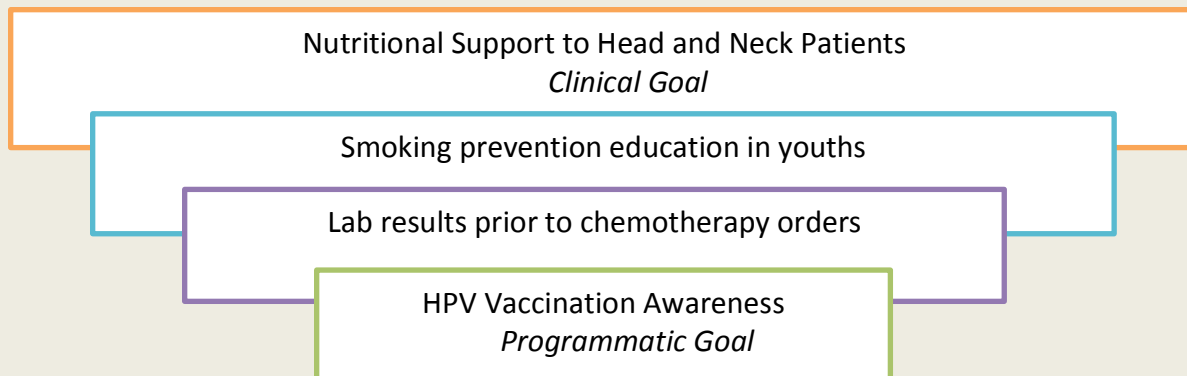


Rideout Regional Medical Center
Comprehensive Community Cancer Program Annual Activities Report 2016

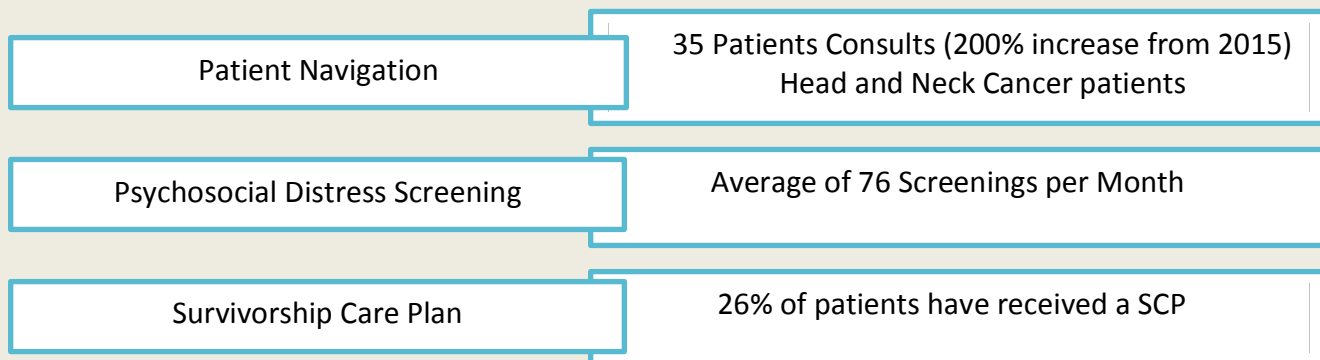
Quality Improvements



Community Outreach



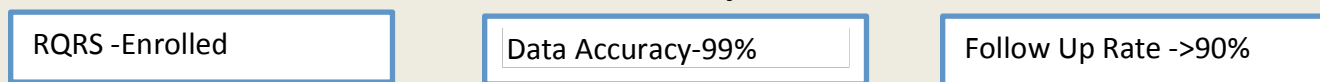
Continuum of Care



Clinical Services



Data Quality



Outcomes



Microsatellite Instability Testing (MSI)/ Mismatch Repair (MMR) for Colon Cancer Monitoring Compliance with Evidence-Based Guidelines

Topic: Physician Investigation of MSI/MMR testing for Stage II colon cancer.

“MMR or MSI testing should be performed for all patients with stage II disease, because stage II MSH-H patients have a good prognosis and do not benefit from 5-FU adjuvant therapy”-NCCN Guidelines

Purpose- To determine if patients are being evaluated and treated according to evidence-based national treatment guidelines.

Background: National Cancer Consortium Network (NCCN) guidelines state that MSI is an important piece of information to consider when deciding whether to use adjuvant chemotherapy in patients with stage II disease. Evidence shows that MSI/MMR is a marker of a more favorable outcome and a predictor of decreased benefit (possibly a detrimental impact) from adjuvant therapy with a fluoropyrimidine alone in patients with stage II disease. Tumors showing the presence of MSI/MMR is classified as either MSI-H/ (dMMR) (unstable) or MSI-L/ (MSS) (Stable). Substantial evidence shows that in patients with stage II disease, a deficiency in MMR protein expression (dMMR) or MSI-H tumor status is a prognostic indicator of a more favorable outcome.

Because patients with stage II MSI-H tumors may have a good prognosis and do not benefit from 5FU adjuvant therapy, NCCN recommends that MMR or MSI testing be performed for all patients with stage II disease.

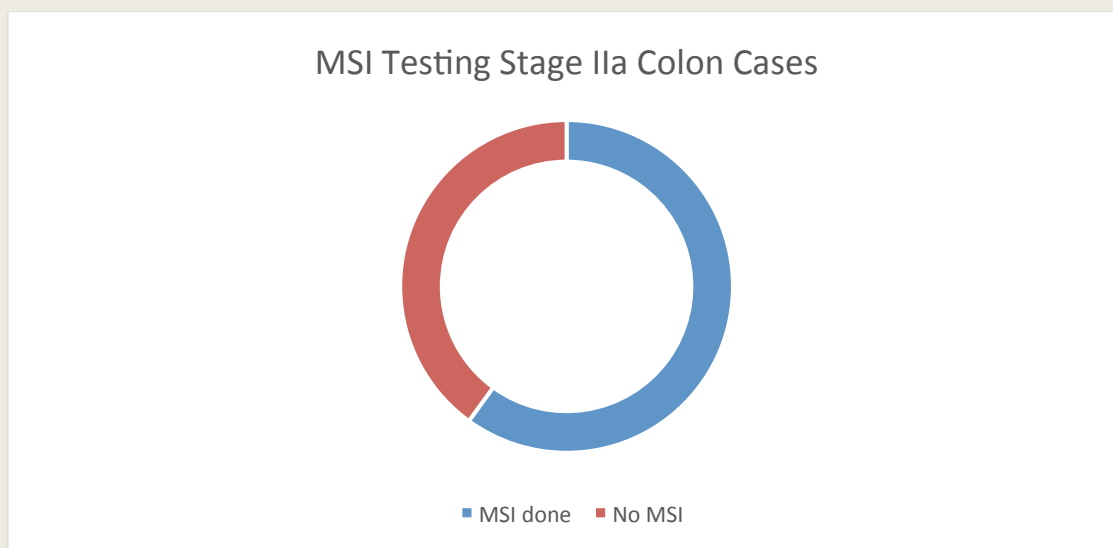
Criteria for Evaluation: Review all T3N0M0 stage IIa analytic Rideout Health 2015 colon cancer patients to determine if MSI/MMR testing was performed. MSI/MMR is documented on the surgical pathology report. The pathology reports for these cases were reviewed.

Stage II colon cancers

Stage IIA T3N0M0 Tumor invades through the muscularis propria and into the pericolorectal tissues-AJCC TNM Staging Seventh Ed.

Results: In 2015 there were 31 analytic colon cancer patients at Rideout Health; 17 were treated with surgery and of those 17 only 5 patients had pT3N0M0, and included in this study.

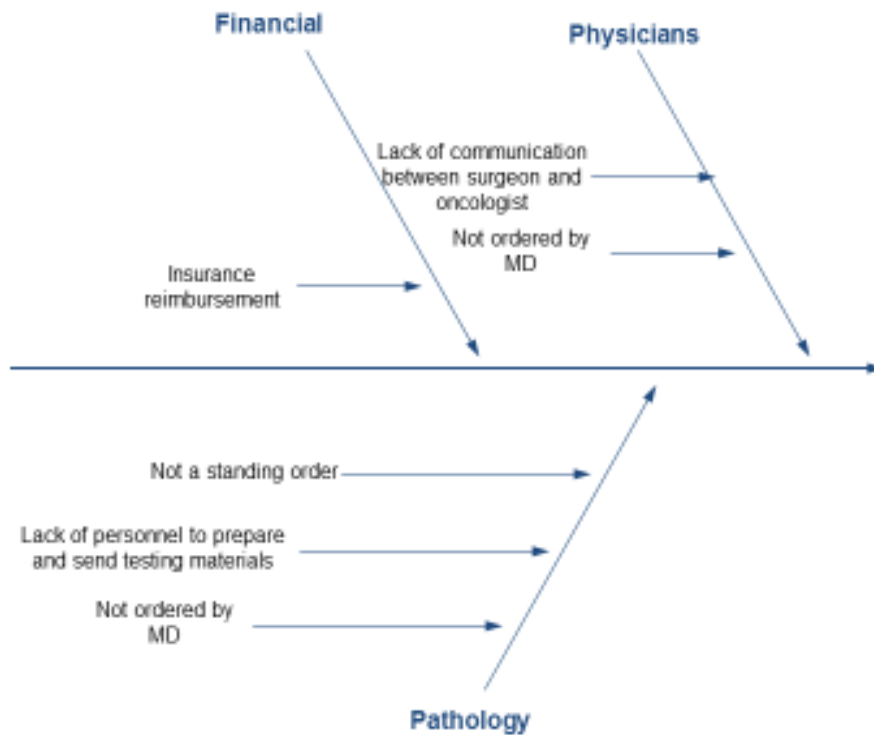
Of the 5 stage IIa cases (T3N0), three cases had MSI/MMR testing. Two cases were MSI-H/dMMR and one was MSS(stable) . None of the 5 stage IIa cases received chemotherapy. There was no apparent documentation as to why MSI testing was not requested for the 1 of the 2 cases.



60% of the analytic pT3N0 colon cancer cases had MSI/MMR testing.

Possible Causes:

Potential Causes for 60% MSI/MMR Testing in Stage IIa Colon Cancer



60%
MSI/MMR Testing
for Stage IIa Colon
Cancer

Conclusion:

Since the inception of this study at the beginning of the year, MSI/MMR is now a standing order on all colon cancer pathology reports. The patients that were tested for the tumor marker were treated appropriately according to their results.