

Supplementary Material

Online Resource S1: Completion of the StaRI checklist

Standards for Reporting Implementation Studies: the StaRI checklist for completion

The StaRI standard should be referenced as: Pinnock H, Barwick M, Carpenter C, Eldridge S, Grandes G, Griffiths CJ, Rycroft-Malone J, Meissner P, Murray E, Patel A, Sheikh A, Taylor SJC for the StaRI Group. Standards for Reporting Implementation Studies ([StaRI statement](#)). *BMJ* 2017;356:i6795



The detailed Explanation and Elaboration document, which provides the rationale and exemplar text for all these items is: Pinnock H, Barwick M, Carpenter C, Eldridge S, Grandes G, Griffiths C, Rycroft-Malone J, Meissner P, Murray E, Patel A, Sheikh A, Taylor S, for the StaRI group. Standards for Reporting Implementation Studies ([StaRI](#)). [Explanation and Elaboration document](#). *BMJ Open* 2017 2017;7:e013318

Notes: A key concept of the StaRI standards is the dual strands of describing, on the one hand, the implementation strategy and, on the other, the clinical, healthcare, or public health intervention that is being implemented. These strands are represented as two columns in the checklist.

The primary focus of implementation science is the implementation strategy (column 1) and the expectation is that this will always be completed.

The evidence about the impact of the intervention on the targeted population should always be considered (column 2) and either health outcomes reported or robust evidence cited to support a known beneficial effect of the intervention on the health of individuals or populations.

The StaRI standards refers to the broad range of study designs employed in implementation science. Authors should refer to other reporting standards for advice on reporting specific methodological features. Conversely, whilst all items are worthy of consideration, not all items will be applicable to, or feasible within every study.

Checklist item		Reported on page #	Implementation Strategy	Reported on page #	Intervention
			“Implementation strategy” refers to how the intervention was implemented		“Intervention” refers to the healthcare or public health intervention that is being implemented.
Title and abstract					
Title	1	1	Identification as an implementation study, and description of the methodology in the title and/or keywords		
Abstract	2	1–2	Identification as an implementation study, including a description of the implementation strategy to be tested, the evidence-based intervention being implemented, and defining the key implementation and health outcomes.		
Introduction					

Introduction	3	2-3	Description of the problem, challenge or deficiency in healthcare or public health that the intervention being implemented aims to address.		
Rationale	4	3–4	The scientific background and rationale for the implementation strategy (including any underpinning theory/framework/model, how it is expected to achieve its effects and any pilot work).	3–4	The scientific background and rationale for the intervention being implemented (including evidence about its effectiveness and how it is expected to achieve its effects).
Aims and objectives	5	4	The aims of the study, differentiating between implementation objectives and any intervention objectives.		
Methods: description					
Design	6	5	The design and key features of the evaluation, (cross referencing to any appropriate methodology reporting standards) and any changes to study protocol, with reasons		
Context	7	5	The context in which the intervention was implemented. (Consider social, economic, policy, healthcare, organisational barriers and facilitators that might influence implementation elsewhere).		
Targeted ‘sites’	8	5	The characteristics of the targeted ‘site(s)’ (e.g locations/personnel/resources etc.) for implementation and any eligibility criteria.	5	The population targeted by the intervention and any eligibility criteria.
Description	9	6–7	A description of the implementation strategy	7–8	A description of the intervention
Sub-groups	10	Non assessed	Any sub-groups recruited for additional research tasks, and/or nested studies are described		
Methods: evaluation					
Outcomes	11	8–9	Defined pre-specified primary and other outcome(s) of the implementation strategy, and how they were assessed. Document any pre-determined targets	8–9	Defined pre-specified primary and other outcome(s) of the intervention (if assessed), and how they were assessed. Document any pre-determined targets
Process evaluation	12	9–11	Process evaluation objectives and outcomes related to the mechanism by which the strategy is expected to work		
Economic evaluation	13	Non assessed	Methods for resource use, costs, economic outcomes and analysis for the implementation strategy	Non assessed	Methods for resource use, costs, economic outcomes and analysis for the intervention
Sample size	14	5	Rationale for sample sizes (including sample size calculations, budgetary constraints, practical considerations, data saturation, as appropriate)		
Analysis	15	9	Methods of analysis (with reasons for that choice)		
Sub-group analyses	16	Non assessed	Any a priori sub-group analyses (e.g. between different sites in a multicentre study, different clinical or demographic populations), and sub-groups recruited to specific nested research tasks		
Results					

Characteristics	17	16–17	Proportion recruited and characteristics of the recipient population for the implementation strategy	13	Proportion recruited and characteristics (if appropriate) of the recipient population for the intervention
Outcomes	18	15–16	Primary and other outcome(s) of the implementation strategy	16	Primary and other outcome(s) of the Intervention (if assessed)
Process outcomes	19	17–18	Process data related to the implementation strategy mapped to the mechanism by which the strategy is expected to work		
Economic evaluation	20	Non assessed	Resource use, costs, economic outcomes and analysis for the implementation strategy	Non assessed	Resource use, costs, economic outcomes and analysis for the intervention
Sub-group analyses	21	Non assessed	Representativeness and outcomes of subgroups including those recruited to specific research tasks		
Fidelity/ adaptation	22	18–20	Fidelity to implementation strategy as planned and adaptation to suit context and preferences	Non assessed	Fidelity to delivering the core components of intervention (where measured)
Contextual changes	23	Non assessed	Contextual changes (if any) which may have affected outcomes		
Harms	24	No harms reported	All important harms or unintended effects in each group		
Discussion					
Structured discussion	25	22–24	Summary of findings, strengths and limitations, comparisons with other studies, conclusions and implications		
Implications	26	25	Discussion of policy, practice and/or research implications of the implementation strategy (specifically including scalability)	25	Discussion of policy, practice and/or research implications of the intervention (specifically including sustainability)
General					
Statements	27	27–28	Include statement(s) on regulatory approvals (including, as appropriate, ethical approval, confidential use of routine data, governance approval), trial/study registration (availability of protocol), funding and conflicts of interest		

Online Resource S2: Data collection sheet



Étude prospective: Implémentation de l'étape 1 du programme ICOPE de l'OMS en Pharmacie

Patient n:

Date 1^{er} contact:

1. Données socio-démographiques

Âge:	Sexe: ☐ femme ☐ homme ☐ autre:
Situation sociale: ☐ célibataire ☐ marié(e) ☐ divorcé(e) ☐ veuf ☐ autre:	
Niveau d'éducation: ☐ primaire ☐ secondaire ☐ bachelier ☐ master ☐ autre:	

2. Données cliniques (veuillez joindre l'historique médicamenteux du patient)

Nombre de médicaments:	Score du CCI:	Score de qualité de vie:
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☐ Chute–nombre:

☐ Hospitalisation non-programmée–nombre:

3. Étape 1 du programme ICOPE

Domaine	Score
Déclin cognitif	0 – 1
Mobilité limitée	0 – 1
Malnutrition	0 – 1
Déficiência visuelle	0 – 1
Déficiência auditive	0 – 1
Symptômes dépressifs	0 – 1
Total =	

4. Suivi à 6 mois (t6)

Date 2^{ème} contact:

Action entreprise par le patient:

Score de qualité de vie:

☐ Chute–date(s):

☐ Hospitalisation non-programmées–date(s):

☐ Décès–date:

☐ Institutionnalisation–date:

Online Resource S3: Study-specific interview guide

Étude prospective:

Implémentation de l'étape 1 du programme ICOPE de l'OMS en pharmacie

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GUIDE D'ENTRETIEN

Axe 1 : Cadre et intégration de l'étape 1 du programme ICOPE

Comment percevez-vous le rôle du pharmacien dans l'identification de la perte des capacités intrinsèques des patients?

- Quelle est la place de cette identification dans les soins pharmaceutiques?

Selon vous, à quel niveau des soins de santé doit se situer l'identification de la perte des capacités intrinsèques? Pour quelle raison?

- Soins primaires?
- Hôpital?
- Autre?

Axe 2: Implication des patients dans l'étape 1 du programme ICOPE

Avez-vous éprouvé des difficultés pour recruter vos patients?

- Quelles sont les raisons principales qui ont conduit à ces difficultés?
- Quels étaient les motifs de refus des patients?
- Quelles similitudes ou différences avez-vous identifiées entre les personnes qui ont acceptées de participer et celles qui ont refusées?

Comment qualifieriez-vous le niveau de satisfaction du patient à la suite de la réalisation de l'étape 1 du programme ICOPE?

- Quels ont été les bénéfices que vous avez perçus pour vos patients ?

Axe 3 : Implémentation de l'étape 1 du programme ICOPE

Globalement, qu'avez-vous pensé de votre rôle dans l'étape 1 du programme ICOPE ?

Quelles barrières avez-vous rencontrées lors de l'implémentation de cet outil ?

- Et concernant les barrières organisationnelles (temps, ressources) ?
- Et concernant les barrières humaines (motivation, formation) ?

Comment ces barrières pourrait-elle être levées?

Quels sont les éléments qui ont facilités l'implémentation de cet outil ?

- Identifiez-vous d'autres éléments qui pourraient faciliter l'implémentation ?

Qu'avez-vous pensé du matériel mis à disposition?

- Quelles améliorations proposeriez-vous pour le matériel fourni?

Axe 4: Perspectives et continuité de l'étape 1 du programme ICOPE

Dans l'éventualité où vous travailleriez en officine, seriez-vous enclin à refaire passer l'étape 1 du programme ICOPE dans le futur? Pourquoi?

- Quels sont les éléments nécessaires à l'utilisation de l'ICOPE dans votre pratique quotidienne?
- Quelles conditions (ressources, personnel, technologie) faciliteraient une réutilisation régulière de l'étape 1 du programme ICOPE dans votre pratique?

Quelles sont, selon vous, les priorités pour améliorer l'étape 1 du programme ICOPE réalisée en officine?

Quels aspects gagneraient à être supprimés ou conservés?

- Concernant le déclin cognitif (rappel des trois mots et question d'orientation dans l'espace)
- Concernant la mobilité limitée (test du lever de chaise)
- Concernant la malnutrition (question sur la perte de poids et/ou d'appétit)
- Concernant la déficience visuelle (question sur les problèmes de vision et maladies liées)
- Concernant la déficience auditive (test à voix chuchotée)
- Concernant les symptômes dépressifs (question sur la dépression ou la perte d'intérêt)

Online Resource S4: Complementary statistical analysis

Table 1. Normality test results for continuous variables.

	W	p-value ^a
Age	0.944	0.031
Medication	0.956	0.057
CCI	0.933	0.012
ICOPE	0.885	0.001
Falls	0.398	0.000
Non-planned hospitalisations	0.515	0.000
EQ-5D-3L score	0.897	0.000
Falls at 6 months	0.355	0.000
Non-planned hospitalisations at 6 months	0.541	0.000
EQ-5D-3L score at 6 months	0.762	0.000

^a Shapiro-wilk test.

Secondary outcome: changes in falls, hospitalisations, and quality of life over six months

Changes in the number of falls, unplanned hospitalisations, and quality of life between baseline and the 6-month follow-up were explored. Given the low incidence of such events, the study was not powered to detect statistically significant changes in these outcomes. Therefore, the six-month analyses should be considered exploratory and hypothesis-generating. A Wilcoxon signed-rank test was used to carry out this comparison. Table 2 presents the results of the Wilcoxon signed-rank test.

Table 2. Differences between the number of falls, unplanned hospitalisation and EQ-5D-3L score at baseline and after 6 months (n = 32).

	Baseline	6-month follow-up	Z	p-value ^a
Falls, median [IQR 25%–75%]	0.0 [0.0–0.0]	0.0 [0.0–0.75]	-1.13	0.257
Unplanned hospitalisations, median [IQR 25%–75%]	0.0 [0.0–0.0]	0.0 [0.0–0.0]	0.00	1.000
EQ-5D-3L score, median [IQR 25%–75%]	0.75 [0.66–1.00]	0.77 [0.70–1.00]	-1.85	0.064

^a Wilcoxon signed-rank test.