

Additional file 5: Barriers and strategies to facilitate implementation of the generic drug substitution policy, as perceived by respondents

Level	Perceived Barriers	Suggested strategies to overcome barriers
Physicians	Overuse by physicians of the ‘non-substitutable’ option for “unjustified” reasons including for drugs that are not available in the market	<ul style="list-style-type: none"> - Cancel the NS option - Educate physicians on the purpose of the NS option and the need to respect its use - Encourage physicians to take into account the economic condition of patient when prescribing the medicine - Establish a limit on the minimum permissible number of NS that can be written by a physician per month.
	Continued use of the old form by physicians, especially for patients who are uninsured or who have private insurance Physicians charging patients for the new form	<ul style="list-style-type: none"> - Persuade physicians to use the new form and circulate reminders - Prosecute physicians who refuse to use the new form - Facilitate availability and access to form - Distribute form free of charge - Prosecute physicians who charge patients for the form.
	Physicians’ interactions with the pharmaceutical industry	<ul style="list-style-type: none"> - Restrict interactions between physicians and pharmaceutical companies - Impose fines on doctors who accept bribery to prescribe certain drugs - Raise awareness among physicians on the effects of physician-industry interactions on their behaviors
	Insufficient awareness of physicians of the importance of applying the policy as well as the rules that govern it	<ul style="list-style-type: none"> - Organize seminars and conferences to all concerned parties including physicians and hospital directors, to explain the goals of the policy and clarify the duties, rights and expectations from each party.
	Errors and omissions when filling prescription form as well as incorrect stamping of form	<ul style="list-style-type: none"> - Simplify the form layout and requirements
Pharmacists	Lack of support by pharmacists for the new policy Poor commitment of pharmacists to the new prescription form with continued acceptance of old form	<ul style="list-style-type: none"> - Organize seminars and conferences to all concerned parties including pharmacists to explain the goals of the policy and clarify the duties, rights and expectations from each party - Mainstream role of pharmacist to be recognized by all physician - Empower pharmacists and grant them the right to perform drug substitution if deemed necessary without referring to physician - Issue a full list of over-the-counter drugs by the MOPH that can be disbursed by

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		pharmacists to the patient without a prescription form. - Clarify the law to regulate the operations of replacement medication.
	Lack of incentives to perform generic substitution	- Provide compensation for pharmacists for their losses because of the reduction in the prices of medicines. - Establish incentive systems to promote generic substitution
	Administrative burden with processing the form with subsequent rejections	- Reduce administrative burden and provide some flexibility when processing the form
	Pharmacists' lack of awareness of the existence of a national list of approved substitutable drugs on the MOPH website	- Raise awareness of pharmacists and involve them in the decision-making process
Consumers	Poor awareness and education of consumer about generic drugs and the unified medical prescription	- Leverage on different media channels to promote the new policy
	Resistance of consumers to generic drugs and generic substitution	- Conduct awareness campaigns to raise the awareness of consumer about generic drugs and the unified medical prescription. - Third party payers to promote generic substitution by disbursing only generic equivalents of brand name drugs
	Lack of trust in pharmacists and preference to purchase the exact medication prescribed by physicians	- Through emphasizing the important role of pharmacist in ensuring the quality and safety of medications
Organizational	Poor adherence of hospitals and dispensaries to the new policy	- Ensure the full commitment of hospitals and dispensaries to the new policy
	Some hospitals charge patients for the new form	- Prosecute entities who refrain from its proper use including those that charge patients for the form.
System	Absence of mechanisms to monitor prescribing patterns	- Computerize prescription forms to allow ongoing and timely surveillance - Adopt magnetic cards to facilitate monitoring of drug prescription patterns
	Poor enforcement systems in place	- Periodic inspections of physicians and pharmacists and dispensaries by the ministry of public health to ensure they are abiding by the policy - Prosecution of, and imposition of fines on entities that violate the rules
	Challenging financial and economic situations that affect some patients' ability to afford consultation fees whenever they want a medication	- Restructure the health care system to ensure free medical services to all citizens - Subsidize consultation fees for poor - Ensure funds to aid the sick
	Lack of universal health coverage which may hinder consumer access to medication	- Accelerate progress to universal health coverage

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		<ul style="list-style-type: none"> - Expand National Social Security Funds (NSSF) beneficiaries (respondents claimed that doctors/organizations tend to use new form with NSSF patients)
	Delays from insurance companies in processing payment of bills related to medicines disbursed according to new prescription form	<ul style="list-style-type: none"> - NSSF to accelerate processing payment of bills related to drugs disbursed according to prescription form.
	Lack of collection of forms by the MOPH resulting in piling up of paperwork at pharmacies	<ul style="list-style-type: none"> - Switch to electronic version that is simple, less time consuming, printable and for free
	Price of several brand name drugs is similar to their generic alternatives, thus discouraging generic substitution	<ul style="list-style-type: none"> - Impose appropriate pricing policies that create a competitive market for generic drugs
	Poor trust of pharmacists, physicians and patients in quality and effectiveness of all generic drugs available in market	<ul style="list-style-type: none"> - MOPH to ensure quality of marketed generic drugs through interventions such as: (1) mandatory quality and bioequivalence testing of generic drugs; (2) requirement for approval of generic drugs by international organizations such as FDA, EMA, and Canadian ones
	Insufficient quantities of alternative medicines which hinder their ability to perform substitutions	<ul style="list-style-type: none"> - Expand the list of alternative generic medicines - Do not register new brands without specifying number of equivalent generics for that brand
	Prescription form does not cover army and dental services	<ul style="list-style-type: none"> - Expand the scope of the policy
	Absence of regulations on pharmaceutical industry's interactions with health care professionals	<ul style="list-style-type: none"> - Restrictive policies preventing certain types of interactions and limiting others - Disclosure of interactions to the public