A workshop to identify tractable research topics and issues for future NIHR research and to explore the context and challenges for research in this field.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Presented by:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tea and Coffee and Registration</td>
<td></td>
</tr>
<tr>
<td>Welcome</td>
<td>Professor Tom Walley</td>
</tr>
<tr>
<td>NIHR and the future of research for older people with complex health needs</td>
<td>Professor Chris Whitty</td>
</tr>
<tr>
<td>Research recommendations from the NICE guideline</td>
<td>Professor Bruce Guthrie</td>
</tr>
<tr>
<td><em>Multimorbidity: clinical assessment and management</em>, and some personal reflections</td>
<td></td>
</tr>
<tr>
<td>The patient and carers perspective of what is important research for older people with complex health needs</td>
<td>Mr Simon Denegri</td>
</tr>
<tr>
<td>Workshop sessions</td>
<td></td>
</tr>
<tr>
<td>1. Group 1 to identify &amp; discuss topics for research focussing on service delivery, pathways, organisations and social and community care interfaces (Kohn Centre)</td>
<td>Professor David Armstrong</td>
</tr>
<tr>
<td>2. Group 2 to identify &amp; discuss topics for research focussing on interventions for prevention, identification or treatment (Wolfson Room 3)</td>
<td>Professor Martin Rossor</td>
</tr>
<tr>
<td>Tea, Coffee and refreshments</td>
<td></td>
</tr>
<tr>
<td>Feedback from the groups</td>
<td>Professor Hywel Williams</td>
</tr>
<tr>
<td>Close of meeting</td>
<td></td>
</tr>
</tbody>
</table>
Background

This workshop identifying research issues for “Older People with Complex Health Needs” has been organised in follow up to the 2015 NIHR Themed Call into “the evaluation of interventions or services delivered for older people with multimorbidity”. When compared with previous NIHR Themed Calls, this call funded relatively fewer new research projects than previous calls. (£3.8M).

To reflect the wide range of remits of the NIHR programmes the phrase “Older People with Complex Health Needs” has been used to broaden the scope of potential research issues while retaining the underpinning importance of multimorbidity.

The phrase ‘complex health needs’ is taken to imply the presence of more than one health or social care need (impacting on health) as well as a depth of need in terms of the severity of the conditions or intensity of the needs. The definition of multimorbidity adopted is; the existence of two or more chronic health disorders in one individual.

The workshop will focus on research issues that can be addressed within the remit of the NIHR and the use of the term ‘older’ does not imply people over any specific age.
Key research recommendations from NICE Guideline: Multimorbidity: clinical assessment and management [NG56]. September 2016

The guideline committee has made the following recommendations for research. The committee's full set of research recommendations is detailed in the full guideline.

Multimorbidity: clinical assessment and management

1. Organisation of care
2. Holistic assessment in the community
3. Stopping preventive medicines
4. Predicting life expectancy

1. Organisation of care

What is the clinical and cost effectiveness of alternative approaches to organising primary care compared with usual care for people with multimorbidity?

Why this is important

The guideline committee felt that primary care was well suited to managing multimorbidity, but agreed that this was often challenging partly because of how primary care is currently organised. However, there was inadequate high-quality research on alternative approaches to organising care for people with multimorbidity. Trials should be undertaken to examine the impact of different strategies on important clinical outcomes, quality of life and cost effectiveness. The committee believed that no single trial could likely address this research need, because there are many plausible interventions and many defined populations in which such interventions might be of value.

Large, well-designed trials of alternative ways of organising general practice based primary care for people with multimorbidity would be of value in defined patient groups (for example, people with multimorbidity who find it difficult to manage their treatment or care or day-to-day activities, people with multiple providers or services involved in their care, people with both long-term physical and mental health problems, people with well-defined frailty, people frequently using unscheduled care, people prescribed multiple regular medicines, and people who are housebound or care home residents).

Such trials should have clear identification and justification of the planned target population, careful piloting and optimisation, and well-described interventions. They need to be sufficiently powered to provide evidence of clinically important effects of interventions on outcomes that are relevant to patients and health and social care services (for example, quality of life, hospital and care home admission, mortality).
2. Holistic assessment in the community

What is the clinical and cost effectiveness of a community holistic assessment and intervention for people living with high levels of multimorbidity?

Why this is important

There was low quality evidence to indicate potential benefit from community assessments based on the principles of comprehensive geriatric assessment in older people. However, the studies were conducted outside the UK and were not aimed at all adults living with multimorbidity. The guideline committee believed that there was some evidence that holistic assessment and intervention in the community may be of benefit for older people, but that the evidence was of low quality and not adequate to inform strong recommendations.

Large, well-designed trials of holistic assessment and intervention in people with multimorbidity would be of value in defined patient groups in the community (for example, people in nursing homes, people who are housebound, people of all ages with well-defined frailty, people with high levels of multimorbidity or polypharmacy).

Such trials must be rigorous, with clear identification and justification of the planned target population, careful piloting and optimisation, and well-described interventions. They need to be sufficiently powered to provide evidence of clinically important effects of interventions on outcomes that are relevant to patients and health and social care services (for example, quality of life, hospital and care home admission, and mortality).

The guideline committee believed that no single trial could likely address this research need, since there are many plausible interventions and many defined populations in which such interventions might be of value. The committee believed that assessment should follow the principles of Comprehensive Geriatric Assessment or the Standardised Assessment of Elderly People in Europe (STEP) tool, and that interventions would likely involve a multidisciplinary team.

3. Stopping preventive medicines

What is the clinical and cost effectiveness of stopping preventive medicines in people with multimorbidity who may not benefit from continuing them?

Why this is important

There is good evidence from randomised controlled trials of the medium term (2–10 years) benefit of medicines recommended in guidelines for preventing future morbidity or mortality, including treatments for hypertension, hyperglycaemia and osteoporosis. However, there is much less evidence about the balance of benefit and harm over longer periods of treatment. It is plausible that harms outweigh benefits in some people with multimorbidity (for example, because of higher rates of adverse events in older, frailer people prescribed multiple regular medicines, or because the expected benefit from continuing a preventive medicine is reduced when there is limited life expectancy or high
risk of death from other morbidities). These people are unlikely to have been eligible or included in published trials showing initial benefit from preventive medicines. The systematic review undertaken by NICE in 2015 did not find any randomised controlled trials of stopping antihypertensive medicines in people with multimorbidity. The review found 1 small randomised controlled trial of stopping statins in people with a life expectancy of 1 year, but the committee did not consider this provided enough evidence to make a recommendation. The review found several randomised controlled trials of stopping bisphosphonates (although not clearly in populations with multimorbidity) and a recommendation was made for this, but no randomised controlled trials were found of stopping calcium and/or vitamin D. Recommendations based on robust evidence on the clinical and cost effectiveness of stopping preventive medicines in people with multimorbidity who may not benefit could have significant budgetary implications for the NHS. No ongoing trials have been identified.

The guideline committee considered that 1 or more large, well-designed trials of stopping preventive medicine in people with multimorbidity would be of value in defined patient groups in the community (for example, people in nursing homes, people who are housebound, people with well-defined frailty, people with high levels of multimorbidity or polypharmacy, people with limited life expectancy). Discontinuation could either be complete (all relevant medicines) or partial (for example, reduced intensity of hypotensive or hypoglycaemic treatment). Such trials have to be sufficiently powered to provide evidence of clinically important effects of interventions on outcomes that are relevant to patients and health and social care systems (for example, quality of life, hospital and care home admission and mortality). The committee believed that given the existing evidence, it would be of greater value to evaluate the effects of stopping discrete medicines or drug classes, rather than stopping all preventive medicines at the same time. The committee also believed that no single trial could likely address this research need, since there are many medicines that could be stopped and many defined populations in which this might be of value.

4. Predicting life expectancy

Is it possible to analyse primary care data to identify characteristics that affect life expectancy and to develop algorithms and prediction tools for patients and healthcare providers to predict reduced life expectancy?

Why this is important

Many people take preventive medicines which are likely to offer small benefits because of reduced life expectancy from other causes. Medicines and other treatments may therefore be adding to treatment burden without adding quality or length of life. The ability to identify people with reduced life expectancy could provide healthcare professionals and people with information that could inform decisions about starting or continuing long-term preventive treatments. Conversely younger people with multimorbidity and reduced life expectancy may benefit from additional preventive treatments. Because this information would be used most often in a primary care setting, the committee considered that a tool derived from information within primary care databases would be most useful.