## Additional file 9: Workshop themes 1-9

*Clustering of variables – barriers and enablers – to theme 1*

Barrier 1

Healthcare professional (HCPs) lack time during routine appointments

- reported by HCPs and patients/caregivers

HCPs “so busy that they can’t talk to you”

**Theme heading 1: Implementation/adoption of patient held medication lists (PHML) into daily practice**

Barrier 2

Limited support for patient held medication lists (PHML) in HCPs’ routine appointments

- lack of engagement with patients about PHML

- accuracy of PHML not frequently checked in daily practice

Enabler 6

Financial incentives/rewards for HCPs to promote KCA campaign

Enabler 1

Only short time needed to engage about PHML in routine appointments

- 5-10 mins selected by most patients/caregivers & HCPs but hospital HCPs report additional time needed (>15 mins)

Barrier 4

Community HCPs focus on negative outcomes to supporting KCA

- increased workload, additional burden for patients

Barrier 3

Poor awareness of ‘Know Check Ask’ (KCA) campaign among HCPs, patients/caregivers

Enabler 3

Opportunities for medication counselling in healthcare settings

- both structured & opportunistic

Enabler 5

Link implementation of KCA campaign to continuing professional development (CPD) points for HCPs

Barrier 5

No information from HCPs to caregivers about patient held medication lists

Enabler 4

Value of regular medication reviews targeting specific patients

- older patients, those on multiple medicines (meds), with chronic conditions

Enabler 2

HCPs connected checking accuracy of PHML to their professional role

*Clustering of variables – barriers and enablers – to theme 2*

Barrier 2

HCP views about patients’ knowledge linked to frequency of engaging about PHML

- if they thought patients not knowledgeable they were less likely to ask them if they have a list of their medications

Barrier 1

Different views about patients’ knowledge about meds among patients/caregivers & HCPs

- HCPs assessed patients’ knowledge at lower levels than their own self-assessments

**Theme heading 2: Knowledge of medicines**

Barrier 3

Concerns among HCPs that blister packs reduce patient knowledge

“big source of medication errors”

Enabler 1

Patients/caregivers assessed their knowledge about medicines at high levels

Enabler 3

Use of clear information/education materials for patients/caregivers

Enabler 2

Use of non-medical language by HCPs when communicating about keeping lists of medicines/medicines

- use patients’ “own language”

*Clustering of variables – barriers and enablers – to theme 3*

Barrier 1

Main concern among HCPs about PHML linked to accuracy

- many experiences of patients with “out of date” lists

Barrier 2

Difficulties for patients in maintaining accurate lists of medicines

- issues with printing, filling and maintenance of lists of medicines as not “tech savvy” or have no printer at home

**Theme heading 3: Accuracy and reliability of PHML**

Enabler 3

Evaluation by HCPs

- use of visual cues to assess quality of list e.g. worn appearance, crossed out text could indicate issues with accuracy of PHML

- awareness that PHML can be useful “starting points”

Enabler 1

Reliability

- agreement that many PHML are reliable sources of information (patients/caregivers & HCPs)

Enabler 2

Resource for HCPs during care transitions

- PHML considered appropriate information source when HCPs creating accurate medication histories

*Clustering of variables – barriers and enablers – to theme 4*

Barrier 2

Non-medical elements

- difficulties for minorities (cultural, language issues)

- difficulties for those with lower socioeconomic status

- difficulties for those with literacy issues

- less access to mobile apps for older patients (many only use non-smart phones)

**Theme heading 4: Characteristics of patients with difficulties maintaining PHML**

Barrier 1

 Medical elements

- patients with comorbidity

- those with medicines that change frequently

- those taking multiple medicines

- patients with low health literacy

- confusion caused by generics (patients not sure what medicines are for when the name changes)

Barrier 3

Older patients can be reluctant to question HCP authority

- “see the doctor as god”

Enabler 1

Importance of family support

- assist patients by creating/maintaining lists of their medicines or accessing information about medicines

Enabler 2

HCP communication skills

- strategies to improve/check patient understanding (e.g. teach-back method)

*Clustering of variables – barriers and enablers – to theme 5*

**Theme heading 5: Impact of perceptual factors**

Barrier 3

Blister packs reduced value of list for many caregivers

“a list is not as good as the blister pack”

Barrier 1

Lack of confidence

- some patients/caregivers could lack confidence to ask HCPs about their medicines

Barrier 2

HCPs’ beliefs about patient competence

- HCPs less confident than patients that patients could keep accurate lists of their medications

Enabler 4

Evolving use of patient held medication lists (PHML) over time

- useful as an initial memory aid until stable medication regime in place

Enabler 1

Positive perceptions of message among HCPs

- positive clinical outcomes i.e. help identify medication issues, reduce medication errors, improve adherence, reduce unused medicines, empower patients

Enabler 3

Self-efficacy - Patients/caregivers confident they could maintain accurate list of their medications without help from HCPs

Enabler 5

Competence

- patients employed variety of internal & external strategies to manage medicines (link to routine behaviours; aids such as medicine lists, blister packs, memory aids)

Enabler 2

Positive perceptions of message among patients/caregivers

- multiple positive outcomes across settings i.e. helped manage medicines, increased awareness, in emergencies, help those on multiple medicines, useful when main carer was away

*Clustering of variables – barriers and enablers – to theme 6*

Barrier 1

Desired format of patient held medication lists (PHML)

- many patients prefer simple lists with minimum information

- HCPs’ concerns that simple lists may not reflect everything patient is taking

**Theme heading 6: Variation in patient held medication lists (PHML) content**

 Barrier 2

Level of detail in patient held medication lists (PHML)

- HCPs want high number of information items

- patients/caregivers less likely to include over-the-counter (OTC) medicines, vitamins or herbal products in their lists

Enabler 1

Shared decision making in healthcare

- informed decisions by patients about their lists of medicines which balances patient needs & HCP concerns

 “what works for them”

Enabler 2

Recommended patient held medication lists (PHML) templates

*Clustering of variables – barriers and enablers – to theme 7*

**Theme heading 7: Trust in key HCPs**

Enabler 1

Impact of key HCPs in engaging with patients about patient held medication lists (PHML)

- pharmacists, GPs, public health nurses in regular contact so considered “trusted” HCPs

Enabler 2

Patients/caregivers suggest expanded pool of key HCPs to support patient held medication lists (PHML)

- as well as pharmacists, GPs also included public health nurses, hospital nurses, hospital doctors

*Clustering of variables – barriers and enablers – to theme 8*

Barrier 2

Low use of smartphone apps to manage medicines

- reported by HCPs, patients/caregivers

Barrier 1

Limitations of current patient held medication lists (PHML) options

- ‘My Meds’ list not portable or durable document

- too many columns “too busy”

Enabler 1

Agreement between patients & HCPs that using a range of PHML or combining paper & digital lists is desirable

**Theme heading 8: PHML design and accessibility**

Barrier 3

Concerns among caregivers about control & privacy of lists of medicines

- important that list “not taken away”

Enabler 2

Access to variety of patient held medication lists (PHML) formats for patients/caregivers

- compact/wallet-sized version with minimum fields

- paper version with additional fields for more detailed information

- digital options (phone app) “live by their phone”

- preference among patients for customised lists, multiple lists to keep in variety of locations (car/handbag/phone)

*Clustering of variables – barriers and enablers – to theme 9*

Enabler 2

Leaflets or ’My Meds ’ list added to pharmacy bags with patients’ medicines

– mentioned/displayed by pharmacist or pharmacy technician as adding to bag

**Theme heading 9: Future promotion of KCA**

Enabler 3

Evidence for HCPs of impact of KCA on adherence, reduction in errors/unused medicines

Enabler 1

Targeted advertising for patients/caregivers with relatable actors/stories

Top 3 KCA resources used by HCPs

- ‘My Meds’ list

- information leaflets

- safer meds website