Delivery Science Grants Program

Novel KP Prostate Cancer Risk Calculator Leads to Better Selection of Men Needing a Biopsy in Those with Mild PSA Elevations

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| Challenge | **Currently only about 25% of men with mild PSA elevations have a prostate cancer that warrants treatment. Better risk assessment is needed.** |
| Existing Evidence | No prospective evaluation of a prostate cancer risk calculator has been performed in men with mild PSA elevations. |
| Target Population | Men without prior biopsies who have mild PSA elevations (<10 ng/ml) |
| Intervention or Exposure | Use of the validated KP Prostate Cancer Risk Calculator 2.0 in counselling for possible biopsy |
| **Outcomes/Key Findings** | Calculator usage led to a biopsy population enriched in high-grade cancer and fewer negative biopsies compared to historical controls and use for informed decision-making regarding prostate biopsy was accepted by patients and physicians.  • After hearing their estimated risks, 74% of men accepted biopsy  • Those that accepted biopsy had higher estimated risks for high-grade cancer and any cancer  • A threshold effect was seen at ~10% for high-grade risk and 30% for any cancer risk |
| **Resulting Action/Change** | **KP Prostate Cancer Risk Calculator can be considered for incorporation into HealthConnect for regular use in supporting clinicians and patients in shared decisionmaking for prostate biopsies.** |
| Additional Recommendations | The KP Prostate Cancer Risk Calculator is currently being built into HealthConnect. We have initiated work with Garfield funding to further study our calculator in KPSC and to refine it using some novel serum markers that are not currently available in KPNC but are being used in KPSC. |
| Implementation Tools | The risk calculator is available for next-step evaluation and use in different settings. |
| Implementation Measurement | Uptake of calculator, percentage accepting biopsy, biopsy outcomes. |
| Reference | Presented at the Western Section American Urological Association Meeting, October 3, 2023  A graph of a bar graph  Description automatically generated with medium confidence |