# NOTA BIBLIOGRÁFICA 2017 n.02

(abril-mayo-junio)

RED DE PROGRAMAS DE CRIBADO DE CÁNCER

## Tabla de contenido



## Cribado de cáncer de mama - general

Monticciolo DL, Newell MS, Hendrick RE, Helvie MA, Moy L, Monsees B, et al. **Breast Cancer Screening for Average-Risk Women: Recommendations From the ACR Commission on Breast Imaging.** J Am Coll Radiol. 2017; Available from: http://linkinghub.elsevier.com/retrieve/pii/S1546144017306749DOI:10.1016/j.jacr.2017.06.001.

Conclusión: *The ACR recommends annual mammography screening starting at age 40 for women of average risk of developing breast cancer. Our recommendation is based on maximizing proven benefits, which include a substantial reduction in breast cancer mortality afforded by regular screening and improved treatment options for those diagnosed with breast cancer. The risks associated with mammography screening are also considered to assist women in making an informed choice.*

Rafferty EA, Rose SL, Miller DP, Durand MA, Conant EF, Copit DS, et al. **Effect of age on breast cancer screening using tomosynthesis in combination with digital mammography.** Breast Cancer Res Treat. 2017;164(3):659–66. Available from: http://link.springer.com/10.1007/s10549-017-4299-0DOI:10.1007/s10549-017-4299-0.

Conclusión: *Addition of tomosynthesis to digital mammography increased invasive cancer detection rates for women 40-69 and decreased recall rates for all age groups with largest performance gains seen in women 40-49. The similar performance seen with tomosynthesis screening for women in their 40s compared to digital mammography for women in their 50s*

*argues strongly for commencement of mammography screening at age 40 using tomosynthesis.*

Alshafeiy TI, Wadih A, Nicholson BT, Rochman CM, Peppard HR, Patrie JT, et al. **Comparison Between Digital and Synthetic 2D Mammograms in Breast Density Interpretation.** AJR Am J Roentgenol. 2017;209(1):W36–41. Available from: http://www.ajronline.org/doi/10.2214/AJR.16.16966DOI:10.2214/AJR.16.16966.

Conclusión: *Overall, synthetic 2D mammography is comparable with digital 2D mammography in assessment of breast density, though there is some variability by reader. Practices can readily adopt synthetic 2D mammography without concern that it will affect density assessment and subsequent recommendations for supplemental screening.*

Raichand S, Dunn AG, Ong M-S, Bourgeois FT, Coiera E, Mandl KD. **Conclusions in systematic reviews of mammography for breast cancer screening and associations with review design and author characteristics.** Syst Rev. 2017;6(1):105. Available from: http://systematicreviewsjournal.biomedcentral.com/articles/10.1186/s13643-017-0495-6DOI:10.1186/s13643-017-0495-6.

Conclusión: *Differences in the conclusions of systematic reviews of the evidence for mammography have persisted for 15 years. We found no strong evidence that design characteristics were associated with greater support for the benefits of mammography in routine breast cancer screening. Instead, the results suggested that the specific expertise and competing interests of the authors influenced the conclusions of systematic reviews.*

D'Orsi CJ, Sickles EA, D'Orsi CJ, Sickles EA. **2017 Breast Cancer Surveillance Consortium Reports on Interpretive Performance at Screening and Diagnostic Mammography: Welcome New Data, But Not as Benchmarks for Practice.** Radiology. 2017;283(1):7–9. Available from: http://pubs.rsna.org/doi/10.1148/radiol.2017170181DOI:10.1148/radiol.2017170181.

Rossi PG, Giordano L. **Mammography screening: please don't be vague, tell me when I should come!** Lancet Oncol. 2017; Available from: http://dx.doi.org/10.1016/S1470-2045(17)30344-3DOI:10.1016/S1470-2045(17)30344-3.

Radhakrishnan A, SA N, AM P, Visvanathan K, Pollack C. **Physician breast cancer screening recommendations following guideline changes: Results of a national survey**. JAMA Intern Med. 2017; Available from: http://dx.doi.org/10.1001/jamainternmed.2017.0453201706

Conclusión: *Different professional societies and organizations continue to disagree over the optimal time to initiate and discontinue breast cancer screening mammography and the optimal screening interval. In October 2015, the American Cancer Society (ACS) revised its guidelines, encouraging personalized screening decisions for women ages 40 to 44 years followed by annual screening starting at age 45 years and biennial screening for women 55 years or older.1 The US Preventive Services Task Force (USPSTF) reissued its recommendations in January 2016 recommending personalized screening decisions for women ages 40 to 49 years followed by biennial mammograms for women ages 50 to 74 years.2 The American Congress of Obstetricians and Gynecologists (ACOG) recommends yearly mammograms for women 40 years or older.3 With physician recommendations the most important determinant for patients obtaining screening,4 we investigated physician recommendations in light of recent guideline changes in a national sample.*

Puliti D, Bucchi L, Mancini S, Paci E, Baracco S, Campari C, et al. **Advanced breast cancer rates in the epoch of service screening: The 400,000 women cohort study from Italy.** Eur J Cancer. 2017;75:109–16. Available from:

http://linkinghub.elsevier.com/retrieve/pii/S0959804917300485DOI:10.1016/j.ejca.2016.12.030.

Conclusión: *Comparing attenders' and non-attenders' stage-specific breast cancer incidence, we have estimated that screening attendance is associated with a reduction of nearly 30% for stages II+.*

Pletscher M. **The effects of organized screening programs on the demand for mammography in Switzerland**. Eur J Heal Econ. 2017;18(5):649–65. Available from: http://dx.doi.org/10.1007/s10198-016-0845-7DOI:10.1007/s10198-016-0845-7.

Conclusión: *The objective of this study is to estimate the causal effect of organized mammography screening programs on the proportion of women between 50 and 69 years of age who have ever used mammography. We exploit the gradual implementation of organized screening programs in nine Swiss cantons using a difference-in-difference approach. An analysis of four waves of the Swiss Health Survey shows that 3.5--5.4{%} points of the 87.9{%} utilization rate in cantons with screening programs in 2012 can be attributed to these organized programs. This effect indicates that organized programs can motivate women who have never done mammography to initiate screening.*

Colin C, Schott-Pethelaz A-M. **Mammographic density as a risk factor: to go out of a 30-year fog**. Acta radiol. 2017;284185117700930. Available from: http://dx.doi.org/10.1177/0284185117700930DOI:10.1177/0284185117700930.

Bernardi D, Belli P, Benelli E, Brancato B, Bucchi L, Calabrese M, et al. **Digital breast tomosynthesis (DBT): recommendations from the Italian College of Breast Radiologists (ICBR) by the Italian Society of Medical Radiology (SIRM) and the Italian Group for Mammography Screening (GISMa)**. Radiol Med. 2017;1–8. Available from: http://dx.doi.org/10.1007/s11547-017-0769-zDOI:10.1007/s11547-017-0769-z.

Conclusión: *This position paper, issued by ICBR/SIRM and GISMa, summarizes the evidence on DBT and provides recommendations for its use. In the screening setting, DBT in adjunct to digital mammography (DM) increased detection rate by 0.5--2.7{texttenthousand} and decreased false positives by 0.8--3.6{%} compared to DM alone in observational and double-testing experimental studies. The reduction in recall rate could be less prominent in those screening programs which already have low recall rates with DM. The increase in radiation exposure associated with DM/DBT protocols has been solved by the introduction of synthetic mammograms (sDM) reconstructed from DBT datasets. Thus, whenever possible, sDM/DBT should be preferred to DM/DBT. However, before introducing DBT as a routine screening tool for average-risk women, we should wait for the results of randomized controlled trials and for a statistically significant and clinically relevant reduction in the interval cancer rate, hopefully associated with a reduction in the advanced cancer rate. Otherwise, a potential for overdiagnosis and overtreatment cannot be excluded. Studies exploring this issue are ongoing. Screening of women at intermediate risk should follow the same recommendations, with particular protocols for women with previous BC history. In high-risk women, if mammography is performed as an adjunct to MRI or in the case of MRI contraindications, sDM/DBT protocols are suggested. Evidence exists in favor of DBT usage in women with clinical symptoms/signs and asymptomatic women with screen-detected findings recalled for work-up. The possibility to perform needle biopsy or localization under DBT guidance should be offered when DBT-only findings need characterization or surgery.*

Chiarelli AM, Muradali D, Blackmore KM, Smith CR, Mirea L, Majpruz V, et al. **Evaluating wait times from screening to breast cancer diagnosis among women undergoing organised**

**assessment vs usual care.** Br J Cancer. 2017;116(10):1254–63. Available from: http://www.nature.com/doifinder/10.1038/bjc.2017.87DOI:10.1038/bjc.2017.87.

Conclusión: *Women with screen-detected breast cancer in OBSP were more likely to have shorter wait times if they were diagnosed through organised assessment. This might be as a result of women diagnosed through a BAC having more procedures per visit, procedures scheduled in shorter intervals, and imaging or biopsy on their first visit. Given the significant improvement in timeliness to diagnosis, women with abnormal mammograms should be managed through organised assessment.*

Lynge E, Beau A-B, Christiansen P, von Euler-Chelpin M, Kroman N, Njor S, et al. **Overdiagnosis in breast cancer screening: The impact of study design and calculations**. Eur J Cancer. 2017;80:26–9. Available from: http://dx.doi.org/10.1016/j.ejca.2017.04.018DOI:10.1016/j.ejca.2017.04.018.

Conclusión: *Overdiagnosis in breast cancer screening is an important issue. A recent study from Denmark concluded that one in three breast cancers diagnosed in screening areas in women aged 50?69 years were overdiagnosed. The purpose of this short communication was to disentangle the study's methodology in order to evaluate the soundness of this conclusion. We found that both the use of absolute differences as opposed to ratios; the sole focus on non-advanced tumours and the crude allocation of tumours and person-years by screening history for women aged 70?84 years, all contributed to the very high estimate of overdiagnosis. Screening affects cohorts of screened women. Danish registers allow very accurate mapping of the fate of every woman. We should be past the phase where studies of overdiagnosis are based on the fixed age groups from routine statistics.*

van den Ende C, Oordt-Speets AM, Vroling H, van Agt HME. **Benefits and harms of breast cancer screening with mammography in women aged 40-49 years: A systematic review.** Int J cancer. 2017; Available from: http://doi.wiley.com/10.1002/ijc.30794DOI:10.1002/ijc.30794

Conclusión: *Based on the current evidence from randomised trials, extending mammography screening to younger age groups cannot be recommended. However, there were limitations including relatively low sensitivity of screening and screening attendance, insufficient power, and contamination, which may explain the nonsignificant results.*

Houssami N, Bernardi D, Pellegrini M, Valentini M, Fantò C, Ostillio L, et al. **Breast cancer detection using single-reading of breast tomosynthesis (3D-mammography) compared to double-reading of 2D-mammography: Evidence from a population-based trial.** Cancer Epidemiol. 2017;47:94–9. Available from: http://dx.doi.org/10.1016/j.canep.2017.01.008DOI:10.1016/j.canep.2017.01.008

Conclusión: *Single-reading of 3D-mammography (integrated 2D/3D or 2Dsynthetic/3D) detected more BC, and had lower FPR, compared to current practice of double-reading 2D-mammography alone these ndings have implications for population BC screening programs.*

Tice JA, Kerlikowske K. **Supplemental Breast Cancer Screening: A Density Conundrum**. J Gen Intern Med. 2017;32(6):593–4. Available from: http://dx.doi.org/10.1007/s11606-017-3989-yDOI:10.1007/s11606-017-3989-y.

He W, Sofie Lindström L, Hall P, Czene K, Lindström LS, Hall P, et al. **Cause-specific mortality in women with breast cancer in situ**. Int J Cancer. 2017;140(11):n/a-n/a. Available from: http://dx.doi.org/10.1002/ijc.30413DOI:10.1002/ijc.30413.

Conclusión: *We conclude that most women diagnosed with BCIS die from causes other than*

*breast cancer, which highlights the need for actions not only to reduce non-breast cancer mortality but also to identify patient where extensive curative BCIS treatment is not adding to survival. This article is protected by copyright. All rights reserved.*

Beau A-B, Lynge E, Njor SH, Vejborg I, Lophaven SN. **Benefit-to-harm ratio of the Danish breast cancer screening programme.** Int J cancer. 2017;141(3):512–8. Available from: http://doi.wiley.com/10.1002/ijc.30758DOI:10.1002/ijc.30758.

Conclusión: *Among 1,000 women invited to screening from age 50 to age 69 and followed until age 79, we estimated that 5.4 breast cancer deaths would be prevented and 2.1 cases overdiagnosed, under the observed scenario in Denmark of a breast cancer mortality reduction of 23.4% and 2.3% of the breast cancer cases being overdiagnosed. The estimated benefit-to-harm ratio was 2.6 for invited women and 2.5 for screened women. Hence, 2–3 women would be prevented from dying from breast cancer for every woman overdiagnosed with invasive breast cancer or DCIS. The difference between the previous published ratios and 2.6 for Denmark is probably more a reflection of the accuracy of the underlying estimates than of the actual screening programmes. Therefore, benefit-to-harm ratios should be used cautiously.*

van Bommel RMG, Weber R, Voogd AC, Nederend J, Louwman MWJ, Venderink D, et al. **Interval breast cancer characteristics before, during and after the transition from screen-film to full-field digital screening mammography**. BMC Cancer. 2017;17(1):315. Available from: http://www.ncbi.nlm.nih.gov/pubmed/28476109DOI:10.1186/s12885-017-3294-5.

Conclusión: *An increase in the proportion of occult interval cancers is observed during the transition from SFM to FFDM screening mammography. However, this increase seems temporary and is no longer detectable after the second round of digital screening. Tumor characteristics and type of surgery are comparable for interval cancers detected prior to, during and after the transition from SFM to FFDM screening mammography, except of a lower proportion of invasive ductal cancers after the transition.*

Sardanelli F, Aase HS, Álvarez M, Azavedo E, Baarslag HJ, Balleyguier C, et al. **Position paper on screening for breast cancer by the European Society of Breast Imaging (EUSOBI) and 30 national breast radiology bodies from Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, G**. Eur Radiol. 2017;27(7):2737–43. Available from: http://dx.doi.org/10.1007/s00330-016-4612-zDOI:10.1007/s00330-016-4612-z.

Conclusión: *Adoption of digital mammography (not film-screen or phosphor-plate computer radiography) is a priority, which also improves sensitivity in dense breasts. Radiologists qualified as screening readers should be involved in programmes. Digital breast tomosynthesis is also set to become ``routine mammography'' in the screening setting in the next future. Dedicated pathways for high-risk women offering breast MRI according to national or international guidelines and recommendations are encouraged.*

Kopans DB. **The Canadian National Breast Screening Studies are compromised and their results are unreliable. They should not factor into decisions about breast cancer screening**. Breast Cancer Res Treat. 2017;165(1):9–15. Available from: http://dx.doi.org/10.1007/s10549-017-4302-9DOI:10.1007/s10549-017-4302-9.

Conclusión: *These fundamental problems compromise the CNBSS and make their results, which are major outliers in the RCT's of breast cancer screening, unreliable. Consequently, they should not be used to establish guidelines for breast cancer screening.*

Moshina N, Roman M, Sebuødegård S, Waade GG, Ursin G, Hofvind S. **Comparison of**

**subjective and fully automated methods for measuring mammographic density**. Acta radiol. 2017;284185117712540. Available from: http://dx.doi.org/10.1177/0284185117712540DOI:10.1177/0284185117712540.

Conclusión: *Mean values of volumetric breast density increased with increasing density category of the subjective classifications. The agreement between BI-RADS and volumetric breast density categories was moderate.*

Sicsic J, Franc C. **Impact assessment of a pay-for-performance program on breast cancer screening in France using micro data**. Eur J Heal Econ. 2017;18(5):609–21. Available from: http://dx.doi.org/10.1007/s10198-016-0813-2DOI:10.1007/s10198-016-0813-2.

Conclusi*on The French P4P program had a nonsignificant impact on breast cancer screening uptake. This result may reflect the fact that the low-powered incentives implemented in France through the CAPI might not provide sufficient leverage to generate better practices, thus inviting regulators to seek additional tools beyond P4P in the field of prevention and screening.*

Grady D, RF R. **Physician adherence to breast cancer screening recommendations**. JAMA Intern Med. 2017; Available from: http://dx.doi.org/10.1001/jamainternmed.2017.0458201706

Conclusión: *We found the Research Letter by Radhakrishnan et al1 rather dispiriting. It suggests that a large proportion of primary care physicians recommend screening mammography for women who are more likely to experience harms than benefits from the examination. Owing to the greater chance of harm, neither the American Cancer Society nor the US Preventive Services Task Force (USPSTF) recommend routine screening mammography for women ages 40 to 44 years. Despite this, 81% of the primary care physicians surveyed in this study reported that they recommend mammography to women in this age range.*

Sankatsing VD V, van Ravesteyn NT, Heijnsdijk EAM, Looman CWN, van Luijt PA, Fracheboud J, et al. **The effect of population-based mammography screening in Dutch municipalities on breast cancer mortality: 20 years of follow-up**. Int J Cancer. 2017;n/a-n/a. Available from: http://dx.doi.org/10.1002/ijc.30754DOI:10.1002/ijc.30754.

Conclusión: *These findings show that the implementation of mammography screening in Dutch municipalities is associated with a significant decline in breast cancer mortality in women aged 55-79, irrespective of time of implementation. This article is protected by copyright. All rights reserved.*

Rosenberg RD, Yankaskas BC, Abraham LA, Sickles EA, Lehman CD, Geller BM, et al. **National Performance Benchmarks for Modern Screening Digital Mammography: Update from the Breast Cancer Surveillance Consortium**. Radiology. 2016;283(1):161174. Available from: http://pubs.rsna.org/doi/10.1148/radiol.2016161174%5Cnhttp://pubs.rsna.org/doi/10.1148/radiol.2411051504DOI:10.1148/radiol.2016161174.

Conclusión: *A decade ago, the BCSC published performance benchmarks for screening mammography in U.S. community practice (13). These metrics informed the ACR BI-RADS to establish performance benchmarks for U.S. practice and also identified opportunities for improvements in future practice. Two key changes have occurred to improve screening mammography performance in community practice. The first is transition from screen-film mam-mography to full-field digital mammog-raphy, and the second is expansion of training programs to enhance the interpretive skills of radiologists engaged in screening mammography programs. Published online before print 10.1148/radiol.2016161174 Content codes:*

Moshina N, Sebuødegård S, Hofvind S. **Is breast compression associated with breast cancer detection and other early performance measures in a population-based breast cancer screening program?** Breast Cancer Res Treat. 2017;163(3):605–13. Available from: http://link.springer.com/10.1007/s10549-017-4214-8DOI:10.1007/s10549-017-4214-8.

Conclusión: *High compression force and low compression pressure were associated with more favorable early performance measures in the screening program.*

Yun SJ, Ryu C-W, Rhee SJ, Ryu JK, Oh JY. **Benefit of adding digital breast tomosynthesis to digital mammography for breast cancer screening focused on cancer characteristics: a meta-analysis.** Breast Cancer Res Treat. 2017;164(3):557–69. Available from: http://link.springer.com/10.1007/s10549-017-4298-1DOI:10.1007/s10549-017-4298-1.

Conclusión: *Adding DBT to FFDM enabled detection of early invasive breast cancer that might have been missed with FFDM alone. Knowing which cancer characteristic DBT detects may allow it to play a complementary role in predicting long-term patient outcomes and facilitate treatment planning.*

Guillaume E, Launay L, Dejardin O, Bouvier V, Guittet L, Déan P, et al. **Could mobile mammography reduce social and geographic inequalities in breast cancer screening participation?** Prev Med (Baltim). 2017;100:84–8. Available from: http://linkinghub.elsevier.com/retrieve/pii/S0091743517301263DOI:10.1016/j.ypmed.2017.04.006.

Conclusión: *After adjustment, MM invitation was associated with a significant increase in individual participation (odds ratio=2.9). MM can target underserved and remote communities, allowing greater participation and decreasing social and geographic inequalities in the general population. Proportionate universalism is an effective principle for public health policy in reducing health inequalities.*

Kuhl CK, Strobel K, Bieling H, Leutner C, Schild HH, Schrading S. **Supplemental Breast MR Imaging Screening of Women with Average Risk of Breast Cancer.** Radiology. 2017;283(2):361–70. Available from: http://pubs.rsna.org/doi/10.1148/radiol.2016161444DOI:10.1148/radiol.2016161444.

Conclusión: *In women at average risk for breast cancer, MR imaging screening improves early diagnosis of prognostically relevant breast cancer. (©) RSNA, 2017 Online supplemental material is available for this article.*

Barranger E, Delpech Y. **[Breast cancer screening: The controversy continues… What's the interest for women?!]**. Gynecol Obstet Fertil Senol. 2017;45(6):325–6. Available from: http://linkinghub.elsevier.com/retrieve/pii/S2468718917300934DOI:10.1016/j.gofs.2017.03.012.

Zuckerman SP, Maidment ADA, Weinstein SP, McDonald ES, Conant EF. **Imaging With Synthesized 2D Mammography: Differences, Advantages, and Pitfalls Compared With Digital Mammography.** AJR Am J Roentgenol. 2017;209(1):222–9. Available from: http://www.ajronline.org/doi/10.2214/AJR.16.17476DOI:10.2214/AJR.16.17476.

Conclusión: *Despite subjective differences in the appearance of s2D and digital mammograms, early outcomes of screening using s2D mammography and DBT are not inferior to those achieved with digital mammography and DBT. Understanding these variations may aid in implementing this technique and improving patient outcomes.*

Haas JS. **The Complexity of Achieving the Promise of Precision Breast Cancer Screening**. JNCI J Natl Cancer Inst. 2017;109(5):djw301-djw301. Available from: http://dx.doi.org/10.1093/jnci/djw3012

Conclusión: *While there is early evidence that digital breast tomosynthesis may have modestly better cancer detection and lower rates of false-positive exams than digital mammography (8,9), this rapidly emerging technology is unlikely to resolve the plethora of issues around screening such as the ages when breast cancer screening should start and stop, how often women should be screened, and whether screening modalities should differ based on cancer risk or breast density.*

Gagliardi AR, Honein-AbouHaidar G, Stuart-McEwan T, Smylie J, Arnaout A, Seely J, et al. **How do the characteristics of breast cancer diagnostic assessment programmes influence service delivery: A mixed methods study**. Eur J Cancer Care (Engl). 2017;e12727–n/a. Available from: http://dx.doi.org/10.1111/ecc.12727DOI:10.1111/ecc.12727.

Conclusión: *Further research is needed to understand how to optimise the organisation and delivery of DAP services. Measures reflecting individual, team and patient-reported outcomes should be used to assess the effectiveness and impact of DAPs in addition to more traditional measures such as wait times.*

Arleo EK, Monticciolo DL, Monsees B, McGinty G, Sickles EA. **Persistent Untreated Screening-Detected Breast Cancer: An Argument Against Delaying Screening or Increasing the Interval Between Screenings.** J Am Coll Radiol. 2017;14(7):863–7. Available from: http://linkinghub.elsevier.com/retrieve/pii/S154614401730145XDOI:10.1016/j.jacr.2017.01.038.

Conclusión: *Among 479 untreated breast cancers detected on screening mammography, none spontaneously disappeared or regressed. An unknown percentage of these cancers represent overdiagnosis, but because all untreated screen-detected cancers were visible and suspicious for malignancy at next mammographic examination, delaying the onset of screening or increasing the interval between screenings should not reduce the frequency of overdiagnosis.*

Pitman JA, McGinty GB, Soman RR, Drotman MB, Reichman MB, Arleo EK. **Screening Mammography for Women in Their 40s: The Potential Impact of the American Cancer Society and U.S. Preventive Services Task Force Breast Cancer Screening Recommendations.** AJR Am J Roentgenol. 2017;1–6. Available from: http://www.ajronline.org/doi/10.2214/AJR.16.17759DOI:10.2214/AJR.16.17759.

Conclusión: *Women 40-49 years old had 18.8% of all screen-detected breast cancers. The two cohorts (40-44 and 45-49 years old) had similar incidences of screen-detected breast cancer (8.9%, 9.8%) and cancer detection rates within performance benchmark standards, supporting a similar recommendation for both cohorts and the American College of Radiology recommendation of annual screening mammography starting at age 40.*

Bastos J, Rodrigues V, Paap E, Broeders M, Pina M, Cruz D, et al. **Breast cancer screening effectiveness in Portugal central Region.** Eur J Cancer Prev. 2017;1. Available from: http://insights.ovid.com/crossref?an=00008469-900000000-99321DOI:10.1097/CEJ.0000000000000376.

Conclusión: *Our results are in agreement with other case-referent studies worldwide, supporting the contribution of screening practices towards the decreasing breast cancer mortality in Portugal.*

Allgood PC, Maroni R, Hudson S, Offman J, Turnbull AE, Peacock L, et al. **Effect of second timed appointments for non-attenders of breast cancer screening in England: a randomised controlled trial.** Lancet Oncol. 2017;18(7):972–80. Available from: http://linkinghub.elsevier.com/retrieve/pii/S1470204517303406DOI:10.1016/S1470-2045(17)30340-6.

Conclusión: *These findings show that a policy of second appointments with fixed date and time for non-attenders of breast screening is effective in improving participation. This strategy can be easily implemented by the screening sites and, if combined with simple interventions, could further increase participation and ensure an upward shift in the participation trend nationally. Whether the policy should vary by time since last attended screen will have to be considered. FUNDING National Health Service Cancer Screening Programmes and Department of Health Policy Research Programme.*

Huang X, Li Y, Song J, Berry DA. **A Bayesian Simulation Model for Breast Cancer Screening, Incidence, Treatment, and Mortality.** Med Decis Making. 2017;272989X17714473. Available from: http://journals.sagepub.com/doi/10.1177/0272989X17714473DOI:10.1177/0272989X17714473.

Conclusión: *We will extend our model in future studies to account for local, regional, and distant disease recurrences.*

Buist DSM, Gao H, Anderson ML, Onega T, Brandzel S, Rabelhofer MA, et al. **Breast cancer screening outreach effectiveness: Mammogram-specific reminders vs. comprehensive preventive services birthday letters.** Prev Med (Baltim). 2017;102:49–58. Available from: http://linkinghub.elsevier.com/retrieve/pii/S0091743517302335DOI:10.1016/j.ypmed.2017.06.028.

Conclusión: *Birthday letters are less effective than mammogram-specific reminder letters at prompting women to undergo timely breast cancer screening, particularly among women up-to-date with screening. Birthday letters may be effective at increasing overall preventive care; however, supplemental outreach may be needed around the due date to increase timely preventive services receipt.*

## ■ Cribado de cáncer de mama - equidad

Committee on Practice Bulletins—Gynecology. **Practice Bulletin Number 179: Breast Cancer Risk Assessment and Screening in Average-Risk Women**. Obstet Gynecol. 2017 Jul;130(1):e1-e16. doi: 10.1097/AOG.0000000000002158. PubMed PMID: 28644335.

*It will present recommendations for using a framework of shared decision making to assist women in balancing their personal values regarding benefits and harms of screening at various ages and intervals to make personal screening choices from within a range of reasonable options. Recommendations for women at elevated risk and discussion of new technologies, such as tomosynthesis, are beyond the scope of this document and are addressed in other publications of the American College of Obstetricians and Gynecologists (ACOG) (5-7).*

Miranda PY, Yao N, Snipes SA, BeLue R, Lengerich E, Hillemeier MM. **Citizenship, length of stay, and screening for breast, cervical, and colorectal cancer in women, 2000-2010**. Cancer Causes Control. 2017 Jun;28(6):589-598. doi: 10.1007/s10552-017-0887-x. Epub 2017 Mar 31. PubMed PMID: 28364196.

*Based on these findings, duration mandates in immigration policy may indirectly influence future pathways to preventive health care and cancer disparities disproportionately affecting immigrant women. We suggest that limits of duration mandates be reevaluated, as they may offer pathways to preventive health care for this vulnerable population, and prevent future cancer disparities.*

Kweon SS, Kim MG, Kang MR, Shin MH, Choi JS. **Difference of stage at cancer diagnosis by socioeconomic status for four target cancers of the National Cancer Screening Program in Korea: Results from the Gwangju and Jeonnam cancer registries**. J Epidemiol. 2017 Jul;27(7):299-304. doi: 10.1016/j.je.2016.07.004. Epub 2017 Mar 6. PubMed PMID: 28279589; PubMed Central PMCID: PMC5498418.

*In conclusion, later stage diagnoses of stomach, colon, and female breast cancer are still associated with SES in Korea in the era of the NCSP for the lower SES population.*

Xu X, Mann JR, McDermott SW, Deroche CB, Gustafson E, Hardin JW. **Women with Visual Impairment and Insured by Medicaid or Medicare Are Less Likely to Receive Recommended Screening for Breast and Cervical Cancers**. Ophthalmic Epidemiol. 2017 Jun;24(3):168-173. doi: 10.1080/09286586.2016.1213302. Epub 2016 Aug 23. PubMed PMID: 27552166.

*We used a new approach to investigate adherence to USPSTF recommendations, accounting for both full and partial adherence. This approach identified disparities in mammography and Pap testing for women with VI. The findings of this study should facilitate the development of effective interventions to increase screening among women with VI.*

## ■ Cribado de cáncer de cuello de útero - general

Benard VB, Castle PE, Jenison SA, Hunt WC, Kim JJ, Cuzick J, et al. **POpulation-based incidence rates of cervical intraepithelial neoplasia in the human papillomavirus vaccine era**. JAMA Oncol. 2017;3(6):833–7. Available from: http://dx.doi.org/10.1001/jamaoncol.2016.3609DOI:10.1001/jamaoncol.2016.3609.

Conclusión: *Population-level decreases in CIN among cohorts partially vaccinated for HPV may be considered when clinical practice guidelines for cervical cancer screening are reassessed. Evidence is rapidly growing to suggest that further increases in raising the age to start screening are imminent, one step toward integrating screening and vaccination.*

Marlow L, Waller J. **The changing landscape of cervical screening—What does the future hold for primary care?** Eur J Cancer Care (Engl). 2017;26(3):e12693–n/a. Available from: http://dx.doi.org/10.1111/ecc.12693DOI:10.1111/ecc.12693.

Conclusión: *The landscape of cervical cancer prevention is changing in many countries thanks to the introduction of vaccination against high-risk types of human papillomavirus (HPV) and the incorporation of HPV DNA testing into cervical screening algorithms. In addition to this, uptake of screening is falling year on year in the UK and elsewhere. These factors present challenges and opportunities for health professionals working in primary care—in terms of communicating programmatic changes to women; responding to questions about the meaning and implications of HPV test results; and delivering interventions to increase screening uptake.*

Viviano M, Catarino R, Jeannot E, Boulvain M, Malinverno MU, Vassilakos P, et al. **Self-sampling to improve cervical cancer screening coverage in Switzerland: a randomised controlled trial**. Br J Cancer. 2017;116(11):1382–8. Available from: http://www.nature.com/doifinder/10.1038/bjc.2017.111DOI:10.1038/bjc.2017.111.

Conclusión: *The participation in CC screening in women offered self-sampling was not higher than among those offered specimen collection by a clinician. Compliance with further follow-up for women with a positive HPV test on the self-sample requires further attention.*

Wentzensen N, Arbyn M, Berkhof J, Bower M, Canfell K, Einstein M, et al. **Eurogin 2016 Roadmap: how HPV knowledge is changing screening practice.** Int J cancer. 2017;140(10):2192–200. Available from: http://doi.wiley.com/10.1002/ijc.30579DOI:10.1002/ijc.30579.

Conclusión: *Human papillomaviruses (HPVs) are the necessary cause of most cervical cancers, a large proportion of other anogenital cancers, and a subset of oropharyngeal cancers. The knowledge about HPV has led to development of novel HPV-based prevention strategies with important impact on clinical and public health practice. Two complementary reviews have been prepared following the 2015 Eurogin Conference to evaluate how knowledge about HPV is changing practice in HPV infection and disease control through vaccination and screening. This review focuses on screening for cervical and anal cancers in increasingly vaccinated populations. The introduction of HPV vaccines a decade ago has led to reductions in HPV infections and early cancer precursors in countries with wide vaccination coverage. Despite the high efficacy of HPV vaccines, cervical cancer screening will remain important for many decades. Many healthcare systems are considering switching to primary HPV screening, which has higher sensitivity for cervical precancers and allows extending screening intervals. We describe different approaches to implementing HPV-based screening efforts in different healthcare systems with a focus in high-income countries. While the population prevalence for other anogenital cancers is too low for population-based screening, anal cancer incidence is very high in HIV-infected men who have sex with men, warranting consideration of early detection approaches. We summarize the current evidence on HPV-based prevention of anal cancers and highlight important evidence gaps.*

Tsiachristas A, Gittins M, Kitchener H, Gray A. **Cost-effectiveness of strategies to increase cervical screening uptake at first invitation (STRATEGIC)**. J Med Screen. 2017;969141317704679. Available from: http://dx.doi.org/10.1177/0969141317704679DOI:10.1177/0969141317704679.

Conclusión: *Unrequested self-sampling and timed appointments are likely to be cost-effective interventions. Further research is required on the duration of effects and on implementing combinations of interventions.*

Cuzick J, Myers O, Lee J, Al E. **Outcomes in women with cytology showing atypical squamous cells of undetermined significance with vs without human papillomavirus testing**. JAMA Oncol. 2017; Available from: http://dx.doi.org/10.1001/jamaoncol.2017.1040

Conclusión: *Human papillomavirus testing led to faster and more complete diagnosis of cervical disease, but 55.8% more biopsies and 20.0% more loop electrosurgical excision procedures were performed. In those tested, virtually all high-grade disease occurred in the 43.1% of women who were HPV positive, allowing clinical resources to be focused on women who need them most. These data provide essential information for cervical screening guidelines and public health policy.*

Kitchener H, Gittins M, Cruickshank M, Moseley C, Fletcher S, Albrow R, et al. **A cluster randomized trial of strategies to increase uptake amongst young women invited for their first cervical screen: The STRATEGIC trial**. J Med Screen. 2017;969141317696518. Available from: http://dx.doi.org/10.1177/0969141317696518DOI:10.1177/0969141317696518.

Conclusión: *Amongst non-attenders, self-sample kits sent and timed appointments achieved an uplift in screening over the short term; longer term impact is less certain. Prior human papillomavirus vaccination was associated with increased screening uptake.*

Ghanouni A, Renzi C, Waller J. **A cross-sectional survey assessing factors associated with reading cancer screening information: previous screening behaviour, demographics and decision-making style.** BMC Public Health. 2017;17(1):327. Available from: http://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-017-4224-9DOI:10.1186/s12889-017-4224-9.

Conclusión: *Interventions that increase screening uptake may also increase subsequent engagement with information. Future research could investigate how to improve engagement at initial invitations. There may also be scope to reduce barriers to accessing non-English information and alternative communication strategies may benefit participants who are less inclined to weigh up advantages and disadvantages as part of their decision-making.*

CM M, PF S. **Human papillomavirus triage of women with atypical squamous cells of undetermined significance—reduction of overtreatment needed**. JAMA Oncol. 2017; Available from: http://dx.doi.org/10.1001/jamaoncol.2017.1522

Conclusión: *The aim of cervical cancer screening is to prevent mortality and incidence of cervical cancer. Population-based cervical cancer screening by quality-assured cytology has led to a significant decrease in mortality and incidence of cervical cancer by early detection and treatment of cervical cancer precursor lesions and low stages of cancer. Histologically, precursor lesions of cervical cancer are classified as cervical intraepithelial neoplasia (CIN), graded from CIN1 to CIN3 according to the severity of the lesion, defined as the width of the cervical epithelium (one-third to full thickness) consisting of morphologically abnormal cells. The reproducibility of grading CIN lesions by pathologists is at best 70%.*

Latsuzbaia A, Hebette G, Fischer M, Arbyn M, Weyers S, Vielh P, et al. **Introduction of liquid-based cytology and human papillomavirus testing in cervical cancer screening in Luxembourg.** Diagn Cytopathol. 2017;45(5):384–90. Available from: http://doi.wiley.com/10.1002/dc.23678DOI:10.1002/dc.23678.

Conclusión: *More cervical lesions were identified using LBC compared to conventional cytology. HrHPV infection was correlated with the severity of intraepithelial lesions. The current findings provide important information to evaluate the prevention of cervical cancer in Luxembourg and for monitoring the future impact of HPV vaccination.*

Labeit AM, Peinemann F. **Determinants of a GP visit and cervical cancer screening examination in Great Britain.** Dalby AR, editor. PLoS One. 2017;12(4):e0174363. Available from: http://dx.plos.org/10.1371/journal.pone.0174363DOI:10.1371/journal.pone.0174363.

Conclusión: *Most of the determinants of visiting a GP and cervical cancer screening examination differ from each other and a GP visit enhances the uptake of a smear test.*

Tan G, Hawkes D. **Addressing Confusion about the Risks and Benefits of Co-Testing versus Human Papillomavirus Testing for Cervical Cancer Screening.** Acta Cytol. 2017;61(3):252. Available from: https://www.karger.com/?doi=10.1159/000472244DOI:10.1159/000472244.

Marlow LA V, Chorley AJ, Haddrell J, Ferrer R, Waller J. **Understanding the heterogeneity of cervical cancer screening non-participants: Data from a national sample of British women.** Eur J Cancer. 2017;80:30–8. Available from: http://linkinghub.elsevier.com/retrieve/pii/S095980491730919XDOI:10.1016/j.ejca.2017.04.017.

Conclusión: *The majority of cervical cancer screening non-participants are not making an active decision not to attend but rather are either unaware or unable to act. There are clear sociodemographic differences between non-participant types, which could be used to identify where tailored interventions may be best targeted.*

Sawaya GF, Huchko MJ. **Cervical Cancer Screening.** Med Clin North Am. 2017;101(4):743–53. Available from: http://linkinghub.elsevier.com/retrieve/pii/S0025712517300299DOI:10.1016/j.mcna.2017.03.006.

Conclusión: *Cervical cancer screening in the United States has accompanied profound decreases in cancer incidence and mortality over the last half century. Two screening strategies are currently endorsed by US-based guideline groups: (1) triennial cytology for women aged 21 to 65 years, and (2) triennial cytology for women aged 21 to 29 years followed by cytology plus testing for high-risk human papillomavirus types every 5 years for women aged 30 years and older. Providing women with affordable, easily accessible screening, follow-up of abnormal tests, and timely treatment will result in the greatest impact of screening on cervical cancer incidence and mortality.*

Castanon A, Landy R, Sasieni P. **By how much could screening by primary human papillomavirus testing reduce cervical cancer incidence in England?** J Med Screen. 2016;24(2):110–2. Available from: http://dx.doi.org/10.1177/0969141316654197DOI:10.1177/0969141316654197.

Conclusión: *Overall, we estimate that 23.9% (95% CI: 19.3?27.6%) of current cases in women invited for screening could be prevented. Based on 2013 cancer incidence statistics, absolute numbers could be reduced by 487 (95% CI 394 to 563) or 3.4 (95% CI 2.8 to 4.0) per 100,000 women per year.*

## Cribado de cáncer de cuello de útero - equidad

Miranda PY, Yao N, Snipes SA, BeLue R, Lengerich E, Hillemeier MM. **Citizenship, length of stay, and screening for breast, cervical, and colorectal cancer in women, 2000-2010**. Cancer

Causes Control. 2017 Jun;28(6):589-598. doi: 10.1007/s10552-017-0887-x. Epub 2017 Mar 31. PubMed PMID: 28364196.

*Based on these findings, duration mandates in immigration policy may indirectly influence future pathways to preventive health care and cancer disparities disproportionately affecting immigrant women. We suggest that limits of duration mandates be reevaluated, as they may offer pathways to preventive health care for this vulnerable population, and prevent future cancer disparities.*

Kweon SS, Kim MG, Kang MR, Shin MH, Choi JS. **Difference of stage at cancer diagnosis by socioeconomic status for four target cancers of the National Cancer Screening Program in Korea: Results from the Gwangju and Jeonnam cancer registries**. J Epidemiol. 2017 Jul;27(7):299-304. doi: 10.1016/j.je.2016.07.004. Epub 2017 Mar 6. PubMed PMID: 28279589; PubMed Central PMCID: PMC5498418.

*In conclusion, later stage diagnoses of stomach, colon, and female breast cancer are still associated with SES in Korea in the era of the NCSP for the lower SES population.*

Fang CY, Ma GX, Handorf EA, Feng Z, Tan Y, Rhee J, Miller SM, Kim C, Koh HS. **Addressing multilevel barriers to cervical cancer screening in Korean American women: A randomized trial of a community-based intervention**. Cancer. 2017 May 15;123(6):1018-1026. doi: 10.1002/cncr.30391. Epub 2016 Nov 21. PubMed PMID: 27869293; PubMed Central PMCID: PMC5339039.

*A multicomponent intervention combining community cancer education with navigation services yielded significant increases in cervical cancer screening rates among underscreened Korean American women. Community-accessible programs that incorporate cancer education with the delivery of key navigation services can be highly effective in increasing cervical cancer screening rates in this underserved population. Cancer 2017;123:1018-26. © 2016 American Cancer Society.*

Xu X, Mann JR, McDermott SW, Deroche CB, Gustafson E, Hardin JW. **Women with Visual Impairment and Insured by Medicaid or Medicare Are Less Likely to Receive Recommended Screening for Breast and Cervical Cancers**. Ophthalmic Epidemiol. 2017 Jun;24(3):168-173. doi: 10.1080/09286586.2016.1213302. Epub 2016 Aug 23. PubMed PMID: 27552166.

*We used a new approach to investigate adherence to USPSTF recommendations, accounting for both full and partial adherence. This approach identified disparities in mammography and Pap testing for women with VI. The findings of this study should facilitate the development of effective interventions to increase screening among women with VI.*

## Cribado de cáncer colorrectal - general

Brenner H, Hoffmeister M, Stock C. **Time to reduce the burden of removing diminutive polyps in colorectal cancer screening.** Gastrointest Endosc. 2017;85(6):1177–9. Available from: http://linkinghub.elsevier.com/retrieve/pii/S0016510717301062DOI:10.1016/j.gie.2017.02.004.

Robertson DJ, Lee JK, Boland CR, Dominitz JA, Giardiello FM, Johnson DA, et al. **Recommendations on Fecal Immunochemical Testing to Screen for Colorectal Neoplasia: A Consensus Statement by the US Multi-Society Task Force on Colorectal Cancer.** Gastroenterology. 2017;152(5):1217–1237.e3. Available from: http://linkinghub.elsevier.com/retrieve/pii/S0016508516350259DOI:10.1053/j.gastro.2016.08.053.

Conclusión: *The use of the fecal occult blood test (FOBT) for colorectal cancer (CRC) screening is supported by randomized trials demonstrating effectiveness in cancer prevention and widely recommended by guidelines for this purpose. The fecal immunochemical test (FIT), as a direct measure of human hemoglobin in stool has a number of advantages relative to conventional FOBT and is increasingly used relative to that test. This review summarizes current evidence for FIT in colorectal neoplasia detection and the comparative effectiveness of FIT relative to other commonly used CRC screening modalities. Based on evidence, guidance statements on FIT application were developed and quality metrics for program implementation proposed.*

Grobbee EJ, Wieten E, Hansen BE, Stoop EM, de Wijkerslooth TR, Lansdorp-Vogelaar I, et al. **Fecal immunochemical test-based colorectal cancer screening: The gender dilemma.** United Eur Gastroenterol J. 2017;5(3):448–54. Available from: http://journals.sagepub.com/doi/10.1177/2050640616659998DOI:10.1177/2050640616659998.

Conclusión: *More AN were both detected and missed in men compared to women at all cut-offs. Gender-tailored cut-offs could either level sensitivity in men and women (i.e., lower cut-off in women) or level the amount of missed lesions (i.e., lower cut-off in men).*

Idigoras I, Arrospide A, Portillo I, Arana-Arri E, Martínez-Indart L, Mar J, et al. **Evaluation of the colorectal cancer screening Programme in the Basque Country (Spain) and its effectiveness based on the Miscan-colon model.** BMC Public Health. 2017;18(1):78. Available from: http://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-017-4639-3DOI:10.1186/s12889-017-4639-3.

Conclusión: *The Basque Country CRC Programme results are aligned to its strategy and comparable to other programmes. MISCAN model was found to be a useful tool to predict the benefits of the programme in the future. The effectiveness of the Programme has not been formally established as case control studies are required to determine long term benefits from the screening strategy.*

Lin KW, Frost JL. **Should Screening Techniques for Colorectal Cancer All Have an "A" Recommendation? No: When It Comes to Colorectal Cancer Screening, Test Choice Matters.** Am Fam Physician. 2017;95(10):618–20. Available from: http://www.ncbi.nlm.nih.gov/pubmed/28671398

Bjerrum A, Andersen O, Fischer A, Lindebjerg J, Lynge E. **Long-term risk of colorectal cancer**

**after negative colonoscopy in a Danish gFOBT screening cohort.** Int J cancer. 2017;141(3):503–11. Available from: http://doi.wiley.com/10.1002/ijc.30756DOI:10.1002/ijc.30756.

Conclusión: *Since FOBT screen positive persons in our study remained at average risk of CRC despite of a negative index colonoscopy, we question the safety of suspending FOBT screening for this group. It needs to be monitored whether recent efforts to improve colonoscopy quality have been successful in ensuring low CRC risk after negative colonoscopy also in FOBT positive persons.*

Brenner H, Werner S. **Selecting a Cut-off for Colorectal Cancer Screening With a Fecal Immunochemical Test.** Clin Transl Gastroenterol. 2017;8(8):e111. Available from: http://www.nature.com/doifinder/10.1038/ctg.2017.37DOI:10.1038/ctg.2017.37.

Conclusión: *Our study illustrates delineation of a range of meaningful cut-offs (here: 9-25 µg Hb/g feces) according to expected diagnostic yield in a true screening setting. Selecting a cut-off within or beyond this range should consider characteristics of the specific target population, such as AN prevalence or available colonoscopy capacity.*

George AT, Field A. **Patients with "interval" colorectal cancers have worse outcomes compared with cancers in patients who decline the National Bowel Cancer Screening Programme - Results from a Multicentre Study.** Color Dis. 2017;19(6):590–1. Available from: http://doi.wiley.com/10.1111/codi.13719DOI:10.1111/codi.13719.

Skyrud KD, Myklebust TA, Bray F, Eriksen MT, de Lange T, Larsen IK, et al. **How many deaths from colorectal cancer can be prevented by 2030? A scenario-based quantification of risk factor modification, screening, and treatment in Norway.** Cancer Epidemiol biomarkers Prev. 2017;cebp.0265.2017. Available from: http://cebp.aacrjournals.org/lookup/doi/10.1158/1055-9965.EPI-17-0265DOI:10.1158/1055-9965.EPI-17-0265.

Conclusión: *Risk factor modification, screening, and treatment all have considerable potential to reduce CRC mortality by 2030, with the largest potential reduction observed for improved treatment and risk factor modification. IMPACT The estimation of these health impact measures provides useful information that can be applied in public health decision-making.*

Partin MR, Gravely AA, Burgess JF, Haggstrom DA, Lillie SE, Nelson DB, et al. **Contribution of patient, physician, and environmental factors to demographic and health variation in colonoscopy follow-up for abnormal colorectal cancer screening test results.** Cancer. 2017; Available from: http://doi.wiley.com/10.1002/cncr.30765DOI:10.1002/cncr.30765.

Conclusión: *In the VHA, blacks are more likely to receive colonoscopy follow-up for positive FOBT/FIT results than whites, and follow-up rates markedly decline with advancing age and comorbidity burden. Patient and physician behaviors explain race variation in follow-up rates and contribute to variation by age and comorbidity burden. Cancer 2017. Published 2017. This article is a US Government work and is in the public domain in the USA.*

Hirst Y, Skrobanski H, Kerrison RS, Kobayashi LC, Counsell N, Djedovic N, et al. **Text-message Reminders in Colorectal Cancer Screening (TRICCS): a randomised controlled trial.** Br J Cancer. 2017;116(11):1408–14. Available from: http://www.nature.com/doifinder/10.1038/bjc.2017.117DOI:10.1038/bjc.2017.117.

Conclusión: *Although text-message reminders did not significantly increase uptake of the overall population, the improvement among first-time invitees is encouraging.*

Barzi A, Lenz H-J, Quinn DI, Sadeghi S. **Comparative effectiveness of screening strategies for colorectal cancer.** Cancer. 2017;123(9):1516–27. Available from: http://doi.wiley.com/10.1002/cncr.30518DOI:10.1002/cncr.30518.

Conclusión: *Improvement in CRC-etection performance is not sufficient to improve screening outcomes. Special attention must be directed to detecting precancerous adenomas.*

Cubiella J, Digby J, Rodríguez-Alonso L, Vega P, Salve M, Díaz-Ondina M, et al. **The fecal hemoglobin concentration, age and sex test score: Development and external validation of a simple prediction tool for colorectal cancer detection in symptomatic patients**. Int J Cancer. 2017;140(10):2201–11. Available from: http://doi.wiley.com/10.1002/ijc.30639DOI:10.1002/ijc.30639.

Conclusión: *Prediction models for colorectal cancer (CRC) detection in symptomatic patients, based on easily obtainable variables such as fecal haemoglobin concentration (f-Hb), age and sex, may simplify CRC diagnosis. We developed, and then externally validated, a multivariable prediction model, the FAST Score, with data from five diagnostic test accuracy studies that evaluated quantitative fecal immunochemical tests in symptomatic patients referred for colonoscopy. The diagnostic accuracy of the Score in derivation and validation cohorts was compared statistically with the area under the curve (AUC) and the Chi-square test. 1,572 and 3,976 patients were examined in these cohorts, respectively. For CRC, the odds ratio (OR) of the variables included in the Score were: age (years): 1.03 (95% confidence intervals (CI): 1.02–1.05), male sex: 1.6 (95% CI: 1.1–2.3) and f-Hb (0–<20 µg Hb/g feces): 2.0 (95% CI: 0.7–5.5), (20-<200 µg Hb/g): 16.8 (95% CI: 6.6–42.0), ≥200 µg Hb/g: 65.7 (95% CI: 26.3–164.1). The AUC for CRC detection was 0.88 (95% CI: 0.85–0.90) in the derivation and 0.91 (95% CI: 0.90–093; p = 0.005) in the validation cohort. At the two Score thresholds with 90% (4.50) and 99% (2.12) sensitivity for CRC, the Score had equivalent sensitivity, although the specificity was higher in the validation cohort (p < 0.001). Accordingly, the validation cohort was divided into three groups: high (21.4% of the cohort, positive predictive value—PPV: 21.7%), intermediate (59.8%, PPV: 0.9%) and low (18.8%, PPV: 0.0%) risk for CRC. The FAST Score is an easy to calculate prediction tool, highly accurate for CRC detection in symptomatic patients.*

DA C, CD J, VP Q, Al E. **Association between time to colonoscopy after a positive fecal test result and risk of colorectal cancer and cancer stage at diagnosis**. JAMA. 2017;317(16):1631–41. Available from: http://dx.doi.org/10.1001/jama.2017.3634

Conclusión: Among patients with a positive fecal immunochemical test result, compared with follow-up colonoscopy at 8 to 30 days, follow-up after 10 months was associated with a higher risk of colorectal cancer and more advanced-stage disease at the time of diagnosis. Further research is needed to assess whether this relationship is causal.

Winawer SJ, Zauber AG. **Can post-polypectomy surveillance be less intensive?** Lancet Oncol. 2017;18(6):707–9. Available from: http://www.sciencedirect.com/science/article/pii/S1470204517303054DOI:http://dx.doi.org/10.1016/S1470-2045(17)30305-4.

Subramanian S, Bobashev G, Morris RJ, Hoover S. **Personalized medicine for prevention: can risk stratified screening decrease colorectal cancer mortality at an acceptable cost?** Cancer causes Control. 2017;28(4):299–308. Available from: http://link.springer.com/10.1007/s10552-017-0864-4DOI:10.1007/s10552-017-0864-4.

Conclusión: *key finding is that risk stratified screening can reduce harms at all levels of compliance. Therefore, selection of screening scenarios should include comprehensive comparisons of mortality, harms from screening, and cost. This study provides guidance for*

*evaluating risk stratified cancer screening and further research is required to identify optimal implementation approaches in the real-world setting.*

Atkin W, Wooldrage K, Brenner A, Martin J, Shah U, Perera S, et al. **Adenoma surveillance and colorectal cancer incidence: a retrospective, multicentre, cohort study**. Lancet Oncol. 2017; Available from: http://dx.doi.org/10.1016/S1470-2045(17)30187-0DOI:10.1016/S1470-2045(17)30187-0.

Conclusión: *BackgroundRemoval of adenomas reduces colorectal cancer incidence and mortality; however, the benefit of surveillance colonoscopy on colorectal cancer risk remains unclear. We examined heterogeneity in colorectal cancer incidence in intermediate-risk patients and the effect of surveillance on colorectal cancer incidence.*

George AT, Aggarwal S, Dharmavaram S, Menon A, Dube M, Vogler M, et al. **Faecal occult blood testing screening for colorectal cancer and "missed" interval cancers: are we ignoring the elephant in the room? Results of a multicentre study.** Color Dis. 2017;19(5):O108–14. Available from: http://doi.wiley.com/10.1111/codi.13585DOI:10.1111/codi.13585.

Conclusión: *A quarter of the colorectal cancers diagnosed in our study were interval cancers. Patients with right-sided interval cancers had the highest proportion of Dukes C and D tumours coupled with the shortest survival time after diagnosis compared with the other groups.*

Helander S, Sarkeala T, Malila N. **Embedded survey study harms colorectal cancer screening attendance: Experiences from Finland 2010 to 2015**. J Med Screen. 2017;969141317698177. Available from: http://dx.doi.org/10.1177/0969141317698177DOI:10.1177/0969141317698177.

Conclusión: *These findings in a Population Based CRC Screening Programme indicate the need of population-based studies that continue analyzing related factors to improve their detection and reducing harm.*

CM R, JM I. **Follow-up of positive fecal test results: Sooner is better, but how much better?** JAMA. 2017;317(16):1627–8. Available from: http://dx.doi.org/10.1001/jama.2017.3629

Conclusión: *A large body of research demonstrates that colorectal cancer screening is an effective method for reducing colorectal cancer mortality.1 Screening can detect cancer at an earlier stage, before it becomes symptomatic, and the detection and removal of adenomas can prevent cancer. Rates of colorectal cancer screening had increased until 2010, at which time approximately 60% of eligible US adults participated in colorectal cancer screening; however, screening has not increased since that time.2 Colonoscopy is the most commonly used colorectal cancer screening test, but it is an invasive procedure and can be both costly and inconvenient for patients. Many patients prefer less-invasive tests.3 Increased use of the fecal immunochemical test (FIT) has the potential to expand the use of colorectal cancer screening to a broader range of patients. However, the effectiveness of FIT depends on several layers of adherence including the initial screening test, repeated annual screening among those with negative test results, and follow-up colonoscopy among patients with positive test results.*

Osborne JM, Wilson C, Duncan A, Cole SR, Flight I, Turnbull D, et al. **Patterns of participation over four rounds of annual fecal immunochemical test-based screening for colorectal cancer: what predicts rescreening?** BMC Public Health. 2017;18(1):81. Available from: http://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-017-4634-8DOI:10.1186/s12889-017-4634-8.

Conclusión: *The findings identify those at risk of non- or inconsistent participation in*

*rescreening. They should aid targeting of interventions for demographic groups at risk and ensuring screening experiences are not perceived as unpleasant or difficult.*

Digby J, Fraser CG, Carey FA, Diament RH, Balsitis M, Steele RJC. **Faecal haemoglobin concentration is related to detection of advanced colorectal neoplasia in the next screening round**. J Med Screen. 2016;24(2):62–8. Available from: http://dx.doi.org/10.1177/0969141316653983DOI:10.1177/0969141316653983.

Conclusión: *A higher proportion of participants with faecal haemoglobin concentrations of?≥?20?µg Hb/g faeces had advanced neoplasia detected at the next round than participants with lower faecal haemoglobin concentrations. Although most relevant when using high faecal haemoglobin concentrations cut-offs, studies of faecal haemoglobin concentrations and outcomes over screening rounds may provide strategies to direct available colonoscopy towards those at highest risk.*

Rat C, Latour C, Rousseau R, Gaultier A, Pogu C, Edwards A, et al. **Interventions to increase uptake of faecal tests for colorectal cancer screening: a systematic review.** Eur J Cancer Prev. 2017;1. Available from: http://insights.ovid.com/crossref?an=00008469-900000000-99312DOI:10.1097/CEJ.0000000000000344.

Conclusión: *From 24 included RCTs, the following interventions increase uptake of faecal tests: advance notification letter (OR 1.20-1.51), postal mailing (OR 1.31-7.70), telephone contacts with an advisor (OR 1.36-7.72). Three interventions showed positive effects of GP involvement such as a GP-signed invitation letter [odds ratio (OR)=1.26], GP communication training (OR=1.22) or mailing reminders to GPs (OR=14.8). Inconclusive results were found for studies comparing different types of faecal tests and those testing the effectiveness of providing various types of written information. Advance notification letters, postal mailing of the faecal tests, written reminders and telephone contacts with an advisor increase patient uptake of faecal tests. There was only limited evidence on the effect of GP involvement on screening test uptake and a lack of studies focusing on nonresponders or disadvantaged groups.*

Larsen MB, Mikkelsen EM, Rasmussen M, Friis-Hansen L, Ovesen AU, Rahr HB, et al. **Sociodemographic characteristics of nonparticipants in the Danish colorectal cancer screening program: a nationwide cross-sectional study.** Clin Epidemiol. 2017;9:345–54. Available from: https://www.dovepress.com/sociodemographic-characteristics-of-nonparticipants-in-the-danish-colo-peer-reviewed-article-CLEPDOI:10.2147/CLEP.S139168.

Conclusión: *Social inequality in screening uptake was evident among both men and women in the Danish CRC screening program, even though the program is free of charge and the screening kit is based on FIT and mailed directly to the individuals. Interventions are needed to bridge this gap if CRC screening is to avoid aggravating existing inequalities in CRC-related morbidity and mortality.*

Giorgi Rossi P, Carretta E, Mangone L, Baracco S, Serraino D, Zorzi M. **Incidence of interval cancers in faecal immunochemical test colorectal screening programmes in Italy**. J Med Screen. 2017;969141316686391. Available from: http://dx.doi.org/10.1177/0969141316686391DOI:10.1177/0969141316686391.

Conclusión: *The incidence of interval cancers in the two years after a negative faecal immunochemical test in routine population-based colorectal cancer screening was less than one-fifth of the expected incidence. This is direct evidence that the faecal immunochemical test-based screening programme protocol has high sensitivity for cancers that will become symptomatic.*

Ritvo P, Myers RE, Serenity M, Gupta S, Inadomi JM, Green BB, et al. **Taxonomy for colorectal cancer screening promotion: Lessons from recent randomized controlled trials.** Prev Med (Baltim). 2017;101:229–34. Available from: http://linkinghub.elsevier.com/retrieve/pii/S0091743516304285DOI:10.1016/j.ypmed.2016.12.024.

Conclusión: *PIs of key RCTs (2012-2015) derived a CRCS taxonomy useful in detailed examination of CRCS promotion and design of future RCTs.*

Lansdorp-Vogelaar I, Goede SL, Bosch LJW, Melotte V, Carvalho B, van Engeland M, et al. **Cost-effectiveness of High-performance Biomarker Tests vs Fecal Immunochemical Test for Non-Invasive Colorectal Cancer Screening.** Clin Gastroenterol Hepatol. 2017; Available from: http://linkinghub.elsevier.com/retrieve/pii/S1542356517308480DOI:10.1016/j.cgh.2017.07.011.

Conclusión: *Biennial FIT screening of subjects 55-75 years old provided 84.9 LYG, at a cost of €122,000 ($137,000) per 1000 participants. Considering a unit cost of €7 ($8) for FIT (including kit and analysis only, excluding organizational costs), a biomarker test that detects CRC with higher levels of specificity and sensitivity (100%) and advanced adenomas at a proportionally higher level of sensitivity (53%) should never exceed a cost of €51 ($57). The threshold cost could increase to more than €200 ($224) for high-performing biomarker tests in cases of limited colonoscopy capacity or higher uptake of this test. CONCLUSION Using the MISCAN-colon microsimulation model to estimate effects of CRC screening tests, we found that in order for a biomarker test with increased overall performance to be cost-effective, it should not exceed 7-fold the unit cost of FIT. This maximum would increase substantially if colonoscopy becomes more expensive or scarce, or if the new test has higher screening uptake. These values could be used to estimate the added value of new biomarkers compared to current FIT screening.*

Green BB, BlueSpruce J, Tuzzio L, Vernon SW, Aubree Shay L, Catz SL. **Reasons for never and intermittent completion of colorectal cancer screening after receiving multiple rounds of mailed fecal tests.** BMC Public Health. 2017;17(1):531. Available from: http://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-017-4458-6DOI:10.1186/s12889-017-4458-6.

Conclusión: *Future CRC screening programs should be designed to minimize these barriers and maximize facilitators to improve long-term screening adherence.*

Sebastian E, Courtier R, Macià F, Grande L, Pera M. **The impact of screening on short-term outcome after surgery for colorectal cancer.** Rev Esp enfermedades Dig. 2017;109(7):485–90. Available from: https://online.reed.es/fichaArticulo.aspx?iarf=683769747232-413278197163DOI:10.17235/reed.2017.4569/2016.

Conclusión: *The diagnosis of colorectal cancer via the screening program is associated with a lower rate of postoperative minor complications and a shorter hospital stay.*

Krilaviciute A, Stock C, Brenner H. **International variation in the prevalence of preclinical colorectal cancer: Implications for predictive values of noninvasive screening tests and potential target populations for screening.** Int J cancer. 2017; Available from: http://doi.wiley.com/10.1002/ijc.30867DOI:10.1002/ijc.30867.

Conclusión: *Variation in CRC prevalence profoundly affects expected PPVs of screening tests, and PPVs should be carefully considered when decisions on screening tests and strategies are made for specific populations and health care systems. Here, we provide estimates of*

*preclinical CRC and expected PPVs and NPVs of noninvasive screening tests, which may enhance the empirical basis for planning of population-based CRC screening strategies.*

Baxter NN, Sutradhar R, Li Q, Daly C, Honein-AbouHaidar GN, Richardson DP, et al. **Do Primary Care Provider Strategies Improve Patient Participation in Colorectal Cancer Screening?** Am J Gastroenterol. 2017;112(4):622–32. Available from: http://www.nature.com/doifinder/10.1038/ajg.2017.4DOI:10.1038/ajg.2017.4.

Conclusión: *In practice, while individual PCP strategies have little effect, the use of multiple strategies to enhance screening appears to improve CRC screening uptake in patients*

## ■ Cribado de cáncer colorrectal - equidad

Kim B, Lairson DR, Chung TH, Kim J, Shokar NK. **Budget Impact Analysis of Against Colorectal Cancer In Our Neighborhoods (ACCION): A Successful Community-Based Colorectal Cancer Screening Program for a Medically Underserved Minority Population**. Value Health. 2017 Jun;20(6):809-818. doi: 10.1016/j.jval.2016.11.025. Epub 2017 Jan 19. PubMed PMID: 28577699.

*The budget impact mainly derived from colonoscopy-related costs incurred for the high-risk group. The effectiveness of FIT to detect CRC was critically dependent on follow-up after positive FIT. Community cancer prevention programs need reliable estimates of the cost of CRC screening promotion and the added budget impact of screening with colonoscopy.*

Fedewa SA, Flanders WD, Ward KC, Lin CC, Jemal A, Goding Sauer A, Doubeni CA, Goodman M. **Racial and Ethnic Disparities in Interval Colorectal Cancer Incidence: A Population-Based Cohort Study**. Ann Intern Med. 2017 Jun 20;166(12):857-866. doi: 10.7326/M16-1154. Epub 2017 May 23. PubMed PMID: 28531909.

*Conclusion: Among elderly Medicare enrollees, the risk for interval CRC was higher in black persons than in white persons; the difference was more pronounced for cancer of the distal colon and rectum and for physicians with higher PDRs.*

Miranda PY, Yao N, Snipes SA, BeLue R, Lengerich E, Hillemeier MM. **Citizenship, length of stay, and screening for breast, cervical, and colorectal cancer in women, 2000-2010**. Cancer Causes Control. 2017 Jun;28(6):589-598. doi: 10.1007/s10552-017-0887-x. Epub 2017 Mar 31. PubMed PMID: 28364196.

*Based on these findings, duration mandates in immigration policy may indirectly influence future pathways to preventive health care and cancer disparities disproportionately affecting immigrant women. We suggest that limits of duration mandates be reevaluated, as they may offer pathways to preventive health care for this vulnerable population, and prevent future cancer disparities.*

Kweon SS, Kim MG, Kang MR, Shin MH, Choi JS. **Difference of stage at cancer diagnosis by socioeconomic status for four target cancers of the National Cancer Screening Program in Korea: Results from the Gwangju and Jeonnam cancer registries**. J Epidemiol. 2017

Jul;27(7):299-304. doi: 10.1016/j.je.2016.07.004. Epub 2017 Mar 6. PubMed PMID: 28279589; PubMed Central PMCID: PMC5498418.

*In conclusion, later stage diagnoses of stomach, colon, and female breast cancer are still associated with SES in Korea in the era of the NCSP for the lower SES population.*

Cubiella J, Digby J, Rodríguez-Alonso L, Vega P, Salve M, Díaz-Ondina M, Strachan JA, Mowat C, McDonald PJ, Carey FA, Godber IM, Younes HB, Rodriguez-Moranta F, Quintero E, Álvarez-Sánchez V, Fernández-Bañares F, Boadas J, Campo R, Bujanda L, Garayoa A, Ferrandez Á, Piñol V, Rodríguez-Alcalde D, Guardiola J, Steele RJ, Fraser CG; COLONPREDICT study investigators. **The fecal hemoglobin concentration, age and sex test score: Development and external validation of a simple prediction tool for colorectal cancer detection in symptomatic patients**. Int J Cancer. 2017 May 15;140(10):2201-2211. doi: 10.1002/ijc.30639. Epub 2017 Mar 6. PubMed PMID: 28187494.

*For CRC, the odds ratio (OR) of the variables included in the Score were: age (years): 1.03 (95% confidence intervals (CI): 1.02-1.05), male sex: 1.6 (95% CI: 1.1-2.3) and f-Hb (0-<20 µg Hb/g feces): 2.0 (95% CI: 0.7-5.5), (20-<200 µg Hb/g): 16.8 (95% CI: 6.6-42.0), ≥200 µg Hb/g: 65.7 (95% CI: 26.3-164.1). The AUC for CRC detection was 0.88 (95% CI: 0.85-0.90) in the derivation and 0.91 (95% CI: 0.90-093; p = 0.005) in the validation cohort. At the two Score thresholds with 90% (4.50) and 99% (2.12) sensitivity for CRC, the Score had equivalent sensitivity, although the specificity was higher in the validation cohort (p < 0.001). Accordingly, the validation cohort was divided into three groups: high (21.4% of the cohort, positive predictive value-PPV: 21.7%), intermediate (59.8%, PPV: 0.9%) and low (18.8%, PPV: 0.0%) risk for CRC. The FAST Score is an easy to calculate prediction tool, highly accurate for CRC detection in symptomatic patients.*

## ■ Cribado de cáncer de pulmón - general

Forrest LF, Sowden S, Rubin G, White M, Adams J. **Socio-economic inequalities in stage at diagnosis, and in time intervals on the lung cancer pathway from first symptom to treatment: systematic review and meta-analysis.** Thorax. 2017 May;72(5):430-436. doi: 10.1136/thoraxjnl-2016-209013. Epub 2016 Sep 28. Review. PubMed PMID: 27682330; PubMed Central PMCID: PMC5390856.

*No socio-economic inequalities in the patient interval or in time from diagnosis to treatment were found. Socio-economic inequalities in stage at diagnosis are thought to be an important explanatory factor for survival inequalities in cancer. However, socio-economic inequalities in stage at diagnosis were not found in a meta-analysis for lung cancer*

## Cribado de cáncer de próstata - general

Downer MK, Stampfer MJ, Cooperberg MR. **Declining Incidence Rates of Prostate Cancer in the United States: Is this good news or not?** JAMA Oncol. 2017;2115:5–6. Available from: http://oncology.jamanetwork.com/article.aspx?doi=10.1001/jamaoncol.2017.0470DOI:10.1001/jamaoncol.2017.0470.

Gómez-Gómez E, Carrasco-Valiente J, Blanca-Pedregosa A, Barco-Sánchez B, Fernandez-Rueda JL, Molina-Abril H, et al. **European Randomized Study of Screening for Prostate Cancer Risk Calculator: External Validation, Variability, and Clinical Significance.** Urology. 2017;102:85–91. Available from: http://linkinghub.elsevier.com/retrieve/pii/S0090429516308081DOI:10.1016/j.urology.2016.11.004.

Conclusión: *We can conclude that the performance of the ERSPC-RC in the present cohort shows a high similitude between the 2 PSA levels; however, the RC variability value is associated with a decreased risk of significant PCa. The use of the ERSPC in our cohort detects a high number of unnecessary biopsies. Thus, the incorporation of ERSPC-RC could help the clinical decision to carry out a prostate biopsy.*

Bibbins-Domingo K, DC G, SJ C, Grossman DC, Curry SJ. **The us preventive services task force 2017 draft recommendation statement on screening for prostate cancer: An invitation to review and comment**. JAMA. 2017;317(19):1949–50. Available from: http://jama.jamanetwork.com/article.aspx?doi=10.1001/jama.2017.4413DOI:10.1001/jama.2017.4413.

Conclusión: *In the absence of evidence to guide screening recommendation for African American men and men with a family history of prostate cancer, the C recommendation applies to the general population and these high-risk groups. For men 70 years and older, the draft recommends against PSA-based screening for prostate cancer (D recommendation). The evidence shows that prostate cancer is slow growing, and the 10-year survival rate is quite high. Rates of overdiagnosis are higher in older men, raising the concern that screening may result in more harm than benefit in this age group.*

Lee DJ, Mallin K, Graves AJ, Chang SS, Penson DF, Resnick MJ, et al. **Recent changes in prostate cancer screening practices and prostate cancer epidemiology.** J Urol. 2017; Available from: http://linkinghub.elsevier.com/retrieve/pii/S002253471774517XDOI:10.1016/j.juro.2017.05.074.

Conclusión: *These findings raise concern for a reversal of the observed improvement in prostate cancer-specific mortality over preceding decades. Alternative screening strategies would a) incorporate the patient's preferences by engaging in shared decision making; b) preserve the survival benefits associated with screening; c) improve on the specificity of screening to reduce unnecessary biopsies and detection of low-risk disease; and d) promote the use of Active Surveillance for low-risk cancers if they are detected.*

Chiu PK, Alberts AR, Venderbos LDF, Bangma CH, Roobol MJ. **Additional benefit of using a risk-based selection for prostate biopsy: an analysis of biopsy complications in the Rotterdam section of the European Randomized Study of Screening for Prostate Cancer.** BJU Int. 2017; Available from: http://doi.wiley.com/10.1111/bju.13913DOI:10.1111/bju.13913.

Conclusión: *A significant proportion of biopsy complications, hospital admissions and costs could be reduced if biopsy decisions were based on ERSPC risk calculators instead of PSA only.*

*This effect was most prominent in more recent biopsies and in men with repeated biopsies or screening.*

The Lancet. **Discuss prostate cancer screening with your doctor.** Lancet. 2017;389(10079):1582. Available from: http://linkinghub.elsevier.com/retrieve/pii/S014067361731053XDOI:10.1016/S0140-6736(17)31053-X.

Mühlberger N, Boskovic K, Krahn MD, Bremner KE, Oberaigner W, Klocker H, et al. **Benefits and harms of prostate cancer screening - predictions of the ONCOTYROL prostate cancer outcome and policy model.** BMC Public Health. 2017;17(1):596. Available from: http://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-017-4439-9DOI:10.1186/s12889-017-4439-9.

Conclusión: *Assumptions about PCa risk and screen-detectable prevalence significantly affect the benefit-harm balance of screening. Based on the assumptions of our model, PCa screening should focus on candidates with familial predisposition with consideration of individual QoL preferences and age. Active surveillance may require treatment initiation before Gleason score progression to 7. Alternative active surveillance strategies should be evaluated in further modeling studies.*

Mottet N, Bellmunt J, Bolla M, Briers E, Cumberbatch MG, De Santis M, et al. **EAU-ESTRO-SIOG Guidelines on Prostate Cancer. Part 1: Screening, Diagnosis, and Local Treatment with Curative Intent.** Eur Urol. 2017;71(4):618–29. Available from: http://linkinghub.elsevier.com/retrieve/pii/S0302283816304705DOI:10.1016/j.eururo.2016.08.003.

Conclusión: The knowledge in the field of diagnosis, staging, and treatment of localised PCa is evolving rapidly. The 2016 EAU-ESTRO-SIOG Guidelines on PCa summarise the most recent findings and advice for the use in clinical practice. These are the first PCa guidelines endorsed by the European Society for Radiotherapy and Oncology and the International Society of Geriatric Oncology and reflect the multidisciplinary nature of PCa management. A full version is available from the EAU office and online (http://uroweb.org/guideline/prostate-cancer/)

Alberts AR, Schoots IG, Bokhorst LP, Drost F-JH, van Leenders GJ, Krestin GP, et al. **Characteristics of Prostate Cancer Found at Fifth Screening in the European Randomized Study of Screening for Prostate Cancer Rotterdam: Can We Selectively Detect High-grade Prostate Cancer with Upfront Multivariable Risk Stratification and Magnetic Reson**. Eur Urol. 2017; Available from: http://linkinghub.elsevier.com/retrieve/pii/S0302283817305146DOI:10.1016/j.eururo.2017.06.019.

Conclusión: *After four repeated screens and ≥1 previous biopsies in half of men, a significant proportion of men aged ≥70 yr still harbor high-grade PCa. Upfront risk stratification and the combination of MRI and TRUS-Bx would have avoided two-thirds of biopsies and low-grade PCa diagnoses in our cohort, while maintaining the high-grade PCa detection of a TRUS-Bx all men approach. Further studies are needed to verify these results.*

Cooperberg MR. **The New US Preventive Services Task Force "C" Draft Recommendation for Prostate Cancer Screening.** Eur Urol. 2017; Available from: http://linkinghub.elsevier.com/retrieve/pii/S0302283817304013DOI:10.1016/j.eururo.2017.05.011.

Conclusión: *The US Preventive Services Task Force has issued a new draft guideline, with a "C" recommendation that men aged 55-69 yr should be informed about the benefits and harms of screening for prostate cancer, and offered prostate-specific antigen testing if they choose it. For men aged ≥70 yr, the recommendation remains "D", or "do not screen." This draft represents substantial progress in the right direction towards offering men a fair opportunity to discuss the risks and benefits of screening with their primary care providers. However, the evidence review underlying the draft remains fundamentally inadequate, leading to biased presentations of both benefits and harms of screening. The final guideline and future revisions should reflect formal engagement with subject matter experts to optimize the advise given to men and their physicians*

## Cribado de cáncer de próstata - equidad

## Cribado de otros cánceres y general sobre cribado - general

Welch H. **Cancer screening, overdiagnosis, and regulatory capture**. JAMA Intern Med. 2017; Available from: http://dx.doi.org/10.1001/jamainternmed.2017.1198

Conclusión: *At the end of World War II, there was an alarming publication by a group of Chicago surgeons reporting that 17% of nontoxic thyroid nodules harbored thyroid cancer. The surgeons concluded that this finding makes "surgical therapy quite urgent in this seemingly harmless lesion."2(p883) A few months later, New York surgeons reported that apparently benign thyroid nodules and innocent-appearing breast lumps had a similar prevalence of cancer.3 They concluded that it is as justifiable to perform a thyroidectomy for a thyroid nodule as a biopsy for a breast mass.*

AR C. **How to look for thyroid cancer**. JAMA. 2017;317(18):1840–1. Available from: http://dx.doi.org/10.1001/jama.2017.4068

Conclusión: *Detection of thyroid carcinoma includes recognition of a nodule by the patient, palpation of a nodule by the physician, or incidental detection of a thyroid nodule during imaging procedures, such as carotid ultrasonography or chest computed tomography. Individual nodules carry a risk of 7% to 9% of harboring a thyroid carcinoma.1 Thyroid carcinomas are usually contained within the thyroid gland and have excellent prognosis, with less than 2% mortality at 5 years.2 These data might suggest a public health benefit of screening—cancer is detected at an early enough stage to have an excellent prognosis. Why not broaden the scope of detection by palpation or as an incidental finding to include routine screening, and detect more of these carcinomas while they are asymptomatic?*

Ferrándiz L, Ojeda-Vila T, Corrales A, Martín-Gutiérrez FJ, Ruíz-de-Casas A, Galdeano R, et al. **Internet-based skin cancer screening using clinical images alone or in conjunction with dermoscopic images: A randomized teledermoscopy trial.** J Am Acad Dermatol. 2017;76(4):676–82. Available from:

http://linkinghub.elsevier.com/retrieve/pii/S0190962216310179DOI:10.1016/j.jaad.2016.10.041.

Conclusión: *The addition of dermoscopic images significantly improves the results of an internet-based skin cancer screening system, compared with screening systems based on clinical images alone.*

Jun JK, Choi KS, Lee H-Y, Suh M, Park B, Song SH, et al. **Effectiveness of the Korean National Cancer Screening Program in Reducing Gastric Cancer Mortality.** Gastroenterology. 2017;152(6):1319–1328.e7. Available from: http://linkinghub.elsevier.com/retrieve/pii/S0016508517300896DOI:10.1053/j.gastro.2017.01.029.

Conclusión: *Within the Korean National Cancer Screening Program, patients who received an upper endoscopy were less likely to die from gastric cancer; no associations were found for UGI series.*

Sosa J, Duh Q, Doherty G. **Striving for clarity about the best approach to thyroid cancer screening and treatment: Is the pendulum swinging too far?** JAMA Surg. 2017; Available from: http://dx.doi.org/10.1001/jamasurg.2017.1338

Conclusión: *The US Preventive Services Task Force (USPSTF) recommends against screening for thyroid cancer in asymptomatic adults, giving the practice a grade of D.1 That is, the Task Force discourages use of screening with palpation or ultrasonography with a moderate degree of certainty that such screening has no net benefit or that the harm outweighs any benefits. The recommendation is based on a systematic evidence review2 that is an update of a prior USPSTF recommendation from 1996,3 which came to a similar conclusion.*

Davies L, LT M. **The uspstf recommendation on thyroid cancer screening: Don't "check your neck."** JAMA Otolaryngol Neck Surg. 2017; Available from: http://dx.doi.org/10.1001/jamaoto.2017.0502

Conclusión: *The US Preventive Services Task Force (USPSTF) has reviewed the evidence for thyroid cancer screening1 and given the practice a grade D recommendation.2 What does this mean? Should we be relieved or outraged? After all, isn't more information good? Shouldn't we try to "catch cancer early" through screening?*

Chorley AJ, Hirst Y, Vrinten C, von Wagner C, Wardle J, Waller J. **Public understanding of the purpose of cancer screening: A population-based survey**. J Med Screen. 2017;969141317699440. Available from: http://dx.doi.org/10.1177/0969141317699440DOI:10.1177/0969141317699440.

Conclusión: *Our findings suggest that although awareness of the purpose of early detection screening is high, awareness that screening can prevent cancer is low across all demographic groups. Understanding the purpose of screening is a key aspect of informed choice but despite current communication strategies highlighting these differences, people do not seem to have a nuanced understanding of these differing aims. Our findings may be indicative of a broader public scepticism about the preventability of cancer.*

Welch HG, Fisher ES. **Income and Cancer Overdiagnosis - When Too Much Care Is Harmful.** N Engl J Med. 2017;376(23):2208–9. Available from: http://www.nejm.org/doi/10.1056/NEJMp1615069DOI:10.1056/NEJMp1615069.

Conclusión: *There are reasons to wonder whether people with higher incomes receive too much medical care. Cancer screening is one area where overutilization can cause harm, resulting in overdiagnosis and potentially unnecessary treatment*

## NOTA BIBLIOGRÁFICA
RED DE PROGRAMAS DE CRIBADO DE CÁNCER

Esta Nota es una recopilación de publicaciones (artículos, informes, libros) sobre cribado de cáncer resultado de una revisión no sistemática de la literatura. Podeis encontrar todas las Notas Bibliográficas en: http://www.cribadocancer.es

Podéis dirigir vuestros comentarios o sugerencias sobre la Nota a:

Josep A Espinàs (bibliografia general). Pla Director d'Oncologia de Catalunya.
c-e: occ-pdoc@iconcologia.net

Ana Molina (bibliografia equidad). FISABIO-Salud Pública. Valencia
c-e: molina_anabar@gva.es