

Long-Acting Reversible Contraception in Primary Care: A Cross-Sectional Study on the Perspectives of Portuguese Family Physicians

Contraceção Reversível de Longa-duração nos Cuidados de Saúde Primários: Estudo Transversal sobre as Perspetivas dos Médicos de Família Portugueses

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Acta Med Port 2026 Jun-Jul;39(6-7):394-397 • <https://doi.org/10.20344/amp.24370>

ABSTRACT

Long-acting reversible contraceptives (LARC) are recommended as first-line methods due to high efficacy and safety. Family Medicine (FM) physicians are ideally positioned to provide counseling and LARC-related services; however, their implementation in primary care is hindered by multiple constraints. The aim of this nationwide cross-sectional study was to characterize family planning practices among FM physicians in Portugal, to identify the main obstacles to LARC provision, and to propose strategies to enhance clinical autonomy. In this manner, an anonymous online questionnaire was distributed among FM physicians (specialists and residents), currently working within the Portuguese National Health Service. A total of 220 responses were collected over six weeks. While nearly all physicians (99.5%) routinely conducted family planning consultations, only 31.8% of respondents reported feeling fully prepared to perform LARC insertions autonomously. Among those who rarely insert LARC (18.7%), the main barriers identified were related to organizational constraints (38.0%) and gaps in practical training (37.0%). The majority (98.2%) expressed interest in further training, particularly in practical insertion/removal techniques. In conclusion, this study highlighted a significant gap in confidence among Portuguese FM physicians regarding LARC provision. Strengthening simulation-based training and promoting structured mentorship with gynecology specialists may help overcome these barriers. **Keywords:** Long-Acting Reversible Contraception; Portugal; Primary Health Care

RESUMO

Os contraceptivos reversíveis de longa duração (do inglês, LARC) são recomendados como métodos de primeira linha devido à sua elevada eficácia e segurança. Os médicos de Medicina Geral e Familiar (MGF) ocupam uma posição privilegiada para oferecer aconselhamentos sobre LARC, mas a sua implementação nos cuidados de saúde primários permanece limitada. Este estudo nacional e transversal teve como objetivo caracterizar as práticas em planeamento familiar dos médicos de MGF em Portugal, identificar obstáculos na disponibilização de LARC e propor estratégias educacionais para superar estes desafios. Para o efeito, foi aplicado um questionário online a médicos de MGF (especialistas e internos de formação) do Serviço Nacional de Saúde português. Foram obtidas 220 respostas num período de seis semanas. Os resultados demonstraram que, embora a quase totalidade dos participantes (99.5%) realize consultas de planeamento familiar, apenas 31.8% dos inquiridos referiram sentir-se completamente preparados para, autonomamente, proceder à colocação de LARC. Entre os profissionais que raramente colocam LARC (18.7%), as principais barreiras identificadas foram constrangimentos logísticos (38.0%), e formação prática insuficiente (37.0%). A maioria (98.2%) manifestou interesse em reforçar a sua formação, particularmente em técnicas práticas de inserção/remoção. Em conclusão, este estudo identificou uma lacuna significativa na confiança dos médicos de MGF em Portugal no que diz respeito à prescrição de LARC, impulsionada por barreiras educacionais e estruturais. Para mitigar estas limitações, propõe-se o reforço da formação prática baseada em simulação, e a promoção de uma colaboração entre os cuidados de saúde primários e hospitalares, através de modelos de mentoria com a especialidade de Ginecologia.

Palavras-chave: Contraceção Reversível de Longo Prazo; Cuidados de Saúde Primários; Portugal

Long-acting reversible contraceptives (LARC) — including copper intrauterine devices (Cu-IUDs), levonorgestrel-releasing intrauterine systems (LNG-IUS), and etonogestrel subdermal implants — are recommended by the World Health Organization (WHO) as first-line contraceptive methods due to their high efficacy, safety, and immediate reversibility upon removal. These methods have failure rates of less than 1% per year, offering effectiveness similar to, or even greater than sterilization, while preserving future fertility. By removing the need for daily compliance, LARC significantly reduces the risk of unintended pregnancies.¹⁻³

Family Medicine (FM) physicians, through their long-term and close relationships with patients, are uniquely positioned to address family planning in an integrated and in-

dividualized manner. This comprehensive, patient-centered approach helps healthcare providers guide each woman toward the most appropriate contraceptive method while ensuring her decision is informed and respected, and evidence shows it improves both adherence and satisfaction.^{4,5}

Despite its advantages, the implementation of LARC in primary care (PC) faces multiple challenges such as limited availability of trained professionals for insertion and removal procedures, misconceptions, and structural barriers.⁶ Current WHO, international, and national society guidelines emphasize that contraceptive counseling should support shared decision-making to ensure fully informed and autonomous choices.^{1,2,7} Despite Portugal ranking fourth in Europe in the 2025 European Contraception Atlas regarding

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Recebido/Received: 16/12/2025 - **Aceite/Accepted:** 26/02/2026 - **Publicado Online/Published Online:** 10/04/2026 - **Publicado/Publicated:** 01/06/2026

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governmental efforts to ensure access, significant variability persists in clinical implementation and provider readiness.⁸

This study aimed to characterize family planning practices among FM physicians in Portugal, identify the main barriers faced by clinicians in LARC provision, assess potential training gaps, and propose targeted educational strategies to enhance autonomy and clinical practice in contraceptive care. We conducted a cross-sectional study involving Family Medicine (FM) physicians (specialists and residents) registered with the Portuguese Medical Association and currently working within the Portuguese National Health Service (NHS). According to official reports from the Portuguese Medical Association and the Central Administration of the Health System (2024), the national FM workforce comprises approximately 8500 physicians, including 6100 specialists and 2400 residents, working across mainland Portugal and the autonomous regions. Participants were recruited via an online, anonymous, self-administered questionnaire written in Portuguese and hosted on Google Forms®. The questionnaire consisted of 25 items across five sections, addressing demographics, availability of family planning clinics, prescribing habits, and challenges encountered in LARC provision. Submission of the completed questionnaire was considered informed consent. To facilitate dissemination, the questionnaire was distributed through residency program coordinators across different regions of the country, and it was also directly shared among peers. A preliminary analysis of data was performed using

Microsoft Excel®. Descriptive statistics were used to summarize the data, with categorical variables expressed as absolute frequencies and percentages. No inferential statistical tests were performed. The project was approved by the Ethics Committee of Hospital Santo António/Instituto de Ciências Biomédicas Abel Salazar, Porto, Portugal (reference 2025-153; 130-CAC/130-CE).

As main results, a total of 220 FM professionals responded to the survey, corresponding to approximately 2.6% of the national FM workforce. The median age was 32 years, and the majority identified as female (82.3%). Slightly more than half were FM specialists (53.6%), and 57.3% reported having less than five years of practice. Most participants were from the Northern region (44.1%) and Lisbon and the Tagus Valley (30.9%), with no responses obtained from the Azores archipelago. Nearly all participants (99.5%) reported performing family planning clinics in their PC units, averaging five consultations per week. Almost all physicians felt comfortable prescribing oral hormonal contraception (97.7%), whereas only 48.4% performed LARC insertions. Among LARC providers, the subdermal etonogestrel implant was the most frequently used method (74.1%), followed by the LNG-IUS (55.0%). The Cu-IUD was barely inserted (0.9%). Permanent contraceptive methods were never reported as being recommended to patients. Although most felt generally comfortable with contraceptive counseling overall, 41 (18.7%) clinicians reported that they rarely or never performed LARC insertions. Among this

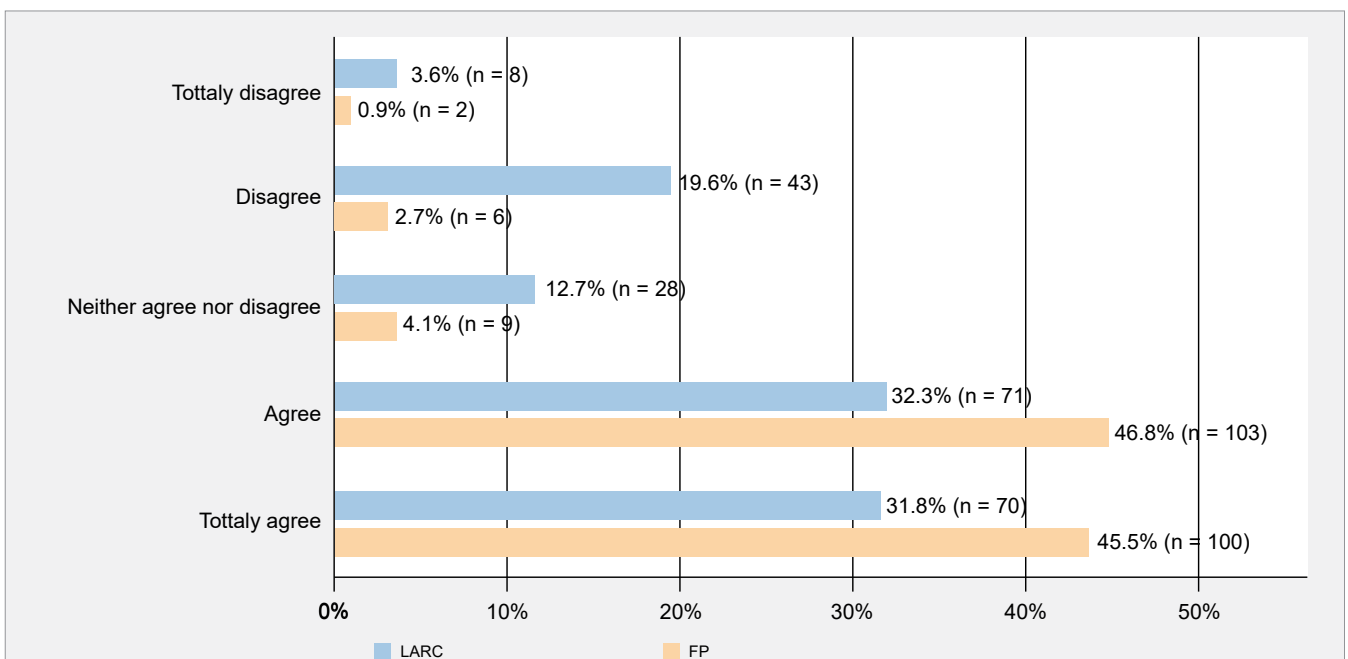


Figure 1 – Self-reported preparedness for LARC insertion. Self-reported preparedness of GFM physicians to autonomously perform FP consultations (in orange) and LARC insertions (in blue). While the majority felt well-prepared to conduct FP consultations (n = 203, 92.3% agreed or totally agreed), fewer respondents expressed the same confidence regarding LARC insertions (n = 141, 64.1%).

subgroup, the most frequently cited barriers were logistical barriers (38.0%), as limited consultation time or lack of materials, and insufficient training (37.0%). When asked about their training, only 70 (31.8%) of all participants felt fully prepared to perform LARC insertions autonomously (Fig. 1). A substantial proportion (98.2%) considered additional educational initiatives in contraception to be “very useful” or “useful” (Table 1). The most frequently requested topics were practical sessions focusing on LARC insertion/removal techniques (43.5%) and the management of LARC complications (21.8%). Furthermore, 120 (54.5%) considered that having access to professional support, such as telephone consulting or periodic multidisciplinary discussions, would be beneficial for improving the safety and confidence of LARC provision within primary care.

This national study provides an updated overview of LARC provision, highlighting marked disparities in confidence and autonomy regarding LARC procedures among Portuguese FM physicians. Many clinicians acknowledged insufficient training and limited procedural competence for autonomous insertions or removals, despite routinely pre-

scribing other contraceptive methods. The finding that only 31.8% felt fully prepared for autonomous LARC insertion underscores the critical importance of procedural training during FM residency. The identified barriers, notably insufficient training and logistical constraints, mirror concerns raised globally.⁹ Addressing these barriers is essential, as access to family planning services may be particularly limited in regions such as the South and the archipelagos, areas traditionally facing greater health workforce shortages.¹⁰

The clinical implications are significant. We propose that enhanced hospital-primary care collaboration, such as on-site mentorship or tele-mentoring, could strengthen decision-making in real time and reduce unnecessary referrals, promoting timely initiation of effective contraception. To consolidate FM physicians' procedural skills, we suggest some targeted interventions: formal logbooks and competency checklists during residency; regular simulation-based workshops; and guaranteed institutional support with appropriate materials and procedural time. Implementing these measures may help reduce inequities and ease referral pressure on secondary and tertiary services.

Table 1 – Perceptions regarding training in Contraception and Reproductive Health

Questionnaire - Section 5	n	%
Did you attend courses on contraception and women's reproductive health during training?		
Yes	189	85.9
No	31	14.1
Do you think further training in the field of contraception and women's reproductive health could be useful?		
Very useful	173	78.6
Useful	43	19.5
Barely useful	3	1.4
Useless	1	0.5
Which kind of training do you consider important to approach in contraception meetings (more than one answer allowed)? (n = 763/N = 220)		
Theoretical Sessions		
Contraindications for different types of contraception	138	18.1
Complications associated with LARCs	166	21.8
Emergency contraception	123	16.1
Other ^a	4	0.5
Practical sessions		
Insertion/removal technique of IUS/IUD	188	24.6
Insertion/removal technique of subdermal implant	144	18.9
Would you find it helpful to have support from a gynecologist during family planning clinics?		
Yes	120	54.5
No	100	45.5

Training experiences and perceived needs of respondents regarding contraception and reproductive health. Most clinicians reported having attended relevant training during residency and rated it as useful; however, a substantial proportion still expressed interest in further educational initiatives, and nearly half considered gynecological support during family planning consultations to be beneficial, underscoring persistent gaps in confidence and practical autonomy.

a: Other theoretical sessions proposed were contraception for adolescents (n = 1), analgesia during IUS/IUD insertion (n = 1) and types of oral combined contraception and their hormonal effects (n = 2).

As limitations of the study, the use of a convenience sample via an online voluntary questionnaire may have introduced selection bias, as physicians with higher interest in family planning were more likely to participate. The sample size represents only 2.6% of Portuguese FM physicians, which, combined with a short collection period during the summer period, may limit the generalizability of the findings. Furthermore, the lack of differentiation between types of primary care units hampers the identification of organizational factors that might influence LARC provision. Finally, regional representation was uneven, which may limit a more comprehensive national geographical analysis.

In conclusion, this study identified structural, educational, and operational barriers that limit the provision of LARC in primary care in Portugal. It underscores the importance of interprofessional training, hospital-primary care collaboration, and task-sharing models to build capacity and promote equitable access to contraception across the country.

ACKNOWLEDGMENTS

During the preparation of this work, the authors used ChatGPT-AI to improve the readability and language of the manuscript. After using this tool, the authors reviewed and edited the content as needed and take full responsibility for the content of the published article.

AUTHOR CONTRIBUTIONS

ABdA: Project administration, methodology, investigation, conceptualization, data curation; writing – original draft, review & editing, supervision.

REFERENCES

- World Health Organization. Medical eligibility criteria for contraceptive use. 5th ed. Geneva: WHO; 2015.
- Direção-Geral da Saúde. Norma n.º 016/2012: planeamento familiar e saúde reprodutiva. Lisboa: DGS; 2022.
- American College of Obstetricians and Gynecologists. ACOG Practice Bulletin No. 186: long-acting reversible contraception: implants and intrauterine devices. *Obstet Gynecol.* 2017;130:e251-69.
- Baker CC, Creinin MD. Long-acting reversible contraception. *Obstet Gynecol.* 2022;140:883-97.
- Holt K, Reed R, Crear-Perry J, Scott C, Wulf D, Dehlendorf C. Beyond same-day long-acting reversible contraception: a paradigm shift to equitable access for all. *Contraception.* 2024;125:110907.
- Linton E, Mawson R, Hodges V, Mitchell CA. Understanding barriers to using long-acting reversible contraceptives (LARCs) in primary care: a qualitative evidence synthesis. *BMJ Sex Reprod Health.* 2023;49:282-92.
- Mazza D, Bateson D, Frearson M, Goldstone P, Kovacs G, Baber R. Current barriers and potential strategies to increase the use of long-acting reversible contraception (LARC) to reduce the rate of unintended pregnancies in Australia: An expert roundtable discussion. *Aust N Z J Obstet Gynaecol.* 2017;57:206-212.
- European Parliamentary Forum for Sexual & Reproductive Rights. European Contraception Policy Atlas 2025. Brussels: EPF; 2025.
- Olson EM, Kramer RD, Gibson C, Wautlet CK, Schmuhl NB, Ehrenthal DB. Health care barriers to provision of long-acting reversible contraception in Wisconsin. *WMJ.* 2018;117:149-55.
- Dehlendorf C, Rodriguez MI, Levy K, Borrero S, Steinauer J. Disparities in family planning. *Am J Obstet Gynecol.* 2010;202:214-20.

ASSM: Methodology, investigation, writing – review & editing.

DBB: Investigation, writing – review & editing, validation.

PG: Methodology, investigation, conceptualization, data curation, software, formal analysis, writing – review & editing, supervision.

JS: Methodology, investigation, writing – review & editing, supervision.

RZM: Conceptualization, investigation, validation.

All authors approved the final version to be published.

PROTECTION OF HUMANS AND ANIMALS

The authors declare that the procedures were followed according to the regulations established by the Clinical Research and Ethics Committee and to the Helsinki Declaration of the World Medical Association updated in October 2024.

DATA CONFIDENTIALITY

The authors declare having followed the protocols in use at their working center regarding patients' data publication.

CONFLICTS OF INTEREST

The authors have no conflicts of interest to declare.

FUNDING SOURCES

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.