

NEW HORIZONS

The contribution of geriatric medicine to integrated care for older people

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Abstract

Aims: to describe contribution of geriatric medicine to the development of integrated care for older people and to suggest future directions for the further development of integrated care for older people.

Methods: literature review and case studies.

Results: geriatricians have made a significant contribution to the development of integrated care for older people. The feasibility of this approach has been shown in demonstration projects. Although there is only limited evidence from randomised controlled trials, integrated care seems likely to be beneficial. There is an opportunity to develop new approaches to integrated care for older people in prevention and provision of community alternatives to hospital care.

Conclusion: the principles and practice of geriatric medicine have been shown to underpin the successful development of integrated care for older people and should continue to do so as new challenges emerge.

Keywords: *integrated care, older people, geriatric medicine*

Introduction

Much has been written recently about the need to develop more integrated care for older people [1–3]. The term integrated care has been commonly used to describe arrangements for working across professional groups and/or organisations to achieve better outcomes for patients. It should be distinguished from the term comprehensive geriatric assessment, which is a form of integrated care for older people that is used to describe the practice of specialist multidisciplinary assessment and management of predominantly frail older people. In this article, I explore how the development of integrated care for older people has been closely associated with the development of British geriatric medicine, how recent evidence has validated the pioneering work of geriatricians and why the principles and practice of geriatric medicine should continue to drive the further development of integrated care of older people.

It is 71 years since Marjorie Warren published an article in the *British Medical Journal* on the care of chronic sick, advocating the need for specialist care for older people in the general hospital [4]. This publication is generally regarded as firing the starting gun for the development of the speciality of geriatric medicine in the United Kingdom, followed soon after by the

founding of the Medical Society for the Care of the Elderly [5], the forerunner of the British Geriatrics Society. Marjorie Warren and other pioneers of British geriatric medicine shared an interest in integrating components of care across traditional boundaries. For a definitive review of the history of geriatric medicine in the United Kingdom, see Barton and Mulley [6], or for a broader, international perspective, see John Morley's review [7].

As well as building on the experience of those who transformed systems and care for older people, it is important also to evaluate evidence from research. In recent years, a number of excellent reviews have been undertaken of the evidence base for integrated care for older people. I would argue that the collective wisdom developed by doctors specialising in the care of older people has been validated by the outcomes of this research.

Integrated care in the hospital setting

As well as articulating the need for specialist care for older people in hospitals, Marjorie Warren started to describe how multidisciplinary hospital teams could work to diagnose, treat and rehabilitate older people to improve outcomes and reduce the need for long-term institutional care [8]. This

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approach has evolved into the well-established system of comprehensive geriatric assessment that has been conclusively shown to deliver better outcomes at lower cost in the care of frail older people in hospital [9].

Integrating specialist old-age medicine and psychiatry

A key component of comprehensive geriatric assessment is the assessment of mental functioning. A landmark paper published in *Age and Ageing* in 1972 was Hodkinson's 'Evaluation of a Mental Test Score for Assessment of Mental Impairment in the Elderly' [10]. The Hodkinson's 10-item abbreviated mental test score has been widely used as a practical tool for screening for cognitive impairment in older people in the hospital setting. Also in the 1970s, Tom Arie was pioneering the development of specialist old-age psychiatry and its integration with old-age medical services [11]. Recent evidence suggests the benefit of providing specialist old-age mental health expertise for frail older people in acute hospitals in reducing length of stay and improves outcomes [12].

Geriatric orthopaedics

Lionel Cosin, an orthopaedic surgeon, was a key figure in the history of geriatric medicine, most famous for establishing the first geriatric day hospital [13]. Cosin was a passionate advocate for focusing on functional improvement in older people's care. Michael Devas, another pioneering orthopaedic surgeon, working with the great geriatrician Bobby Irvine in Hastings in the 1970s, fully developed the principles and practice of integrated geriatric and orthopaedic care for older people with hip fractures [14]. Recent evidence from randomised controlled trials has validated the cost-effectiveness of this approach [15].

Community alternatives to hospital care

Much of the history of geriatric medicine in the United Kingdom has been about breaking barriers for older people to gain access to acute hospital care. Specialist wards for older people in acute hospitals have become the norm following their introduction in Sunderland in the 1950s by Eluned Woodford Williams [16]. Ironically, the success of the Specialty in becoming integral to the work of acute hospitals has led to a retreat from influence within community care for older people [17]. Reductions in hospital length of stay have meant that most rehabilitation for frail older people following acute hospital care now take place in community settings. Comprehensive Geriatric Assessment needs to be applied in community settings for frail older people to reduce unnecessary admission to hospital, shorten length of stay and improve outcomes [18, 19].

Preventive care

Jimmy Williamson's article in *The Lancet* in 1964 on the unreported needs of old people at home [20] identified that

significant threats to the health, independence and well-being of older people living at home are ignored. These included treatable problems relating to mobility, vision and hearing, heart disease, neurological disability, continence, joint and foot problems, mental health problems, social care, housing and financial needs. Responding to these problems remains a challenge to our system of care, to this day.

Efforts to address this challenge through preventive health checks have had mixed success. The most powerful study conducted in the United Kingdom to test this approach through the application of systematic geriatric assessment had a negative outcome [21]. However, there is a large and increasing body of work which shows that a targeted approach to identify those at greater risk with a personalised response is cost-effective in improving outcomes for older people at home [22–24]. Furthermore, targeted prevention of older people at risk of falls has also been shown to be cost-effective [25].

Whole system approach

The instincts of the British pioneers in geriatric medicine about improving care for older people through joining up disciplines and sectors to deliver integrated care have now been shown in randomised controlled trials to be valid. However, much of this development has been through a patchwork of initiatives. Attention is now being given to taking a whole system approach to the integration of services for older people. This includes paying attention to micro (clinical integration), meso (professional and organisational integration) and macro (system integration) [26]. This whole system approach has been advocated for many years by Chris Foote and colleagues based on their pioneering work in Swindon [27]. International case studies suggest that the success of integrated care may depend less on the adoption of any single component and more on how all the components can be amalgamated [28]. Structural integration of services is less important than paying attention to developing effective working relationships across service boundaries with good communication systems [29].

Integrating clinical expertise, research evidence and policy analysis

Geriatricians need to lead in the further development of integrated care for older people, working with experts in health policy and in health services research. An excellent example of the power of interdisciplinary thought leadership is the recent King's Fund paper 'Making our health and care systems fit for an ageing population' [30], which provides a masterly review of the detailed requirements for evidence-based integrated care for older people from prevention through to end-of-life care.

Personal perspectives

I was centrally involved in the development and implementation of the National Service Framework (NSF) for Older

People [31], in England. Policy developments in the mid-2000s were antithetical to the delivery of integrated care, which limited the impact of the NSF [32–34]. After stepping down as the National Clinical Director for Older People’s Services, I worked in Warwickshire developing integrated care services in response to a frailty crisis as well as directing an international programme for preventative care. Although the approaches in these projects need to be tested using rigorous methods by independent researchers, I believe they fit with a new set of challenges for the further development of integrated care for older people.

Preventive care: an international approach

If older people are not to suffer from living with unmet needs for their health and care, we need to implement a simpler version of comprehensive geriatric assessment appropriate for use in the preventative care of older people in primary care settings. The EASYCare project was developed towards this end [35]. In the last few years, we have validated the approach for use in poor, middle income and rich countries, showing it to be acceptable and perceived to be useful by frontline practitioners and by older people themselves [36, 37] (Table 1). Impact of the EASYCare Project depends on how it is embedded within a service intervention. Rigorous evaluation within randomised controlled trials has only been undertaken to date in the Dutch EASYCare studies as part of a programme of targeted assessment and response to older people’s needs involving primary care and specialist practice, where it was found to be a cost-effective intervention [38]. The EASYCare approach has been embedded

within very different interventions according to the setting of use. For example, in Tanzania, it has been incorporated into the WHO Community Strengths Framework to enhance older people’s abilities to contribute to the lives of their families and communities [39]. In the Netherlands, it has been combined with training in dementia recognition and shown to be effective in supporting early recognition of dementia in primary care [40]. In the United Kingdom, it has been used to mobilise support from the third sector through telephone-based assessment and response undertaken by trained assessors working for Age UK [1]. In the Balkans, it is being used to underpin health policy development as countries formally torn apart by war seek to develop new systems for social cohesion and inter-generational support [41].

Unquestionably, the specialty of geriatric medicine has established its role in leading the development of care for the most frail older people, underpinned by the technology of comprehensive geriatric assessment. The EASYCare programme adapts this approach to provide a practical system that can reach a much larger number of older people in the primary care setting, targeting those at risk of poor outcomes. Studies of cost-effectiveness are needed for the diverse range of interventions undertaken using the EASYCare approach.

Responding to a frailty crisis

Perhaps, the biggest challenge to ensuring the sustainability of hospital services is managing the rising number of emergency presentations of older people who have the classical non-specific presentations of falls, off legs and confusional states. These presentations are usually associated with a complex mix of medical problems that impact on physical, mental and social functioning. In many cases, there is a need to manage patients with a frailty crisis in the acute hospital setting because there is a serious underlying medical problem or a need for surgery, but in other cases the older person can be assessed, diagnosed, treated and rehabilitated in a community setting. Lack of community alternatives to hospital care can lead to unnecessary hospital admission or increased length of hospital stay.

In Warwickshire, we were able to redistribute services across hospital and community settings so that we could provide a 2-h emergency community response for frail older people. We increased the capacity of our hospital old-age specialist teams so that frail older people in hospital would have rapid access to specialist care. Enhanced community capacity allowed patients to be discharged for assessment and ongoing rehabilitation, though agreed pathways of post-acute care (Table 2). Operational integration with re-enablement services ensured that we could offer all older people an opportunity to recover before placement with potential needs for long-term care. This transformation of services secured improved productivity of community services, reduced needs for acute hospital care and achieved better outcomes for patients [42]. This promising approach needs to be fully evaluated for cost-effectiveness in a range of settings.

Table 1. Studies undertaken with EASYCare 2010

Country	Pilot/acceptability study	Full psychometric study
Albania	✓	
Australia	✓	
Brazil	✓	
Chile	✓	
China	✓	
Columbia	✓	
Hong Kong	✓	✓
India	✓	✓
Indonesia	✓	
Iran	✓	✓
Kosovo	✓	✓
Lesotho	✓	
Macedonia	✓	
Malaysia	✓	✓
Netherlands	✓	✓
Poland	✓	✓
Portugal	✓	✓
Romania	✓	
Taiwan	✓	✓
Tonga	✓	
Turkey	✓	✓
Uganda	✓	
UK	✓	✓

Table 2. Discharge to assess pathways

Pathway	Patient group	Intermediate care	Ongoing care
0	No need for post-acute care	Discharge home	Primary health care
1	Need for post-acute care, at home	Community rehabilitation/reablement for up to 6 weeks	Primary health care plus domiciliary social care if needed
2	Need for bed-based post-acute care (medium to high complexity)	Care home or community hospital rehabilitation for up to 6 weeks	Primary health care plus domiciliary or residential social care if needed
3	Need for bed-based post-acute care (very high complexity)	Nursing home rehabilitation for up to 6 weeks	Primary health plus domiciliary or residential social care, nursing home care or continuing health care if needed

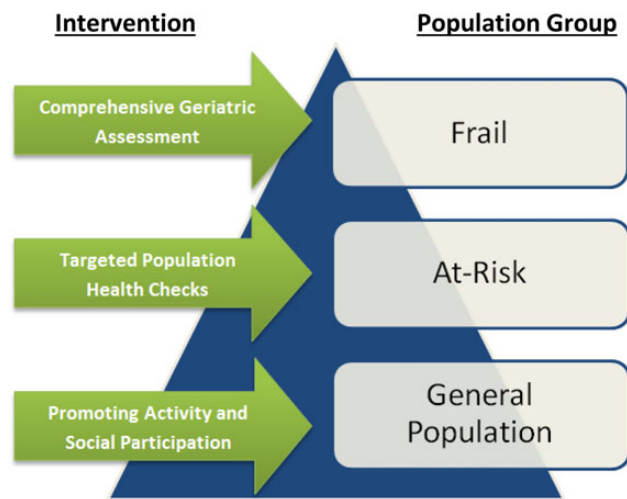


Figure 1. A strategy for the older population.

An overall strategy

As an overall strategy for achieving best health outcomes for older people, it might be helpful to categorise the older population into three groups: general, at-risk and frail with increasingly specialised care as levels of need increase (Figure 1). Within this, five key principles for the care of at-risk and frail older people could be applied:

- (1) Get in early (through targeted preventive health checks)
- (2) Assess better before admission (with a 2-h emergency community response as an alternative to admission)
- (3) Old-age specialist acute care (with early review following emergency presentation)
- (4) Discharge to assess (to protocol-driven pathways of post-acute care in the community)
- (5) Recovery before placement (with no long-term placement without comprehensive geriatric assessment and a period of rehabilitation)

Conclusion

For over 70 years, geriatricians have pioneered the development of integrated care for older people. More recently, policymakers have understood the value of this approach, with mounting evidence of cost-effectiveness. Geriatricians will continue to pioneer new approaches with a renewed emphasis on care outside of hospital and on preventive care.

There are huge differences in the structure and financing of health and care systems across the globe, but the principles and practice of geriatric medicine have universal relevance for the development of new models of care.

Key points

- Geriatricians have pioneered developments in integrated care.
- Recent evidence validates their approaches.
- The principles and practice of geriatric medicine should be applied to the development of integrated approaches to preventive and community aspects of care for older people.

Conflicts of interest

Intellectual property for the EASYCare assessment is owned by the EASYCare Foundation Ltd, a not-for-profit Company limited by guarantee. Ian Philp and his immediate family are Directors of the Foundation. The Company receives income from third party commercial exploitation of the EASYCare products, with income used to support the EASYCare project mission to improve the lives of older people throughout the world. Profits are donated to charity.

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