Augmenting Intelligence & Amplifying Health: Proactive Outreach for Enhanced Preventive Screening

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OBJECTIVE
Preventive screenings early detect disease at their pre-symptomatic stage, leading to timely interventions and better health outcomes. A proactive, automated approach leveraged augmented intelligence (AI) to screen large patient populations in the convenience of their homes.

IMPLEMENTATION METHODS

- Over 66,000 patients were approached, of which 29,000 opted into the screening project. Within 12 weeks, nearly 12,000 patients were screened leveraging the automated approach.
- An AI algorithm was developed that categorized patients as average risk or high risk, based on factors such as family history or personal history of colorectal cancer or personal history of polyps on previous colonoscopy. Patients were then categorized as average risk or high risk.
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- Approximately 40,000 kits were distributed within a 12-week timeframe, averaging a staggering roll-out rate of approximately 6,000 kits per week. This approach enabled improved access to screening, detecting certain DNA markers and blood in the stool.
- A staggered roll-out strategy was implemented, with an initial focus on patients overdue for screening.
- Leveraging AI and automation enabled improved access to screening, while avoiding thousands of hours in provider, nurse, and scheduling time while improving quality and patient outcomes.

RESULTS

- 44,138 Patients Contacted
- 25% Screened (11,614)
- Colorectal Cancer Screening Rate

<table>
<thead>
<tr>
<th>Cancer</th>
<th>Average Risk</th>
<th>High Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cologuard</td>
<td>85%</td>
<td>15%</td>
</tr>
<tr>
<td>Result</td>
<td>88%</td>
<td>Positive</td>
</tr>
</tbody>
</table>

CONCLUSIONS

The initial focus targeted average-risk patients overdue for CRC. Subsequent phases of the project transitioned to proactive communication to patients due to screen for Cologuard and included the accelerated delivery of screening kits since the patient was overdue. This new approach has transformed the delivery of healthcare and streamlined the screening process by leveraging AI to identify patients at risk, automate the ordering and delivery of screening kits to patients in the convenience of their homes.

REFERENCE

Colorectal Cancer: Screening | United States Preventive Services Taskforce
Accessed on 1/15/2023 at uspreventiveservicestaskforce.org

CAKES: Cancer Awareness Kit for Every Screening
Avondale, AZ 85323
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FINANCIAL IMPACTS

- The automated approach reduced administrative and clinician burden by: Nearly 12,000 patients were screened leveraging the automated approach, equating to thousands of hours for provider, nurse, and scheduling time while improving quality and patient outcomes.
- The care team would review their medical history, discuss the patient's colorectal cancer risk and automate the ordering and delivery of screening kits once the patient was overdue.
- Leveraging AI and automation enabled improved access to screening, avoiding thousands of hours in provider, nurse, and scheduling time while improving quality and patient outcomes.

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Nearly 12,000 patients were screened leveraging the automated approach, equating to thousands of hours for provider, nurse, and scheduling time while improving quality and patient outcomes. As healthcare solutions, these new approaches are becoming more broadly accepted, and healthcare systems are increasingly seeing benefits, developing an eroded, synergistic approach to screening and prevention, paving the way for better health among populations.

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