IMPERIAL

Why patients struggle to take **statins**, and how healthcare professionals can help

The problem

Statins prevent heart attacks and strokes, but non-adherence is common, particularly among some minoritised groups (e.g. ethnic minorities and lower socioeconomic status) who already face a higher risk of cardiovascular disease (CVD). Missed doses raise the risk of preventable CVD events, hospitalisation and early death.

What we have developed

Imperial College London and the Hammersmith & Fulham Partnership have developed a tailored text-message programme to support statin adherence at scale.

We used four sources of evidence:

233 patients surveyed in primary care

70 studies in a systematic review

17 patients interviewed in depth

48 patients and **22** healthcare professionals in collaborative design workshops

Grounded in behavioural science, the programme tailors messages to each patient's profile (e.g. primary/ secondary prevention, polypharmacy, demographic factors) and their individual adherence barriers. In user-testing, patients found the programme acceptable and helpful.

NIHR | Patient Safety Research Collaboration

Text message programme that responds to patient barriers

Patients face different barriers at each stage of their statin treatment. Common concerns are shown below, along with examples of how these are addressed in the programme. Different messages are sent depending on individual patient profiles and needs.

TURN OVER FOR CONSULTATION PROMPTS

STAGE 1 — Starting statins

Why was I prescribed this?

Statins lower your risk of heart attack and stroke, whether you are at higher risk, have had a heart or blood vessel problem, or have inherited high cholesterol.

What do statins do?

Statins help your liver make less cholesterol and clear the buildup, keeping blood flowing and lowering your risk of heart attack and stroke.

Are they worth the risk?

Statins are safe, work well for people of all backgrounds, and are approved by UK authorities. Any side effects are usually mild and often pass. Your GP can help you decide.

Why statins were offered, how they work, whether they are safe and worth taking.

STAGE 2 — Taking statins day to day

How and when do I take them?

Take statins once a day, ideally at the same time. If you miss a dose, take it later that day or skip it. Grapefruit juice and some antibiotics can affect how statins work.

Does missing a dose matter?

Statins build up their protection over time, so they are usually taken long term. Missing doses, even a couple of days a week, can reduce how well they work.

Are statins working?

You should have a blood test at 3 and 12 months after starting, to check your liver and cholesterol. If you haven't been invited, contact your GP surgery, it's okay to ask.

How and when to take them, why missed doses matter and when to expect blood tests.

STAGE 3 — Considering stopping statins

Should I stop if I get side effects?

If you think a statin is causing side effects, do not stop on your own. Many ease over time or improve by changing the dose or type. Your GP can help.

Can I replace statins with lifestyle changes?

Lifestyle changes and statins work best together. Many people with healthy habits still need statins, because some risk comes from things they can't control, like age and genetics.

Where do I get help?

Your community pharmacy can help with most medication questions. For more, visit trusted sources such as the British Heart Foundation or NHS.

What to do about side effects, whether lifestyle can replace statins and where to get help.

Supporting adherence in your consultations

Clear communication when offering statins and supportive follow-up help patients take statins as prescribed. The prompts below are the key points our research showed are helpful to cover.

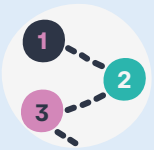
When offering statins: STATIN

- **S** **Share the risk.** Statins lower CVD risk at any cholesterol level, and protection depends on daily use. For primary prevention, put the risk in plain numbers (e.g. 15 in 100 over 10 years).
- **T** **Talk through benefits and side effects.** Early effects often settle or ease with food and water, and the dose can be reviewed or switched.
- **A** **Address all risk factors.** Cover modifiable ones (diet, exercise) and non-modifiable ones (age, ethnicity).
- **T** **Tell them how and when to take it,** and check for drug interactions.
- **I** **Inform and check understanding.** Point to trusted sources (pharmacy, British Heart Foundation and NHS).
- **N** **Note the follow-up plan** at 3 and 12 months; tell patients to ask if not invited.

At follow-up: CARE

- **C** **Check the blood tests and results,** and explain what they mean.
- **A** **Ask about side effects,** and act on them (review the dose, switch the statin).
- **R** **Review adherence,** without judgement, and explore any reasons for missing doses.
- **E** **Encourage and reassure** the patient to keep going.

Next steps



We are now planning a feasibility study, the next step towards making the programme available in routine care. Even small gains in adherence could prevent heart attacks and strokes. If you are interested in becoming a research site, contact **j.rosenberg22@imperial.ac.uk**

Funded by NIHR
National Institute for Health and Care Research

WISDOM · EXCELLENCE · EDUCATION · RESPONSIBILITY · AUTONOMY · COMPASSION
WE CARE
HFP MEDICAL

This project is funded by the National Institute for Health and Care Research (NIHR) under its Research for Patient Benefit (RfPB) Programme (Grant Reference Number NIHR205407). Infrastructure support for this study was provided by the NIHR Patient Safety Research Collaboration: North West London (NIHR PSRC: NWL, Ref. NIHR204292). The views expressed are those of the author(s) and not necessarily those of the NIHR or the Department of Health and Social Care.