be reimbursed by their Member State for treatments received in other Member States.

Currently national health services have established tariffs for specific lists of treatments. Under the Cross-border Healthcare Directive, patients will be allowed to receive healthcare in another Member State and be reimbursed up to the level of costs that would have been assumed by their Member State, if treatment for the indication is available in the Member State of residence. This will create a factual patient shared billing situation as patients will be travelling abroad to extend their choice of treatment. These patients will then be reimbursed for the standard cost, if the type of treatment was provided in their Member State. This means that patients will cover themselves for the difference for their specific choice of treatment. This situation will potentially generate losses of income for Health services as treatments performed abroad will have to be reimbursed by National Health Services of the Member State of affiliation of the patient.

Member States should look into introducing innovative funding mechanisms such as patient shared billing in order to avoid income losses for their Health Services and avoid discriminating patients based on their treatment choice.

### 4. National Patient Choice Legislations – examples

There are several examples of Member States who have implemented patient choice articles or provisions in their legislation. As of 25 October 2013, all Member States need to have such provisions in place given the implementation deadline of the EU Cross-border Healthcare Directive.

- In Belgium, the law on patient rights' from 22 August 2002, mentions freedom of choice of doctors, provider of care, and the right of information<sup>13</sup>. This law on patient rights' is therefore already steering in the direction of patient choice, as well as the choice to the provider of care.
- France has clear legal rules on informed patient choice and consent, which state that the patient needs to be informed about the different treatments which are proposed by the doctor, plus all other possible solutions. Furthermore, the patient explicitly has or assumes an active role in the decision making process, as the legislation states that everybody takes the decisions concerning his or her health<sup>14</sup>.
- The concept of patient choice is based on Article 2 of the German Constitution, granting every citizen the right to self-determination. In this context, German legislation has granted the right of patients to choose from equivalent treatment options while also giving the physicians the right to decide which treatment is most appropriate, based on his medical knowledge. Additional limitations result of the efficiency principle (§12 SGB V), requiring the physicians to opt for the most cost effective treatment for statutory sick fund insured patients<sup>15</sup>. In Germany changes were made to their Federal Social Law (§33 of the SGB V) in January 2012, which allowed co-payment for cataract treatment, covering both costs of material and treatment.
- The Netherlands has a patient's rights' law in place and the Ministry has already wanted to amend this law since 2008<sup>16</sup>. The main reason for amending this legislation is to include better provisions on right to information to enable patients to make informed choices. This currently is in the process of being amended by the Dutch Parliament. This revision will have incorporated most of the requirements of the EU Cross-border Healthcare Directive when it gets adopted.
- Patient rights are set out in the Constitution in Poland but also enshrined in the Bill on Patient Rights as well as the Bill on Medical Activities<sup>17</sup>. These rights enclose patient choice, such as choice of practitioner, second opinion as well as the right of patients to be informed of different treatment options.
- Patient choice is a right enshrined in the UK National Health Service Constitutions since 2010<sup>18</sup>. One of the major goals of the Health and Social Care Act 2012 is to ensure higher levels of choice for patients by stimulating competition and involving clinicians in commissioning of services.

## VII. Annexes: Understanding the backgrounds

### 1. Understanding an Ageing Society and Active Ageing

Percentage of the population above 65 years in the WHO European Region\*



\*Except Andorra, Monaco and San Marino.

The European Commission has recognized ageing as one of the greatest social and economic challenges of the 21st century for the European societies.

As mentioned in the introduction, the ageing society is being debated and discussed all over the EU, mainly because this growing ageing population will put pressure on the healthcare budgets of all EU Member States. By 2025, more than 20% of Europeans will be 65 or over with an expected high and increasing number of people above the age of 80<sup>19,20</sup>. In this context, 2012 has been announced as the year of Healthy and Active ageing by the European Union as well as by the WHO<sup>21</sup>.

Eyesight is among the most fundamental elements of a high quality of life, especially when ageing.

On the occasion of the World Health Day, on 7 April 2012, John Dalli, Former European Commissioner for Health and Consumer policy emphasized the need to adapt Europe to this demographical challenge<sup>22</sup>. Indeed, given the demographical changes expected by 2050, it is of crucial importance to develop “age-friendly” policies which would help foster age-friendly environments, products and services for active and independent living. This will notably allow empowering elderly population and providing support in managing their chronic condition to enhance their independent living capabilities.

### 2. Understanding the Societal Impact of Cataract

Considering the tremendous increase of the ageing population, there will be an increase in the amount of patients needing care and treatments. The patients undergoing medical interventions to preserve eyesight, including Cataract replacement, should be guaranteed the best possible treatment. This is particularly important for the case of Cataract because the treatment can only be performed once and because patients will live longer with their implants and therefore need the treatment best fitted for their needs. Currently, there is a need for changes in the healthcare system because of the non-sustainability of healthcare financing.

The European Economic and Social Committee (EESC) has published an opinion on ‘The impact of population ageing on health and welfare systems’ in July 2010<sup>23</sup> where they called for ‘making systems for additional payments and

complementary insurance more flexible'. With making additional payment more flexible one can think of a patient choosing a technologically more advanced procedure whilst only paying the difference between the common, reimbursed procedure and the chosen procedure. This is particularly important for tackling the current issues with demographic change and also stimulates innovation as patients can choose technologically advanced procedures if preferred without paying for the entire procedure.

Additionally, the EESC called for measures to improve the ability of the elderly population to live independently. Particularly important is their call to 'ensure that all those in need of care receive those services that are necessary to uphold their autonomy and dignity'. Similarly in France in 2011, policy makers have tried to address the issue of independence through stakeholders meetings in order to develop a national strategy on it. Therefore, it is of utmost importance to make sure the elderly population can live independently and with keeping their dignity as long as possible. Good eyesight is vital to be able to live independently.

### a. Disability and Falls

Falls are a serious issue to the elderly population as these can cause fractures and lead to disability which severely impacts on the level of independence of an older person. Falls could be prevented by enabling older aged population to better perceive and operate in their environment<sup>24</sup>.

 **Thirty percent of people over 65 will fall each year.  
In the age of 80 this number rises to fifty percent.**  
*World Health Organisation* 

In 2004, the WHO has determined the main risk factors for falls of elderly people in a report on this topic<sup>25</sup>, which outlined that the risk of falls increases rapidly with age<sup>26</sup>. The European Commission stated that falls are the dominant cause of injuries among the elderly, accounting for 29% of all fatal injuries of older people. A consequence is that "many become dependent and require institutional care with high implications for costs, and reduced quality of life"<sup>27</sup>. Injuries sustained from falls can seriously reduce the mobility and independence of older adults. And in some cases it can even increase the risk of premature death.

#### Country Examples of Fall Injuries

##### Norway

A 2006 Norwegian survey of people aged over 67 found that nearly one-quarter had experienced a fall in the preceding six months. Of those, more than one-half reported that their most recent fall had led to an injury and roughly 15% said it had resulted in a fracture<sup>28</sup>.

##### United States

In the US, according to the Centres for Disease Control and Prevention (CDC), falls are the leading cause of injury-associated deaths among the people over 65. And falls are the leading cause of non-fatal injuries and hospital admissions for trauma in that group. The CDC adds that the fear of falling can in itself place great restrictions on mobility and increase social isolation, leading to further negative outcomes<sup>29</sup>.

##### United Kingdom

A UK study demonstrated a significant reduction in the risk of falls after Cataract surgery in the elderly population. The study shows that Cataract surgery is an effective intervention to reduce the risk of falls in elderly patients with Cataract related visual impairment<sup>30</sup>.

Falling with age is non-discriminatory as it can happen to anyone. Numbers show that it is a global concern. Falling can have multiple causes ranging from the medical condition of the person, the psychological status, nutritional deficiencies as well as visual impairments.



The needs of the elderly are not well-understood,  
including their relation with their environment



Cataract is described as a visual impairment which can contribute to the risk of falls and a study has shown that Cataract surgery can reduce the risk of falls of older people with Cataract<sup>31</sup>. Additionally, wearing glasses can increase the risk of falling, as elderly people often have different pairs of glasses such as reading glasses next to their normal glasses<sup>32, 33</sup>. With a traditional implantable lens (monofocal) the patient would still need at least one pair of glasses for reading. Additionally, it is very likely that if the person also has an additional condition such as astigmatism they will still need another pair of glasses for mid-distance and distance vision.

The European Economic and Social Committee (EESC) specifically calls for ‘new technologies that enable independent living’ as well as additional research relating to, among others, visual impairment (e.g. Cataracts). Furthermore, one of its recommendations for the national level is to make ‘systems for additional payments and complementary insurance more flexible’. This would therefore enable the elderly population to choose their treatment with regard to Cataract surgery.

#### b. Social exclusion

For the ageing population especially social exclusion is an important issue. Therefore, social exclusion is being addressed at EU and international level through the concept of Healthy and Active Ageing. The European Union focused its attention on social exclusion during their European Year in 2010 for Combating Poverty and Social Exclusion<sup>34</sup>. As mentioned before, France has also held debates in the beginning of 2011 on elderly dependence and independence issues.



Social exclusion is a key issue for the elderly population



Social exclusion can be caused by many factors, but one important factor is mobility. Vision impairment is a factor which can contribute to social exclusion. **Given that the Cataract surgery will only be performed once on each eye (unless there are complications) this is why patient choice, making the outcome best fitting the individual patient need, is so important.**

Living independently is of great importance to the elderly population. The European Commission has emphasised before that there is a need for smart innovations for sustainable and efficient health systems and that there is a need to find ways to empower elderly people to better manage their chronic conditions and to provide settings that enable them to live independently.

In February 2011, in France several debates were organised on ‘National Dependency’ by Roselyne Bachelot-Narquin, Minister for Social Cohesion and Solidarity. Even though dependency is not just a concern for older adults, the debate clearly focused the elderly population and aimed at addressing dependency situations. Given the demographic situation and estimations for the future it is clear that dependency of old population will put additional burden on the healthcare system.

#### c. Contribution to society

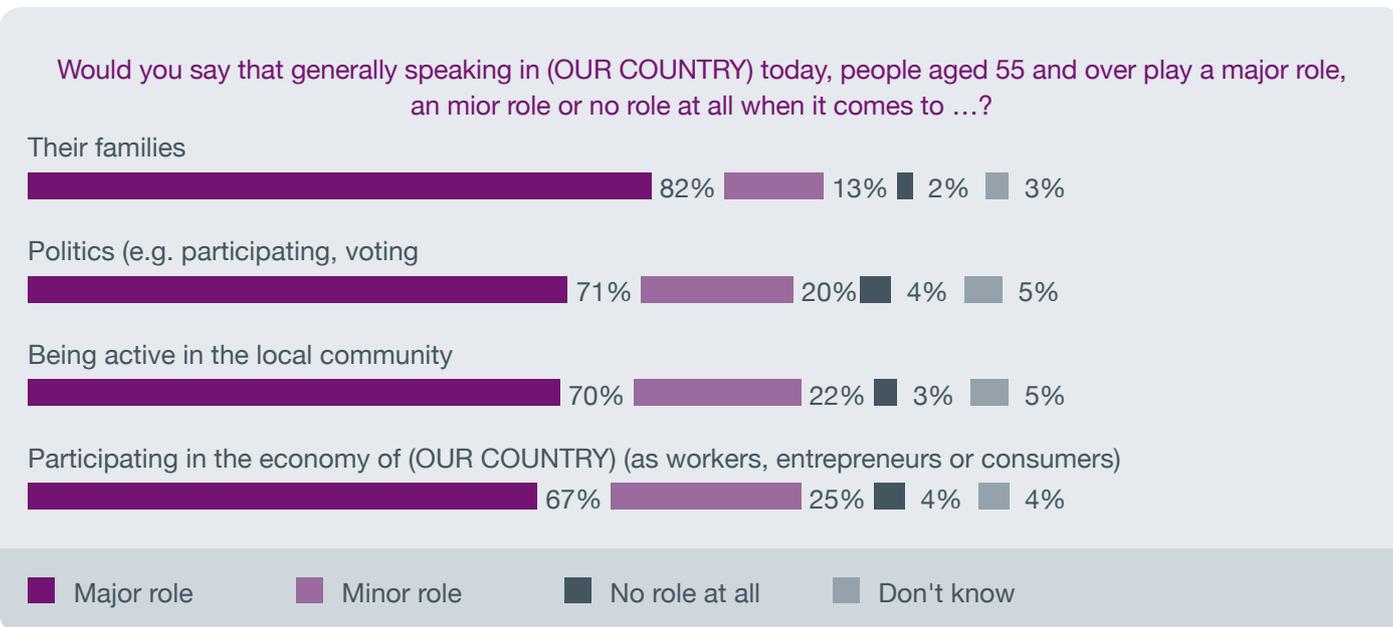
Good eyesight is indispensable, not only for professions with a need for precise vision, but also in general for all professions.

The society is increasingly dependent on highly active persons above fifty years of age, with regards to their contribution to society, such as for working, but also as an important voting block. Currently, almost all nations in the EU are implementing or proposing measures to keep older people on the labour market, for example via more focus on the European Life Long Learning programmes or the raising of pension age.

Excellent eyesight is indispensable for certain professions including precision workers. In case of Cataract of such employees, it is indispensable to provide access and choice for the most appropriate available treatment.

Any medical intervention that guarantees the best level of activity, especially regarding fundamental aspects such as eyesight, are indispensable for a healthy and active society.

A Eurobarometer<sup>35</sup> has conducted a survey on people's opinions on active ageing. According to the graph below, the participants expect that people of over 55 years of age play a major role in all areas of society, from within their families up to voting and their economic contribution to society.



The older population will only grow in size in the upcoming years. The needs of this population will have to be taken increasingly into account<sup>36</sup>, for example in politics. In the Netherlands, a political party has been founded in 2011 named "50plus". The 50plus party immediately entered the provincial state elections, in which they received a good result with on average 2.25% of the votes (2% is the threshold)<sup>37</sup>. The provincial state elections are not key elections in the Netherlands, but it does show that the 50plus party can be an increasingly important party in other elections. The creation of a political party solely devoted to the elderly population is a phenomenon which could further develop itself in the EU.

Finally, the elderly population is also participating greatly in society by volunteering for many different organisations and causes. Additionally, older people are also contributing to society by being carers for those in society who need it. The role of the older people is crucial because they are involved in different activities including facilitating reconciliation of work and family life by caring for young children.

### d. Quality of life

Living longer is the new norm. This rise of life expectancy is good news for individuals, but of course, provided that their quality of life is good too.

"Some people may well spend nearly as much time in retirement as they did in their working lives"<sup>38</sup>. This is why healthy and active ageing is increasingly important. The quality of life is the most important aspect of life. Everyone wants to be able to move properly, be fit, be active and be able to use all of your senses properly.

When becoming older the body will not be able to stay as fit, but a lot can be done to improve healthy and active ageing. No wonder that the WHO and the EU have both prioritised 'Healthy and Active Ageing' for the year 2012 and hopefully to keep this as a priority for many years to come.

### 3. Understanding the medical background to Cataract and its treatment

A Cataract is a clouding of the lens of the eye (the Crystalline lens), which slowly impedes the passage of light<sup>39</sup>. The lens is usually clear, allowing light to pass. Cataracts are a slow progressing condition. Over time the Cataract will continue to develop so that larger and more patches of the lens will block the vision. This will limit the amount of light passing through the lens causing the vision to become blurred or cloudy. The cloudier the lens become, the more a person's sight will be affected<sup>40</sup>. Most Cataracts are related to ageing, although occasionally children may be born with the condition, or Cataract may develop after an injury, inflammation or disease<sup>41</sup>. Cataract can develop in one or both eyes.

Cataracts are the leading global cause of impaired vision. Estimates have shown that over half of all people aged over 65 have some Cataract development in one or both eyes. Cataract affects men and women equally.

**Diagnostic:** The diagnosis of Cataract is done through a standard eye exam and slit-lamp examinations are sufficient for it to be diagnosed. Other diagnostic tests are rarely needed, except to rule out other possible causes of poor vision.

**Age-related Cataract:** Age-related Cataracts is the most common type of Cataract. Risk factors for age-related Cataract include diabetes, prolonged exposure to sunlight, smoking and alcohol consumption<sup>42</sup>. Cataracts that affect older people are known as age-related Cataracts. An adult Cataract develops slowly and where the lens of the eye slowly gets clouded. Vision in the affected eye or eyes progressively gets worse which generally lead to decreases vision even in daylight.

**Congenital Cataract:** A congenital Cataract t is a clouding of the lens of the eye that is present at birth. The lens of the eye is normally clear. It focuses light that comes into the eye onto the retina. Congenital Cataracts are rare and its causes are difficult to identify, they often occur as part of other birth defects.

**Other types of Cataract:** Traumatic Cataract may develop after eye injuries, inflammation, and some other eye diseases. Other Cataracts include secondary Cataracts which can develop after use of drugs (i.e. corticosteroids).

#### a. Available treatments

Cataract is a disease which can be treated with a sophisticated micro-surgery procedure, requiring specialised medical expertise, by replacing the lens of the eye. The surgery can only be performed once on each eye. The surgeries performed to treat Cataract are already the most common procedures performed in hospitals. Different levels of surgery exist ranging from the traditional treatment that would require wearing glasses following the surgery or with innovative technology allowing patients to have much improved eyesight and allowing them to have such good vision that the wearing of glasses for all activities during their daily lives will not be necessary. With an increase in the ageing population one can also expect an increase in the amount of Cataract surgeries performed. Taking into account that the people living with these implants are also living longer it is of vital importance that they get the best possible treatment and best possible choice.

{


Cataract can be treated with a sophisticated micro-surgery procedure by specialised medical experts. And it does not require over night stay for the patient.

}

Before the operation a patient's eyes and general health are assessed and the eye undergoing surgery will be measured so that the appropriate artificial lens that will replace your natural lens can be selected. Most surgery is performed using a keyhole procedure, which means that a small incision is made.

### Intraocular lenses

The natural lens is replaced during surgery by an intraocular artificial lens. The oldest written account of operating on Cataracts is by Susruta, written in Sanskrit and probably dating from 6th to 3rd century BC. In more recent times, Sir Harold Ridley undertook the first modern implantation of an intraocular monofocal lens implant in 1950 at St Thomas' Hospital, London. New types of lenses have been introduced on the market. There currently exist 4 main types of intraocular lenses. Artificial intraocular lenses can also correct common eyesight problems such as myopia.

→ **Monofocal lenses:**

Monofocal lenses are the most commonly used lenses. These lenses have a fixed focus and allow for good distance vision. As the lens cannot adapt itself, reading glasses are needed for close vision.

→ **Multifocal:**

Multifocal lenses, as their name suggests, are lenses allowing for far, middle and close distance vision.

→ **Accommodating lenses:**

Accommodating lenses rely on the principle that artificial lenses should function as the original lens

→ **Toric Lens:**

Toric lenses are mainly used for patients with astigmatism, which is an eye condition creating problems with focussing, which often leads to headaches as one of the symptoms.





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