Appendix1. TREND Statement Checklist

Paper Section/ Topic	Item No.	Descriptor	Reported? ✓	Reported? Pg #
TITLE and ABSTRACT				
Title and Abstract	1	• Information on how units were allocated to interventions	X	Abstract
		• Structured abstract recommended	X	Abstract
		• Information on target population or study sample	X	Abstract
INTRODUCTION				
Background	2	• Scientific background and explanation of rationale	X	Introduction
		• Theories used in designing behavioral interventions		NA
METHODS				
Participants	3	• Eligibility criteria for participants, including criteria at different levels in recruitment/sampling plan (e.g., cities, clinics, subjects)	X	Materials and methods, Data sources
		• Method of recruitment (e.g., referral, self-selection), including the sampling method if a systematic sampling plan was implemented	X	Materials and methods, Data sources
		• Recruitment setting		NA
		• Settings and locations where the data were collected	X	Materials and methods, Data sources
Interventions	4	• Details of the interventions intended for each study condition and how and when they were actually administered, specifically including:	X	Materials and methods, Intervention Measures
		o Content: what was given?	X	Materials and methods, Intervention Measures
		o Delivery method: how was the content given?	X	Materials and methods, Intervention Measures
		o Unit of delivery: how were subjects grouped during delivery?		N/A
		o Deliverer: who delivered the intervention?	X	Materials and methods, Intervention Measures
		o Setting: where was the intervention delivered?	X	Materials and methods, Intervention Measures
		o Exposure quantity and duration: how many sessions or episodes or events were intended to be delivered? How long were they intended to last?		N/A
		o Time span: how long was it intended to take to deliver the intervention to each unit?		N/A
		o Activities to increase compliance or adherence (e.g., incentives)	X	Materials and methods, Intervention Measures
Objectives	5	• Specific objectives and hypotheses	X	Introduction

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Outcomes	6	• Clearly defined primary and secondary outcome measures	X	Materials and methods, Outcome measures
		• Methods used to collect data and any methods used to enhance the quality of measurements	X	Materials and methods, Data sources
		• Information on validated instruments such as psychometric and biometric properties		NA
Sample size	7	• How sample size was determined and, when applicable, explanation of any interim analyses and stopping rules		NA
Assignment method	8	• Unit of assignment (the unit being assigned to study condition, e.g., individual, group, community)	X	Materials and methods, Study design
		• Method used to assign units to study conditions, including details of any restriction (e.g., blocking, stratification, minimization)	X	Materials and methods, Outcome measures
		• Inclusion of aspects employed to help minimize potential bias induced due to non-randomization (e.g., matching)	X	Materials and methods, Statistic analysis
Blinding (masking)	9	• Whether or not participants, those administering the interventions, and those assessing the outcomes were blinded to study condition assignment; if so, statement regarding how the blinding was accomplished and how it was assessed		NA
Unit of Analysis	10	• Description of the smallest unit that is being analysed to assess intervention effects (e.g., individual, group, or community)	X	Materials and methods, Statistic analysis
		• If the unit of analysis differs from the unit of assignment, the analytical method used to account for this (e.g., adjusting the standard error estimates by the design effect or using multilevel analysis)		NA
Statistical methods	11	• Statistical methods used to compare study groups for primary methods outcome(s), including complex methods for correlated data	X	Materials and methods, Statistic analysis
		• Statistical methods used for additional analyses, such as subgroup analyses and adjusted analysis	X	Materials and methods, Statistic analysis
		• Methods for imputing missing data, if used		NA
		• Statistical software or programs used	X	Materials and methods, Statistic analysis
RESULTS				
Participant flow	12	• Flow of participants through each stage of the study: enrollment, assignment, allocation and intervention exposure, follow-up, analysis (a diagram is strongly recommended)		NA
		o Enrollment: the numbers of participants screened for eligibility, found to be eligible or not eligible, declined to be enrolled, and enrolled in the study		NA
		o Assignment: the numbers of participants assigned to a study condition		NA
		o Allocation and intervention exposure: the number of participants assigned to each study condition and the number of participants who received each intervention		NA
		o Follow-up: the number of participants who completed the follow-up or did not complete the follow-up (i.e., lost to follow-up), by study condition		NA
		o Analysis: the number of participants included in or excluded from the main analysis, by study condition		NA
		• Description of protocol deviations from study as planned, along with reasons		NA
Recruitment	13	• Dates defining the periods of recruitment and follow-up		NA
Baseline data	14	• Baseline demographic and clinical characteristics of participants in each study condition	X	Results, Table1

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		• Baseline characteristics for each study condition relevant to specific disease prevention research		NA
		• Baseline comparisons of those lost to follow-up and those retained, overall and by study condition		NA
		• Comparison between study population at baseline and target population of interest	X	Results, Baseline data
Baseline equivalenc e	15	• Data on study group equivalence at baseline and statistical methods used to control for baseline differences		NA
Numbers analyzed	16	• Number of participants (denominator) included in each analysis for each study condition, particularly when the denominators change for different outcomes; statement of the results in absolute numbers when feasible	X	Results, Table2 and Table3
		• Indication of whether the analysis strategy was "intention to treat" or, if not, description of how non-compliers were treated in the analyses		NA
Outcomes and estimation	17	• For each primary and secondary outcome, a summary of results for each estimation study condition, and the estimated effect size and a confidence interval to indicate the precision	X	Results, Table2 and Table3
		• Inclusion of null and negative findings	X	NA
		• Inclusion of results from testing pre-specified causal pathways through which the intervention was intended to operate, if any		NA
Ancillary analyses	18	• Summary of other analyses performed, including subgroup or restricted analyses, indicating which are pre-specified or exploratory	X	Results, Table3
Adverse events	19	• Summary of all important adverse events or unintended effects in each study condition (including summary measures, effect size estimates, and confidence intervals)		NA
DISCUSSION				
Interpretati on	20	• Interpretation of the results, taking into account study hypotheses, sources of potential bias, imprecision of measures, multiplicative analyses, and other limitations or weaknesses of the study	X	Discussion
		• Discussion of results taking into account the mechanism by which the intervention was intended to work (causal pathways) or alternative mechanisms or explanations	X	Discussion
		• Discussion of the success of and barriers to implementing the intervention, fidelity of implementation	X	Discussion
		• Discussion of research, programmatic, or policy implications	X	Discussion
Generaliza bility	21	• Generalizability (external validity) of the trial findings, taking into account the study population, the characteristics of the intervention, length of follow-up, incentives, compliance rates, specific sites/settings involved in the study, and other contextual issues	X	Discussion, Conclusion
Overall evidence	22	• General interpretation of the results in the context of current evidence and current theory	X	Conclusion

From: Des Jarlais, D. C., Lyles, C., Crepaz, N., & the Trend Group (2004). Improving the reporting quality of nonrandomized evaluations of behavioral and public health interventions: The TREND statement. *American Journal of Public Health*, 94, 361-366. For more information, visit: http://www.cdc.gov/trendstatement

Appendix 2: The TIDieR (Template for Intervention Description and Replication) Checklist*:

Information to include when describing an intervention and the location of the information

Item number	Item	Where located **	
		Primary paper (page or appendix number)	Other † (details)
	BRIEF NAME		
1.	Provide the name or a phrase that describes the intervention.	**Abstract**	**N/A**
	WHY		
2.	Describe any rationale, theory, or goal of the elements essential to the intervention.	**Introduce**	**N/A**
	WHAT		
3.	Materials: Describe any physical or informational materials used in the intervention, including those provided to participants or used in intervention delivery or in training of intervention providers. Provide information on where the materials can be accessed (e.g. online appendix, URL).	**Materials and methods**	**Ref. 6**
4.	Procedures: Describe each of the procedures, activities, and/or processes used in the intervention, including any enabling or support activities.	**Materials and methods**	**N/A**
	WHO PROVIDED		
5.	For each category of intervention provider (e.g. psychologist, nursing assistant), describe their expertise, background and any specific training given.	**Materials and methods**	**N/A**
	HOW		
6.	Describe the modes of delivery (e.g. face-to-face or by some other mechanism, such as internet or telephone) of the intervention and whether it was provided individually or in a group.	**Materials and methods**	**Ref. 6，Ref. 7**
	WHERE		
7.	Describe the type(s) of location(s) where the intervention occurred, including any necessary infrastructure or relevant features.	**Materials and methods**	**Ref. 8**

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	WHEN and HOW MUCH		
8.	Describe the number of times the intervention was delivered and over what period of time including the number of sessions, their schedule, and their duration, intensity or dose.	**Materials and methods**	**N/A**
	TAILORING		
9.	If the intervention was planned to be personalised, titrated or adapted, then describe what, why, when, and how.	**Materials and methods**	**N/A**
	MODIFICATIONS		
10.‡	If the intervention was modified during the course of the study, describe the changes (what, why, when, and how).	**N/A**	**N/A**
	HOW WELL		
11.	Planned: If intervention adherence or fidelity was assessed, describe how and by whom, and if any strategies were used to maintain or improve fidelity, describe them.	**Materials and methods**	**N/A**
12.‡	Actual: If intervention adherence or fidelity was assessed, describe the extent to which the intervention was delivered as planned.	**N/A**	**N/A**

** **Authors** - use N/A if an item is not applicable for the intervention being described. **Reviewers** – use '?' if information about the element is not reported/not sufficiently reported.

† If the information is not provided in the primary paper, give details of where this information is available. This may include locations such as a published protocol or other published papers (provide citation details) or a website (provide the URL).

‡ If completing the TIDieR checklist for a protocol, these items are not relevant to the protocol and cannot be described until the study is complete.

* We strongly recommend using this checklist in conjunction with the TIDieR guide (see *BMJ* 2014;348:g1687) which contains an explanation and elaboration for each item.

* The focus of TIDieR is on reporting details of the intervention elements (and where relevant, comparison elements) of a study. Other elements and methodological features of studies are covered by other reporting statements and checklists and have not been duplicated as part of the TIDieR checklist. When a **randomised trial** is being reported, the TIDieR checklist should be used in conjunction with the CONSORT statement (see www.consort-statement.org) as an extension of **Item 5 of the CONSORT 2010 Statement.** When a **clinical trial protocol** is being reported, the TIDieR checklist should be used in conjunction with the SPIRIT statement as an extension of **Item 11 of the SPIRIT 2013 Statement** (see www.spirit-statement.org). For alternate study designs, TIDieR can be used in conjunction with the appropriate checklist for that study design (see www.equator-network.org).

Appendix 3. Number of daily full medical orders in different sample hospitals from 2016 to 2020

Hospital code	Number of daily full medical orders				
	2016	2017	2018	2019	2020
GZ301	2670	397	461	388	151
GZ302	335	219	208	342	1072
GZ303	1181	1104	879	931	701
GZ304	581	542	542	558	469
GZ305	1125	1323	1143	1382	817
GZ306	1327	2296	2493	1704	236
GZ307	721	762	671	536	388
GZ308	810	735	589	175	101
GZ309	289	353	236	223	110

Appendix 4. The addition coefficient in Guangzhou medical institutions of 2018

Index coefficient	Weight coefficient	Index meaning
Case mix index （CMI）	When CMI≥1, the addition is 1%; for every 0.1 increase in CMI, the addition coefficient increases by 1%, and the maximum addition is 10%.	Reflecting the complexity of the combination of admitted and treated diseases
Elderly patients aged 60 and above	When the proportion of elderly hospitalizations is greater than or equal to the city's average level, the addition is 1%. For every 0.1% increase in the average level, the addition coefficient will increase by 1%, and the maximum addition will be 5%.	Reflecting the medical treatment situation of special populations
High-level medical institution assessment	Addition of 0.5%	Summit Program Medical Institutions
Key specialty assessment	0.5% addition for key specialties established by governments at all levels	Reflecting the technical level of medical institutions
Hierarchical management assessment	AAA level adds 1.0%. AA level adds 0.5%	Reflect the level of service management of medical institutions

AAA, Level of Hierarchical management assessment