Acute Diabetes Service in the AMU

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Background

DIABETES

• Comorbid condition in up to 20% of patients on the medical take

• Associated with longer length of stay

• Associated with increased rate of complications

• Primarily reactive diabetic service

Health and Social Care Information Centre, National Diabetes Inpatient Audit 2013
Aim

To improve the safety, quality and efficiency of the care of diabetic patients.

New PROACTIVE AMU ACUTE DIABETES TEAM focussing on:

- Delivering early specialist care
- Providing education to ward staff
- Reducing medication errors and hypoglycaemia
- Preventing avoidable admissions
Method

ACUTE DIABETES TEAM

• Nurse-led
• Supported by Consultants
• Attended AMU at least twice daily
• Proactive identification and review of patients with diabetes
• Initial brief observation period in Sept 2013
• Simple observational data collected prospectively daily (mon – fri)
Method

ACUTE DIABETES TEAM SERVICE – over subsequent months:

• Daily review of patients with diabetes on AMU
• Individualised care plans (sent to primary care on discharge)
• Medication reviews
• Face-to-face and telephone support for ward staff
• Rolling programme of multidisciplinary ward education
OVERALL

• 12-fold increase in number of diabetic patients seen within 24 hours of admission
  - 7 patients in quarter pre-project
  - 84 patients in quarter post-project

• Total 556 patients seen in 6 months (~50% of 1167 patients with DM admitted to AMU)

• Diabetic review of over 60% of all hospital inpatients with diabetes (snapshot audit)
Outcomes

- Admissions avoided / early facilitated discharges:
  - Oct – Dec 2013: 20 patients
  - Jan – Mar 2014: 33 patients

- Medication errors
  - 87 errors detected (of which 48 prevented)
  - ~60% reduction in rate of medication errors/pt

- Hypoglycaemic events
  - ~50% reduction in rate hypos/pt
## Outcomes

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>6 month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients seen</td>
<td>18</td>
<td>102</td>
<td>86</td>
<td>78</td>
<td>98</td>
<td>85</td>
<td>107</td>
<td>556</td>
</tr>
<tr>
<td>Hypos</td>
<td>3</td>
<td>8</td>
<td>4</td>
<td>10</td>
<td>7</td>
<td>10</td>
<td>11</td>
<td>50</td>
</tr>
<tr>
<td>Hypos per pt seen</td>
<td>0.16</td>
<td>0.08</td>
<td>0.04</td>
<td>0.12</td>
<td>0.07</td>
<td>0.12</td>
<td>0.1</td>
<td>0.09</td>
</tr>
<tr>
<td>Med errors (ME)</td>
<td>7</td>
<td>21</td>
<td>14</td>
<td>13</td>
<td>18</td>
<td>7</td>
<td>14</td>
<td>87</td>
</tr>
<tr>
<td>ME per patient</td>
<td>0.39</td>
<td>0.21</td>
<td>0.16</td>
<td>0.16</td>
<td>0.18</td>
<td>0.08</td>
<td>0.13</td>
<td>0.16</td>
</tr>
<tr>
<td>Med errors avoided</td>
<td>N/A</td>
<td>14</td>
<td>7</td>
<td>8</td>
<td>8</td>
<td>4</td>
<td>7</td>
<td>48</td>
</tr>
</tbody>
</table>

**Medication error rate (per patient)**

**Hypoglycaemic event rate (per patient)**
Take Home Messages

• EDUCATION, EDUCATION, EDUCATION!!
  ➢ Multidisciplinary
  ➢ Learning from errors
  ➢ Empowering the team (including the patient)

• Improved patient safety

• Admission avoidance, facilitating discharge and improving flow

SAMsterDAM May 2014
Future Aspirations

• Improved patient satisfaction
• Improved communication with primary care
• Expansion of service
• Financial benefits
Thank you for listening.

Any questions?

For further information / ideas / suggestions, please contact:

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