Editor’s view

50th anniversary commentary collection

Age and Ageing celebrates its 50th anniversary this year with a series of state-of-the-art commentaries on key issues in geriatric medicine. In the first of these, Olde Rikkert et al. argue that illness is more important than disease in old age. The traditional medical focus on diagnosis and specific treatment is inadequate in the face of chronic disease, multi-morbidity, disability and non-specificity of presentation. Instead, the authors propose a focus on symptoms and problems, which exist in complex, interacting and dynamic networks. The roots of this are already embedded in clinical practice, through comprehensive geriatric assessment and the formulation of problem lists. Developments in complexity science and high-powered computing offer the theory and modelling methods to make these ideas useable in practice, with the prospect of better-directed, more effective and less burdensome personalised health care.

COVID-19 vaccination

Exclusion of typical end-users of medicinal products in the trials which establish their efficacy is a recurring theme. Care home residents were at highest risk from COVID-19, and suffered the greatest burden of mortality, but were wholly excluded from COVID-19 vaccine trials. Hollingsworth et al. used linked routine data on 14,000 vaccinated care home residents to examine the protective effect of vaccines. Only 1% had a positive PCR test up to 3 months after vaccination. Sixty percent of these occurred within 7 days of vaccination, 90% within 28-days and very few after 42 days. Infection risk was halved in those with previous COVID-19 infection.

Pierobon et al. analysed routine data from the entire population of the Veneto Region. In the first pandemic wave, nursing home residents were 15-times more likely to be infected with COVID-19, 10-times more likely to die and five-times more likely to be hospitalised compared with the rest of the population. With 95% vaccine coverage amongst residents and staff, alongside other precautionary measures, risks for nursing homes residents in the third wave were 30% less for infection, 75% less for hospitalisation and 50% less for death, compared with a matched non-nursing home population.

Dementia and delirium risk factors

Until recently, recommendations for management of atrial fibrillation (AF) suggested that attempts to restore and maintain sinus rhythm were ineffective, and emphasis should be on heart rate control and anticoagulation to reduce the risk of embolism. New evidence suggests that this may not always be the case. Kim et al. analysed routine data on 41,000 anticoagulated patients with AF. Fifty-five percent had a rhythm control strategy, including 7% who had catheter ablation, the rest using drugs, mostly amiodarone, flecainide or propafenone. AF is a risk factor for dementia, which was diagnosed in about 10% of the population over a mean of 4 years of follow-up. After propensity matching for other characteristics, risk of dementia was 14% lower in those with a rhythm-control compared with a rate-control strategy. Risk was 40% less amongst those who had had catheter ablation. The association was strongest in younger patients, was independent of stroke, and held for Alzheimer’s as well as vascular dementia. Residual confounding, selection bias and reverse causation are always concerns in observational studies, but, alongside other evidence, we may need to re-consider our approach to AF.

Delirium most often affects people with frail brains. Pendlebury et al. studied the risk of delirium among hospitalised patients who had had brain imaging to investigate TIA or stroke up to 5 years previously. Sub-cortical white matter ischaemic change was associated with 2.7-fold increased risk of delirium, and atrophy with 2.2-times increased risk. The association with white matter ischaemia was independent of prior cognitive function.

Hospital-at-home

Hospital admission is at best burdensome for frail older people, and many clinicians suspect that hospital admission is associated with harms, including deconditioning, delirium, infections and loss of abilities. Many aspects of acute hospital care can be provided at home. Shepperd et al. recently reported the results of a large-scale randomised controlled trial, which demonstrated no overall difference in outcomes between hospital admission-based care and hospital-at-home for those in whom home treatment was appropriate, although rates of subsequent institutionalisation were reduced by 40% for hospital-at-home patients. Singh et al. report an economic evaluation. Hospital-at-home was associated with 3 fewer days in hospital within one month and 1 fewer day within 6 months of randomisation. Hospital-at-home was cheaper than hospital admission, both from a public sector perspective, and after taking into account informal care costs. Surprisingly, hospital-based care was associated with more hours of unpaid help over
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6 months. There were no differences in quality-adjusted survival. Hospital-at-home is cost-effective.

Trauma-risk prediction

Hjelholt et al. developed and tested a prognostic score for use among hip fracture patients, based on 5 readily available clinical variables. One-year mortality varied from 5% to 91% across the range of prognostic categories.

Fangjie Zhao et al. report development and validation of a geriatric trauma frailty index. The index was derived from an American dataset and validated in a Chinese population. It relies on previously-collected, electronically recorded, healthcare data, akin to the Hospital Frailty Risk Score, which can be important in trauma situations where direct data collection from patients may not be possible. Frail patients had longer length of stay (9 versus 5 days) and higher mortality (12% versus 1%).

In an editorial, Todd and Clegg argue that severity of injury alone does not determine outcomes, and that the vulnerability and complexity of the injured person must also be considered. Prognostic scores are important to support trauma care, identifying those at greater risk and with special needs. However, the ultimate arbiter of their usefulness will be demonstrating an impact of their use on outcomes.

Long-term outcomes in age-related macular degeneration

Exudative age-related macular degeneration is a leading cause of blindness, whose progress can be slowed by intra-ocular therapies. Young et al. used linked, routine, clinical, mortality and blind registration data to study 10-year outcomes after ranibizumab or aflibercept anti-vascular endothelial growth factor treatments. After a 3-month loading dose regime, further treatments were given as required based on clinical examination, resulting in a mean 2.2 treatments per year. 80% of patients’ vision deteriorated during follow-up and 12% were registered blind. Rate of visual loss was substantially less than would have been expected in an untreated cohort, but greater than had been achieved in trials or with more proactive treatment regimes, which carry the cost of additional ophthalmology clinic appointments and 4–6 injections per year. Half of the patients died during follow up, but mortality rate was less than that of the general population.

Urgent care collection

Age and Ageing has curated a themed collection of previously-published papers on urgent care for older people, giving free access to 15 papers. Conroy and Thomas provide a commentary charting the evolution of geriatric medicine from a rehabilitation- and community-orientated specialty to a major provider of acute care. They discuss the ‘who’ (the population), ‘how’ (the interventions) and ‘why’ (the outcomes) of urgent care, emphasising the importance of consistently getting basic care right.

Dermoscopic visualisation of scabies mites

On-line publication brings opportunities to host a wider range of supporting multi-media materials for published papers. In future, we hope to see more visual elements embedded in the abstracts, such as thumbnails of your figures, infographics or videos. We can also host graphical, audio and video elements within the main body of the articles. This recently published Clinical Reminder features a striking example from Ling-Li Chen et al., a video abstract graphically demonstrating crawling scabies mites on the skin of a 101-year-old woman.

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