Improving Prevention Screening: Lessons Learned

J Pye, T Ellis, J Foltz, D Michael, D Drake, D Thompson, J Wynn,
P Lockamy, D Gay, A McMahon, M Jones, S Bryant, S Nelson, J Setzer,
A Bertholdt, M Brennan, D Davis, B Crawford, S Vandiford, S Kaminchak, D Cornwall

Joseph Pye, MD
Clinical Informatics
Vidant Health
Greenville, North Carolina 27834
252.847.2698
Joseph.Pye@VidantHealth.com

Introduction

In North Carolina, 40 out of every 100 deaths from late-stage colorectal cancer could have been prevented if all men and women aged 50 years or older were routinely screened.[1]

A Primary Care Physician (PCP) does not have enough time to address preventive care. A PCP in the US needs 7.5 hours per day to manage the preventive care needs and as much as 21 hours per day to manage all the needs of an average-sized patient panel.[2] Patients receive 55% of the preventive services they need.[3] Physicians must see fewer patients while taking care of more.[4] Reimbursement models are changing to pay for preventive care.

One solution is to develop top-of-license clinical staff teams, armed with clinical analytics tools and care coordination processes, to address preventive care gaps.[5]

Aim Statement

Develop a colorectal cancer screening toolkit for use by ambulatory clinic staff in closing care gaps.

Acknowledgements

The Teachers of Quality Academy program was developed with financial support from the American Medical Association as part of the Accelerating Change in Medical Education Initiative.

This poster was prepared with financial support from the American Medical Association.

Special thanks to the Vidant Health and ECU Physicians clinical, quality, operational and IS teams who put in hundreds of man-hours over the past four years to support this effort.

Methods

1. Establish a standard process for tracking colorectal ca screening status in the EHR
2. Create a database (registry) for colorectal ca patient screening status
3. Identify patients overdue for screening using the database
4. Alert staff that a patient needs screening by building a point of care reminder system
5. Show colorectal ca screening status for an entire patient panel by creating reports
6. Manage patient outreach by creating additional reports and configuring reminders
7. Empower staff to close colorectal ca screening gaps through protocols & processes
8. Educate staff and providers on the entire workflow through development of a toolkit
9. Validate processes with ongoing revision of systems and toolkit

Results

1. PDSA #1: Agree on guidelines and no standard process
   - Clinical governance engaged for standard process
2. PDSA #2: See a patient's colorectal ca screening status at point of care
   - Point of care tools configured to display status
3. PDSA #3: Align Epic tools with our data
   - Registry created to organize and allow for tracking of patient screening status
4. PDSA #4: Display screening status at panel, practice, or group level
   - Dashboards and reports created
5. PDSA #5: Engage clinical staff routinely in closing preventive care gaps
   - New reminder system, protocols and rooming workflow created
6. PDSA #6: Manage outreach efforts for colorectal ca screening at a clinic/group level
   - Tools to track colorectal cancer screening outreach were enabled and configured
   - Last and next outreach dates to organize outreach were added to reports
7. PDSA #7: Nourish uptake and use of the tools
   - A toolkit was developed pulling the tools together and demonstrating the process
8. PDSA #8: Enrich colorectal cancer screening status accuracy in EHR
   - Piloted process contact patients using MyChart to update status
9. PDSA #9: Engage patients
   - Letter and telephone campaigns are planned to reach MyChart non-responders
   - Work-related obstacles are under discussion with Vidant Health HR leadership
   - Care coordination is being engaged to identify available financial support
   - Appointments have been scheduled with their physician
10. PDSA #10: Power outreach through adequate staffing
    - Discussions underway to resource dedicated outreach staff

References

[1] North Carolina Advisory Committee on Cancer Coordination and Control. (2014) Cancer Control Plan, 2014-2020. Retrieved from CDC: ftp://ftp.cdc.gov/pub/Publications/Cancer/ccc/north_carolina_ccc_plan.pdf
[2] Kimberly S. H. Primary Care: Is There Enough Time for Prevention? American Journal of Public Health April 2003: Vol. 93, No. 4, pp. 635-641.
[3] Altschuler J, Margolius D, Bodenheimer T, Grumbach K. Estimating a reasonable patient panel size for primary care physicians with team-based task delegation. Ann Fam Med. 2012;10(5):396-400.
[4] Michael D, Pye J. "From Papyrus to Pop Health: Evolution of the Medical Record." ECU Family Medicine Residency Program. Greenville, NC. Feb 16, 2017. Grand Rounds.
[5] The Advisory Board Company. (2010) The Accountable Physician Enterprise: Partnering with Physicians to Transform Care Delivery. Retrieved from ABC: https://www.advisory.com/research/health-care-advisory-board/studies/2010/the-accountable-physician-enterprise/extending-resources-for-high-performance/pcp-transition-to-team-based-care

Discussion

Even when preventive care is an organizational priority, there are many obstacles and dependencies in closing gaps:

- You can't change what you don't measure. Measuring requires clear, consistent records
- Achieving clear, consistent records takes collaboration and agreement between physicians, nurses, and quality/ops leaders
- Even with clear, consistent records, developing effective processes takes work and time
- Even with processes in place, there are still always the human factors of clinical resources and patient engagement

The results chronicle obstacles that are generalizable to almost any QI process. The toolkit was created and early indications are that it will be successful. It will take several months before any real data will be available for analysis.

There are also more obstacles to clear. More human capital is needed, reimbursement is not yet there to fund that need, and there are access barriers (cost, time off work, etc.) facing engaged patients.

Conclusion

The aim was accomplished. A toolkit is in place to guide Vidant Health and ECU Physicians in their efforts to close colorectal cancer screening gaps.

Even with the best technology, processes and staff in place, there will always be barriers to preventive care. However, considerable progress can be made in achieving significant preventive care screening rate improvements with basic infrastructure, tools and processes.