Innovating patient-facing care pathways in breast cancer using the 4R model
4R = Right Information / Care / Patient / Time

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BACKGROUND

• ASCO’s “Criteria for High-Quality Clinical Pathways in Oncology” calls for development of multi-modality patient-focused pathways. However, clinical pathways are typically created for provider use.
• The innovative 4R model (right information and right care for the right patient at the right time), developed by the Center for Business Models in Healthcare and Northwestern University, is an approach to pathways which empower patients in conjunction with their care team.
• 4R incorporates recommendations from the Institute of Medicine, Medicare’s OCM, and NCCN guidelines:
  • multi-modality planning from diagnosis to survivorship or hospice
  • specifying clinical team and their responsibilities
  • inclusion of definitive and supportive cancer care in the plan.

OBJECTIVE

To help breast cancer patients, their families and caregivers, and their care team manage guideline-concordant breast cancer care through use of 4R patient care sequences / pathway plans.

METHODS

• The 4R model was implemented in a target population of breast cancer patients and care teams at two major institutions serving predominately minority and underserved patients (Montefiore Einstein Center for Cancer Care, Bronx, NY and University of Illinois Cancer Center, Chicago, IL)
• Patient surveys were collected from patients treated prior to (historical) and after (4R cohort)
• Descriptive statistics and Fisher’s exact test were used for analysis

REFERENCE

2. Trosman JR et al. Results from a pilot of an innovative 4R Cancer Care Delivery Model: impact on patient self-management. J Clin Oncol 36, 2018 (suppl; abstr 6527)
3. Weldon CB et al. Results from a pilot of an innovative 4R Cancer Care Delivery Model in early breast cancer: impact on timing and sequencing of guideline recommended care. J Clin Oncol 36, 2018 (suppl; abstr 561)

RESULTS

<table>
<thead>
<tr>
<th></th>
<th>4R Cohort (n=50)</th>
<th>Historical cohort (n=123)</th>
<th>P-value</th>
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</thead>
<tbody>
<tr>
<td>Knowing cancer stage</td>
<td>92%</td>
<td>72%</td>
<td>0.0043</td>
</tr>
<tr>
<td>How well care plan was explained</td>
<td>90%</td>
<td>63%</td>
<td>0.0002</td>
</tr>
<tr>
<td>Never or seldom felt not in control of care</td>
<td>74%</td>
<td>54%</td>
<td>0.0166</td>
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<tr>
<td>Able to manage care well or very well</td>
<td>86%</td>
<td>72%</td>
<td>0.0512</td>
</tr>
<tr>
<td>Care plan clear or very clear</td>
<td>84%</td>
<td>78%</td>
<td>0.413</td>
</tr>
</tbody>
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• 90% of 4R cohort (45/50) found care sequence plan very useful or useful
• Compared with historical cohort, patients receiving 4R plans had improvement in:
  • Feeling that care was explained very well or well (p=0.0043)
  • Knowing cancer stage (p=0.0002)
  • Never or seldom feeling not in control of care (p=0.0166)

CONCLUSIONS

• The 4R model is a promising patient self-management method providing early breast cancer patients with their own care pathways
• 4R care sequence plans improved several aspects of patient self-management, as well as delivery of multi-modality care
• An ongoing collaboration continues development of the 4R model to address remaining gaps and improve efficacy

ACKNOWLEDGEMENT

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