

## *Additional file 7. Strategies categorized as having insufficient evidence*

These statements correspond to category 3 of the evidence rating scheme of Ryan et al. [1]: “insufficient evidence” (Additional file 2).

### **1) Providing information or education**

#### **Single strategies**

- Package leaflets in different formats (qualitative vs quantitative) for improving understanding of adverse effects of medicines [2].
- Patient Information Leaflets use before consultation, screening or surgery or medication information – effect on patient (less) anxiety [3].
- Patient Information Leaflets that are well written and used at an appropriate time – effect on improving knowledge and satisfaction [3].
- Provision of education or communication as a single component – effect on reducing adverse effects from drugs [1].
- Health literacy strategies using alternative numerical presentations, alternative pictorial representations, or alternative media delivered as a single strategy or when compared with other strategies (e.g., video, computer, or slide show presentations) – effect on comprehension and/or intent to seek health care [4].
- Evidence-based written recommendations (clinical practice guidelines) may increase awareness [5].

#### **Combined strategies**

- Dissemination and communication strategies using different approaches – effect on understanding and use of information [6].
- Communicating precision using different approaches [6].
- Use of social media for health communication [7].
- Online health information delivered using an "adult education style" discussion, instruction and practice in small groups – effect on health literacy [8].
- One to one risk communication (not necessarily face to face) – effect on treatment choices [9].
- Quality of care information (real or hypothetical performance) – effect on choice of higher quality-rated health plan (Faber 2009).
- Public release of performance data regarding any aspect of healthcare organizations or healthcare individuals – effect on change in service selection [10].
- Better dissemination strategies (active or passive) for guidelines or recommendations [11].

### **2) Communication and decision-making facilitation**

#### **Single strategies**

- Use of tailored SMS for dialogue initiation may increase interaction (communication) between researchers and patients [12].

### **Combined strategies**

- Consumer health informatics applications – effect on relationship-centered outcomes [13].
- Use of social media – effect on improving the professional and patient relationship and patient empowerment [14].
- Interventions focused on promoting communication about medicines between patients and professionals [1].
- Mobile phone messages between care provider and participant to deliver preventive health care – effect on satisfaction or anxiety [15].
- Delayed prescribing – effect on antimicrobial resistance [1].

## **3) Acquiring skills and competencies**

### **Single strategies**

*None identified*

### **Combined strategies**

- Toolkits (self-test, information sheets, book, CDs, Audio CDs) may improve health status, behavior, and self-efficacy (patients with arthritis) [16].
- Other types of health literacy interventions – effect on health outcomes (knowledge, self-efficacy, behavioral intent, medication adherence, disease prevalence and severity, quality of life and costs) [4].
- Self-management and self-monitoring of antithrombotic medicine – effect on major hemorrhages and thromboembolic events or mortality, which may be because these events are rare thus studies are likely to have insufficient power to detect a clinical difference [1].
- Provision of training by pharmacists to improve medication adherence [1].
- Medicine self-administration programs – effect on medicines adherence, knowledge, errors or satisfaction [1].
- Life coaching interventions to improve self-efficacy and self-empowerment – effect on health-related outcomes. Note: the life coaching could be in the form of: individual telephone coaching, individual face-to-face, telephone, or internet coaching or a combination of these methods. The studies including disadvantaged patients showed the most convincing results [17].

## **4) Behavior change support**

### **Single strategies**

- Email vs standard mail or usual care may change behaviour or understanding for preventive health actions [18].

### **Combined strategies**

- Electronic resources such as the internet and telecommunications systems – effect on any of the measured outcomes. However, it may improve the nurse-patient relationship [19].
- Alternative statistical formats – impact on health behaviour [20].

- Adding personal stories to patient decision aids – impact on support for people’s informed decision-making [21].
- When email counselling was compared to telephone counselling for the majority of measures on patients there was no difference between groups [22]. Where there were differences these showed that telephone counselling leads to greater change in lifestyle modification factors than email counselling.

## **5) (Personal) support**

### **Single strategies**

*None identified*

### **Combined strategies**

- Structured counselling or compliance therapy, or of group or home-based visits – to promote vaccination [1].

## **6) Consumer system participation**

### **Single strategies**

*None identified*

### **Combined strategies**

- Use of a “patient advisory council” for patient engagement in health care delivery – impact on clinical results, priority setting, patient safety and/or patient satisfaction [23].
- Nursing care through telemedicine – impact on access to healthcare, satisfaction and use of resources [19].
- Use of patient portals allowing patients to access their personal health information – effect on health or proxies for health (mortality, emergency room visits, hospitalizations, heart failure practice visits or risk factors) or empowerment [24].
- Electronic tools for health information exchange (e.g. electronic medical records) – impact on hospital readmission and length of stay [25].
- Information Technology applications implemented to support patient-centered care – impact on intermediate health outcomes (patient or provider satisfaction, health knowledge, behavior and cost) [26].

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