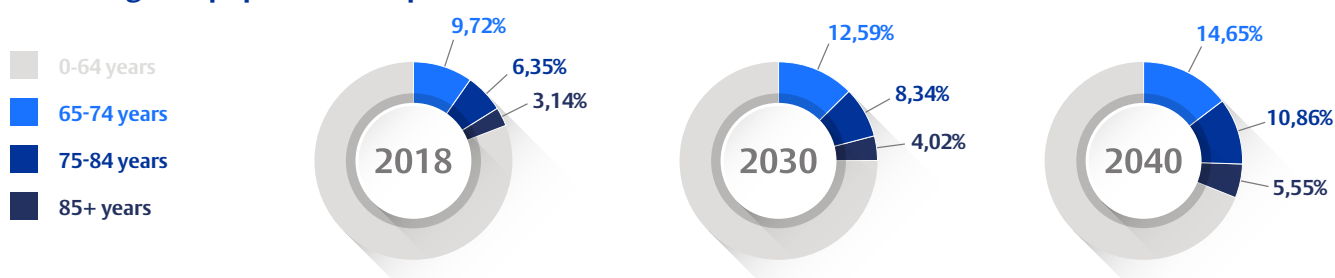
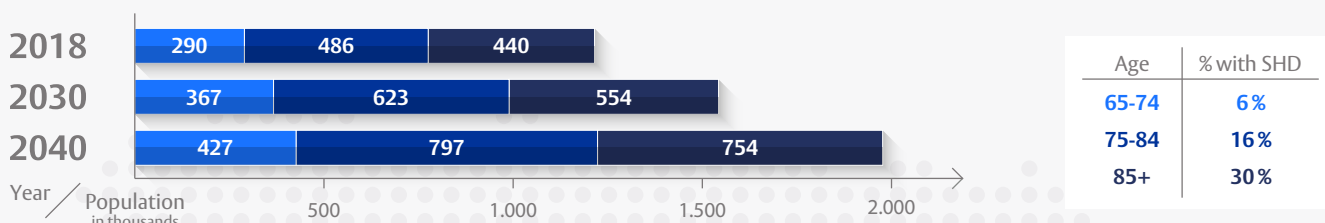


**Structural Heart Diseases (SHD)** are cardiac defects often and increasingly linked to functional decline and population ageing that demand repair and/or replacement of heart valves such as aortic stenosis, mitral valve regurgitation and tricuspid repair.

## Percentages of population in Spain<sup>1</sup>:



## Estimated number of people with SHD in Spain\*:



\* These figures have been extrapolated based on projected demographic figures from the Instituto Nacional de Estadística<sup>1</sup> and the burden of Structural Heart Diseases provided in the OxVALVE Population Cohort Study<sup>2</sup>. Figures rounded to the nearest thousand.

## Key facts related to SHD in Spain:

**5,9 billion €**

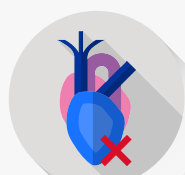
of direct healthcare expenditure for cardiovascular diseases (CVD) in 2015<sup>3</sup>.

CVD represented **8,31%** of the total health public budget in 2015<sup>3</sup>.

In 2040, **14%** of people over 65 will have SHD, which represents **4,36%** of the total population<sup>4</sup>.

## Key Messages:

- Spain is one of the **fastest ageing countries** in the world; soon 1 in 3 inhabitants will be over 65 years old. This will lead to an **increase of the incidence of cardiovascular diseases**.
- Although valve disease affects gender equally, reality shows **infradiagnosis within women**<sup>5</sup>.
- Heart Valve diseases account for **8% to 26% of heart failures**<sup>6</sup>, which are the **first cause of hospitalization** of people over 65 years old in Spain<sup>7</sup>.
- 59%** of patients diagnosed with severe aortic stenosis **do not receive intervention**. **14%** of intervened patients **remain on waiting list** after one year, and **19%** of them **die before getting any treatment**<sup>8</sup>.
- SHD is a **major cause of functional decline** in the elderly population and as such, Spanish policies **must tackle SHD** as part of ageing strategies.
- Investments in health innovations for this population are an **economic necessity** for Spain to adapt to the new demographic challenges.



In 2040 Spain will have an estimated **2 million people** over 65 with SHD.

<sup>1</sup> Instituto Nacional de Estadística (2016) Proyecciones de Población 2016-2066

<http://www.ine.es/jaxi/Tabla.htm?path=/t20/p278/p01/2016-2066/0/&file=01001.px&L=0> [retrieved on: 25/July/2018]

<sup>2</sup> J. d'Arcy et al. Large-scale community echocardiographic screening reveals a major burden of undiagnosed valvular heart disease in older people: the OxVALVE Population Cohort Study. Eur Heart J. 2016 Dec 14;37(47):3515-3522. doi: 10.1093/eurheartj/ehw229. Epub 2016 Jun 26.

<sup>3</sup> Centre for Economics and Business Research (2014) Coste económico de las enfermedades cardiovasculares desde 2014 a 2020 en seis países europeos [retrieved on: 25/July/2018]

<sup>4</sup> Ministerio de Sanidad, Servicios Sociales e Igualdad (2015) Diferentes series de gasto sanitario <https://www.msssi.gob.es/estadEstudios/estadisticas/sisInfSanSNS/pdf/diferentesSeriesGastoSanitario.pdf> [retrieved on: 25/July/2018]

<sup>5</sup> Ferreira-González I et al. Prevalence of calcific aortic valve disease in the elderly and associated risk factors: a population-based study in a Mediterranean area. Eur J Prev Cardiol. 2013 Dec;20(6):1022-30. doi: 10.1177/2047487312451238. Epub 2012 Jun 7.0140673606692088

<sup>6</sup> Nkomo VT et al. Burden of valvular heart diseases: a population-based study. The Lancet. 2006 Sep;368(9540):1005-11. doi: 10.1016/S0140-6736(06)69208-8.

<sup>7</sup> I. Sayago-Silva et al. Epidemiología de la insuficiencia cardíaca en España en los últimos 20 años. Rev. Esp. Cardiol., 2013;66:649-56 - Vol. 66 Núm.08 doi: 10.1016/j.recresp.2013.03.014.

<sup>8</sup> González Saldivar H, et al. Prognosis of Patients With Severe Aortic Stenosis After the Decision to Perform an Intervention. Rev Esp Cardiol. 2018. <https://doi.org/10.1016/j.rec.2018.03.023>