Enhancing end of life management

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Introduction
The aim of this paper is to draw emphasis on the variation in medical costs incurred by the largest open health insurance company in South Africa, Discovery Health Medical Scheme (DHMS), from the provision of benefits during the last year preceding a beneficiary's death relative to those in earlier years as well as to those of surviving beneficiaries. Building on this knowledge, the paper goes on to showing how Discovery Health's unique data position is used to identify, segment and understand the beneficiaries on a risk path to death, as well as the approaches by which the palliative services offered to beneficiaries can be enhanced so as to not infringe on the beneficiary's dignity, subject to the Scheme's cost constraints.

Methods
The benefit enhancement approach discussed in this paper highlights the significance of social support in conjunction with a multidisciplinary approach to specialized medical care in achieving the aforementioned objective. To identify the population at-risk of dying, segmentation techniques were adopted initially to identify the true palliative population from all deaths and then statistical modelling techniques performed to identify risks in the population, behaving similarly to those that have died, in the following year. So a model was fit to all DHMS data which then predicted who is at a high risk of dying in the following year. This population serves as the population to then enroll on an End of Life initiative, supported by his/her doctor and family.

Results
Medical providers in the South African healthcare industry are often at a disadvantage, with insufficient information and tools to make that call about 'dying'. This in turn results in beneficiaries desperately seeking costly medical attention in the form of, for example, surgeries, high-cost drugs and active cancer treatment that lead to a further deterioration of health.

DHMS is in a distinctive position, having a wealth of claims information by month, by provider and by condition as well as audited/confirmed mortality data dating back to 2008 (which includes a cause of death description). This enables DHMS to inform on which beneficiaries are at risk of dying and to engage much earlier with providers regarding the discussions around palliative care.

Conclusions
DHMS believes that there is value in empowering providers to diagnose and to communicate to beneficiaries the advantages of activating palliative treatment instead of seeking more aggressive treatment during these final stages of life. This empowerment will allow members and families to engage more with the benefit opportunities available to support the very seriously ill.

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