Effect of Inpatient Recruiting on Attendance at Phase II Outpatient Cardiac Rehabilitation.

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ABSTRACT

Methods

On weekdays, patient census on inpatient cardiac floors were reviewed between October 2013 and July 2016 for OCR-eligible patients. 430 hospitalized patients with eligible diagnoses were referred to OCR and identified for follow-up by a clinical exercise physiologist (CEP). The visit took place if the patient was available and willing. During the in-patient visit the CEP endorsed OCR, with the goal of scheduling the patient’s first OCR visit. Endorsement methods included verbal exploratory discussion, use of a customized informational brochure, descriptive video, and inclusion of family or friends in the discussion when appropriate.

Endpoints

Primary outcome was the difference between percentage participation in OCR orientation among patients that were visited while hospitalized, compared with those not visited. Secondary outcomes included:

- Days between hospital discharge and first OCR visit
- Attendance (number of sessions)
- Influencers of participation amongst visited patients (brochure, video, family/friends present, or verbal discussion only)

Statistics

Chi-square test (p) was performed to assess participation differences between visited and non-visited patients. Unpaired t-test was performed to test for differences between visited and non-visited patients for the following variables:

- Number of days between hospital discharge and OCR visit
- Attendance (number of sessions)

Percentage participation rates by specific endorsement methods (Brochure, Video, Family or Friends, or verbal discussion only) are reported.

Alpha level was set at 0.05 for all analyses.

RESULTS (continued)

Table 2. Participation Rate

<table>
<thead>
<tr>
<th>Measure</th>
<th>Visited Inpatient (n=352)</th>
<th>Not Visited Inpatient (n=139)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participated OCR (n=317)</td>
<td>178 (51%)</td>
<td>41 (29%)</td>
</tr>
<tr>
<td>Did Not Participate</td>
<td>174 (49%)</td>
<td>98 (71%)</td>
</tr>
</tbody>
</table>

OCR, Outpatient Cardiac Rehabilitation; *Independent t-test with Welch correction for unequal variances. **p<0.05

Table 3. Days from Discharge and Number of Sessions

<table>
<thead>
<tr>
<th>Measure</th>
<th>Total Participating Patients (N=219)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Days between hospital discharge and OCR</td>
<td>15 (1, 26)</td>
</tr>
<tr>
<td>OCR Med (Max, Min)</td>
<td>22 (2, 176)</td>
</tr>
<tr>
<td>p=0.01</td>
<td></td>
</tr>
<tr>
<td>OCR, Outpatient Cardiac Rehabilitation</td>
<td>24 (1, 377)</td>
</tr>
</tbody>
</table>
| *Independent t-test with Welch correction for unequal variances. **p=0.05

References


DISCUSSION

Inpatient endorsement of OCR by a CEP, with the goal of scheduling the first session prior to hospital discharge, was associated with almost a two-fold higher OCR orientation participation rate (51% vs. 29%). OCR participation began 7 days sooner after hospital discharge for the majority of visited compared to non visited patients (Table 3 median days difference). Complete OCR sessions was meaningfully greater (median difference 11) amongst visited compared to non visited patients. Combined use of verbal endorsement with informational brochure, and either a video, or inclusion of family or friends was associated with approximately 25% greater participation compared to verbal discussion alone; and approximately 15% greater participation than verbal discussion with brochure.

Limitations

- Caution should be applied to these findings because the potential for selection bias due to various factors, including the possibility that non-visited patients were clinically different from visited patients, is present due to a non-randomized study design.

Conclusions

- These data show that non-physician inpatient recruitment of patients with eligible diagnosis and physician referral for OCR was associated with a significantly higher rate of participation, earlier start, and increased number of completed sessions.
- Greater rates of OCR participation are associated with use of multiple endorsement strategies while inpatient.