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Lay Summary

HEALTH CARE EXPENDITURES, AGE, PROXIMITY TO DEATH AND MORBIDITY: IMPLICATIONS FOR AN AGEING POPULATION
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Working out how much we will need to spend in future on our health system, and working out how much to allocate to health budgets across the country, are not simple matters and require that we are able to correctly explain existing patterns of health care expenditures. Most people agree with a 1986 report from the International Monetary Fund that "demographic pressures of an aging population will be associated with increased demand for medical services". This fuels the worry that the health system will become unaffordable as the share of older people in the population rises.

But some researchers have argued that it's not the share of older people in the population that is the problem. They recognise that health care expenditures increase as people get older. But the expenditure is highest the closer people are to dying – whatever age they are. This is called the "time-to-death" hypothesis. And those who support this hypothesis say that ageing is a "red herring" when it comes to explaining health care expenditure.

But other researchers argue that there is another explanation. They maintain that individuals are now ageing more healthily, but experience greater ill-health concentrated at the very end of their lives. It is these health problems, called morbidities, that explain expenditure. This is called the "compression of morbidity" hypothesis.

Our research uses English administrative data about people who have spent time in hospital to incorporate individual-level morbidity as well as age and time-to-death, to explain why health care expenditure varies from one person to another. We find that time-to-death indeed better explains health care expenditures than does age. However time-to-death is less useful for forward planning or forecasting health care expenditures, because a person's future time-to-death is unknown. Therefore it is important that our findings also show that the role played by time-to-death can be explained by available measures of morbidity.

Our results strengthen the need to include detailed measures of morbidity in models of health care expenditures. Just including time-to-death is insufficient in models explaining health care expenditures. If we are to forecast accurately how much money the health system needs, we need to take account of the health problems that people suffer. This is important to allow the planning of future resource requirements and in developing appropriate models for budgets to be allocated fairly across the country.

Full report available at:
http://www.york.ac.uk/media/che/documents/papers/researchpapers/CHERP107_health_care_expenditures_ageing_morbidity.pdf

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