The Research Scan - May 2015

Fast access to research about improving quality in healthcare

We’ve searched more than 40,000 journals to select the most interesting and relevant articles for people working to improve healthcare. Access the research scan online by clicking here.

PERSON-CENTRED CARE

Automated app creates personalised suggestions
In the Journal of Medical Internet Research - Mobile and Ubiquitous Health, Rabbi and colleagues from the US reported on a randomised trial of a mobile phone app that created personalised suggested actions automatically from information about diet and exercise. Participants liked the personalised suggestions and the app was associated with increased physical activity.

Patient activation predicts health service use
In Medical Care Research and Review, Hibbard and colleagues from the US followed 4,865 people with long-term conditions over a four year period. They found that patient activation scores predicted behaviours and health outcomes. People with higher activation scores had better self-management, improved functioning, and lower use of healthcare services.

Clinicin control is a barrier to self-management
Mudge and others from New Zealand reviewed 14 studies about clinicians’ perceptions of supporting self-management. In BMJ Open, they described how ‘control’ plays a significant role and suggested that clinicians may need help to move away from seeing supporting self-management as something they ‘do’ to patients.

Supporting self-management
• Occupational therapy sessions improve self-management
• At home rehabilitation reduces service use after heart attack
• Tablet computer use at home reduced days spent in hospital
• Supporting self-care may not reduce COPD admissions
• Age and wellbeing influence motivation to self-manage
• Healthcare relationships important for the less advantaged

Health coaching
• Text messages are feasible for health coaching
• Health coaching is promising but needs to be better defined

Engagement and choice
• Time and positive attitudes needed for patient participation
• Lower activation is associated with increased hospital use
• Data about outcomes may not influence patient choice

A number of other interesting studies were published. Click on any of the hyperlinks to see a description.
PATIENT SAFETY

Workshop improved incident reporting in primary care
In the British Journal of General Practice, Verbakel and colleagues from the Netherlands reported on a randomised trial comparing a safety culture survey alone or the survey plus a workshop for improving safety incident reporting. The culture survey led to five times greater reporting of incidents than no intervention. Practices that also took part in a workshop reported 42 times more incidents than no intervention. Thus a discussion workshop may add value when attempting to change safety reporting behaviours.

24% of children in hospital may experience harm
In Pediatrics, Stockwell and colleagues described a trigger tool developed to identify harms in children in hospital. Based on reviewing 600 records from six hospitals, they concluded that one quarter of children in hospital may experience a harmful event (24%) and about half of these events may be preventable (45%).

Care bundle reduced pressure ulcers by 70% in ICU
Tayyib and colleagues from Saudi Arabia tested the effectiveness of a standardised pressure ulcer prevention bundle for critically ill people in two intensive care units. In the Journal of Nursing Scholarship, they described how 140 people were randomly assigned by unit to receive usual skin care or the bundle. Follow-up occurred over 28 days. The incidence of pressure ulcers was lower in the group that received the prevention bundle (7% versus 33% for usual care). The severity of pressure ulcers also reduced.

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Safety in primary care
- Patients identified factors affecting safety in primary care

Safety in ambulance services
- Service users provide feedback about ambulance service risks

Safety in hospital
- Putting together kits of equipment may reduce infections
- Better patient safety culture is linked to fewer adverse events
- Longer breaks between shifts improve hand hygiene
- WHO checklist is used more if clinicians think it is valuable
- Checklists help to streamline surgery handovers
- Professionals do not want patients to question hand washing
- Prescription discrepancies may be common in hospital
VALUE FOR MONEY

Telephone case management reduced admissions

In the *European Journal of Emergency Medicine*, Edgren and colleagues from Sweden described randomly assigning 12,181 frequent emergency department users to telephone case management from a nurse or no intervention. Over a two-year period, case management was associated with a **12% reduction in hospital admissions**. Careful patient selection, appropriate staff training and using a centralised call centre were key success factors.

Pay-for-performance may have short-term gains only

One region of England set up a voluntary programme providing financial incentives for improving the quality of care for pneumonia, heart failure and heart attack. McDonald and colleagues released a manuscript comparing this region and the rest of England. Over the first 18 months, mortality rates for the incentivised conditions combined reduced significantly more than in other parts of England. However this was **not sustained** at 42 months.

Home phone calls are less costly than clinic video calls

In the *Journal of Medical Internet Research*, Richter and colleagues described randomly assigning 566 smokers to smoking cessation sessions by videoconference at primary care clinics or by telephone at home. After one year there was no difference in quit rates. Telephone support was less costly than videoconferences because participants spent **time and money travelling** to clinics.

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System-level changes
- **Food subsidies and taxes** help to increase healthy eating
- **Pay-for-performance** may widen gaps between practices

Service-level changes
- **Rapid access** for ambulance arrivals reduces waiting time
- **Telemedicine support** for rural professionals is cost-effective
- **Falls prevention** programme may be cost effective
- **Polypill** to prevent heart attacks may be cost-effective
- **Proactive care** for older people costs similar to usual care

Staff-level changes
- **Navigation** may increase cancer screening rates
- Doctors and pharmacists trained in **smoking cessation**
- Cost-effectiveness of **collaborative care** is uncertain
- **Online nurse support** may not have short-term cost benefits
APPROACHES TO IMPROVEMENT

High-performing work practices linked to quality
In *Health Care Management Review*, McAlearney and colleagues from the US explored how hospitals reduced central line-associated bloodstream infections. Based on visiting eight hospitals and 194 interviews they concluded that hospitals with lower infection rates focused on 1) staff engagement, 2) staff recruitment and development, 3) empowering frontline teams and 4) leadership alignment and development.

Public consultations need to hear people’s concerns
In England, public consultation is required about any significant proposed changes to service delivery. In *Health Policy*, Barratt and colleagues compiled feedback about one consultation. A lot of information was provided about changes but people thought that commissioners were dismissing their concerns. Government policy emphasises the importance of ‘evidence’ in consultations, but this approach fuelled hostility towards the proposals. A more interactive style which seeks to act on people’s concerns may be needed.

Free online tools help to analyse survey results quickly
Patient experience surveys often include open-ended questions that provide rich information but are time-consuming to analyse. In the *Journal of Medical Internet Research* – *Medical Informatics*, Maramba and others from England found that it was feasible to use freely available online text processing tools for extracting information from patient experience surveys. These automated tools could cut down processing time of improvement data.

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**Measurement tools**
- New tool measures [carer activation](#)
- 19 tools for assessing [patient empowerment](#) identified
- Wide variation in measuring if [patient preferences](#) are met
- Tool developed to measure experience of [ambulance services](#)
- [Online and paper surveys](#) have the same response rate

**Implementing improvement**
- [Leadership and sustainability](#) are key factors in improvement
- [Ring-fenced time](#) is important for improving culture and care

**Getting evidence into practice**
- [Reminder prompts](#) need to be short and simple to work
- [Visual aids](#) help clinicians make better decisions
- Hybrid online and in-person [learning](#) is useful
- [Online learning](#) helps nurses think about evidence in practice
- [Audit and feedback](#) helps to [reduce length of stay](#)
- [Audit and feedback](#) needs to be more timely and specific

*The research scan is produced by The Evidence Centre and commissioned by The Health Foundation, an independent charity working to continuously improve the quality of healthcare in the UK.*